# Template for comments

Public consultation on the revised ECB guide to internal models

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<tr>
<th>Institution/Company</th>
<th>ABN AMRO Bank N.V.</th>
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**Contact person**

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**General comments**
## Template for comments

**Public consultation on the revised ECB guide to internal models**

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:** 15 September 2023

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<tr>
<th>ID</th>
<th>Chapter</th>
<th>Section</th>
<th>Paragraph</th>
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<th>Type of comment</th>
<th>Detailed comment</th>
<th>Concise statement as to why your comment should be incorporated</th>
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<tr>
<td>1</td>
<td>General topics</td>
<td>1.8 General principles on climate-related and environmental risks</td>
<td>25</td>
<td>12</td>
<td>Clarification</td>
<td>Not clear how to incorporate climate-related environmental risk drivers in market risk models (VAR, SVaR, IRC). Some clarification or examples are needed.</td>
<td>The ECB should not claim that there is guidance where there is not. Industry practice involving EBA discussion paper part 2 expected this year.</td>
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<td>2</td>
<td>General topics</td>
<td>1.8 General principles on climate-related and environmental risks</td>
<td>25</td>
<td>12</td>
<td>Clarification</td>
<td>Although the Guide claims to clarify how banks should go about including material climate-related and environmental risks in their models, it does not provide sufficient information about how material climate or environmental risks should be taken into account.</td>
<td>When referring to the context of Guidance on climate-related and environmental risks, does ECB mean specifically Expectation 7.2 of that Guidance? Given that ECB expects banks to be fully aligned with all supervisory expectations, including having in place a sound integration of C&amp;E risks in their stress testing framework and ICAAP (ECB Walking the talk, 2022), does it mean that ECB expects that internal models shall be adjusted to account for material and relevant C&amp;E risks and shall be used for the calculation of own funds requirements before end of 2024?</td>
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<td>25</td>
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<td>Clarification</td>
<td>Definition of relevant and material C&amp;E risk drivers - ECB Guide to internal models (2023), General topics/par. 25: “Institutions should assess the materiality of all risks in the life cycle of their internal models as set out in paragraph 2 of this chapter, including climate-related and environmental risks (Footnote 24).” Where climate-related and environmental risks drivers are found to be relevant and material, institutions should include such risk drivers in their internal models approved for use for the calculation of own funds requirements for credit and market risk. When referring to the context of Guidance on climate-related and environmental risks, does ECB mean specifically Expectation 7.2 of that Guidance? Given that ECB expects banks to be fully aligned with all supervisory expectations, including having in place a sound integration of C&amp;E risks in their stress testing framework and ICAAP (ECB Walking the talk, 2022), does it mean that ECB expects that internal models shall be adjusted to account for material and relevant C&amp;E risks and shall be used for the calculation of own funds requirements before end of 2024?</td>
<td>What is considered ‘material’? How should this be determined? This is subjective wording and requires clarity.</td>
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<td>4</td>
<td>General topics</td>
<td>1.9 General principles for the implementation of a changed or extended model</td>
<td>26</td>
<td>12</td>
<td>Clarification</td>
<td>It is not clear whether ECB expects similar requirements for the implementation of reversion requests (including slotting approach, and other less sophisticated approaches, e.g. SA or F-IRB approach). Under Section 2.8, a similar requirement can be added with a reference to paragraph 26.</td>
<td>Correct implementation of the SA, F-IRB is also important for RWA reporting.</td>
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<td>5</td>
<td>General topics</td>
<td>1.9 General principles for the implementation of a changed or extended model</td>
<td>26</td>
<td>12</td>
<td>Clarification</td>
<td>The paragraph states that exceptions to ECB expectation for the implementation in 3 months, should be requested by the institution in question. However, the process for this request is not clear. Considering the processing timelines for the requests, we understand that this should be done as early as possible during the assessment of the material change application and should be aligned with the ECB before the notification of the decision. Also, we want to confirm that, according to Article 3 paragraph 6 of the CDR 529/2014, institutions can still present an updated plan if unexpected delays with regards to the implementation of the change arises after the decision. A footnote can be added to clarify these points.</td>
<td>Alignment with CDR 529/2014 and further clarification of the ECB expectations will be beneficial.</td>
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Additional guidance is needed regarding new types of exposures, which do not fall under range of application of approved rating systems (e.g. as a new type of exposure, or because the products is extended to new segments, e.g. a new country) or use of SA. In this case, an institution can neither use IRB (as IRB model is not approved for new exposures), nor SA (as there was no PPU request submitted).

