4 April 2006

Feedback to the consultation on CP10 revised

1. On 19 January 2006, CEBS published a revised version of its consultation paper on the implementation, validation, and assessment of the Advanced Measurement (AMA) and Internal Ratings Based (IRB) approaches (CP10 revised). The consultation period ended on 16 February 2006.

2. Fourteen responses were received, all but one of which were published on the CEBS website. (One respondent asked that its comments be treated confidentially.) In addition to soliciting written comments, CEBS provided an opportunity for industry experts nominated by the CEBS Consultative Panel to provide further input, at a special meeting with CEBS experts.

3. This paper presents a summary of the key points arising from the second round of consultation and the changes made to address them. Although the second round of consultation was intended to cover only new sections of the consultation paper, comments on other parts of the consultation paper were also received and were considered by CEBS. The Annex provides a detailed description of the comments received and CEBS' response to them.

4. Most respondents remained critical of the guidelines, despite CEBS' decision to adopt many of the comments received in the first round of consultation.

5. The final guidelines have adopted a significant number of suggestions put forward in the second round of consultation. However, a gap is likely to remain between the final guidelines and the industry's preferences. In particular, the general criticism that the guidelines are too detailed and should use a 'principles-based' approach instead of a 'rule-based' approach could not be fully accommodated. CEBS considers that the current version of the consultation paper strikes an appropriate balance between general principles and detailed guidelines. (See Appendix 1 and 2 of the feedback table for an illustration of this) The assessment of the AMA and IRB approaches is a new area, and a satisfactory degree of convergence can be achieved only by retaining some degree of detail in the guidelines. Over time, as good industry practices emerge, CEBS will be able to rely more on them and to move towards more principles-based guidance.

6. In this feedback document, CEBS has distinguished between:

- General comments relating to the overall concept and content of CP10 revised; and
- Specific comments, in particular on sections 3 and 4 of CP10 revised.

General comments

7. A number of respondents expressed their approval on the following points:

   - CEBS' willingness to engage the industry in dialogue and the detailed feedback CEBS provided on the first round of responses;
   - the incorporation of more flexibility into parts of the paper;
   - the flexibility introduced for institutions which have already completed preliminary applications;
   - the usefulness of certain added features, such as the recognition of the 'comply or explain' concept in the area of internal governance;
   - CEBS' endorsement of the principles-based approach to the treatment of Expected Loss in the AMA that was developed by the Basel Committee's Accord Implementation Group;
   - the clarity that has been brought to the treatment of Purchased Receivables, and in particular the factoring/invoice discounting type transactions;
   - the improvements that have been made to the text in the revised LGD section (especially the section on the discount rate);
   - the easing in the language outlining the data requirements, the allocation of costs, and the estimation of methodologies; and
   - the fact that the principle of proportionality is now considered at several points.

8. However, some respondents continued to express reservations about the objective of the guidelines and their level of detail. These respondents would prefer a top-down, principles-based approach. They argued that the high degree of detail in the paper results in guidelines that are too prescriptive, and that this degree of detail is not necessary to achieve convergence. They raised particular concerns that the guidelines would result in a 'tick box' approach, and that national supervisors would accept only the examples in the guidelines when assessing whether an institution complies with the requirements of the CRD.

9. However, as in the first round of consultation, other respondents explicitly asked for more detailed guidance: for example, on permissible procedures for assessing PDs, setting minimum levels of coverage of a rated portfolio for admission to the implementation plan, setting a uniform indicator for significant risk transfer, defining an appropriate margin of conservatism in benchmarking and backtesting, and the treatment of insurance haircuts in the context of operational risk when institutions have a renewal process in place. These suggestions were not limited to associations of small banks.

CEBS reiterates that Article 2 of the Commission Decision of 5 November 2003 establishing the Committee of European Banking Supervisors directs it to "…contribute to the consistent application of Community directives and to the convergence of Member States' supervisory practices throughout the Community." These objectives cannot be achieved exclusively through the use of a principles–based approach, since the high-level nature of principles would make the goal of enhancing a level-playing field difficult to achieve in practice. A mix of high–level principles and more detailed guidelines has therefore been adopted in the guidelines. Examples are not meant to be prescriptive or to lead to a 'tick-box' approach.

10. Some respondents continued to think that some of the provisions in the internal governance section impose impractical restrictions on institutions.

After considering the industry's comments, CEBS has substantially amended the internal governance parts of the guidelines. The 'comply or explain' principle in paragraph 356 explicitly gives the industry the opportunity to convince supervisors of the equivalence of other internal governance approaches chosen. CEBS has taken further account of the comments received and clarified various further paragraphs in the text.

11. A number of respondents continued to ask CEBS to develop a 'qualification certificate' to facilitate communication between the various supervisors.

CEBS has considered this proposal but still believes that the process described under Article 129(2) of the CRD automatically generates a process similar to a 'qualification certificate.' This will be from the outset a common product of the consolidating home supervisor and host supervisors.

12. Some respondents provided general comments on the new sections on credit and operational risk:

- they continued to disagree strongly with the general concept of downturn LGDs;

- they considered the guidelines on securitisation to be too detailed and too prescriptive for this rapidly developing area. They felt that this could result in a box-ticking or auditing approach, and that the use of examples in this context is not supported and could introduce further ambiguity; and

- they thought that the level of detail in the operational risk section is unhelpful, is inconsistent with a principles-based approach, and encourages (if not establishes) superequivalence to the CRD.

CEBS notes that the concept of downturn LGD is explicitly mentioned in the CRD. It must be re-emphasized that CEBS' task, according to the Commission Decision referred to above, is to explain and clarify the CRD in order to promote convergence.

13. A number of respondents criticised the short consultation period for CP10 revised.

CEBS has tried to find the right balance between industry requests that the final guidelines be published as soon as possible and industry requests for enough time to guarantee the highest quality of the comments submitted. In order to give the industry an additional possibility to provide input, CEBS organised the meeting with industry experts mentioned above.

14. Some respondents were concerned about the possible level playing field implications of different interpretations of the 'good faith' clause in paragraph 14a. They wanted CEBS to extend the scope of application of the clause beyond sections 3 and 4.

The 'good faith' clause is intended to apply to cross-border groups as well as to domestic institutions. However, CEBS believes that it is important for all institutions to be incorporated in the pre-application process from the outset. Such early involvement avoids subsequent duplication of effort for all parties involved. In no case can the guidelines delay the implementation of requirements of the CRD itself.

Specific comments

15. Some respondents continued to feel that cross-checking operational risk data against accounting data (paragraphs 442 and 445 of CP10 revised) would not be helpful.

CEBS has already accommodated these concerns by giving paragraph 445 a principles-based and illustrative character. In addition, CEBS has now also revised paragraph 442.

16. Several respondents were concerned that, in addressing national discretion for determining Significant Risk Transfer, CEBS has introduced a number of issues, such as the references to accounting practice, that fail to provide the intended clarity and guidance. They felt that CEBS' proposed guidelines in this regard (quantitative thresholds based on the percentage of losses retained by the originator as a first-loss tranche) may not be consistent with a regulatory framework that applies capital floors to senior exposures, and may result in many securitisation transactions not benefiting from regulatory capital relief.

CEBS has clarified that the accounting rules should not be taken as a reference when it comes to assessing the significance of a risk transfer.

17. Some respondents felt that using the Basel definition of 'equities' (especially capital requirements for indirect holdings and the classification of convertibles as equity exposures) could hamper market developments.

The current wording of the section on equity exposures leaves enough flexibility to avoid hampering market developments. The section on

convertibles has been reworded in such a way that at least the equity part of a convertible could be included in the equity exposure class.

18. A number of respondents thought that the proposed requirements on correlation for AMA models go beyond the CRD, and that the overly conservative standards (illustrated by a correlation higher than 1.0) jeopardise the consistency between supervisory requirements and banks' risk management practices and compromise the incentive to move to AMA.

CEBS has accommodated these comments by modifying paragraph 462a of CP10 revised and by deleting Annex VIII. In general, although CEBS had aimed to provide examples for high-level standards and best practices in the implementation of AMA framework in most of the Annexes of CP10 revised, some of them have been deleted in order to avoid conveying messages that could be misinterpreted. CEBS will continue its dialogue with the industry on the contents of these annexes.

19. Some respondents were concerned that provisions in CP10 revised might inhibit innovation on other risk transfer mechanisms

CEBS has accommodated these concerns by modifying paragraph 462g of CP10 revised.

20. In addition to the specific issues listed above, a number of respondents commented in more detail on other individual paragraphs of CP10 revised.

A considerable number of these specific comments have been accommodated by amendments to the text. However, CEBS does not believe that all of the comments received justified changes in the text. The Annex provides a more detailed overview of how these comments have or have not resulted in changes, and provides a corresponding CEBS commentary.

21. The feed-back table below makes reference to the paragraph numbering used in CP10 revised, which sometimes contained also letters, e.g. paragraphs 187a, 187b, etc. In the final Guidelines the numbering is based on a consecutive numbering only, so in the example above paragraphs 187a and 187b have become paragraphs 190 and 191. Appendix 3 enables a cross-referencing between the paragraphs of CP10 revised and the final Guidelines.

ANNEX: Feedback table on CP10

Draft text CP10	Received Comments	CEBS Analysis	Amended text
Comments on specific paragraphs			
1. Introduction			
1.1 Why issue guidelines and why now?			
Para 14a	Some respondents stated, that although the "good faith clause" was welcomed in principle, the inclusion of the new Section 14 a could mean that full harmonisation is firmly established for the areas covered by the guidelines. Section 14 a would not accept any deviation from the guidelines over time and would contradict the principle of proportionality, for all institutions are subject to the guidelines. Given the repetitions of the CRD provisions within the proposed guidance, the current draft might suggest that the implementation of parts of the Directive itself may be delayed at a national level. In addition the 'good faith' clause may cause a disparity of treatment across the EU. Banks which are already far advanced in their implementation work will be required to do considerable work to comply with Section 2 of the guidelines. We would encourage CEBS to extend the goodwill clause across the entirety of the guidelines.	Paragraph 14a was introduced in the paper to give certain institutions some leeway in the application of the guidelines by the supervisors at the beginning of its implementation. Different applications of the provisions in the guidelines after this transition period are natural due to the proportionality principle and due to the large number of possible but not binding examples on how to comply with certain provisions of the CRD. In no case could the guidelines delay the implementation of parts of the CRD itself Section 2 of the Guidelines refers to the process to be followed when it comes to IRB or AMA (pre-) applications. CEBS thinks it is important, that institutions are incorporated into this process right from the beginning. Such an early involvement avoids for all parties involved – also for the institution – a later duplication of work. However, CEBS has clarified that paragraph 8a and 14a also refer to cross-border groups and/or their subsidiaries	See changed paragraphs 8a and 14a
Para 14b	One respondent suggested to introduce reasonable transition periods be allowed for any changes to the guidelines.	This request will be dealt with in detail when the supervisors have gained experience with the approval and assessment process and will start to actually revise the guidelines	N/R
1.2 What is covered and what is not?			

Para 15a	Several respondents reiterated that although Paragraph 15 clarifies the scope of application of CP10, the question of EU-Non-EU arrangements remains unanswered and needs clarification	Although this may indeed be an area of future work for CEBS, it is too early to incorporate any provisions on this in CP10.	N/R
1.3 Addressees/Scope of application			
Para 23a	One respondent proposed changing the wording 'are free' with 'will refrain from' in the sentence: '*In transposing a Directive, member states are free to impose stricter requirements than those set out in the Directive*', as this harms a uniform implementation of the CRD.	Paragraph 23a reflects the common understanding of CEBS members	N/R
1.4 Contents of the guidelines			
2. Cooperation procedures, approval and post approval process			
	One respondent asked for clarification on what exactly happens if a host supervisor does not accept a preliminary application as part of the home supervisors approach	CP10 does not require a preliminary application as such, although some individual countries may accept or even ask for it. Other countries do not accept preliminary applications at all, due to national legal restrictions. Section 2.2.6. describes how the supervisors will cooperate under these preliminary applications, emphasising the dialogue between supervisors and a leading role for the home supervisor. Any problems encountered during the preliminary application phase should be sorted out in a pragmatic and straightforward fashion.	N/R
2.1. Cooperation procedures between supervisory authorities under Article 129			
2.2. Approval and post – approval process			
2.2.1. Application			
2.2.1.1. Minimum Content			
Para 51	One respondent suggested to rewrite the last bullet and to make it more clear. The text implies, for example, that correlations are capital-relief tools, which is not necessarily so. Furthermore, the text also implies that capital-relief tools can only be applied to expected loss, but they are as relevant (or	Paragraph 51 clearly states that capital relief tools are not restricted to expected loss	N/R

	even more so) for unexpected losses		
Para 53	One comment stated, that this paragraph would intend that all internal documents of the bank shall be made available to supervisors in the course of the acceptance procedure for a rating system. However, it should be sufficient that only those documents are made available which are necessary for assessment of acceptance of the rating system. Internal minutes of meetings and similar documents which are not essential for a judgement on acceptance should not have to be made available to the supervisors. Another respondent raised the point, that the right of each national supervisor to ask for additional documents when assessing an application to use an AMA or IRB approach, or in subsequent examinations or inspections, would be contradictory with art. 129.2 of the Directive as well as with the overall goal of the consultation document.	Once again CEBS stresses that it is not expected that institutions will be asked for the entire documentation they have on their IRB and/or AMA approaches. Still, supervisors should not be unnecessarily restricted in asking for justified additional documentation. CEBS does not see any contradictions here to Art. 129 (2) of the CRD. In the application process the consolidating supervisor could for example ask the local supervisor to assess locally developed models, making it necessary that this supervisor gets the adequate information from the subsidiary on behalf of the consolidating supervisor.	N/R N/R
Para 57	One respondent asked for clarification on the last bullet point but one: 'general information on the institution's IT structure': would the information on the institution's IT-structure refer to the IT related only to ORM-systems or to the global IT organisation of the entity?	Paragraph 57 had already been amended following industry comments on CP10 that clarified that it is only IT related to IRB or AMA approaches	N/R
Para 58	According to several respondents the requirements regarding the "implementation plan" exceed requirements laid out in some member states and it should therefore - In line with the "good faith clause" (Paragraph 14 a) - be clarified that no legal consequences are imposed on those institutions whose IRBA application has already been launched on the basis of national IRBA application regulations.	The way how exactly paragraph 14a is applied lies in the responsibility of each national supervisor, not in the responsibility of CEBS	N/R
Para 58 to 61	One respondent asked for clarification on the following: Application process for partial use. It is our view that only one file should be submitted for the	The introduction of a single application as discussed in section "2. Cooperation procedures, approval and post approval process" of the guidelines relates to the	N/R

