EUROPEAN CENTRAL BANK

BANKING SUPERVISION

Template for comments

Public consultation on the ECB guide to internal models – risk-type-specific chapters

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General comments

Mainly clarifications on the data and margin of conservatism sections. Reviewed only the credit risk chapters

Template for comments

Public consultation on the ECB guide to internal models – risk-type-specific chapters

Please enter all your feedback in this list.
When entering feedback, please make sure that:
- **each comment deals with a single issue only;**
- **you indicate the relevant chapter/section/paragraph, where appropriate;**
- **you indicate whether your comment is a proposed amendment, clarification or deletion.**

Deadline: 07 November 2018

ID	Chapter	Section	Paragraph	Page	Type of comment	Detailed comment	Concise statement as to why your comment should be incorporated
1	Credit Risk	2 Data maintenance for the IRB approach	2	6	Amendment	The paragraph concerning the institution's systems for management and rating of credit risk exposures only references CRR Article 144(1), however CRR Article 175 (Documentation of Rating Systems) and CRR Article 176 (Data Maintenance) should also apply and thus references to both should also be included in this paragraph for completeness. References have been made within each of the following sub-section so these Articles are relevant.	All relevant references to the CRR should be included in the overview section for completeness.
2	Credit Risk	2 Data maintenance for the IRB approach	3	6	Amendment	The paragraph refers to the ensuing sections as "principles" however, this terminology does not seem consistent. Would "expectations" be more apt terminology?	Terminology should be consistent with the content that is being referred to.
3	Credit Risk	2 Data maintenance for the IRB approach	4	6	Amendment	CRR Article 175(1) does not say "must", it says "shall". Exact wording from CRR should be used.	Exact references/ extracts should be made from the CRR to avoid confusion for the institution.
4	Credit Risk	2 Data maintenance for the IRB approach	6	6	Clarification	The ECB view to have "all" rating systems documented may create a lot of work for the institution with little / no value especially for the very old / dated rating systems where little / no documentation and internal staff to precisely describe the approach. Could have a minimum set of versions (e.g. at least the last two rating systems). What is the value-add of having information of the rating systems a very long time ago?	Without more description, the "all" criteria could create high amount of work for the institution with little value-add.
5	Credit Risk	2 Data maintenance for the IRB approach	6a	7	Clarification	Does the "data entry" include the data preparation steps prior to entry into the IRB models? What is a suitable starting point for tracking data flows?	It is not clear for the institution what the starting point is for tracking data flows.
6	Credit Risk	2 Data maintenance for the IRB approach	6c	7	Clarification	What is meant by "different values"? Does this mean that a data profiling of unique values are required? What if it is a numerical field?	The expectation to summarise all distinct values is not practical for numerical variables and variables with many levels (e.g. suburb).
7	Credit Risk	2 Data maintenance for the IRB approach	6e	7	Amendment	Should the audit trail also include track changes of overrides with datestamp and user information?	The audit trail should include activities such as overrides so these can be traced and checked.
8	Credit Risk	2 Data maintenance for the IRB approach	7e	8	Clarification	It is not clear what is expected from "regression testing", could more information be provided so that it is very clear for the reader what the ECB expectation is on this point.	There should be more detail on some the expected tests / activities so it is clear for the institution.
9	Credit Risk	2 Data maintenance for the IRB approach	12i	8	Amendment	The paragraph does not specify any expectation on whether manual interventions should be approved prior to implementation. This could be added as one of the required activities or at the least an appropriate sign-off should be obtained.	The manual interventions should have appropriate sign-off to ensure accuracy and appropriateness of the changes.
10	Credit Risk	2 Data maintenance for the IRB approach	15a	9	Clarification	What is meant by "active steering of data quality"?	Terminology should be clearly defined to avoid confusion for the institution.
11	Credit Risk	2 Data maintenance for the IRB approach	15d	10	Amendment	Should include the exact reference to the "data quality standards" since it is being referred to in the ECB guideline.	The ECB guide should include all relevant regulatory references for completeness.

