Bank Policy Compliance Report

# Executive Summary

## Executive Summary: Compliance Assessment Report  
  
This report summarizes the findings of a comprehensive compliance assessment conducted on [\*\*Bank Name/Department\*\*]. The assessment evaluated the bank's adherence to relevant regulatory requirements across a defined scope, encompassing a total of \*\*530\*\* individual requirements.  
  
\*\*Overall Compliance Posture:\*\*  
  
The assessment revealed a generally satisfactory compliance posture. The bank demonstrated a strong commitment to regulatory compliance, with a significant portion of requirements met. However, areas for improvement were identified, requiring attention and remediation.  
  
\*\*Key Findings:\*\*  
  
\* \*\*Overall Compliance:\*\* The assessment results indicate the following compliance breakdown:  
 \* \*\*Fully Compliant:\*\* 78 requirements (14.7%)  
 \* \*\*Satisfactory:\*\* 303 requirements (57.2%)  
 \* \*\*Major Gaps:\*\* 20 requirements (3.8%)  
 \* \*\*Non-Compliant:\*\* 79 requirements (14.9%)  
 \* \*\*Missing Requirement:\*\* 50 requirements (9.4%)  
\* \*\*Strengths:\*\* The bank demonstrated strong performance in [\*\*mention 1-2 specific areas where the bank excelled, e.g., "customer due diligence procedures" or "data security protocols" - based on the assessment's findings, if available\*\*].  
\* \*\*Areas for Improvement:\*\* The assessment identified areas requiring attention, including [\*\*mention 1-2 specific areas where the bank needs improvement, e.g., "documentation of risk assessments" or "staff training on specific regulations" - based on the assessment's findings, if available\*\*]. The presence of \*\*20 "Major Gaps"\*\* and \*\*79 "Non-Compliant"\*\* requirements necessitates prompt action to mitigate identified risks and ensure full adherence to regulatory expectations. The \*\*50 "Missing Requirements"\*\* also need to be addressed to ensure a complete compliance framework.  
  
\*\*Recommendations:\*\*  
  
Based on the assessment findings, we recommend that [\*\*Bank Name/Department\*\*] prioritize the following:  
  
\* Develop and implement a remediation plan to address the identified "Major Gaps" and "Non-Compliant" requirements.  
\* Establish a process to address the "Missing Requirements" and integrate them into the existing compliance framework.  
\* [\*\*Include any other specific recommendations based on the assessment's findings, e.g., "Enhance staff training on [specific regulation]" or "Review and update existing policies and procedures to align with current regulatory guidance."\*\*]  
  
\*\*Conclusion:\*\*  
  
While the bank demonstrates a generally satisfactory compliance posture, the identified gaps and non-compliance areas require immediate attention. By proactively addressing the recommendations outlined in this report, [\*\*Bank Name/Department\*\*] can strengthen its compliance program, mitigate potential risks, and ensure continued adherence to regulatory requirements. We recommend ongoing monitoring and periodic reviews to ensure the effectiveness of implemented remediation efforts.

# Compliance Statistics

Fully Compliant: 78

Satisfactory: 303

Major Gaps: 20

Non Compliant: 79

Missing Requirement: 50

# Detailed Findings

## Requirement: REQ001

Description: In the case of defaulted exposures, institutions are required to estimate LGD (so called LGD in-default) and expected loss best estimate (ELBE).

Reference: Executive summary

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: In the case of defaulted exposures, institutions are required to estimate LGD (so called LGD in-default) and expected loss best estimate (ELBE).

Reference: Not specified

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: The GL specify aspects common to all risk parameters, such as the use of human judgement both in the development and in the application of the internal models, appropriate margin of conservatism (Mo C) that should be incorporated in risk parameters, and regular reviews of the models to ensure timely implementation of necessary changes in case of deteriorated performance of the models.

Reference: Not specified

Status: Satisfactory

Recommendations: \* Enhance Section 9.3 to explicitly state how the Margin of Conservatism (MoC) is incorporated into risk parameters. \* Strengthen Section 10.3 to explicitly describe the process for model reviews and how they ensure timely implementation of necessary changes in case of deteriorated model performance.

## Requirement: REQ003

Description: all loss observations have to be used for the calibration of the actual capital requirements.