	whole institution, including a description of all methods to be used. There should not be additional application files in host countries for those subsidiaries within the group that will adopt a more basic approach.	implementation of Article 129(2) of the CRD and, hence, to the use of IRB or AMA on a group wide basis. Although this may include an application for partial use at the consolidated level, it does not take away the possibility for host supervisors to request an application or information file from a subsidiary that locally intends to use a more basic approach.	
Para 62	According to one respondent this paragraph is too prescriptive and should be reworded. Institutions develop one overall common framework on operational risk which is compliant with the CRD, which can be assessed. The self assessment is in practice performed within each institution vis-à-vis the institution's CRD compliant framework and not vis-à-vis the CRD itself	CEBS doesn't see a contradiction between the point that is raised here and the wording of Paragraph 62	N/R
Para 64	One comment stated that regarding the documentation requirements and self-assessment the combination of documentation requirements arising from the "use test" and those related to the obligation of banks to demonstrate to their supervisors that they meet minimum requirements at the outset and on an ongoing basis poses many challenges for banks. There is therefore a risk in that a "general" request for the documentation contained in Par. 277 and the description of self-assessment contained in Par. 64 could easily devolve to a voluminous, paragraph by paragraph, self-assessment process, unable to differentiate amongst mission-critical elements and less-central aspects.	This is not the intention of the two paragraphs. This concern would typically be addressed in the pre-application phase when it comes to the dialogue between the institution and the supervisor(s)	N//R
2.2.1.2. Language and signatory			
Para 67	Several respondents pointed out, that banks are concerned with the burden and cost of translation that this paragraph could impose. Policies, internal models processes, Systems are numerous and their full documentation can not be gathered in multiple languages for the sake of the comprehensive	Once again CEBS stresses that it is not expected that institutions will be asked for the entire documentation they have on their IRB and/or AMA approaches. Paragraph 67 explicitly stresses a dialogue between the supervisors and the institution emphasising that the other documentation should be in a language or languages agreed between the	N/R

	application file which CEBS refers to. We recommend that no more than 2 languages may be requested for the most basic documents and that only the operational language is used for the more technical processes and their related documentation and procedures. Only summaries and abstracts should be made available in a handily manner.	institution, the consolidation supervisor and the host supervisors.	
2.2.1.3. The starting of the six – month period			
2.2.2. Supervisor's Assessment			
Para 74	According to several respondents the wording of Paragraph 74 allows for the validation process to "include off-site analysis or on-site missions, conducted by their own or external staff." This could lead to potential conflicts of interest, in particular if external staff (as confirmed by regulators) is sourced from consultancy firms.	CEBS has accommodated this comment by changing paragraph 74	See changed paragraph 74
2.2.3. Decision and permission			
Para 80	For two respondents the new version of Paragraph 80 now only demands that "the competent authorities shall do everything within their power to reach a joint decision" on a bank's application. Thus the regulator's obligation to come to a conclusion after six months is called into question – possibly implying that waiver application decision process can go on indefinitely.	This seems to be a misunderstanding. CP10rev still says in Paragraph 80 (which is basically a CRD quote): […] within six months, the competent authorities shall do everything […]	N/R
2.2.4. Change in the consolidating supervisor			
2.2.5. Post - approval process			
2.2.6. Transition period			
3. Supervisor's assessment of the application concerning the minimum requirements of the CRD - Credit Risk			
3.1. Permanent Partial use and roll – out			
Para 98	According to one respondent the minimum level of cover of a rated portfolio for admission to the implementation plan still has to be set. For some portfolios, which are to be defined as non- material business, the permanent use of the Standard	CEBS considered giving detailed guidance on the issues raised in this comment as too prescriptive. Apart from some guidance on the general calculation of the threshold (see paragraph 123) a principle based approach has been chosen here	N/R

	Approach is allowed. It is evident that the two concepts -- the roll-out entry threshold and the nonmaterial business threshold -- are substantially interdependent. First, it is important to clarify what is meant by non- material business; second, it would be opportune to a threshold for the overall portfolio, but not counting the volumes for claims treated in permanent partial use, share exposures, securitizations and assets not strictly of a credit nature, plus a number of thresholds at different levels for different portfolios (possibly set according to country of residence for cross-country exposures). Further, we think it is important to lay down guidelines on possible failure to carry out the roll-out plan. It remains clear that violations can be sanctioned with variable intensity depending on how serious they are, but we think it is important for banks to know, even if only in general, the consequences of such violations.		
3.1.1. Roll – out			
3.1.2. Permanent partial use			
3.2. Use test			
Para 139a	At the meeting with the industry experts on CP10 revised the concern was raised that "measures" could refer to difference in the calculation of correlations. It was therefore suggested to delete this term.	CEBS has accommodated this comment by changing paragraph 139a correspondingly	See changed paragraph 139a
3.3. Methodology and documentation			
3.3.1. Assignment to exposure classes			
3.3.1.1. Retail exposure class			
3.3.1.1.1. Individual persons and SMEs			
Para 155	One respondent asked for clarification whether paragraphs 155 and 158 taken together require banking groups to assign each counterparty to a single category, given the limit of €1 million, which is	This follows immediately from Article 86 (4) a, since the total amount owed by an obligor client or by a group of connected clients is to be calculated by summing all amounts owed to the institution itself and to all other	See changed paragraph 155

	valid both for the level of EU parent institution and for the application of solo requirements?	group members (parent and its subsidiaries). CEBS has tried to clarify this by changing Paragraph 155	
Para 158	Two respondents raised concerns that regarding the aggregation of exposures in § 158, communication by the parent company of the portfolio (corporate or retail) to which a counterparty belongs would not appear to be sufficient to preserve the principle of single rating required for corporate counterparties (regardless, obviously, of whether the subsidiaries are or are not product companies). In particular, when banking groups generally have product companies specializing in leasing, the time required to decide and disburse this kind of finance is very brief, and assessments of creditworthiness are based on different sources of information than are used in the class loan application.	Paragraph 158 is deliberately written in a principle based approach, leaving it up to the institution to prove that the process chosen is compliant with the CRD requirements. If the aggregated exposure exceeds € 1 million, the regulatory capital requirements for the group of connected clients are calculated according to the corporate risk curve. Where a subsidiary of the borrowing group has an exposure of less than 1 million, and this exposure is managed on a retail basis, this exposure may continue to be treated in accordance with the rules for retail exposures but the supervisory formula to be applied to this exposure should be that appropriate for corporates	N/R
3.3.1.1.2. Qualifying revolving retail exposures			
Para 167 and 168	Two respondents were concerned that "The benchmark level is to be the volatility of loss rates for the QRR portfolio relative to the volatility of loss rates for the other retail exposure subclasses." creates a circular reference and is thus impractical in practice. Furthermore, several respondents pointed out that the requirement to measure loss volatility for all three retail classes implies a high iterative workload	CEBS tried to accommodate these comments by changing paragraphs 167 and 168	See changed paragraphs 167 and 168
3.3.1.1.3. Retail exposures secured by real estate collateral			
3.3.1.2. Corporate Exposure class			
3.3.1.2.1. SMEs in the corporate exposure class			
3.3.1.2.2. Specialised Lending			
3.3.1.3. Securitisation exposure class			
3.3.1.3.1. Definition of securitisation exposure class			
Para 187a	For several respondents the list of IRB approaches listed is not exhaustive: Besides RBA and SFA, IAA	CEBS has accommodated this comment by changing this paragraph accordingly	See changed paragraph

	and the fallback approach for unrated liquidity facilities should also be included.		187a
Para 187c	Two respondents proposed clarifying the point made in brackets at the end of sub-paragraph c), suggesting that the phrase below (in bold) be inserted so that it reads: *"(I.e., senior and subordinated debt both default at the same time, and only the liquidation proceeds are distributed unevenly, while with securitisations, the default in respect of* ***individual tranches*** *might occur at different points in time over the lifetime of the transaction.)"*	CEBS has accommodated this comment by changing this paragraph accordingly	See changed Paragraph 187c
Para 187d	Two respondents proposed – to be consistent with the text of the CRD - changing in Annex III 4) the words "direct control over the physical collateral" by "substantial degree of control".	CEBS has accommodated this comment by changing Annex III Part 4 accordingly	See changed Annex III Part 4
3.3.1.3.2. Indicators of significant risk transfer			
Para 187e	One respondent recommended including 'sponsor' within the first sentence of the paragraph. This is because sponsor is a separately defined term within the CRD and sponsors along with originators and third party investors may hold securitisation positions.	CEBS has accommodated this comment by changing this paragraph accordingly	See changed paragraph 187e
Para 187f	Several respondents pointed out, that although it is intended to clarify that an originator who fails to transfer significant credit risk has to "keep the securitised exposures under the retail and corporate exposure class", this is misleading since in principle exposures from every exposure class can be securitised. We therefore would like to suggest stating instead that "the originator will have to calculate riskweighted exposure amounts for the securitised assets according to the rules for the "respective exposure class".	CEBS has accommodated this comment by changing this paragraph accordingly	See changed paragraph 187f
Para 187h to k	One respondent raised the point that para 187 assigns excessive discretion to the national regulatory authorities in assessing the effectiveness of risk transfer. This discretion could lead to a wide	CEBS has tried to accommodate this comment by changing Paragraphs 187h and k and by deleting paragraphs 187i and j	See changed paragraphs 187h to k

	range of differing regulatory practices (and therefore to distortions of the level playing field) ranging from a case-by-case approach by assessing the transaction specific risk transfer to prescription of a "quantitative threshold" based on EL/UL calculations or considerations. CEBS should consider ways to address the potential variation of supervisory practices and bring this part of the guidance more in line with the principles-based approach. According to other comments CEBS should delete the last two sentences of 187h, all of 187i and 187j, and the beginning of 187k up to '…accounting derecognition', since the addition of this guidance would not be helpful and that the only guidance necessary is to state that accounting derecognition is neither a prerequisite for, nor evidence of, significant risk transfer.		
Para 187l and m	For two respondents the quantitative assessment in these paragraphs do not address the issue of transactions where no risk has been transferred from the originator, which we understand to be the purpose of the significant risk transfer requirement. Furthermore, the process envisaged with respect to the determination of significant risk transfer is not risk sensitive and would require a significant amount of regulatory resource. These proposals seem to require supervisors to assess the amount of risk transfer in each transaction at inception and on an ongoing basis. In addition, the assessment of whether the risk transferred is significant must be consistent with a regulatory framework that applies floor levels of capital to senior exposures. The guidance has not captured this - for example, the designation of transfer of "tail end" or "catastrophic" risk (achieved by the sale of AAA rated tranches alone) as 'significant' should be incontrovertible.	If there is no significant risk transfer, then this would not be considered as a securitisation under the prudential securitisation framework. It will therefore be considered as if the exposure was not securitised	N/R

Para 187m	For one respondent the threshold in this Paragraph **(**percentage of losses (EL + UL) retained by the originator) should be made consistent across Europe and discussed thoroughly with the Industry before being set.	As far as a concrete figure for this threshold is concerned no further convergence could be achieved at this stage	N/R
3.3.1.4. Equity exposure class			
Para 187r and s	Several respondents rejected the de facto adoption of the Basel Accord definition of "equity exposures" for the EU is rejected. The definition in Article 86 (5) should be kept instead as it already laid the foundation for national implementation in several member states. A less rigid definition gives flexibility to institutions to establish adequate criteria and processes to delineate between credit and equity exposure. This flexibility reflects the general Pillar II idea of proportionality and gives flexibility to efficiently respond to changes in the market environment. Products with debt- and equity-characteristics (e.g. mezzanine) are an important and dynamic market segment. Therefore, regulatory rules for the categorization of these products need to provide sufficient flexibility to keep up with the development of new products and structures in the market. The inclusion of indirect equity exposures, i.e. "holdings in corporations, partnerships, limited liability companies or other types of enterprise which issue ownership interests and are engaged principally in the business of investing in instruments" is, moreover, unclear. This poses problems particularly under an individual entity-level approach. If, for example, holdings in "financial enterprises" (Art. 4 no. 5 of Directive 2000/12/EC) are not deducted from equity, the holdings of the financial enterprise would have to be treated by the bank in the IRBA within the framework of a "look-through" approach. This should	The definition provided in Article 86(5) of the CRD has not been changed in CP10 revised. However, CEBS has elaborated further on this definition. To grant some flexibility for market developments Paragraph 187 s already emphasises that "This section provides guidance on typical instruments that should usually be included […]" Bearing in mind that less capital is needed if investments are treated according to capital requirements for equity exposures than if investments are treated by deducting the total amount invested from own funds, it is not unduly burdensome to require the inclusion of indirect equity interests into the respective equity exposure. Also in the latter case the required capital is typically lower than the total amount invested. CEBS has tried to clarify that an indirect holding in the form of a subsidiary of a corporate need not be taken into account separately, as far as indirect equity exposures connected to a direct equity exposure are incorporated into calculating the risk-weighted exposure amount for the direct equity exposure	N/R N/R See amended paragraph 187r

	be rejected, as the bank's loss is limited to the amount invested in the financial enterprise. The "look-through approach" would, moreover, constitute an additional "partial consolidation" that is not offset in supervisory terms by any gain in knowledge going beyond group reports.		
Para 187t and u	At the meeting with industry experts a contradiction between paragraph 187t and 187u has been pointed out	CEBS has clarified this by changing paragraph 187t correspondingly	See changed paragraph 187t
Para 187u	Some respondents pointed out that the term "Tier 1 capital" does not appear in Directive 2000/12/EC. Reference should be made instead to the capital components in Article 57 a)-c) of Directive 2000/12/EC. Furthermore, according to a number of respondents the fact that the issuer may defer indefinitely the settlement of the obligation should not automatically classify a product as equity. Classification should be based on a broader analysis of the instrument and not on single features.	The first bullet point has been changed accordingly. The second bullet point reflects the common understanding of the CEBS members	See changed Paragraph 187u
Para 187x	A number of respondents rejected the CEBS's proposal to assign convertible bonds to the equity segment. Since the conversion of the bond into shares/equity is only an option, the exposure should be treated as any bond, as long as the option is not exercised. Only after conversion of the bond into shares would the exposure be assigned to the equity segment.	A convertible bond is to be viewed as a combination of an option and a bond. As far as it represents an option on equities, it is to be treated like other long or short positions in equities. Consequently, the partial exposure arising from the option part forms an off-balance sheet item to be assigned to the equity exposure class. CEBS has tried to clarify this by changing paragraph 187x accordingly.	See amended paragraph. 187x
Para 188 et seq.	Some respondents stated that the criteria governing the use of certain approaches for the treatment of exposures are described adequately in Annex VII, Part 1 No. 15 and that additional criteria ("approach should be chosen according to the general principle of adequacy and proportionality", "choice made by the institution should reflect the size and complexity of exposures as well as the expertise available within	CEBS is not superequivalent to the CRD here. The simple risk weight approach is to be considered as a general fallback solution. However, CEBS has tried to accommodate this comment by changing Paragraphs 188 and 188c	See changed paragraphs 188 and 188c