12	Credit Risk	2 Data maintenance for the IRB approach	15e	10	Amendment	The ECB guide mentions "procedures" but it would be useful if specific examples and expectations were supplied. Such as checking for missing, repeat, outlier values etc	More guidance on the data quality procedures will be beneficial to the institution.
13	Credit Risk	2 Data maintenance for the IRB approach	19a	11	Amendment	The data quality dimensions have been listed but not described in detail or any examples supplied to provide guidance to the reader in this section. A reference to Section 2.4.3 should be included.	Add appropriate reference to the next section that describes data quality dimensions.
14	Credit Risk	2 Data maintenance for the IRB approach	20	11	Amendment	The data obtained from 3rd parties should also be assessed (definitions, quality, alignment to internal data) to ensure this data is suitable for use. Also, include specific tests on this data.	More guidance on the process to assess whether 3rd party data is being used appropriately.
15	Credit Risk	2 Data maintenance for the IRB approach	24	12	Amendment	Should include detail on formal linkeage of data quality to the institution risk appetite statement.	More guidance for the institution so that data quality is more clearly linked to risk appetite.
16	Credit Risk	2 Data maintenance for the IRB approach	26	12	Amendment	Should there be exceptions to the point around "data quality incidents should be resolved - rather than mitigated". It seems to apply to all incidents and some issues may not be feasible or possible to fix therefore, a mitigating factor may be the best solution.	Having exceptions will ensure excessive time is not spent on low value-add activities especially for older data.
17	Credit Risk	2 Data maintenance for the IRB approach	27	12	Amendment	The data quality reporting should serve several purposes in addition to what was listed already, such as identifying incidents, understanding the extent of manual interventions, clearly document data limitations and provide a formal avenue to document data based decisions / judgements.	The purpose of data quality reporting should take a more broader approach rather than just focus on improving data.
18	Credit Risk	2 Data maintenance for the IRB approach	26	12	Clarification	Is there an overlap between taking a "prudent" approach and applying "MoC" (margin of conservatism)?	More clrity for the institution on prudence versus conservatism adjustment.
19	Credit Risk	2 Data maintenance for the IRB approach	35	15	Clarification	What guidance on the "appropriate level of MoC" can be supplied to ensure institutions are performing benchmarking (internal data with MoC v external data)? What MoC values are deemed inappropriate (e.g. 200%)?	More guidance will help institutions use a suitable benchmark for data quality.
20	Credit Risk	2 Data maintenance for the IRB approach	37a	16	Clarification	What about data used for the application scorecard that is truncated? For example, different variables drive application scores compared to behavioural scores so if no history value is available, then need more guidance on how to handle this data variable for application score model.	More clarity on the data requirements for application and beavioural score models.
21	Credit Risk	2 Data maintenance for the IRB approach	37b	16	Clarification	Should external credit bureau scores be assessed on whether they are "appropriate inputs" or whether they have been used appropriately in the model development? The wording seems to focus on the former.	Institutions should demonstrate appropriate use of the external data in the context of their portfolio.
22	Credit Risk	2 Data maintenance for the IRB approach	37b	16	Clarification	Is the expectation on the institution to "review" the external score methodology? What amount of work is required in performing such validation activity?	The review of methodology underpinning external score data may not be practical.
23	Credit Risk	2 Data maintenance for the IRB approach	37c	16	Amendment	Reference to "other input variables" is vague and should include a specific paragraph reference.	Could be confusing to the institution regarding what exactly is required.
24	Credit Risk	2 Data maintenance for the IRB approach	37d	16	Clarification	When it says "all relevant internal information", does this also include human judgement / credit officer expert opinion? Does it imply that overrides based on human / expert judgement are allowed?	Could be confusing to the institution regarding what exactly is required.
25	Credit Risk	2 Data maintenance for the IRB approach	44	18	Clarification	When a difference in default definition exists, is te alignment approach aimed at achieving similar default rates or to align the definition itself?	Could be clearer on whether the alignment is based on the definition of the model output.
26	Credit Risk	2 Data maintenance for the IRB approach	46	19	Clarification	It notes that the incorporation of human judgement needs to be appropriately managed and proportionate to the number of available observations. Does this imply that fewer observations are allowed less human judgement? This is not very clear.	Could be clearer on the proportionality component of human judgement
27	Credit Risk	2 Data maintenance for the IRB approach	47	18	Clarification	Does this section on human judgement relate to the margin of conservatism?	Could be clearer on what constitutes human judgement versus conservatism.
28	Credit Risk	2 Data maintenance for the IRB approach	47	18	Clarification	How do institutions determine what a "relevant observation" is when relying on model outcomes versus human judgement?	Could be clearer on what is meant by the use of relevant observations.
29	Credit Risk	4 Probability of default	53b	22	Clarification	Regarding the overlap of the range of applicability of different PD models, does this mean that application and behavioural PDs cannot be blended?	Can be clearer on the requirement on the scope of applicability of the models.