Reference: Not specified

Status: Major Gaps

Recommendations: 1. \*\*Explicitly Define Calibration Process:\*\* The policy should include a dedicated section or subsection that explicitly outlines the process for calibrating capital requirements using loss observations. This should include the methodology for incorporating historical loss data (default rates, LGDs, CCFs) into the capital calculations. 2. \*\*Data Integration and Analysis:\*\* Detail how loss observations are integrated into the model calibration process. This should include the types of loss observations used (e.g., realized losses, defaults), the data sources, and the analytical techniques employed (e.g., statistical analysis, regression models). 3. \*\*Link to Capital Calculation:\*\* Clearly explain how the calibrated risk parameters (PD, LGD, CCF) derived from loss observations are used in the calculation of capital requirements. This should include references to the relevant regulatory formulas and methodologies. 4. \*\*Documentation and Validation:\*\* Emphasize the importance of documenting the calibration process, including data sources, methodologies, and assumptions. The policy should also specify how the calibration process is validated to ensure its accuracy and reliability. 5. \*\*Regular Review and Updates:\*\* The policy should mandate a regular review of the calibration process to ensure its continued relevance and accuracy. This should include updates to the calibration parameters based on new loss observations and changes in the economic environment.

## Requirement: REQ004

Description: sufficient time has to be granted for their implementation, which also takes into account the time needed to seek supervisory approval for material model changes.

Reference: Not specified

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: When implementing any changes in the rating systems stemming from the regulatory review of the IRB Approach, and also subsequently on a continuous basis, institutions should take into account not only these GL but also provisions included in other related regulatory products, in particular in the RTS on IRB assessment methodology, the RTS on materiality threshold for past due credit obligations, the GL on the application of the definition of default, and the RTS on the nature, severity and duration of economic downturn.

Reference: First paragraph

Status: Satisfactory

Recommendations: 1. \*\*Enhance Continuous Monitoring:\*\* Add a section or modify existing sections (e.g., Model Performance Assessment and Review, Model Changes and Extensions) to explicitly describe the processes for continuously monitoring and incorporating updates from the referenced regulatory products (RTS on IRB assessment methodology, RTS on materiality threshold for past due credit obligations, GL on the application of the definition of default, and RTS on the nature, severity and duration of economic downturn) into the IRB models. This should include a schedule for review and update, and the roles and responsibilities for this process. 2. \*\*Specific Examples:\*\* Provide specific examples of how the bank will address the requirements of each of the referenced regulatory products. For example, how the bank will incorporate the RTS on IRB assessment methodology into its model development and validation processes.

## Requirement: REQ001

Description: All requirements for LGD are also applicable to LGD in-default and ELBE, unless specified otherwise in Chapter 7 of the GL.

Reference: Chapter 7 of the GL

Status: Satisfactory

Recommendations: 1. Add a sentence to the beginning of Section 7 or the introduction to the LGD section (6) stating: "All requirements for LGD, as detailed in Sections 6, are also applicable to LGD in-default and ELBE, unless specified otherwise in this Chapter 7."

## Requirement: REQ001

Description: Rating systems should be developed for specific types of exposures, i.e. groups of exposures that are homogeneously managed in accordance with the definition included in Article 142(1) of the CRR.

Reference: Structure of the rating systems

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: the data used for calculating long-run average default rate or LGD for the purpose of calibration has to contain all observations from the relevant historical observation period.

Reference: Not specified

Status: Major Gaps

Recommendations: 1. \*\*Explicitly State Data Completeness Requirement:\*\* Add a specific statement to Sections 5.4 and 6.6 (or relevant sections on LRA calculation) that the data used for calculating the LRA default rate and LGD must include all available observations from the defined historical observation period. 2. \*\*Data Quality Controls:\*\* Enhance the data quality management framework (Section 3.2) to include specific checks to ensure the completeness of data within the historical observation period used for LRA calculations. This should include procedures to identify and address any missing observations. 3. \*\*Validation Procedures:\*\* Include validation procedures (Section 10.1) to verify the completeness of the data used for LRA calculations. This should involve checking for missing data points and assessing the impact of any identified gaps.

## Requirement: REQ002

Description: any identified issues are assessed from the perspective of their influence on risk quantification and, if a bias in risk quantification is identified, it has to be addressed through an appropriate adjustment and margin of conservatism (Mo C).

Reference: Not specified

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: The adequate levels of PD should be reflective of the long-run average default rate, whereas adequate levels of LGD should be the higher of the LGD based on the long-run average LGD and the LGD reflective of the downturn conditions.

Reference: Not specified

Status: Satisfactory

Recommendations: \* Amend Section 7.3 (Specific Requirements for LGD in-default) to explicitly state that LGD in-default should be the \*higher\* of the LRA LGD and the downturn LGD. This will ensure that the policy fully aligns with the regulatory requirement.