	the institution") should not be introduced. These criteria are not part of the Pillar I requirements in the CRD and could therefore narrow the leeway given by the CRD, especially with respect to the Simple Risk Weight Approach.		
Para 188c	For two respondents the requirement to integrate the (regulatory) models into the risk management process is too prescriptive and unrealistic as banks will prefer and must be allowed to employ their own internal models to manage risks.	This is a minimum requirement for using internal models for capital requirement purposes according to Annex VII part 4 paragraph 115 of the CRD. CEBS has tried to clarify this accordingly	See amended paragraph 188c
Para 188d	Several respondents stressed that the guidance should not refer to active portfolio-management as a criterion for sufficiently diversified portfolios. Sufficient diversification and active portfolio management are different criteria. Given that the CRD only refers to sufficient diversification, CP10 should refrain from introducing a new, additional criterion.	CEBS has accommodated this comment by deleting the last sentence	See changed Paragraph 188d.
3.3.1.5. Purchased receivables			
Para 188o	One respondent recommended that the guidance make it clear that any concentration limit considered necessary by the firm would be set by the firm, not the supervisor.	CEBS confirms that the understanding of the Paragraph would be the institution to set the limit (subject to supervisory review, however)	N/R
Para 188q	One respondent highlights that the second condition listed in this paragraph might be a problem. The implication of this condition is that the institutions would need to confirm that the underlying obligors (who may not be known) are not their usual customers. By providing invoice discounting it is quite possible that some of the underlying obligors are the institutions customers. However, meeting this condition in practice would be almost impossible, and as such the condition should either be re-drafted or deleted.	CEBS has accommodated this comment by changing paragraph 188q accordingly	See changed paragraph 188q
Para 188t	For two respondents the text is unclear about the seller's default and its link with dilution risk. In paragraph 188t dilution risk refers to the possibility that the potential amount of receivables bought and	Full recourse to the seller in respect of both default risk and dilution risk would allow to treat the exposure instead as a collateralised exposure (Article 87 (2) of the CRD). Consequently, the cases described here are those where	See changed paragraph 188t

	financed by the institution may be reduced on the initiative of the seller. Regarding the examples which are given, ("offsets or allowances rising from return of goods sold, disputes regarding product quality, possible debts of the borrower to a receivables obligor and any payment or promotional discounts offered."), it is important to note that these losses only materialise when the seller is in default. In most cases, when the seller is not in default, recourse exists and the difference between what is due to the bank and what has been received by the institution must be paid back. Actually, the seller's default risk plays a significant role which should be more clearly defined.	an institution has no full recourse to the seller. CEBS has tried to clarify the points made here by changing Paragraph 188t accordingly	
Para 188u	Two respondents regard the proposed pro rata treatment of dilution as overly prescriptive and not reflective of the way dilution risk is addressed in ABCP transactions and therefore recommend deleting this paragraph.	This reflects the common understanding of the CEBS members	N/R
Para 188x	One respondent believes that Dilution risk is commonly reflected in the price and the prescribed CRD EL (i.e. PD*LGD) is therefore an unsuited measure to assess materiality, as it already assumes that the risk is material.	CEBS has tried to accommodate this comment by replacing the regulatory term EL by "expected loss" where appropriate and by deleting paragraph 188x	See changed paragraphs 188w and 188y
3.3.2. Definition of loss and default			
3.3.2.1. Definition of default			
Para 196	A few respondents point out, that in some situations, if a materiality threshold set at national level is used there are a significant number of positions that return to performing status. They ask for clarification whether it is correct to apply the interpretation whereby the bank can use, in calculating its "past due" positions for calibrating PD, a different materiality threshold that factors in an analysis of this "cure rate".	Paragraph 196 states that institutions might take into account other indications for the materiality of past due amounts <u>in addition to</u>, <u>but not as substitute of</u>, the thresholds set by the supervisors. This means that, for example, internal materiality thresholds may be used as indications for the unlikeliness to pay criterion.	N/R
3.3.2.2. Definition of loss			
Para 198	Two respondents suggest as for the concept of	This proposal would require an exercise that goes beyond	N/R

	economic loss, having a table of concordance between CRD and IAS to solve definitional problems and those connected with the actualization rate (IAS uses original rate on the transaction, CRD other rates, such as the risk-free rate).	the scope of CP10	
Para 168 and 199	A few respondents still raise the point, that the definitions of realised loss and loss in LGD are unclear and potentially ambiguous(cf. Para 168). The vague loss definition here remains inconsistent with Para 199 (e.g., do fees or workout costs count towards losses or not?). Moreover, they consider the requirements too granular, especially as regards the data required to calculate economic loss. In this area, there is a reflection of indirect costs in industry practice and that the high level of granularity adds little value. Furthermore, it would be essentially impossible from a technical viewpoint to capture all recovery costs at an entity level. The granularity could in fact lead to an arbitrary inaccurate measurement. The requirements also fail to reflect the development of PDs in relation to LGDs and could act as an obstacle to evolution towards best practices in this fast developing area.	The first comment has been already addressed after the first round of consultation on CP10 (the answer was: "The text of paragraph 199 has been changed and has now indicative character"). However, in order to address industry's concerns further, CEBS has made an explicit reference in paragraph 168 to the loss definition as in paragraph 198 (Paragraph 168 refers to the same concept of loss as paragraph 198, namely to loss as defined in Article 4 section 26 of directive 2000/12/EC).	See changed Paragraphs 168, 198 and 199
3.3.3. Rating systems and risk quantification			
3.3.3.1. Probability of Default (PD)			
3.3.3.2. Loss Given Default (LGD)			
Para 219a and 239a	One respondent was concerned, that although apparently CEBS's intention was to incorporate the Basel Downturn LGD guidance in CP10, the selective approach employed (introducing some aspects of the guidance but leaving out some other key ones) has brought CP10 closer to the view, already discarded in the original Basel Committee guidance, that a positive correlation between default rates and recovery rates exists for every portfolio in every economic situation.	a) This is not the case. Paragraph 219 clearly states that "… cases where future recovery rates are expected to be independent of future default rates, there is no supervisory expectation that the forward looking forecasts of recovery rates embedded in LGD paramenters will differ from those expected during more neutral conditions". To make this clearer a link to paragraph 239a has been set	a) see changed paragraph 239a

	Several other respondents state that the clear statement of the Basel Committee's „Guidance on Paragraph 468 of the Framework Document" (Section 115, p. 10) in favour of banks: "No material adverse dependencies between default rates and recovery rates have been identified through analysis ..., the LGD estimates may be based on long-run default-weighted averages of observed loss rates or they may be derived from forecasts that do not involve stressing appropriate risk drivers" should be included.	b) CEBS does not contradict the first part of the quoted sentence in the guidelines, the first part of the second sentence is already included in CP10. However, since CEBS does not object to section 115 of the quoted Basel paper it has inserted this passage into paragraph 239a	b) see changed paragraph 239a
Para 232	Two respondents point out, that to incorporate the results of incomplete workouts in LGD estimates makes little sense in particular for workouts with binary payments, e.g., the liquidation of mortgage loans.	Para 232 leaves it open for institutions to demonstrate that the incomplete workouts in this case are not relevant and that the exclusion of those incomplete workouts does not lead to an underestimation of the LGD. However, in other cases information from incomplete workout could be relevant for estimating LGD, e.g. if for recent incomplete workouts recovery cash flows have a lower level or occur later than observed during typical workout periods in the past	N/R
Para 237	Two respondents think the statement "Use of market prices for defaulted exposures for LGD estimation in case of scarce internal loss data" could enforce the use of likely unrelated information – which would be unacceptable. Although the wording has been improved in the revised paper this is still critical as there remains a risk of conservative misinterpretation at the national level.	CEBS thinks it has already sufficiently accommodated this comment by changing paragraph 237 ("relevant" external information).	N/R
Para 239a	One respondent points out that identifying appropriate downturn conditions for the entire portfolio on the basis of internal empirical data is highly unrealistic. Even more unrealistic is identifying downturn conditions for each supervisory asset class and each jurisdiction since the number of defaults and recovery proceeds for several asset classes/jurisdictions is very small.	a) Paragraph 239a reflects the common understanding of CEBS members	a)N/R

	Some respondents think, that statements like "While institutions are building better data sets and developing more experience in estimating downturn LGDs, supervisors may choose to direct them to focus their efforts on types of exposures for which they believe the downturn effect is of special concern." (in Paragraph 239a) open the door to regulatory arbitrariness. Finally, for two respondents the requirements of 239a (1) "Identifying appropriate downturn conditions for each supervisory exposure class within each jurisdiction" could be interpreted as going beyond the referred CRD paragraphs (Annex VII; Part 4; 73,74). These requirements on data availability (i.e. for each supervisory exposure class within each jurisdiction) not only will cause severe practicality issues but also exceed those included in national guidance already proposed by several jurisdictions.	b) this statement has been introduced to give institutions especially at the beginning of the implementation of the CRD the possibility to agree with their supervisors on feasible solutions on how to estimate Downturn LGDs. Paragraph 239a has been changed to make this clearer c) This requirement should be well know as it is already stated in Principle 1 (a) of the Basel Committees "Guidance on Paragraph 468 of the Framework Document". It does not go beyond CRD requirements but merely provides clarification on how to identify downturn conditions.	b) see changed paragraph 239a c) N/R
Para 239c	Two respondents would like to ask CEBS to include explicit wording to the effect that the use of non-downturn LGDs in a firm's internal management processes will not, in itself, be regarded as breaching the use test.	The relevant details for use test are already described in paragraphs 129, 133 and 136.	N/R
Para 239e	For several respondents, although the text tries to clarify the definition of LGD versus ELBE on defaulted assets, this still remains very confusing. CEBS should therefore **be more** explicit on the calculation of LGDs and RWAs on defaulted assets	The aim of paragraph 239e) was not to elaborate on the BEEL itself but to clarify the difference between downturn LGD and BEEL. CEBS had no mandate to deal with the estimation of the BEEL itself. Accordingly, CP10rev. contains nothing about this issue.	N/R
3.3.3.3. Conversion Factors			
Para 245ff.	According to several respondents by continuing to include a reference to undrawn amounts in the definition of CFs, CEBS effectively removes all potential for applying alternative EAD models. While the Directive is flexible on this issue, CEBS should not seek to continue to impose unintended additional	Paragraphs 245ff. are based on the definition of the CRD which makes explicit reference to the undrawn amount in this respect. However, Paragraph 250 states: "This list [of four different approaches] is not meant to be exhaustive and does not preclude any other approach. Institutions are encouraged to develop approaches that best fit their	N/R

	restrictive requirements.	specific approaches"	
Para 251 to 253	For two respondents the requirement to adopt a 1 year period for the fixed horizon or cohort period when assessing CFs is super equivalent to CRD. This is compounded by the requirement that no other period may be used unless it can be shown to be more conservative than a 1 year period. It is also inconsistent with Para 143, requiring that "parameter estimates and modelling should be as accurate as possible" and with Para 242 which states the "CF, even more than PD and LGD, depends on how the relationship between institution and client evolves in adverse circumstances…" which implicitly recognises that in the assessment of CFs, banks should recognise the impact of their policy and processes around managing problem customers.	The CRD defines in in Art. 4 (25) the probability of default of an obligor with respect to a one year period, and Art. 4 (29) the EL as *"the ratio of the amount expected to be lost on an exposure .. over a one year period to the amount outstanding at default"* . As the CF is used to determine the exposure value it seems obvious to use a time horizon of one year (para. 251). However, paragraphs 252 (for the cohort approach) and 254 (for the fixed horizon approach) allow for divergence from this requirement if another time horizon is more accurate and more conservative. Nevertheless, it should be kept in mind that the CF estimates need to be appropriate for any case of default, independent of the date of default within a year. This is a consequence of estimating PDs from of one-year-default rates (i.e. without including any information of the date of default within a year	N/R
Para 254	For two respondents the momentum approach should not only be viewed as a "transitory solution". Instead they request recognition of proportionality, whereby for certain portfolios this may be considered a longer term solution.	Paragraph 254 reflects the common understanding of CEBS members	N/R
Para 257 to 261	One respondent doesn't understand why for short-terms letters arising from the movement of goods, which are similar to guaranties given by the bank, it is not possible to use supervisory conversion factor on a permanent basis if the bank is in an A-IRB approach for the other products. This respondent asks CEBS to permit the credit institution to apply the same treatment for short-terms letters arising from the movement of goods as the one applied to guaranties given by the banks, that is to say, to use supervisory CF	CEBS has tried to accommodate this comment by changing paragraph 261	See changed paragraph 261
Para 261	According to several respondents the attempt to accommodate aval products in Paragraph 261 fails as no clear statement is made about what "undrawn" means for guarantees.	Avals may take various forms. They may be guarantees having the character of credit substitutes (full risk items) or may be indemnities (e.g. tender bonds) and as such medium risk items according to Annex II. The question what undrawn amount means for guarantees is only	N/R

		relevant when an institution is to use its own estimates of CF. It appears to be hard to answer indeed in particular in the case of tender bonds. It may be preferable to address the underlying problem by using a narrow interpretation of Annex VII part 3 para. 11, i.e. by allowing the use of supervisory CFs for such items. However, this had not been agreed in the past. Instead a compromise was struck within CEBS allowing CF estimates for all exposures that are not full risk items. When the use of own estimates of CF is permitted, institutions will at the same time be prevented from using supervisory CFs for those types of exposures.	
3.3.4. Quality of internal documentation			
Para 277	A few respondents still think that paragraph 277 lists numerous documentation requirements without differentiating between rating development and parameter calibrations. The text appears to refer only to PD ratings and is not appropriate as a requirement for LGD/CF calibrations/modelling. This paragraph is easily misinterpreted, potentially causing supervisors to ask for the impossible, i.e. a "CF rating system" or "LGD model output calibrated to default probabilities".	As already stated in the feed-back table to CP10 these principles apply to all parameters. However, CEBS tried to clarify this by amending the seventh bullet point of section 2 of paragraph 277	See changed paragraph 277
3.3.5. External vendor models			
3.4. Data			
3.4.1. Data accuracy, completeness and appropriateness			
3.4.2. Data quality standards and consistency with accounting data			
Para 306	According to a number of respondents this paragraph states that data quality could be reviewed by replicating the preparation of data and model output based on a sample of data. The data sample as well as the review process could then be audited by the supervisor. This process could mean unnecessary duplication of data preparation (original and sample data has to be prepared; the later is checked by the supervisor). No duplicate data preparation should be	Paragraph 306 only says that this could be done on a sample basis, so the institution is free only to work with the complete data set for the purposes of this paragraph	N/R