Our understanding is that this case should fall under CRR Article 146 and use of SA should be allowed before approvals are received. As such we would suggest to add a paragraph providing this guidance:

"In case of introduction of new product, and/or acquisition of the portfolio leading to new exposures for an institution, the institution is expected to analyze if the new exposures 1) fall under scope of approved rating systems, 2) fall under scope of approved permanent partial use of SA and 3) if any notifications or requests are needed in line with Commission Delegated Regulation (EU) No 529/2014. In case no applicable rating system or approval for the use of SA exist, or notifications/requests are needed before the use of IRB approach, institutions are expected to use SA for the new exposures until appropriate approvals are granted or notifications submitted as long as new product is immaterial (in line with CRR art. 146(a)), and provide ECB a remediation plan (covering submission of relevant requests/notifications) if exposures become material in line with CRR art. 146(a)."

Guidance is needed if SA approach can be applied to new products/exposures, before a formal request for use of SA is submitted. New product/PPU risk assessment, new model or PPU/SA are submitted and approved. Without this clarity, introduction of new (innovative) products can be slowed down in IRB banks, leading to unlevelled playing field.
The paragraph relates to the IT implementation of a material change in the context of consolidations. All potential cases on incompliance included in the Credit Risk section, it reads very general and therefore not clear whether it is intended to provide guidance how intra-group transactions should be treated. In particular in case of mergers/organisation of subsidiaries, a simplified treatment could be considered for the (sub) consolidated reporting, i.e. in general allowing to continue using same IRB models or SA approach as applied to the exposures before merger. A requirement to have a non-live production version of the model implemented and the implementation fully tested before applying for a major change would be advisable and could unnecessarily delay the application, particularly if the scope of the change only becomes clear once the model is fully operational. The ECB proposed approach is not according to IT best practice: after handing the user acceptance test and go live approval the lead time to deploy in production should be as short as possible. It is important to have an IT environment for continuous integration/continuous delivery (CI/CD), the lead time should be as short as possible to ensure: • All new components are in-line with the IT production environment • Latest (regulatory) requirements are incorporated (not possible if requirements are frozen after 9 months before go live approval)

The term “consolidation” is used in this document to mean any business combination of pre-existing independent legal entities that is relevant to the perspective of prudential supervision of institutions by the ESM, including mergers between institutions and acquisition by one institution of another institution, but excluding intra-group transactions. “The part of the first sentence in brackets should be deleted so that the first sentence reads: "When applying for a material model change, the institution should provide evidence that it is able to provide a new version of the required IT systems ready to be put into production once the change is approved.”

The part of the first sentence in brackets should be deleted so that the first sentence reads: "When applying for a material model change, the institution should provide evidence that it is able to provide a new version of the required IT systems ready to be put into production once the change is approved.”

The part of the first sentence in brackets should be deleted so that the first sentence reads: "When applying for a material model change, the institution should provide evidence that it is able to provide a new version of the required IT systems ready to be put into production once the change is approved.”

The paragraph relates to the IT implementation of a material change. While this paragraph is included in the Credit Risk section, it reads very general and therefore not clear whether it is applied for a material change in market risk models.
20 Credit risk 4.3 Days past due criterion 69 81 Clarification This paragraph states that non-EUR past due amounts should be converted to EUR using the exchange rate quoted every day, but there is no reference to a relevant regulation currently in force.

Please clarify whether there is an existing legal reference for this requirement.

21 Credit risk 4.4 Unlikeness to pay criterion 79 84 Clarification The paragraph suggests that the default is triggered if the materiality threshold is exceeded for 90 days or more (including the 90th day), while paragraphs 59(b) and 66 suggest more than 90 days (excluding the 90th day).

Please remove the inconsistency between paragraphs 62, 59.b and 66 in Credit risk chapter.

22 Credit risk 4.7 Adjustments to risk estimates in the case of changes to the definition of default 92 88 Amendment The requirement is about making changes to the DoD and in particular about retrospectively simulation of the proposed DoD. There is an explicit expectation that the RDS covers at least two years of data adjusted at granular level by means of a retrospective simulation. While we agree that retrospective simulation is good and the way to go, it may not be possible for each individual default trigger (in particular UTP) to back-score the proposed UTP for at least 2 years, in particular when human judgement is applied. It may be that the requirement is not so strict, e.g., that it is ok if for certain triggers requiring human judgement less than 2 years of data is also accepted, but this is not explicitly stated.