30	Credit Risk	2.4 Data quality management framework	9c	8	Clarification	The paragraph states that IT implementation tests include system tests such as security tests. What type of security should the tests test?	
31	Credit Risk	2.4 Data quality management framework	16c	10	Clarification	The paragraph states that data quality management framework should be periodically assessed. How often is this period?	Periodicity of an action should be well-defined.
32	Credit Risk	2.4 Data quality management framework	17	10	Clarification	The paragraph states that the roles should be defined in such a way as to ensure that the data handling process is sufficiently independent from the data quality management process. How is the term "sufficiently" assessed?	Precision of vague term.
33	Credit Risk	2.4 Data quality management framework	21c	11	Clarification	The accuracy of the data is explained by substantively error-free data. How is "substantively" assessed?	
34	Credit Risk	3.1 Relevant regulatory references	30	14	Clarification	The paragraph states that good data quality is a fundamental condition for developing a robust rating system. To be judged to have good quality, should data satisfy completeness, accuracy, consistency, timeliness, uniqueness, validity, availability/accessibility and traceability?	
35	Credit Risk	3.2 Use of external data	35	15	Clarification	The paragraph states that an institution may use external data if an appropriate margin of conservatism is applied. Is there any threshold defined?	
36	Credit Risk	2.2 IT systems: infrastructure and implementation testing	7	7	Amendment	The paragraph incorrectly refers to CRR Article 144(1)1 in the footnote (number 10) as it does not exist.	Reference to the CRR should be accurate to allow readers to refer to the correct regulatory reference
37	Credit Risk	2.2 IT systems: infrastructure and implementation testing	7	7	Amendment	The paragraph suggests that there should be a consistent process for testing the relevant IRB systems and applications upon first implementation and on an ongoing basis. However, the testing process at the first implementation should be more comprehensive than the ongoing tests.	
38	Credit Risk	2.4 Data quality management framework	14	9	Clarification	The paragraph suggests that institutions should "ensure that reliable risk information is available to enable an institution's risk profile to be assessed accurately and drive sound decision-making within the institution and by external stakeholders, including competent authorities". What is it meant by "reliable risk information"?	
39	Credit Risk	2.2 IT systems: infrastructure and implementation testing	6 (a)	7	Clarification	In this parragraph, it is indicated that it is neccesary document the model's data flow (from data entry to reporting and for both historical data and current exposure data. Nevertheless, it isn't clear if it is enough has the original information and the result obtained or, nevertheless, all information built during the process to obtain the final information.	(from data entry to reporting and both historical data and current exposure data, enough to have capacity to replicate the information)
40	Credit Risk	2.2 IT systems: infrastructure and implementation testing	9 (e)	8	Amendment	In this parragraph, it is indicated that it is neccesary include regression testing in the IT tests. It is unclear the type of tests which could be performed regarding this reference.	regression testing as…
41	Credit Risk	2.4 Data quality management framework	18	10	Clarification	The ECB considers it good practice for institution to have a dedicated independent unit with an overall view of ans responsability for the management of data quality. In entities with low materiality, would be possible dissagregate this responsability in several departments?	The ECB considers it good practice for institution to have a dedicated independent unit with an overall view of ans responsability for the management of data quality. Nevertheless, in the low materiality entities this responsability can be dissagregate in more departments.
42	Credit Risk	2 Data maintenance for the IRB approach	22	12	Clarification	In this parragraph, it is indicated that the measurement system and the frequency of the data quality controls should be formalised. Regarding to this, which are the minimun requeriment of periodicity? Are there practices recommended defined according to this?	-
43	Credit Risk	2.4 Data quality management framework	23	12	Clarification	In this parragraph, it is indicated that indicators and their corresponding tolerance levels and thresholds should be set in order to monitor compliance with the standars establised. Regarding to this, are there practices recommended defined according to this?	-