	required for supervisory review purposes.		
3.4.3. Representativeness of data used for model development and validation			
Para 312	This paragraph states that institutions should demonstrate the comparability of data sets by means of analyses of the population of exposures. For a number of respondents this requirement raises practicability issues since exposure information is generally not provided with ratings of ECAIs or pools.	The purpose of the paragraph is to prevent the use of external data where no exposure information is available. It is apparently read as if it implied that institutions need to have access to a detailed breakdown of the population of exposures. This would be indeed difficult to achieve, e.g. when default rates associated with external rating grades (as permitted under Annex VII Part 4 paragraph 64 of the CRD) are to be used for estimating PDs. Therefore, CEBS has given a clarification on this.	See changed paragraph 312
Para 312	One respondent thinks that Representativeness and/or comparability analysis require **all** key characteristics to be similar. Suggested criteria comprise distribution of the population according to the key characteristics and the level and range of these key characteristics. This is **impractical** as not every single driver can be representative in a development or test sample. The added sentence "Although it is unrealistic to expect a perfect match in every case, the institution should nevertheless ensure that the distributions are reasonably close" is insufficient as the wrong key message ("to require all key characteristics to be similar") remains.	It should be acknowledged that not every single driver could be representative in a development or test sample. Paragraph 312 has been changed accordingly	See changed paragraph 312
3.4.4. Data sources and definition of default			
3.5. Quantitative and qualitative validation and its assessment			
3.5.1. High level principles on validation			
3.5.2. Validation tools: Benchmarking and Backtesting			
Para 337	Paragraph 337 continues to demand that "In cases where lack of data (internal or external data) prevents the proper use of benchmarking and/or backtesting, institutions should apply an appropriate (instead of "higher") margin of conservatism in their estimations." For a number of respondents this leaves the definition and measurement of "appropriate margin" entirely open to regulatory arbitrariness.	The current Paragraph 337 represents the common understanding of CEBS. Appropriateness refers here to the provisions of Annex VII part 4 para. 54 of directive 2000/12/EC: "a margin of conservatism that is related to the expected range of estimation errors". However, this does not replace the CRD provision "Where methods and data are less satisfactory and the expected range of errors is larger, the margin of conservatism shall be larger"	N/R

Para 340	Several respondents point out that there is an inconsistency between specific guidelines set out in Paragraph 340 and more general principle guidance (principle 5, Paragraph 333): Paragraph 340 states that institutions should take action if internal validation thresholds (i.e. derived from confidence intervals) are exceeded; thus, Paragraph 340 could be interpreted as "hard" thresholds for backtesting. Principle 5 comprises both quantitative and qualitative elements for validation. This is stressed in the context of benchmarking and low default portfolios. Thus, "hard" thresholds for backtesting or benchmarking results (as set in Paragraph 340) contradict principle 5.	The third bullet point of paragraph 340 only gives an example for what could trigger remedial actions. The important thing is that there is a process in place that is clearly defined. So CEBS sees no contradiction at all in this point. However, for clarification that this is an example, paragraph 340 has been changed	See changed paragraph 340
3.5.3. Low – default portfolios			
Para 349 and 351	One respondent thinks that the present Consultation Paper merely lists the disclosure criteria. Permissible procedures for assessing PD are not included. More detailed information for orientation of supervisors and banks should be available here, because otherwise primarily subjective criteria of the relevant supervisory authority would be decisive for acceptance of a method. Also in case of low-default portfolios admissible procedures for assessing PD should be listed. It is not sufficient to refer to "adequate margins of conservatism" (item 349) or to the requirement of "use-tests" (item 351). If no admissible methods of validation and estimation are stated, bank groups operating in several Member States run the risk that a method is accepted in one country but not in another, the foregoing being subject to the proviso that the guidelines formulated by CEBS have the character of a recommendation and must not be binding minimum requirements.	CEBS has deliberately chosen a principle-based approach in this respect in order to avoid too much prescriptiveness at this point	N/R

Para 352	The unchanged Paragraph 352 requires that "limitations in the dataset should not exempt institutions from performing a quantitative validation in low default portfolios". For some respondents this is a contradiction in terms as a lack of data will not allow useful quantitative validation; the paragraph will thus create unnecessary work. Instead we suggest CEBS include reference to supervisory expectations around the amount and relative importance of such quantitative validation techniques in low default portfolio scenarios, where more emphasis and weight is likely to be put on the more qualitative validation methods.	CEBS recognises that there may be problems with quantitative validation based on internal data, but approximation techniques could be applied and external data used (e.g. benchmarking). Also in the first bullet point after para 333 "where outcomes analysis is less reliable" this issue has been addressed. However, to give an example on this paragraph 352 has been amended accordingly	See changed paragraph 352
3.6. Internal governance			
Para 360 and 364	A number of respondents think it should be clarified that for small institutions an adequate control process is sufficient and no separate organizational unit is required. Similarly, two respondents are still concerned that the CEBS guidelines on the measure of independence go beyond the requirements intended in the CRD. The proposed guidelines still ask for a split between an institution's Credit Risk Control Unit and Credit Risk Control function. This is not backed by CRD. Even for large institutions, such independence cannot be achieved due to scarcity of skilled staff in general.	The important distinction is the distinction between functions and an organisational unit. CEBS has focused on the functions. The two functions distinguished (but explicitly allowed to coexist in the same unit) are model review and model development (see second sentence of paragraph 363). This obviously does not require to split between CRCU and Credit Risk Control function, as already clarified by the last sentence of paragraph 363. For any other solution chosen, according to Paragraph 356 the institution has under the "comply or explain" approach the possibility to convince the supervisor(s) that this approach is compliant with the supervisor's requirements	N/R
3.6.1. Role of the management body and senior management			
Para 365	See industry comment on paragraph 469	This paragraph has been changed to maintain consistency between the IRB and AMA parts on internal governance	See changed paragraph 365
Para 368	See industry comment on paragraph 473	This paragraph has been changed to maintain consistency between the IRB and AMA parts on internal governance	See changed paragraph 368
Para 364 and 370	CEBS should remove the double reference to "audit" in the two paragraphs to refer instead to "another comparable independent unit".	CEBS is using the language of the CRD here and has made paragraphs 364 and 370 consistent	see changed paragraph 370
3.6.2. Independent Credit Risk Control Unit			
Para 385	Paragraph 385 says: "the head of the control function should be subordinated to a person who has no responsibility for managing the activities that are	CEBS has tried to clarify this by emphasizing that it refers to a person managing the activities […]. "Managing the activities" refers to activities like originating or renewing	See changed paragraph 385

	being monitored and controlled". For a few respondents this technically still implies that risk methodology and validation units may not be part of the risk management function, which is common practice in many institutions.	exposures. Consequently, those activities include the assignment of ratings as far as they are made by the personnel responsible for originating or renewing exposures. CEBS has tried to clarify this by changing paragraph 385 accordingly. If this explanation shouldn't be sufficient to accommodate the concerns of the industry here, according to Paragraph 356 the institution still has under the "comply or explain" approach the possibility to convince the supervisor(s) that this approach sufficiently deals with the risks the supervisor's requirements are trying to cover. "	
3.6.3. Role of Internal Audit			
3.6.4. Independence/conflict of interests in rating assignment			
3.6.5. Reliance on the work of external auditors in the review process			
Para 417	In case of partial use TSA and BIA institutions are supposed to meet the TSA qualifying criteria for all business lines. A few respondents argues that it follows from this that BIA business lines will also have to be subject to complex standards. This contradicts the idea of a partial approach, since a bank will only opt for partial use for gross income segmentation reasons only. They therefore believe that the qualitative requirements of each approach should also be applied to the corresponding business lines, i.e. compliance with BIA requirements must be sufficient for BIA business lines.	CEBS accommodated this comment in the following way: 1) In terms of capital calculation, on a legal entity basis, it makes no sense to use "BIA" and "TSA for certain business lines" at the same time. The only case of a possible combination of TSA and BIA is where certain branches would use the BIA. This combined use is "not acceptable", meaning (as already correctly stated in § 413) that CEBS does accept that the branch uses BIA at the local level (for instance, for internal information purposes), but not that the result of this local BIA-calculation is added to the results of the TSA calculation for the rest of the business for determining the overall solo capital requirement. The branch has to report the necessary TSA figures to the main office. On the other side, credit institution adopting an AMA at solo level may benefit of BIA figures taken from branches or TSA/ASA figures taken from branches or business lines when they compute their overall solo capital requirement during the (solo) roll out period. 2) Concerning the qualifying criteria, Paragraph 417 has to be read as an overall requirement for the whole institution,	See changed Paragraph 417 and 417a

		but this does not mean that every domestic or foreign branch separately taken has to meet all those requirements at its own level. In order to make this concept clearer, Par. 417 has been reworded; in such a context the faculty, limited by Art 105 (4) to AMA credit institutions at consolidated level, has been interpreted as applicable in a more general context (AMA institutions at solo level and TSA/ASA credit institutions at consolidated and solo levels)	
Para 418	Two respondents asked for clarification whether, in the event that a bank or group elects an AMA approach but this approach is not adopted by one of its units or BLs, it is possible to include also the data of the unit/BL in determining the capital requirement under the AMA, even if the unit/BL does not satisfy the requirements for the advanced method. Confirmation was sought, that in some cases a firm must only meet AMA requirements at a group level	Only the units/BLs which satisfy the AMA requirements are allowed to contribute to the AMA consolidated capital requirement (for example by providing data) and, according to Par. 464. to benefit of the allocated capital. The units that do not satisfy AMA requirements should calculate their solo capital according to BIA and/or TSA This figure is also the contribution to the consolidated capital charge (building block method)	See changed Paragraphs 417 and 417a
Para 426	One respondent asked for publication of clear and definitive rules on the definition of "relevant indicator", because this respondent considered it excessively costly for such an indicator to be used only for the determination of the TSA/BIA capital requirement. It is held (aligning with the IAS definition) that this indicator should coincide with gross income calculated for the financial statement. Another problem for this respondent relates to the method for calculating risk on solo basis. In general, for TSA applied at group level banks proceed to determine the opening per BL of the "contribution to the consolidated" of individual entities constituting the group (and within the consolidation perimeter). What is needed, therefore, is to define a methodology such that, in the event of an additional request to calculate a capital requirement on a solo basis, one can start from the opening on the amount of the "contribution to the consolidated" result,	This argument comes too late in the process to take account of it in CP10. CEBS is exploring other ways of discussing the problems raised.	N/R

	supplementing the amounts relative to intragroup items within BLs using a standard methodology. This methodology would be applied only if the bank considers it appropriate.		
Para 429	A number of respondents raised the following point: According to Appendix X, part 4, paragraph 2 of the CRD, national authorities should be able to impose additional requirements for partial use of an AMA (minimum threshold upon introduction and obligation for complete "roll out") on a case-by-case basis. However, Paragraph 429 expresses the expectation that additional requirements are to be imposed in most cases. The CRD provides for permanent partial use as the typical case, even for material units. Consequently, the CEBS proposal cancels out the purpose of the CRD, is not covered by the CEBS mandate and should be dropped.	CEBS reiterates that this paragraph is making reference to a national discretion that all supervisory authorities want to use in the way described in this paragraph. The authorities are therefore exercising their right to impose stricter requirements than the ones listed in the CRD and make this public via CP10.	N/R
Para 430	One respondent asked for the introduction of a difference between a permanent and a temporarily partial use in the roll-out policy, as the phrasing here implies that the roll-out plan will only be completed when all subsidiaries have implemented AMA	This is not the intended meaning of the paragraph. CEBS thinks, that this is stated clearly enough	N/R
4.3.1. Roll-out			
Para 437	Providing examples brings more drawbacks than benefits. Therefore they should be deleted	This paragraph has already been amended to emphasise the non – binding and exhaustive nature of the examples	N/R
4.3.3. Data			
Para 442 and 445	A number of respondents suggest changing the sentence in §442 2nd bullet point to "a review of the Systems by which the institution ensures data quality standards" or to drop the paragraph completely. Although cross-checking against material accounting is cited as an example of activity aiming to improve the data quality standards, in § 442 regulators set as a minimum standard for internal audit to review the cross-checking against accounts. This effectively turns the example into a requirement. It should remain an example	CEBS accommodated this comment by changing Paragraph 442	See changed paragraph 442

Para 445	Two respondents note that Para 445 still requires cross checking of loss data to accounting data and to explain material divergences. They believe this is a requirement to reconcile data to the general ledger but that it is impossible for a number of reasons. Reconciliation to the general ledger is not always an appropriate tool and as such is unlikely to be carried out, so the requirement in the last bullet of Para 445 should be removed.	The level of prescription of the old paragraph 445 was extensively reduced in CP10 revised: in particular the term "reconciliation" was substituted with "cross checking", the "cross checking activity" was made referred just to "material" accounting data. Finally the four bullet points of Par. 454 were transformed in examples. In light of that, the concern of the industry does not seem to be justified.	N/R
Para 448	For a number of respondents the requirements of Paragraph 448 regarding data documentation are inappropriate. Database descriptions und statements of IT system weaknesses do not contain any additional information about the accuracy of the data used. Therefore, the requirements regarding database descriptions and statements of weaknesses should be dropped or streamlined into some high-level principles.	This paragraph reflects the common understanding of the CEBS members	N/R
Para 449a	Two respondents pointed out that it is inappropriate for CEBS to describe AMA approaches that have "begun to gain broad acceptance" because this could detract from the flexible nature of the AMA and lead to premature and forced convergence of industry practice. Since the principles set forth are closely related to the LDA and scenario based (SBA) approaches, they could discourage the development of other methodologies. Furthermore, they present a narrower view than is found in the CRD. CEBS should either broaden this section to make it very general or remove it altogether. One suggestion to broaden it would be rewording of the last sentence to: *"….. be applicable to any AMA approach, either existing or yet to be developed."*	CEBS has accommodated this comment by changing Para 449a accordingly	See changed paragraph 449a
Para 449b	Two respondents recommend that this paragraph	CEBS has accommodated this comment by changing Para	See changed

	should emphasise that examples are offered, but others not mentioned in the text could be equally valid. As some of the definitions in 456 are new and not used by industry we recommend the rewording of this paragraph: *"… understanding among competent authorities and examples of the definitions and the interpretation of the most commonly used Operational Risk concepts."*	449b accordingly	Paragraph 449b
Para 450	Two respondents suggested adding 'Cause' as an operational risk class. The word 'etc' should be deleted as this is not an example.	The term class is rather generic to include any kind of category (even a "cause"); however in order to make it clearer the Parapraph has been amended accordingly.	See changed Paragraph 450
Para 450 to 451	One respondent thinks that these two paragraphs should be deleted. Paragraph 451 acknowledges that some terms are used interchangeably – this is itself potentially confusing. Only one term should be used in each case, preferably 'distribution' and 'figure'.	Paragraph 450 is necessary to define a concept frequently used in the following paragraphs and, on the other side, commonly accepted in the practice. The reference to both the terms in par. 451(distribution/estimate and figure/measure) is necessary to link the industry more common concepts (as distribution and figure) with the CRD terminology (estimate and measure)	N/R
Para 453	For two respondents it seems that the model should be applied consistently across the risk classes. This could pose problems for institutions in which the four key elements of the model are applied at different level of granularity (more detailed the qualitative ones and, for obvious reasons, less granular the quantitative ones).	The consistency here should be interpreted in the meaning that classes which are comparable in term of operational risk profile should be addressed by similar models. Adopting different /inconsistent models for classes which have similar op risk profile is not logically acceptable as it could incentive regulatory arbitrage	N/R
4.3.4.1. AMA four elements			
Para 455	Two respondents think that the wording of paragraph 445 is unclear and does not contain any precise requirement and should therefore be deleted or at least be revised to read, "The responsibility for determining how the four elements are weighted and combined rests with the institution." This would also be consistent with the language in para 456.	CEBS has accommodated this comment by changing Para 455 accordingly	See changed Paragraph 455
Para 456b	One respondent suggested to replace "loss events database" by "operational risk data". This is a broader term avoiding implicit suggestion that loss events are directly injected in the capital calculation	CEBS has accommodated this comment by changing Para 456b accordingly	See changed Paragraph 456b