Suggestion is to amend the text to mention that this is a general expectation, and that exceptions are possible for individual triggers if duly justified.

23 Credit risk 5.1 Structure of PD models 103 94 Clarification This paragraph suggests that the default is triggered if a credit obligation based on a threshold on the diminished financial obligation does not need to be back-scored after adjustment of the threshold.

Please clarify whether there is an existing legal reference for this requirement. Extensively subject to interpretation. Is there a certain threshold or a bit more guidance on this?

Material is subject to interpretation. A concrete definition of material in the context (i.e. as can be found in Credit Risk 4.1 art. 59 IV) would provide more clarity.

24 Credit risk 5.1 Structure of PD models 109 97 Clarification Material is subject to interpretation. A concrete definition of material in the context (i.e. as can be found in Credit Risk 4.1 art. 59 IV) would provide more clarity.

Extensively subject to interpretation. Is there a certain threshold or a bit more guidance on this?

Material is subject to interpretation. A concrete definition of material in the context (i.e. as can be found in Credit Risk 4.1 art. 59 IV) would provide more clarity.

25 Credit risk 5.2 PD risk quantification 120(d) 101 Amendment Supplement with "(consider at the beginning of the one-year observation period, as also mentioned in par 73 of EBA GL on PD and LGD, so that it becomes ‘...’ it is the ECB’s understanding that each obligor – or each facility in cases where point (a) above applies – present at the beginning of the one-year observation period, should be counted) (...)."

For clarification

26 Credit risk 5.2 PD risk quantification 120(a) 101 Clarification Not clear what is meant with "obligors that cease to exist": Do they mean deceasing persons? Or change in set of obligors that are identified as joint-obligor? Or credit obligation that ceases to exist (migration/merger/offshore/closed/etc)?

For clarification

27 Credit risk 5.2 PD risk quantification 126 103 Amendment A clarification is requested to indicate whether there is no material difference between average PD and the LRA DR in case of no statistical difference. Probably it is meant that we should verify that the directions and magnitudes are random (similar to paragraph 135), but this is not explicitly stated.

Suggestion to include this here as well in case.

28 Credit risk 5.2 PD risk quantification 132 103 Amendment Please clarify this requirement and explicitly state whether banks should verify that the directions and magnitudes are random (similar to paragraph 135).
Credit risk

6.1 Realised LGD

Clarification

Some/most climate-related and environmental information will not be available nor retrievable for historical defaults. No indication how to tackle this. MiCET Overdrink? Also, due to the progressive – in time what is – nature of climate/environment risk (drier climate, more wildfires, more river droughts/floods, higher sea-levels, etc), it is intrinsically impossible to use statistical modelling based on historical empirical data. This comment is relevant for footnotes 74, 86 and 50.

Climate/environmental risks are obviously important for credit risk, but not enough guidance on how to incorporate this into IRB modelling.

6.3 Risk quantification

188 128 Deletion

Please delete the footnote align it directly with art179(1) and art 179(2)

To make the climate risk assessment date (the requirement) as flexible as possible.

6.1 Realised LGD

Clarification

To consider whether ESG risks are relevant and material for a segment subject to the internal model, banks would benefit from clarifications on cases when MoC shall be assigned.

6.2 LGD structure

172 121 Clarification

Please assure consistency between this revised provision in the revised ECB Guide and future CRR3 (Art 182.1-g).

7.2 Realised CCFs

Footnote 85 is rather strict, and there is no mention of a maximum common period in art 179(1) of the CRR. However, art 172(1)(b) states: “Where an institution uses data that is pooled across institutions it shall meet the following requirements: (b) the pool is representative of the portfolio for which the pooled data is used”, which implies something similar to footnote 85, but is more open to interpretation.

Please delete the footnote and align it directly with art179(1) and art 179(2)

7.2 Realised CCFs

199 136 Amendment

Topic: paragraph 5

Broken reference

6.1 Relevant regulatory references

208 140 Clarification

Topic: Margin of conservatism

ECB Guide to internal models (2023), Credit Risk / p. 208: “The MoC should consider any deficiencies stemming from missing or inaccurate information including, where relevant and material, any missing or inaccurate climate-related information considered in risk estimates.”