## Requirement: REQ001

Description: Governance for data representativeness

Reference: 4.2.2

Status: Satisfactory

Recommendations: 1. \*\*Enhance Data Representativeness Assessment:\*\* The policy should explicitly detail the methods used to assess data representativeness for both model development and calibration. This should include specific analyses, such as comparing the distribution of risk drivers in the development data to the application portfolio and calibration data. 2. \*\*Specify Frequency of Assessment:\*\* The policy should specify the frequency with which data representativeness is assessed, particularly for model validation and ongoing monitoring. 3. \*\*Expand on Data Quality Dimensions:\*\* While the policy mentions data quality dimensions, it could be expanded to include more specific examples of checks and controls relevant to residential mortgage data.

## Requirement: REQ002

Description: Human judgement in estimation of risk parameters

Reference: 4.3

Status: Satisfactory

Recommendations: \* Enhance Section 4.3 by including specific examples of how human judgment should be managed in model development. This could include: \* Training programs for personnel involved in using human judgment. \* Calibration exercises to ensure consistency in judgment across different individuals. \* Oversight mechanisms, such as independent review of judgments. \* Consider adding a section on the use of explainability techniques for ML models, as human judgment is often used to interpret the results of these models.

## Requirement: REQ003

Description: Identification of deficiencies

Reference: 4.4.1

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Appropriate adjustment

Reference: 4.4.2

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: Treatment of deficiencies and margin of conservatism

Reference: 4.4

Status: Satisfactory

Recommendations: 1. \*\*Provide Specific Examples:\*\* Include specific examples of deficiencies (Category A and B) relevant to residential mortgage models, such as data quality issues (e.g., inaccurate LTV data, outdated property valuations) and methodological limitations. 2. \*\*Detail AA Methodologies:\*\* Expand on the methodologies used for Appropriate Adjustments (AA) for different types of deficiencies. 3. \*\*Enhance Monitoring and Remediation:\*\* Provide more detail on the monitoring and remediation processes, including the frequency of monitoring, the escalation process for significant deficiencies, and the timelines for remediation.

## Requirement: REQ006

Description: Model development in ELBE and LGD-in-default estimation

Reference: 7.2

Status: Satisfactory

Recommendations: 1. \*\*Enhance ELBE and LGD in-default Methodologies:\*\* Provide more detailed descriptions of the methodologies used for ELBE and LGD in-default estimation, including how the bank will incorporate current economic circumstances and exposure status. 2. \*\*Specific Examples:\*\* Include specific examples of how the bank will apply the requirements for ELBE and LGD in-default estimation in the context of residential mortgage portfolios. 3. \*\*Cross-referencing:\*\* Ensure clear cross-referencing between sections 7.2 and 7.3 and other relevant sections of the policy, such as those related to data requirements, risk drivers, and model performance assessment.

## Requirement: REQ007

Description: Calculation of realised LGD and LRA LGD for defaulted exposures

Reference: 7.3.1

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Reference EBA Guidelines:\*\* Add a specific section or subsection within Section 6 (Loss Given Default (LGD) Model Development and Quantification) that explicitly references and aligns with the EBA Guidelines on LGD Estimation (EBA/GL/2017/16). This should include specific references to the guidelines' requirements for calculating realised LGD and LRA LGD. 2. \*\*Enhance Downturn LGD Details:\*\* While Section 6.7 addresses Downturn LGD, expand this section to provide more detail on the methodologies used to derive LGD estimates appropriate for economic downturns, referencing Commission Delegated Regulation (EU) No 2021/930. 3. \*\*Cross-reference with DoD:\*\* Ensure that the calculation of realised LGD is explicitly linked to the bank's Definition of Default (DoD) as outlined in Section 3.5, ensuring consistency in the application of default triggers and the subsequent LGD calculations.

## Requirement: REQ008

Description: Specific requirements for ELBE estimation

Reference: 7.3.2

Status: Satisfactory

Recommendations: 1. \*\*Enhance Methodological Specificity:\*\* The policy should include more specific details on the methodologies used for ELBE estimation, including how the bank determines the "best estimate" of expected loss. This should include the types of data used, the analytical techniques employed, and the assumptions made. 2. \*\*Address Economic Sensitivity:\*\* The policy should explicitly state how the bank ensures that ELBE reflects current economic circumstances, especially in the context of residential mortgages. This could involve referencing specific economic indicators or market data used to inform the ELBE calculation. 3. \*\*Provide Examples:\*\* Include examples of how ELBE is calculated for different types of residential mortgage exposures, considering various scenarios (e.g., different LTV ratios, property types, and geographic locations). 4. \*\*Detail the Use of Accounting Provisions:\*\* Clarify the conditions under which accounting provisions can be used as ELBE, ensuring alignment with regulatory requirements.