Para 456b to h	Two respondents pointed out, that none of the definitions in 456b to 456h are necessary and should be deleted. Despite CEBS's presumed assumption, these are not descriptions that are recognised by the industry. This will lead to prescription, especially when the proposed definition of a loss event and how to treat it in a model is not based on CRD requirements. Where methodologies cannot be matched to these definitions they are likely to deter the development of alternative approaches. In particular the terms 'rapidly recovered loss event', 'multiple effect losses' and 'near miss event' definitions should be removed. These terms are not used in the CRD and should therefore not be introduced in CEBS guidelines. Also, in the case of the 'rapidly recovered losses, this information is of little use to an OpRisk framework, but is a significant burden to capture; the resources required to capture these losses would be much better deployed in real risk management activities. One respondent states that Paragraphs 456b) - 456h) refer to definitions of different internal data elements, and these definitions are based on terms "loss" and "gain". Without specifying what is meant under these terms (e.g. P/L entry including created/released provisions, on-balance entry, any kind of amount estimated without impact to accountancy) it is not possible to understand well the other definitions either. Example: rapidly recovered loss, provided the loss is on-balance entry on pending account, could be the same as near miss event, provided the loss is P/L entry.	CEBS tried to accommodate this comment by amending Paragraph 456b to h	See changed Paragraphs 456b to h
Para 456g and h	For one respondent the introduction of new terminology at this late date is problematic for several reasons. First, certain of the descriptions used are vague, which could create misinterpretations, and they are used inconsistently	CEBS tried to accommodate these comments by amending Paragraphs 449b, 456g and by deleting Paragraph 456h	See the changes in the respective Paragraphs

	throughout the text. For example, the distinction between the terms "multiple effect losses" and "multiple-business line losses" described in these two paragraphs is not entirely clear. For some banks, the only types of losses that have broader effects are those that either occur over a period of time (i.e. where there are cashflows spread over a period of time - the "multiple time" losses from par 456(f)) and those that affect more than one Business Group. The latter type of loss appears to meet the definition of both "multiple effect loss" and "multiple-business line loss". The rationale for such different specifications should be explained in more detail, possibly through examples that clarify such distinction (without, we hope, increasing prescriptiveness), or the distinction between the two categories of losses should be removed. Moreover, according to this respondent the introduction of new classes that are not part of Basel II could create a significant amount of work for banks that have already classified their loss data. In order to fulfill the new requirements, bank policies for loss reporting and database categorization may need to be changed to satisfy new definitions and data fields. Historical losses would need to be analyzed again, which could create significant additional effort. Introduction of new terms should be avoided at this stage and any definitions should be very clearly labeled as merely indicative for regulators, intended to explain common industry practice. Banks should retain the ultimate decision whether to adopt these definitions or to specify other definitions that they will document to regulators as part of the approval process		
Para 456c and j	One respondent thinks that the term "rapidly recovered loss events" needs to be clarified. The choice of the period is an important one because it	The objective of the guidelines on Rapidly recovered loss events (RRLE) is twofold:	See changed paragraphs 456c and j

	determines whether or not some losses can be treated gross or net in the internal model. For this reason the period should be a choice of the bank even if it can be agreed in principle to flag in the calculation dataset the "rapidly recovered loss events" possibly defined by regulators. For another respondent, although CP10 does not prescribe specific requirements for rapidly recovered losses, it does imply that supervisors may define short time limits for a loss to be considered a "rapidly recovered loss." It is not clear why this requirement should be necessary since the capital holding period has a time horizon of one year. Furthermore, a very short time limit may result in an inordinate amount of work, many reversals, and recording of losses only a tiny percentage of which are real losses. Banks should be able to define their own procedures in this area, subject to a requirement to defend their reasonableness to their primary regulators.	1) providing the banks with the opportunity to not include into the calculation data set the short lived events (i.e the losses completely recovered in a short period). Differently from what stated in one comment, this allows banks not to collect and categorise data on RRLEs. 2) implicitly requiring banks to include into the calculation data sets the not short lived events (among which the losses completely recovered only after such a short period). In order to make these objectives more explicit the text has been reworded, also taking into account of the comments received on the first sentence	
Para 456j	According to the first sentence in Paragraph 456j, losses and recoveries stemming from insurance policies should be recorded separately in the database. Two respondents suggested to rephrase this as follows: "Institutions should be able to separate OR events (e.g. loss, recovery) related to existing insurance policies in the calculation data set. The proposed possibility to record net amounts in the case of rapidly recovered loss events is not customary in practice and the advantage of such an approach is unclear. Two other respondents were concerned about the introduction of a supervisory discretion which will create an unlevelled playing field, and the requirement to collect and categorise information on RRLEs. Industry does not routinely collect such information, is not required to do so and does not	see above	See above

	want to collect data just for the sake of it, at extra expense. According to them, all references to RRLEs should be deleted.		
Para 456k	For two respondents the sentence: "Multiple-effect losses should also be aggregated into a single loss before inclusion in the calculation data set" is overly prescriptive, and does not account for possible situations where other calculation methods could be justified (Le., multiple-effect losses impacting entities related to different business lines in different countries, with different risk profiles; in such cases, frequencies of the losses are perfectly correlated but severities are not necessarily). This sentence could be completed as follows: "Multiple-effect losses should usually be aggregated into a single loss before inclusion in the calculation data set; possible exceptions should be documented by institutions." Two other respondents think that this paragraph should be deleted.	CEBS tried to accommodate these comments by changing Paragraph 456k correspondingly	See changed Paragraph 456k
Para 456l	A number of respondents reject such a requirement, since the development of procedures to detect incidents or near misses is not addressed in the CRD and is thus an additional requirement.	CEBS tried to accommodate this comment by changing paragraph 456l in order to, on one side, highlight the possible value of op risk gain events for management purposes and, on the other side, to give institutions more freedom in treating the op risk gain events (if, obviously, this doesn't lead to an undue reduction of the capital figures)	See changed Paragraph 456l
Para 456n	Several respondents suggest, that if it is not intended to rule out other possibilities, the following example could be amended: Capital figures calculated for a centralised function can be assigned to the affected business lines in a well-documented way. Other respondents propose modifying the sentence: "In any case, the aggregated amounts, and not the pro-rated amounts, should be included in the calculation data set" (which is according to their pont	456 n) first and second bullet points are just examples; other methods, e.g. the ones suggested in the comments, could be used, too. It is not necessary to list all of them. Nevertheless 456 n) second bullet point has been reworded	See changed paragraph 456n

	of view overly prescriptive, and does not account for possible situations where other calculation methods could be justified (Le., multiple-effect losses impacting entities related to different business lines in different countries, with different risk profiles)) as follows: "The aggregated amounts, and not the pro-rated amounts, should usually be included in the calculation data set; possible exceptions should be documented by institutions." Finally, one respondent thinks that this paragraph should be clarified to indicate that central losses included in a "Corporate Center" category do not necessarily need to be allocated or "assigned" to a particular Business Group for AMA purposes (as compared to "management purposes" as specified in para 456n). Furthermore, all examples describe such assignment on a loss-event level. To be inclusive of other methods of assignment, the example could be amended as follows: "Capital figures calculated for a centralized function can be assigned to the affected business lines in a well-documented way."		
Para 456p	Several respondents suggested deleting this paragraph since the content of Paragraph 456 p is purely descriptive and not a precise requirement.	The paragraph is necessary as it raises attention on the threshold issue which is a very important component of the operational risk framework	N/R
Para 456q	Two respondents indicated that the example "for example by linking thresholds to risk tolerance" should be deleted as it implies that risk tolerance is currently set against levels of accepted/unaccepted loss, which is not the case. Two other respondents recommended the deletion of paragraph 456q as a whole, as 456b emphasises it is entirely up to the firm to set loss collection thresholds.	CEBS gives just an example here. Other methods are possible	N/R
Para 456 r	Two respondents proposed deleting the example "for example by making use of appropriate distributions and suitable parameter estimation procedures " as it	CEBS gives just an example here. Other methods are possible	N/R

	implies that historical loss data is used in the data calculation set which is possibly not the case. Two other respondents suggested re-writing the paragraph as: *'Firms must demonstrate that any bias potentially introduced by the level at which a threshold is set is properly recognised and adjusted for.'*		
Para 456 t to v	Too much focus on consortia data could be interpreted as an incentive for institutions to participate to consortia initiatives - such recommendation being not in line with the purpose of the document. This paragraph should be rewritten in a summarized way, stating clearly that participating to consortia initiatives is up to the institutions and not an issue for regulators. We believe that § 456w and 456x, provided they are generalised to all types of external data, would suffice.	The Guidelines contain important messages referring to consortia (see first sentence Par 456 u, for example). The quality of the external data is as important as the quality of the internal data. Paragraphs 456 s-456x address this point	N/R
Para 456v	One respondent noted that the ORX-database does contain significant information on tail events, and thus recommend mentioning this for clarity purposes	CEBS thinks that it would not be appropriate to make reference to any concrete database in this respect	N/R
Para 456u and w	Two respondents think that these two paragraphs implicitly push firms towards using external data provided by consortia, which not all banks want to join. 456w introduces the possibility that public data could also be biased. Additionally 456u introduces a requirement about how institutions that participate in consortia should provide data. This is a matter for the consortia, not regulators, to provide guidance on. These respondents feel that this paragraph improperly prescribes what the 'right' external data is and recommend the deletion of Paragraphs 456u and 456w.	see CEBS analysis on paragraphs 456t to v	N/R
Para 456x	One respondent found this wording too prescriptive as 'size' is not the first word "where" is replaced by "in those cases where"., and asked for a rewording	This paragraph reflects the common understanding of CEBS members	N/R

	that is more principle-based. This respondent also pointed to the fact that may not be best proxy to adjust the scaling of the data, and thus request that reference to any specific scaling factor is deleted. Every organization must define how it will scale data, and convince the appropriate regulators of the appropriateness of it scaling methodology.		
Para 456z	Two respondents pointed out that the scenario analysis is normally used for obtaining figures for tail events; the intention in Paragraph 456 z seems to be establishing scenarios for "normal" events. This interpretation is at odds with the basic intention of scenario analysis, which is for scenarios to replace missing data points in the tails. This point should therefore be deleted. Another respondent suggested amending the second sentence of para 456z to "In certain approaches, scenarios may be used to provide information on the institution's overall operational risk exposure." Because para 456z could be inferred to require that firms need to establish scenarios for "normal" events as good practice. Many firms have chosen to use scenarios to supplement loss data to ensure complete coverage of risks. However, other firms use scenarios to populate the whole of the loss distribution.	CEBS has tried to accommodate these comments by taking over one of the industry proposals	See changed paragraph 456z
Para 457	A number of respondents asked for confirmation that the term "repeatability" should be clarified to refer to the process and not the outcome of the scenario. By their nature, scenarios are subjective. Thus, it is doubtful that two people (or two groups of people) would reach the same exact conclusion given the same set of data. It should be clarified that "repeatability" refers to the process to estimate scenario parameters, rather than the outcomes of scenarios. In general, the paragraphs on scenarios should be written more flexibly so they do not imply	Paragraph 457 already stresses that it is the repeatability of the process	N/R

	any one given approach to scenario generation.		
Para 457 a	A number of respondents pointed out that it would not be possible to prove the granularity or granularity assumptions regarding the number of scenarios in a statistical analysis. Paragraph 457 a should therefore be deleted. Two other respondents found it sufficient to change the paragraph as follows: "Institutions should be able to explain the rationale behind the level at which scenarios are studied and/or the units in which they are studied."	CEBS accommodated these comments by taking over one of the industry proposals	See changed paragraph 457a
Para 457b and c	For the sake of consistency according to some respondents "model" should be replaced by "System" in these two paragraphs - which is in line with prescriptions in §457d. Two respondents pointed out that the earlier part of the paragraph seems to push firms to use Key Risk Indicators (KRIs), as opposed to self assessment with a subsequent qualitative adjustment being made to the model. In live use by firms BE & ICFs are qualitative modifications to the quantitative output of a model. These modifications should not be prescribed by regulators.	CEBS accommodated this comment by replacing "model" by "system" It is not the intention of this paragraph to push institutions to use KRIs. This is only one of many other possibilities. CEBS has tried to clarify this by amending paragraph 457b	See changed paragraph 457b and c
Para 457e	One comment at the meeting with industry experts on CP10 revised suggested deleting the last sentence para 457e because it would be too much focused on KRIs.	CEBS has accommodated this comment by deleting the last sentence of Paragraph 457e	See changed paragraph 457e
4.3.4.2. AMA four elements: qualitative inputs			
Para 459	A number of respondents suggest to delete the point " … to be built by specialists …" since this is unclear. Another respondent suggested rewording of this paragraph to *'…..AMA models that use qualitative data should be reviewed by specialists, and used with particular circumspection and care.*	CEBS has tried to accommodate this comment by deleting Paragraph 459	See deleted paragraph