Questions: Banks would benefit from clarifications on cases where MoC shall be assigned.
a) Where C&E risks are relevant and material for a segment subject to the internal model, however no C&E data is at hand to be accounted in the internal model for this specific segment for the calculation of own funds requirements, shall banks apply MoC for absence of C&E data? b) Considering that C&E data is available for rather limited observation period, does ECB expects specific observations period (e.g. at least 5 years) of C&E data to be available for accounting for in the internal models for the calculation of own funds requirements, where C&E risks are relevant and material for a segment?

6.1 Relevant regulatory references

208 140 Clarification

8.1 Relevant regulatory references

Please assure the time banks have to include C&E risks in the calculation of own funds for credit risk.

8.1 Relevant regulatory references

38 Credit risk

6. Loss given default

143 113 Clarification

The statement as is is subject to Institution’s own interpretation and can result in differences in application.

7 Loss given default

143 113 Clarification

Minimum period of data required for development of PD and LGD parameters are clear in the guidelines and regulation. The similar clarity for the climate-related and environmental information would help Institution to set up the data collection plan.
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<th>179</th>
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<td>The paragraph states that institutions should be able to provide an inventory of analyses that have been conducted with the purpose of developing the VaR and sVaR models. Given that VaR and sVaR models can be quite mature, in other words developed a few years ago, for how many years should a bank provide an inventory of analyses? Does this imply having the underlying information for annual reviews and/or monitoring available or also other analyses done that might not have been mandatory so far? And how many years should a bank provide an inventory of analyses for VaR and sVaR, if the models are developed many years ago? Is it restricted to IMA and monitoring reports?</td>
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<th>5.2 General requirements</th>
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<th>Clarification</th>
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<tr>
<td>The paragraph states that institutions should be able to provide an inventory of analyses that have been conducted with the purpose of developing the IRC model. Given that IRC model can be quite mature, in other words developed a few years ago, for how many years should a bank provide an inventory of analyses? Does this imply having the underlying information for annual reviews and/or monitoring available or also other analyses done that might not have been mandatory so far? And how many years should a bank provide an inventory of analyses for IRC, if the model was developed many years ago. Is it restricted to IMA and monitoring reports?</td>
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<td>The paragraph states that institutions should analyse any observed differences between these estimates and estimates that are derived in combination with current market prices where the relevant corrections were performed to obtain real-world PDs. It is unclear how the corrections should be obtained. More clarification is needed.</td>
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<td>The paragraph states that institutions should identify which terms, information or assumptions in the methodology used to estimate PDs for IRC are different from the terms, information or assumptions used to account for expected losses. What does the ECB refer to when mentioned here PD used for expected losses? Basel PDs? It is not clear how to compare IRC PDs to the PDs used for estimation of expected losses, especially if IRC PDs are obtained from external vendors.</td>
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<th>7.5 Management of RNIME and implementation in an institution’s risk engines</th>
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<td>Footnote 97 in point (c), paragraph 186 in section 7.5 (Management of RNIME and implementation in an institution’s risk engines) states that: “The calculation should be made at the end of the quarter by comparing the sum of impact quantification of the RNIME, e.g. at the end of the quarter, with the 60-business-day average of the VaR or sVaR, or the 12-week average of the IRC or CRM amount of the preceding quarter.” The comparison of the RNIME numbers for the purpose of the calculation of this ratio should be in line with VaR and sVaR methodology. For VaR and sVaR, the 60-day average, or 12 week average for IRC or CRM amount, is suggested in the same footnote. To note, this feedback has already been provided by the industry (see Feedback statement: Responses to the public consultation on the draft ECB guide to internal models, July 2019 – risk-type-specific chapters, section 4.7 Risk not in the model engines (MR Section 7), point 10, p. 29). However, it seems that the ECB might have misinterpreted the feedback provided as it referred, as part of its response to the feedback, to the need to use the 60-day (or 12-week for IRC) average risk numbers to increase the stability and make it possible to use the same basis (denominator), although this did not lead to a change in the aforementioned footnote (last column). In order words, we totally agree with the explanation (stability and same basis for comparison), although we still deem it important to clarify (and amend), as this is creating confusion to the industry. Please clarify whether the 60-day average of the RNIME used in the numerator of the CIQ risk number can be used instead of the RNIME at the end of the quarter, and please subsequently amend the footnote in order to align the numerator and denominator of the CIQ risk number in terms of methodology (both using the average with the same periodicity).</td>
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