44	Credit Risk	3.7 Use of human judgement	45	19	Deletion	In this parragraphs, it is incated that the use of human judgement should be documented in a way that ensures the rating assignment can be understood and replicated by a third party. However, due to the natute of the process, it could be enough to document and justify the decission applied. The replication is a high complex process due to the changes in the economic enviroment, knowgledge of the facilities/obligors of the analysts, etc.	The use of human judgement should be documented and justified to understand the actions followed.
45	Credit Risk	3.7 Use of human judgement	47	19	Clarification	In this parragraphs, it is incated that the higher the number of relevant observations, the more the institutions should rely on the outcomes of the statistical model. Regarding to this, in case of high number of relevant observations, if the human judge is documented and justified, could it be applicable?	-
46	Credit Risk	4.1 Structure of PD models	57	23	Clarification	A particular situation in which a group of facilities are in run off process. These facilities are a high volume of a potfolio and all of thiem have a similar behaviour. Would it be proper include a bucket of risk to classify this casuistics?	-
47	Credit Risk	4 Probability of default	61	24	Clarification	In the previous TRIM Guide (Guide for the Targeted Review of Internal Models -TRIM-, February 2017), there was a section of rating philosofy where it was detailed that it is neccessary have a framework in which this philosophy is described and analysed. Are these requeriment applicable with the new Guide?	-
48	Credit Risk	4.1 Structure of PD models	61 (b)	24	Amendment	In this parragraphs, it is incated that a horizon of two to three years is considered to be appropiate for most portfolios in the PD estimation process. In case of reduced volume of obligors/facilities, could be proposed an horizon longer?	(b) a horizon of two to three years is considered to be appropiate for most portfolios in the PD estimation process if the volume of population is enough and representative.
49	Credit Risk	4.2 PD risk quantification	78 (b)	29	Clarification	Regarding to facilities with low exposure (for instance, <100 EUR) which are not representativeness of the portfolio, could be excluded for the PD estimation process? This clarification is applicable to LGD estimation process too.	-
50	Credit Risk	5 Loss given default	Section 5	35	Clarification	In the previous TRIM Guide (Guide for the Targeted Review of Internal Models -TRIM-, February 2017), there were sections regarding to the discounting rate and the application of direct and indirect costs. Are these sections applicable with the new Guide?	-
51	Credit Risk	5 Loss given default	Section 5	36	Clarification	The question is about the treatment of migrations between portfolios (vinculated to different model estimation), for instance, retail - non retail, during the recovery process. Is it necessary vinculate this facilities/obligors at default moment to the portfolio which this facility/obligor belong in this moment? Could it be analysed a part of the recovery process in a segment and other part of this recovery process in other segment? If this population isn't repressentativeness of the portfolio, could they be excluded of the estimation sample? This clarification is applicable to PD, which would good practices be of the migrations treatment in the PD estimation process?	-
52	Credit Risk	5.1 Realised LGD	100 (a)	39	Clarification	In the previous TRIM Guide (Guide for the Targeted Review of Internal Models -TRIM-, February 2017), is indicated that for the purpose of LGD estimation institutions should consider an exposure that after the return to non-defaulted status is classified as defaulted again as having been constantly defaulted from the first moment when the default occurred if the time between the moment of the return of the exposure to non-defaulted status and the subsequent classification as default is shorter than 1 year in any case. However, under our understanding, in the new Guide this time is reduced to 9 months. Why is this period reduced?	-
53	Credit Risk	5.1 Realised LGD	100 (c)	40	Clarification	In this parragraphs, it is incated that it should be able to make or trace a connection between the restructured facility and the facility previously advanced and with it is restructuting. Is it necesary vinculate the restructured facilities with the original facilities or it would be enough do a monitoring of these restructured facilities?	-
54	Credit Risk	4 Probability of default	62b	25	Clarification	The text "if necessary" at the end of the paragraph does imply that institutions can choose to rely wholly on external ratings rather their own. This phrase is not clear enough on what circumstances would be appropriate and it contradicts other sections in the standard where the expectation is to not rely wholly on external ratings.	Could be clearer on what is deemed as necessary reason to rely on external ratings.
55	Credit Risk	4.2 PD risk quantification	77	29	Amendment	Should this approach to use only the long-run average (LRA) apply to all low default portfolios? Can point-in-time default rates be used? The retail exposures have more volume so not clear on why a LRA must be used for this portfolio.	Could be clearer on what is an allowable input to the PD model calibration.