Para 460	Several respondents suggested the removal of the second bullet of 460 as it is impossible to demonstrate.	CEBS has tried to accommodate this comment by amending Paragraph 460 accordingly	See changed paragraph 460
4.3.4.3. Consistency of the risk measurement system			
Para 461c	According to Paragraph 461c, loss events and loss amounts within operational risk classes should be independent and identically distributed. A number of respondents point out, that dependent loss events within a risk class can be modeled by using a negative binomial instead of a Poisson distribution for frequencies as well. The paragraph should therefore be reworded as follows: "Institutions should seek to identify operational risk classes within which loss amounts are independent and identically distributed. Alternatively, institutions may wish to adjust their data for known drivers in order to simplify the modeling process, which needs to be justified." Another respondent notes that given the present depth of time series, the request of i.i.d in each "operational risk class" seems to prescriptive and very difficult to satisfy. Finally, a last respondent suggested to delete this paragraph since it is too focused on the LDA.	CEBS accommodated this comment by changing Paragraph 461c accordingly	See changed paragraph 461c
Para 461e	For one respondent the steps suggested in this paragraph are typically steps applicable to an LDA approach based on historical data. They do not fit steps taken in other approaches, particularly SBA or a hybrid approach. For instance "goodness of fit" diagnostic tools are not well adapted to SBA; however, other methods are chosen to achieve the same goal (for instance comparing historical data with potential loss data). These steps should be removed or, similarly to § 461D, it should be emphasised that the following steps are "intended to be non-binding".	CEBS tried to accommodate this comment by clarifying that the steps are neither exhaustive nor binding	See changed paragraph 461e

Para 461d	One respondent points out, that together with Annex 5, point 1, the provision on stationarity seems too prescriptive and very difficult to satisfy. It could be interpreted as also applied to kurtosis and/or skewness measures. Since the existence of these two measures for OR should not be given for grant, it seems not to be appropriate to ask for their stationarity.	The stationarity should be interpreted as applied just to the data and not to the measures. In any case, these are examples and not requirements	N/R
Para 461c to f	One respondent asked for rewriting this paragraph so that the guidelines require the bank to demonstrate an accurate, sophisticated testing of model inputs and outputs for robustness and soundness, rather than including a list of statistical techniques. In addition, the guidelines presented for modeling techniques are too heavily oriented toward banks that have chosen to adopt an LDA approach. Steps 1-4 as outlined in para 461e are typically steps applicable to an LDA approach based on historical data, and may not be relevant to other approaches, particularly an SBA or a hybrid approach. For instance, "goodness of fit" diagnostic tools are not well adapted to the SBA; however, other methods are chosen to achieve the same goal (e.g., comparing historical data with potential loss data). CEBS should either remove these steps, or clearly emphasize that they are "non-exhaustive and non-binding examples".	These are examples and not requirements	N/R
Para 461 g to h	One respondent stated that the requirement to "evaluate the accuracy of the capital figures" may be hard to satisfy by "traditional" means since there is no standard concept such as backtesting for market risk VaR that could be applied to the op risk capital figure. It should be made clear that banks should be responsible for coming up with their own reasonable evaluation procedures, which they will have to justify to their primary regulators. Similarly, the only bases for "accuracy" are by way of: (i) relevance to historical data (which some banks	CEBS tried to accommodate this comment by deleting the last bullet point of Annex VII	See changed Annex VII

	view as a reflection of chance and not as a risk measure; moreover, it does not necessarily reflect improvements in op risk management or changes in the business which may have occurred since the point in time) and/or (ii) peer comparison (which is problematic because it is not an independent evaluation as all banks may have inaccurate figures in a systematic way).		
Para 461i/j	A number of respondents raised the point that he reason for the introduction of an internal holding period is not explained. This only creates additional complexity. The CRD does not contain any rules whatsoever on this, so that an additional requirement is again being created here. No such supervisory approval of internal calculation methods is justified even under Pillar II. It should therefore be removed.	CEBS had accommodated this comment by deleting paragraphs 461i and j	See deleted paragraphs
Para 461l	A number of respondents think that the recommendation in Paragraph 461l to use a historical observation period longer than five years for low-frequency operational risk classes is not covered by the CRD and therefore suggest deleting Paragraph 461 l. According to another respondent this description is too much focused on an LDA-approach. For this reason we ask to replace the words '<u>may need</u>' by '<u>may benefit from</u>'	In many circumstances more than 5 years are necessary to have sufficient data: as clarified in the examples listed in paragraph 461m, such data are not necessarily actual, but they can be also scenario generated. (see third bullet point) This description does not only hold true for LDA approaches.	N/R N/R
Para 461 q	One respondent recommended combining the standards set out in these two paragraphs in the following way: "In order to generate a regulatory operational risk measure at a soundness standard comparable to a 99.9 percent confidence level, institutions can perform a direct calculation at the 99.9 percent confidence level, or they can calculate an initial measure at a lower confidence level located in the right end of the loss distribution. The institution should be able to demonstrate that the	CEBS tried to accommodate this comment by changing Paragraphs 461p and q	See changed paragraphs 461p and q

	scaling method yields an output that is plausible and reliable. The confidence level used should not necessarily be interpreted as a boundary between the body and the tail of the distribution."		
Para 461q to t	One respondent stated that these paragraphs propose to scale lower quantiles to the 99.9% quantile in case the 99.9% quantile cannot be calculated in a reliable way. How would it then be possible to come up with reliable scaling factors? These paragraphs should be removed. Otherwise there is a risk that a specific model (e.g. EVT) would be imposed in determining the scaling factor.	When data are not sufficient, the calculation of the initial capital figure at a lower quantile than 99.9% allows to gain at least greater stability of the measure. If the calculation had been performed directly at 99.9%, the figure would be, probably as low accurate as the figure at a lower percentile, but much more volatile. Different models than EVT can be used to scale up (see for example first bullet point; also scenario analysis could be performed)	See changed paragraphs 461p and q
4.3.4.4. Expected loss, correlation, insurance and other risk transfer mechanisms			
Para 461v	Two respondents point out that the document does not solve the problem of creating a "bridge" between IAS and CRD. They would welcome some more explicit solution in this regard and ask for a text that clarifies that specific reserves for events that have already occurred will not qualify as allowable only if these events are exceptional. In fact following IAS37 all provisions/specific reserves (whether linked to exceptional events or not) should be recognized if and only if: a) an entity has a present obligation (legal or constructive) as a result of a past event; b) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and c) a reliable estimate can be made of the amount of the obligation. This shows that previsions/specific reserves are by their nature linked to events that have already occurred and that this characteristic should not prevent them to be an EL off-set.	This proposal goes beyond the scope of CP10	N/R
Para 461x	One respondent pointed out that the measurement of	Paragraph 461x simply reflects the CRD provision. In	See newly

	correlations among the so called tail events can be hardly measured given the low data density. Moreover from a quantitative perspective it is to be expected that the loss events in the tail-area are independent from each other by nature. The whole discussion regarding correlations among tail events show that the requirements are beyond reality. They should be removed.	order to make this clearer a new paragraph has been included in the text (see explanation of this paragraph below in comments to 462a)	inserted paragraph 461xa
Para 461y	One respondent suggested changing "built on a set of loss events and loss amounts that are" into "built on a set of loss events and loss amounts **(actual or constructed)** that are"	CEBS accommodated this comment by changing Paragraph 461y accordingly	See changed paragraph 461y
Para 462a	A number of respondents suggested deleting paragraph 462a due to the following reasons: Paragraph 462a calls for the AMA capital charge to be calculated as at least the sum of the individual risk measures. This already very conservative calculation method is only possible, it states, if it can be demonstrated that dependencies of tail events are not underestimated. It can be concluded from this that the existence of dependencies of tail events is regarded as a frequent phenomenon. The consequence of this requirement is that the central idea of reducing risk through diversification is ruled out for the AMA. Such a premise therefore means that AMA modeling cannot produce any more risk-sensitive result than a calculation under the Standardised Approach. This cancels out the effect of the key Basel principle of the "continuum of approaches". Furthermore, according to another respondent the paragraph on correlations has three major flaws: 1) It focuses on specific and rare cases (tail events) of correlations without addressing the majority of cases. 2) It does not account for situations where correlations can be applied with justification. It thus appear contradictory with §461 x and the underlying	The original objective of the last sentence of Par. 462 a has obviously been misunderstood by the industry. In general, Paragraph 462a aims at highlighting the attention of the institutions on the dependencies on the tails rather than on the body of data .: in a nutshell, as the tail is the part of the data that most affects the (individual) capital estimates, the tail dependencies have usually a bigger impact than the body dependencies on the final capital figure. Par. 462a pushes banks to properly address the tail dependencies. Even if in most cases superadditivity between different risk estimates is not expected to occur, especially when estimating the 99.9 % percentile and when risk classes are adequately chosen, in some, probably limited, circumstances it could happen; banks should take care of that. This paragraph should give an idea of the level of quality supervisors would expect as demonstration from banks seeking to use the benefits of correlated risk sources. Merely relying on the general idea that "it is to be expected that the loss events in the tail-area are independent from each other by nature" is not sufficient proof of the low correlation effect. When banks calculate the capital figure as the sum of	See changed paragraph 462a

	Annex X, 3, 11 of the CRD. 3) It implicitly opens the door to the concept of super-additivity (the concept by which correlation factors between risk classes for tail events could be >1), This respondent suggested replacing the last sentence in §462 with the following: "In particular, institutions should ensure that they do not underestimate the dependencies of the tail events when calculating the overall AMA capital charge."	individual risk measures , they are not required to do specific analysis/demonstrations concerning dependencies (this is evident from the CRD provision, but better clarified in the new paragraph added in CP10; see above) On the contrary, if banks introduce a "dependency" mechanism in their data/classes (for example by using the same random generator behind 2 different risk class, thereby introducing a dependency structure) it is expected that they do it with the correct dependency structure. Said that, in order to not create misunderstandings, the last sentence of Paragraph 462a has been deleted	
Para 462c	Whereas one respondent suggested deleting the whole paragraph, a number of other respondents proposed deleting only the words '…. before the modelling phase' since a firm's approach to this issue will be dependent on its particular model. Regulators should not prescribe a particular treatment.	CEBS accommodated this comment by changing Paragraph 462c accordingly. The reason for advocating this methodology (dependency structure introduced before the aggregation phase") is that CEBS prefers risk management and analysis of risk sources instead of indiscriminate number crunching to produce statistical figures. These figures are likely to be very volatile if data is scarce, as many banks recognize.	See changed paragraph 462c
Para 462e	Two respondents suggested to delete Paragraph 462e and to reword Para 462f as follows: *"The soundness of dependency assumptions which have a material impact on the overall AMA measure should be demonstrated …… of stress-tests analyses."*	The focus on stress tests demanded from some respondents is not useful as stress tests might be seen from part of the industry as another form of undeliverable quantitative requirements	N/R
Para 462e-f	One respondent pointed out that greater emphasis should be given on the need for qualitative judgments and reliance on expert analysis in the validation of correlation approaches. In many cases, a pure statistical validation measure will not be possible due to the low number of data points. Therefore, a reasoned judgment may play a role as part of a bank's validation processes. One respondent has developed several principles to guide the validation process (included as Appendix B of their answer) and would recommend that CEBS consider whether it is appropriate to include such	Paragraphs 462e and f express that quantitative forms of validation are not always possible with tail events and that in such cases at least qualitative forms of validation have to be used Many of these principles have already been incorporated in the CRD and CP10.	N/R N/R

	principles as part of CP10 Revised.		
462g to j	One respondent recommended a more flexible and pragmatic approach by regulators: - Restrictions in term of minimum rating of the insurer. This is crucial since in many cases insurance are taken with pools of companies some of which could be rated (or even unrated) less than the prescribed level; - Treatment of the initial and residual term of the insurance policies. The CRD recognises insurance as a sound operational risk mitigants. Given the evolution in this field, both on the banking and insurance side, a flexible supervisory approach is essential. There is however a need for guidance relating to the CRD provision which applies a haircut three months prior to the end of an insurance policy when AMA banks have a clear and well-defined renewal process. This provision is not realistic and banks do not know how to manage it. In the extreme case, and following the proposed logic, it would mean a financial institution would need 20% more capital on December 31 (last day of existing policy) vis-à-vis January 1 (first day of new policy). It would be useful for CEBS to provide reasonable and pragmatic principles on how to deal with these instances. Two other respondents proposed that CEBS should commit to developing reasonable and pragmatic principles to deal with any unintended consequences (such as an increase in capital on the last day of an existing policy) related to the insurance requirements in the CRD. Specifically, the requirement to apply a haircut three months prior to the end of a policy when banks have a clear and well-defined renewal process in place would result in an increase in capital that is not warranted, and CEBS is encouraged to include reasonable principles in line with para 462g of CP10 Revised to address this point.	Given the rather early stage, many aspects of insurance have been left aside in CP10. This doesn't mean they will not be addressed in the near future: among these aspects one of the most important is the haircut three months period.	N/R

	Finally, one comment pointed out, that applying a "similar" level of standards for the recognition of other risk transfer mechanisms as the one for insurance haircuts would hamper alternative business developments	CEBS has accommodated this comment by changing paragraph 462g accordingly	See changed paragraph 462g
Para 462h	One respondent stated argued that this paragraph stated that outsourcing can not be considered as an "other risk transfer mechanism" and asked for clarification whether this means that a bank has to exclude from its calculation data set all the recoveries deriving from SLA with providers (i.e. the losses even if recovered by SLA should be inserted gross of recoveries). It seems to be not acceptable since such a provision would discourage sound SLA policies. This was supported by another respondent.	Recoveries from SLA with outsourcers should be dealt similarly to any other kind of recoveries different from insurance and other risk transfer mechanism (for example it could be considered similar to the rembourse from a employee). In such a case, the recoveries are subject neither to the qualifying criteria nor to the limit of 20% envisaged for insurance (and other risk transfer mechanism). How the losses are included in the calculation data set (that is according to the net losses or to the gross losses and the pertinent recoveries) is up to the bank. As good practice, CEBS expects that: 1) if the net value is used this should be well reasoned 2) institutions have **readily available audit trail and easily accessible data trail** (that is, built-in, data processing ways) to attach subsequent, maybe long-term recoveries (many years after) to a specific loss event, and retrieve them at the push of a button for calculation purposes.	N/R
4.3.4.5. Internal Validation of risk measurement and management processes			
Para 463b	One respondent suggested merging this paragraph with 463e, to read….. *'An institution should have an internal validation process to ensure that elements of its methodology affected by a significant change in its operational risk profile or assumptions are revalidated. The internal validation process should be proportionate and take into account the specific purpose for which the operational risk measurement systems are used.'* Another respondent proposed to rewrite bullet point 5	CEBS thinks it is important to keep the idea of an independent review. This is not reflected in the industry proposal any more CEBS doesn't specify in CP10 which body (Internal Audit	N/R

	to address the situation where the internal validation is performed by internal audit, as the current text then would require another independent group to review the internal review which has already been done by an independent party	or whatever else) has to perform the independent review (see also above the changed Par. 442, first sentence)	
Para 463f	One respondent pointed out that the requirement that "Institutions should ensure that information that is input into the risk measurement systems is as accurate and complete as possible" should be revised to state "….as reasonably practicable." It is not reasonable to expect 100% completeness and accuracy of data, and CEBS should take a pragmatic view to support reasonable and proportionate standards in this area. For this reason two other respondents suggested adding a final clause: *'and as complete as practicable, having regard to its pre-determined cut off levels and the cost and benefits of any such information verification'.* (Many things are possible, but few are practicable)	CEBS accommodated this comment by changing Paragraph 463f accordingly	See changed paragraph 463f
Para 463j	"Paragraph 463 j stipulates that all data above the threshold set must be validated to ensure they are comprehensive, appropriate and accurate." A number of respondents stated that this requirement is hard to understand as it is followed by wording to the effect that banks, after having set low thresholds, are required to validate all loss events exceeding this threshold to be able to use these in a model. However, those losses hardly influence the quantile and therefore the capital measures. This requirement thus merely results in a considerable amount of bureaucracy, which does not positively influence the quality of the capital measure. This should be rephrased in the following way "…only material loss events should be validated…". Two other respondents suggested that the	CEBS tried to accommodate this comment by changing Paragraph 463j	See changed paragraph 463j

	requirement that "all" data above the threshold be validated should rather read "data above the threshold should be subject to proportionate validation, taking into account the impact of the data upon the AMA calculation results." It is assumed that 'constructed' data means external data and recommended that the wording be changed to reflect this. The last sentence should be changed to read 'where external data is used it should be subject to proportionate review and challenge.'		
Para 463 m	Some respondents suggested deleting the term "economic" from these paragraphs since regulator attention should be on regulatory capital.	CEBS accommodated this comment by changing Paragraph 463m accordingly	See changed paragraph 463m
Para 463n	Two respondents suggested deleting this statement, as a methodology cannot be validated until it is built. Model development is an iterative process.	At the development stage means when the model is built for the first time	N/R
Para 463q	A number of respondents stated that for the first time in CP10R KRIs are mentioned (although previously alluded to in Para 457b) and that the reference to KRIs should either be deleted or the word 'might' inserted before the first bullet, to read: *'These might include verifying that:'*	Par. 463 q states that institutions can use a variety of validation techniques, among which also KRI's. As written, the paragraph clearly considers KRI's as an example	N/R
4.3.4.6. Allocation methodology			
Para 464	One respondent stated, that under the assumption that 462a remains of application, a formal allocation may not be required if one calculates the overall capital requirement by summing stand-alone capital requirements. In such cases, the composition of the capital number is itself already an allocation, and formalizing an allocation adds no value.	Regardless of the criteria used to calculate the overall capital figure (stand-alone or not), Annex X, Part 3, para. 30 requires institutions to describe the methodology used for allocating op risk capital between the different entities of the group.	N/R
4.3.5. Internal Governance			
Para 466	A number of respondents pointed out that the word "passively" is misplaced here and should be deleted. Banks actively engage in business that they recognize will generate operational risks; indeed all business entails operational risk of one sort or	CEBS accommodated this comment by changing Paragraph 466 accordingly	See changed paragraph 466

	another.		
Para 469	Two respondents suggested rewording the last two sentences as follows *'The management body should have a general awareness of the AMA framework used by their institution. Senior management may delegate certain tasks but remain responsible for implementing and developing the AMA framework*	CEBS has tried to accommodate this proposal by rephrasing the last sentence of Paragraph 469	See changed Paragraph 469
Para 470	According to one respondent this paragraph should be rephrased to reflect a more realistic view of the role of the management body vis-à-vis the operational risk framework in the following way: "They should have …a good comprehension of the operational risk reports submitted to them and general understanding of how operational risk affects the institution." Two other respondents pointed out that it is not possible for the management body and senior management to have a detailed comprehension of an operational risk framework's associated management reports. The second sentence should be reworded as follows: *'They should have a general understanding of how operational risk affects the institution, of the overall operational risk framework and a detailed comprehension of the operational risk management reports presented to them.'* The last bullet point should be deleted.	CEBS has tried to accommodate this proposal by rephrasing paragraph 470	See changed Paragraph 470
Para 473	For two respondents, though the objective of ensuring that "the overall risk management and measurement processes and Systems remain effective over time" is shared, this paragraph could question the independence of Internal Audit and, to a minor extent, the ORM function. It should therefore rather read: "The operational risk management function and Internal Audit should work, on a ongoing basis, in close cooperation with senior	CEBS has tried to accommodate this proposal by rephrasing paragraph 473	See changed paragraph 473

	management, to ensure that their control procedures and measurement systems are adequate and that the overall risk management and measurement processes and systems remain effective over time." At the very least, it should be clarified that only the "management body" has proper oversight of procedures and systems adopted by Internal Audit.		
Para 474	Two respondents stated that, though the tasks listed in this paragraph are appropriately under the responsibility of senior management, the ORM function should be associated to, and be held partly responsible for these tasks. The paragraph should rather read: "Senior management should ensure, in cooperation with the appropriate level of the ORM function, that the following tasks are being addressed." In addition, these two respondents suggested that there should be some reference to a "phasing in" of this list of tasks, as it is unrealistic to imagine that all of these tasks will be implemented within the remaining 2 year time horizon, particularly the last bullet point. Furthermore, two other respondents suggested that the wording 'before they are introduced' in the 9th bullet point should be deleted, since it introduces a requirement that senior management (which we take to mean those individuals heading a firm's operational risk team) should assess operational risks in new areas before they are introduced is unrealistic in some cases. For instance it is unlikely that such senior management would be involved at the due diligence stage before an acquisition was completed..	CEBS thinks that this is already addressed in the paragraph, since it states that Senior management should ensure that the tasks are being addressed and not that Senior management itself should take care of all these tasks alone. One possibility of doing this is indeed the one listed in the industry proposal	N/R
Para 481	Several respondents suggested deleting the term "economic" from these paragraphs since regulator attention should be on regulatory capital.	Regulatory attention is indeed on regulatory capital, but not exclusively. The regulatory "model" should not be detached from the internal economic capital model.	N/R
Para 482	One respondent argued that Paragraph 482 defines	Both comments have been accommodated by changing	See changed

	processes for the operational risk management function without allowing for these processes to be delegated. A delegation similar to other risk types is to be permitted. Another respondent thinks that it is not yet possible to back test or benchmark the quantification and allocation processes. This sentence should be re-written as: *"(…) Insurance), where sufficient data is available, benchmarking and/or back testing and (…)"*	paragraph 482 accordingly	paragraph 482
Annexes			
Annex III	One respondent proposed to delete section 3 of Annex III (tranched cover), as the examples raise questions of practical implementation. In particular the last sentence does not provide any additional guidance merely highlighting a boundary issue. In regulatory terms a Credit Default Swap (CDS) will always be unfunded. If the CDS is collateralised then the collateral rules will also apply.	This Annex provides examples of boundary issues. Whether or not collateral rules apply is a secondary issue	N/R
Annex IV	One respondent suggested deleting this annex	The list included in Annex IV aims to identify the institutions internal documentation CEBS members consider relevant in the context of the model description. Even if other, different documents could be considered as relevant as the listed one, the list is mainly aimed to ensure higher level playing field in the documentation banks could produce regarding AMA models.	N/R
Annex V	According to one respondent this annex should be removed or, at least, modified as follows in section 2, "Appropriate techniques for the estimation of the parameters": The sentence: "Nevertheless, where the data resuit... not sufficiently large" is overly prescriptive and does not account for specific situations where "Maximum likelihood estimation" cannot be used because the paucity of data and where either the "methods of moments" or the "generalized method of moments" could be appropriate and justified. This sentence should be	CEBS has accommodated this comment by deleting Annex V	See deleted Annex V

	replaced by the following: "Institutions should explain the relevance of the chosen method". A large number of respondents suggested removing Annex V since it is far too prescriptive		
Annex VI	Several respondents suggested deleting this Annex	CEBS has accommodated this comment by deleting Annex VI	See deleted Annex VI
Annex VII	A number of respondents strongly recommended that Annex VII be removed. Specifically, the last bullet point in Annex VII is unrealistic as it presumes that banks have calculated op risk capital many times and are in a position to observe its variability across time. This is not the case at the present as most banks have not begun the parallel run. Assuming the third bullet refers to the statistical error of the VaR as a result of the estimation error of the parameters, this point may prove difficult to implement at this stage depending on the methodology adopted. This is because: (a) it requires banks to have quantified the relationship between VaR and the model parameters that drive the calculated VaR number,and (b) it presumes that banks have used a parameter estimation method that provides standard errors of the parameter estimates. These assumptions can be fulfilled when adopting an LDA approach based on historical data but is far more difficult for any other type of approach. This makes the point too prescriptive and may not be applicable to some of the methodologies employed by some banks. Two other respondents preferred deletion of this Annex, or at least the replacement of the first line with the words: *'The following is a non-exhaustive and non-binding list of elements that may represent good practice of the model output.'*	CEBS tried to accommodate these comments by deleting the last bullet point of Annex VII and to emphasize right at the beginning that only indicative examples are given	See Changed Annex VII
Annex VIII	Several respondents suggested deleting this Annex , whereas two other proposed only deleting the last	CEBS has accommodated this comment by deleting Annex VIII	See deleted Annex VIII

	sentence of para 3, referring to the 'science' of non-subadditivity.		

Appendices I and II

CEBS thinks it has now reached a good balance between a principle-based and a rule-based approach. This holds especially true for the part on Operational Risk. For the purpose of clarifying this CEBS presents below both section 3.3.2.2. (Definition of loss) from the Credit risk part of the Guidelines and an excerpt from section 4.3.4.1. of the Operational risk part. In order to identify easily where the paragraphs describe a principle-based approach the respective parts are set in bold and the examples are framed and in a smaller font:

Appendix 1: CP10 section 3.3.2.2. (Definition of loss)

3.3.2.2. Definition of loss

243. For the purpose of determining minimum capital requirements for credit risk, the CRD defines loss and Loss Given Default (LGD) in Article 4(26) and (27) of the CRD, and dedicates a specific section to the requirements specific to own LGD estimates. The definitions are based on the concept of economic loss (Article 4(26) of the CRD), which includes material discount effects and material direct and indirect costs associated with collecting on the instrument.

Data for economic loss

244. The Loss Given Default (LGD) is the ratio of the loss on an exposure due to the default of a counterparty to the amount outstanding at default (Article 4(27) of the CRD). **The data used to calculate the realised LGD of an exposure (see also the definition provided in paragraph 262 of these guidelines) should include all relevant information.**

This could include, depending on the type of the exposure:

- The outstanding amount of the exposure[1] at the time of default (including principal plus unpaid but capitalised interest and fees).
- Recoveries, including the income and sources of recoveries (e.g., cash flows from sale of collateral and guarantee proceeds or realised income after the sale of defaulted loans).
- Work-out costs, including material direct and indirect costs associated with work-out collection. Such work-out costs could stem from the cost of running the institution's work-out department, the costs of outsourced collection services directly attributable to recoveries such as legal costs, and also an appropriate percentage of other ongoing costs such as corporate overheads.
- As far as needed for calculating material discount effects, the dates and the amounts of the various cash flows that were incurred ('timing of the recovery process').

245. Institutions should collect and store data to assess LGDs, including recovery and work-out costs. This information should be collected at the level of each defaulted exposure or each pool (when necessary in the retail exposure class). Over time, institutions should collect

[1] For the different possibilities for calculating exposure values, see Annex VII, Part 3 of the CRD.

work-out costs at as granular level as possible. **If institutions only have data at an aggregate level, they should develop a proper allocation methodology.**

Use of external data of economic loss

246. The less internal information the institution has for estimating LGDs (also in terms of representativeness of the defaulted portfolio), the more important is the use of external data (including pooled data) and multiple data sources (e.g., the combination of external and internal data) for improving the robustness of LGD parameter estimation. In particular, appropriate external benchmarks, if available, should be considered by the institution. The institution should carefully evaluate all relevant external data and benchmarks, as some data on components of loss are typically country-specific (for example, the potential inability to gain control over collateral depends on national legal frameworks) or institution-specific (for example, collection processes leading to variations in work-out costs, other direct costs, and indirect costs). In other cases, some components of economic loss might not be included in the external data. **The institutions should analyze the loss components of the external data and the comparability of external data with respect to its lending practices and internal processes, and should take into account the results of these analyses during the estimation process**. (See also section 3.4.4. on data sources.)

Discount rate

247. The discount rates used by institutions to incorporate material discount effects into economic loss may vary depending on the respective market, the kind of facility, or the institution's work-out practices for defaulted facilities.

248. The measures of recovery rates used in estimating LGDs should reflect the cost[2] of holding defaulted assets over the workout period, including an appropriate risk premium. When recovery streams are uncertain and involve risk that cannot be diversified away, net present value calculations should reflect the time value of money and an appropriate risk premium for the undiversifiable risk. In establishing appropriate risk premiums for the estimation of LGDs consistent with economic downturn conditions, the institution should focus on the uncertainties in recovery cash flows associated with defaults that arise during an economic downturn. When there is no uncertainty in recovery streams (e.g., recoveries are derived from cash collateral), net present value calculations need only reflect the time value of money, and a risk-free discount rate is appropriate.

249. Measures of recovery rates can be computed in several ways.

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[2] The concept of cost referred to here must be consistent with the concept of economic loss as described in paragraph 198.

For example,

- By discounting the stream of recoveries and the stream of workout costs by a risk-adjusted discount rate which is the sum of the risk-free rate and a spread appropriate for the risk of the recovery and workout cost cash flows,
- By converting the stream of recoveries and the stream of workout costs to certainty-equivalent cash flows[3] and discounting these by the risk-free rate, or
- By a combination of adjustments to the discount rate and adjustments to the streams of recoveries and workout costs that is consistent with this principle.[4]

The process for arriving at a discount rate should be consistent for all exposures of the same kind. Institutions should justify this point carefully, to ensure the absence of any arbitrage caused by manipulating discount factors. Whenever they apply a risk-free rate, they should demonstrate to their supervisors that any remaining risk is covered elsewhere in the calculation.