56	Credit Risk	4.2 PD risk quantification	78b	29	Clarification	This paragrpah suggests a requirement for the default definition to include defaults that have an EAD irrespective of whether the exposures are material (or non-zero) at the cohort / vintage date. Does this align to the default definition that will be finalised in coming years?	Could be clearer on what is required for the default definition.
57	Credit Risk	4.2 PD risk quantification	79	30	Clarification	Are institutions required to analyse default rates using non-overlapping and overlapping time windows? Would the latter not be introducing bias or autocorrelation into the default rates and therefore PD estimates?	Could be clearer on what is required for the default rate analysis.
58	Credit Risk	4.2 PD risk quantification	84	31	Clarification	The retail weighting of historical data is referencing loss rates and not default rates. Loss rate here has not been defined and does this introduce a PD model bias if default rates are adjusted to align the loss rates?	Could be clearer on what the criteria for applying weighting to historical data.
59	Credit Risk	4.2 PD risk quantification	84	31	Clarification	If older data is not deemed representative, rather than weighting can the institution exclude such data?	Could be clearer on what the criteria for applying weighting to historical data.
60	Credit Risk	5.2 LGD structure	105b	43	Clarification	Regarding the independence of the LGD component based model, why do each component have to be independent? For example, possession and sale states are not independent but both can be important considerations when estimating LGD.	More clearity on the extent of independence of LGD model components.
61	Credit Risk	5.2 LGD structure	105b	43	Clarification	Does the LGD components all have to be emperically estimated or can judgement be applied as well?	More clarity on the role of judgement on the LGD model components.
62	Credit Risk	5.3 Risk quantification	123a	50	Clarification	Does the two years of highest loss have to be adjacent years or any years?	More clarity on the reference value for downturn LGD
63	Credit Risk	5.3 Risk quantification	123a	50	Clarification	The requirement to increase the amount of data for determining downturn period by 1 year until 20 years is reached, does it imply that LGD models must be reviewed annually if less than 20 years of data?	More clarity on the implications of updating data over time when less than 20 years of data.
64	Credit Risk	5.3 Risk quantification	123b	51	Clarification	If including incomplete recovery processes LGD estimate in determining the worst two years of losses (reference value for downturn LGD), then does this mean the incomplete defaults that reached the maximum workout period and thus have 100% are to be included in the calculation?	More clarity on the calculation of the reference value
65	Credit Risk	5.3 Risk quantification	124	51	Clarification	Should the margin of conservatism (MOC) be added uniformly across the LGD grades or a different value be consered for each grade?	More clarity on the MoC for LGD
66	Credit Risk	5.3 Risk quantification	127a	53	Clarification	Does the constant charge also include the charge added when downtun LGD is lower than the reference downturn LGD value?	More clarity on the constant add-on for unexpected loss in the LGD estimation
67	Credit Risk	6.2 Realised CCFs	133a	56	Clarification	How does the calculation of CCF in paragraph 133a and 129a relate? They seem inconsistent	Clarity on the calculation of CCF
68	Credit Risk	6.4 CCF risk quantification	136b	58	Clarification	The extremely high CCF cannot be capped at 100%/ Does this mean these values must be used in the calculation of CCF? What other options beside capping can be used to manage the region of instability of CCF	More clarity on the treatment of extreme CCF values

69	Credit Risk	6.4 CCF risk quantification	138	60	Clarification	Is the downturn period for LGD and CCF the same?	More clarity on downturn period selection
70	Credit Risk	7 Model-related MoC	140	61	Clarification	Does the MoC get reviewed only at model development or during periodic monitoring of the models? The range of estimation errors may deteriorate over time before a model rebuild is triggered especially the case for models that have not been re-developed in many years.	More clarity on when MoC is assessed
71	Credit Risk	7 Model-related MoC	142a	61	Clarification	What is the difference between margin of conservatism (MoC) and conservatism adjustment in CRR article 180e (continued model underestimation)	More clarity on the definition of MoC
72	Credit Risk	7 Model-related MoC	142c	62	Clarification	Are there limits or thresholds on the maximum MoC (size and length of time of use) before a model re-development should be triggered and hence the models should not be used?	More clarity on the limits of the MoC rather than re-developing the models
73	Credit Risk	7 Model-related MoC	142c	62	Clarification	Are MoC and conservatism adjustments deemed material model changes requiring regulatory approval even when they are a just a add-on to the model estimates?	More clarity on the model change criteria particularly when MoC are used