Allocation of direct and indirect costs

250. Work-out and collection costs should include the costs of running the institution's collection and work-out department, the costs of outsourced services, and an appropriate percentage of other ongoing costs, unless an institution can demonstrate that these costs are not material.

251. **An institution should demonstrate that it collects in its databases all information required to calculate material direct and indirect costs. The cost-allocation process should be based on the same principles and techniques that institutions use in their own cost accounting systems**.

These might include (among others) methods based on broad averages, or statistical methods based on appropriately chosen samples within a population of defaulted obligors. Institutions should demonstrate that the cost-allocation process is sufficiently relevant and rigorous.

Institutions should also define 'materiality' and document the cost elements in a consistent way over time.

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[3] A certainty-equivalent cash flow is defined as the cash payment required to make a risk averse investor indifferent between receiving the cash payment with certainty at the payment date and receiving an asset yielding an uncertain payout whose distribution at the payment date is equal to that of the uncertain cash flow.

[4] An institution may use an 'effective interest rate' as the discount rate in accordance with IAS 39, but in that case it should adjust the stream of net recoveries in a way that is consistent with this principle.

Appendix 2: Excerpt from CP10 section 4.3.4.1. (AMA four elements)

4.3.4.1. AMA four elements

[…]

Loss event identification and classification

528. **Institutions should have a policy that identifies when a loss or an event recorded in the internal loss events database is also to be included in the calculation data set. This policy should provide a consistent treatment of loss data across the institution**. Competent authorities should obtain relevant information from the institution on its policy for loss identification and classification.

529. **Institutions should be able to separate operational risk events (e.g. loss, recovery) related to existing insurance policies and other risk transfer mechanisms in the calculation data set.** Supervisors could allow institutions to not include the "rapidly recovered loss events" in the calculation data set.

530. Multiple time losses should be aggregated into a single loss before inclusion in the calculation data set. Multiple-effect losses should also be aggregated into a single loss before inclusion in the calculation data set; **possible exceptions should be documented by institutions and properly addressed to prevent undue reduction of the capital figures.**

531. The capture of near miss events, while not generally required to be included in the calculation data set, could nevertheless be useful in increasing awareness of the institution's operational risk profile and improving its operational risk management processes. Competent authorities could therefore encourage institutions to develop procedures that allow them to identify incidents or near misses. The capture of the operational risk gain events could also be useful for management purposes. The inclusion of the operational risk gain events in the calculation dataset should be appropriately addressed in order to not determine undue reduction of the capital figures.

532. Annex X, Part 3, Paragraph 17 of the CRD requires institutions to set specific criteria for assigning loss data arising, among other sources, from events in a centralised function or activities that span more than one business line.

The following are general examples of how this could be achieved:

- *Assignment of the entire loss to the business line for which the impact is the greatest or, solely for management purposes, to a centralised function (for example 'Corporate Center').*
- *Proportional assignment of the losses to the affected business lines. In this case, a reference code should be used to label the individual business line loss amounts, so as to identify them for attribution to the originating specific-loss event. In any case, the aggregated amounts, and not the pro-rated amounts, should be included in the calculation data set; possible exceptions should be documented by institutions and properly addressed to prevent undue reduction of the capital figures.*

Minimum loss thresholds

533. Annex X, Part 3, Paragraph 15 of the CRD requires institutions to define appropriate minimum loss thresholds for the collection of internal loss data.

534. **The institution is responsible for defining the threshold for an operational risk class.** This threshold is usually determined by the inherent risk and complexity of the class, as well as by the cost-benefit analysis of collecting the data below the threshold**. Nevertheless, setting the threshold requires accuracy, as it can influence the results of the model considerably.** Competent authorities should pay particular attention to how institutions have set their thresholds**.**

535. **Institutions should be able to provide evidence to competent authorities that the threshold or thresholds selected for the operational risk classes are reasonable (for example by linking thresholds to risk tolerance), do not omit important operational loss event data, and do not adversely impact the credibility and accuracy of the operational risk measures.**

536. Competent authorities should verify that the institution avoids potential biases in the estimation of model parameters, explicitly taking into account the incompleteness of the calculation data set in the model due to the presence of threshold(s) (for example, by making use of appropriate distributions and suitable parameter estimation procedures).

External data

537. Annex X, Part 3, Paragraph 19 of the CRD states that the institution's operational risk measurement system shall use relevant external data, especially when there is reason to believe that the institution is exposed to infrequent, yet potentially severe losses.

538. Consortia initiatives, which are generally set up by institutions, collect data above low thresholds, usually very close to the thresholds established internally by those institutions.

539. Institutions that participate in consortia initiatives should provide data which are classified in a homogeneous manner and contain

information which is comprehensive and reliable. Information obtained from consortia initiatives which have the above-mentioned characteristics can be considered an appropriate external data source for capital calculation purposes, particularly when institutions have limited internal loss data, e.g. on new businesses.

540. Where external data from consortia are insufficient for obtaining information on severe tail events, especially on their causes, public sources could provide useful additional information.

541. **Particular care must be taken when an institution uses only public data to ensure that they are appropriate, unbiased, and relevant to the institution's businesses and operational risk profile.**

542. Differences in the size of institutions or other institution-specific factors should be taken into account when incorporating external data in the measurement system, *for example by making assumptions as to which external loss events are considered relevant and on the degree the data should be scaled or otherwise adjusted.*

Scenario analysis

543. Annex X, Part 3, Paragraph 20 of the CRD requires institutions to use scenario analysis of expert opinion, in conjunction with external data, to evaluate their exposures to high-severity events.

544. The use of scenario analysis is not restricted to evaluating exposures to high-severity events. In certain approaches, scenarios may be used to provide information on the institution's overall operational risk exposure.

545. **In order to generate credible and reliable data, institutions should ensure a high level of repeatability of the process for generating scenario data, through consistent preparation and consistent application of the quantitative and qualitative results.**

546. **Institutions should ensure that the process by which the scenarios are determined is designed to reduce as much as possible subjectivity and biases.** In particular:

- **The assumptions used in the scenarios should be based as much as possible on empirical evidence. Relevant internal and external data available should be used in building the scenario;**
- **In choosing the number of scenario to apply, institutions should be able to explain the rationale behind the level at which scenarios are studied and/or the units in which they are studied;**
- The assumptions for generating scenario analyses and the process by which the scenario is built should be well documented.

Business Environment and Internal Control Factors (BE&ICFs)

547. By their nature, BE&ICFs should be forward-looking and closely aligned with the quality of the institution's control and operating environment. These factors should reflect potential sources of operational risk such as rapid growth, the introduction of new products, employee turnover, and system downtime. BE&ICFs should provide information on how risk is mitigated or magnified by internal and/or external environment, and have to be appropriately captured in the risk measurement system. BE&ICFs can be incorporated into the AMA system in different ways and at different modeling stages. Key Risk indicators are one, but not the only example for BE&ICFs.

548. Annex X, Part 3, Paragraphs 21-23 of the CRD require an institution's firm-wide risk assessment methodology to capture key business environment and internal control factors (BE&ICFs) that can change its operational risk profile. Institutions should document where in their system they use BE&ICF and their rationale for doing so.

549. An institution's risk measurement system should incorporate at least those BE&ICFs that have a significant influence on its operational risk profile. However, when implementing the risk measurement system for the first time, it might not be possible to justify the appropriateness of the sensitivity of risk estimates because of a lack of empirical evidence on the relationship between the BE&ICFs and the operational risk exposure. **In such cases, institutions should at least qualitatively justify the appropriateness of the methods used to incorporate BE&ICFs in their risk measurement system.**

Appendix 3

Correspondence table between the paragraphs of CP10 final and CP10 revised

CP10 revised	CP10 final	CP10 revised	CP10 final	CP10 revised	CP10 final	CP10 revised	CP10 final
1	1	44a	51	97	101	147	151
2	2	45	52	98	102	148	152
3	3	46	53	99	103	149	153
4	4	47	54	100	104	150	154
5	5	48	55	101	105	151	155
6	6	49	56	102	106	152	156
7	7	50	57	103	107	153	157
8	8	51	58	104	108	154	158
8a	9	52a	59	105	109	155	159
9	10	53	60	106	110	156	160
10	11	57	61	107	111	157	161
11	12	58	62	108,109	112	158	162
12	13	59	63	110	113	159	163
13	14	60	64	111	114	160	164
14	15	61	65	112	115	161	165
14a	16	62	66	113	116	162	166
14b	17	63	67	114	117	163	167
15	18	64	68	115	118	164	168
15a	19	65	69	116	119	165	169
16	20	66	70	117	120	166	170
18	21	67	71	118	121	167,168	171
19	22	68	72	119	122	169	172
19a	23	69	73	120	123	170	173
20	24	70	74	121	124	171	174
21	25	71	75	122	125	172	175
22	26	72	76	123	126	173	176
23	27	73	77	124	127	174	177
23a	28	74	78	125	128	175	178
24	29	75	79	126	129	176	179
25	30	76	80	127	130	177	180
26	31	77	81	128	131	178,179	181
27	32	78	82	129	132	180	182
28	33	79	83	130	133	181	183
29	34	80	84	131	134	182	184
30	35	81	85	132	135	183	185
31	36	82	86	133	136	184	186
32	37	83	87	134	137	185	187
33	38	84	88	135	138	186	188
34	39	85	89	136	139	187	189
35	40	86	90	137	140	187a	190
36	41	87	91	138	141	187b	191
37	42	88	92	139	142	187c	192
38	43	89	93	139a	143	187d	193
39	44	90	94	140	144	187e	194
40	45	91	95	141	145	187f	195
41	46	92	96	142	146	187g	196
42	47	93	97	143	147	187h	197
43	48	94	98	144	148	187k	198
43a	49	95	99	145	149	187l,m	199
44	50	96	100	146	150	187q	200

CP10 revised	CP10 final	CP10 revised	CP10 final	CP10 revised	CP10 final	CP10 revised	CP10 final
Paragraphs 201 to 250		Paragraphs 251 to 300		Paragraphs 301 to 350		Paragraphs 351 to 400	
187r	201	206	251	249	301	300	351
187s	202	207	252	250	302	301	352
187t	203	208	253	251	303	302	353
187u	204	209	254	252	304	303	354
187v	205	210	255	253	305	304	355
187w	206	211	256	254	306	305	356
187x	207	212	257	255	307	306	357
187y	208	213	258	256	308	307	358
187z	209	214	259	257	309	308	359
188	210	215	260	258	310	309	360
188b	211	216	261	259	311	310	361
188c	212	217	262	260	312	311	362
188d	213	218	263	261	313	312	363
188e	214	219	264	263	314	313	364
188f,g	215	219a	265	264	315	314	365
188h	216	219b	266	265	316	315	366
188i	217	220	267	266	317	316	367
188j	218	221	268	267	318	317	368
188k	219	222	269	268	319	318	369
188l	220	223	270	269	320	319	370
188m	221	224	271	270	321	320	371
188n	222	225	272	271	322	321	372
188o	223	226	273	272	323	322	373
188p	224	227	274	273	324	323	374
188q	225	228	275	274	325	324	375
188r	226	229	276	275	326	325	376
188s	227	230	277	276	327	326	377
188t	228	231	278	277	328	327	378
188u	229	232	279	278	329	328	379
188v,w	230	233	280	279	330	329	380
188y	231	234	281	280	331	329a	381
188z	232	235	282	281	332	329b	382
189	233	236	283	282	333	329c	383
189a	234	237	284	283	334	329d	384
190	235	238	285	284	335	329e	385
191	236	239	286	285	336	330	386
192	237	239a	287	286	337	331	387
193	238	239b	288	287	338	332	388
194	239	239c	289	288	339	333	389
195	240	239d	290	289	340	334	390
196	241	239e	291	290	341	335	391
197	242	240	292	291	342	336	392
198	243	241	293	292	343	337	393
199	244	242	294	293	344	338	394
200	245	243	295	294	345	339	395
201	246	244	296	295	346	340	396
202	247	245	297	296	347	341	397
203	248	246	298	297	348	342	398
204	249	247	299	298	349	343	399
205	250	248	300	299	350	344	400

CP10 revised	CP10 final	CP10 revised	CP10 final	CP10 revised	CP10 final	CP10 revised	CP10 final
Paragraphs 401 to 450		Paragraphs 461 to 500		Paragraphs 501 to 550		Paragraphs 551 to 600	
345	401	393	451	443	501	461b	551
346	402	394	452	444	502	461c	552
347	403	395	453	445	503	461d	553
348	404	396	454	446	504	461e	554
349	405	397	455	447	505	461g	555
350	406	398	456	448	506	461h	556
351	407	399	457	449	507	461k	557
352	408	400	458	449a	508	461l,m	558
353	409	401	459	449b	509	461n	559
354	410	402	460	450	510	461o	560
355	411	403	461	451	511	461p	561
356	412	404	462	452	512	461q	562
357	413	405	463	453	513	461r	563
358	414	406	464	454	514	461s,t	564
359	415	407	465	455	515	461u	565
360	416	408	466	456	516	461v	566
361	417	409	467	456a	517	461w	567
362	418	410	468	457f	518	461x	568
363	419	411	469	458	519	461xa	569
364	420	412	470	460	520	461y	570
365	421	413	471	461	521	461z	571
366	422	414	472	456b	522	462	572
367	423	415	473	456c	523	462a	573
368	424	416	474	456d	524	462c	574
369	425	417	475	456e	525	462d	575
370	426	417a	476	456f	526	462e	576
370a	427	418	477	456g	527	462f	577
370b	428	419	478	456i	528	462g	578
371	429	420	479	456j	529	462h	579
372	430	421	480	456k	530	462i	580
372a	431	422	481	456l	531	462j	581
373	432	423	482	456m,n	532	463a	582
375	433	424	483	456o	533	463b	583
376	434	425	484	456p	534	463c	584
377	435	426	485	456q	535	463d	585
378	436	427	486	456r	536	463e	586
379	437	428	487	456s	537	463f	587
380	438	429	488	456t	538	463g	588
381	439	430	489	456u	539	463h	589
382	440	431	490	456v	540	463i	590
383	441	432	491	456w	541	463j	591
384	442	433	492	456x	542	463k	592
385	443	434	493	456y	543	463m	593
386	444	435	494	456z	544	463n	594
387	445	436	495	457	545	463p	595
388	446	437	496	457a	546	463q	596
389	447	438	497	457b	547	464	597
390	448	440	498	457c	548	465	598
391	449	441	499	457d	549	466	599
392	450	442	500	461a	550	467	600

CP10 revised	CP10 final
Paragraphs 600 to 625	

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