## Requirement: REQ009

Description: Specific requirements for LGD in- default estimation

Reference: 7.3.3

Status: Satisfactory

Recommendations: \* Enhance Section 7.3 to include specific methodologies for determining the downturn LGD, referencing the Commission Delegated Regulation (EU) No 2021/930. \* Provide more detail on the calculation of the add-on for unexpected losses during the recovery period. \* Include examples of how the bank will document the breakdown of LGD in-default components.

## Requirement: REQ010

Description: Calculation of IRB shortfall or excess

Reference: 8.4

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ011

Description: Review of estimates

Reference: 9

Status: Satisfactory

Recommendations: 1. \*\*Enhance Scope of Review:\*\* Expand on the scope of the review process to include specific aspects of the estimates to be reviewed, such as the underlying data, assumptions, and methodologies used in the model. 2. \*\*Define Review Methodology:\*\* Provide a clear methodology for reviewing estimates, including the steps involved, the tools and techniques to be used, and the criteria for evaluating the accuracy and reliability of the estimates. 3. \*\*Specify Review Frequency:\*\* While the policy mentions annual reviews, it could be more specific about the frequency of reviews for different types of estimates or under different circumstances (e.g., after significant market changes). 4. \*\*Document Review Findings:\*\* The policy should explicitly state the requirement to document the findings of the review process, including any identified issues, corrective actions taken, and the results of the review. 5. \*\*Address Human Judgement:\*\* The policy should address the impact of human judgement on risk differentiation capability (e.g., discriminatory power) as part of the review process.

## Requirement: REQ012

Description: General requirements specific to ELBE and LGD-in-default estimation

Reference: 7.1

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ013

Description: General requirements specific to LGD estimation

Reference: 6.1

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ014

Description: General requirements specific to PD estimation

Reference: 5.1

Status: Satisfactory

Recommendations: \* Provide more specific details on the methodologies used for risk driver selection, model validation, and calibration. \* Include examples of how the bank mitigates overfitting in its PD models. \* Elaborate on the specific techniques used for assessing the performance of PD models in sub-ranges. \* Provide more detail on the process for ensuring homogeneity and heterogeneity in grades/pools. \* Include more specific examples of how the bank integrates and weights internal information with external ratings. \* Provide more detail on the explainability techniques used for ML models.

## Requirement: REQ015

Description: Model development in LGD estimation

Reference: 6.2

Status: Satisfactory

Recommendations: 1. \*\*Enhance Model Development Process Details:\*\* The policy should include more specific details on the model development process for LGD estimation. This should include information on model selection criteria, the statistical methods used, and the process for validating the model. 2. \*\*Strengthen Documentation Requirements:\*\* While the policy mentions documentation standards, it should explicitly state the documentation requirements specific to LGD model development. This should include details on the data used, the model methodology, the assumptions made, and the results of the validation process. 3. \*\*Expand on Validation Procedures:\*\* The policy should provide more detail on the validation procedures for LGD models. This should include information on the frequency of validation, the methods used, and the criteria for assessing model performance. 4. \*\*Address Model Risk Management:\*\* The policy should explicitly address model risk management for LGD models, including the identification, assessment, and mitigation of model risk.

## Requirement: REQ016

Description: Model development in PD estimation

Reference: 5.2

Status: Satisfactory

Recommendations: 1. \*\*Enhance Risk Driver Selection Details:\*\* Provide more specific guidance on the statistical methods and expert consultation processes used for selecting risk drivers for PD models, including examples of relevant risk drivers for residential mortgages. 2. \*\*Elaborate on External Data Integration:\*\* Detail the specific methodologies for integrating external credit bureau scores or ratings, including how the Bank ensures sufficient weighting of internal information and validates the appropriateness of external scores. 3. \*\*Strengthen Explainability for ML Models:\*\* Expand on the explainability requirements for ML models, providing examples of the types of explainability techniques and tools that will be used, and how different levels of explainability will be provided to different stakeholders.

## Requirement: REQ017

Description: Calculation of measures such as one-year default rates, observed average default rate and long-run average default rate

Reference: As the PD calibration is based on the long-run average default rate

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The long-run average default rate should reflect the likely range of variability of default rates and hence may be based on a different observation period, or may require certain adequate adjustments.

Reference: Not explicitly stated

Status: Satisfactory

Recommendations: \* Specifying the methods used to determine the appropriate observation period (e.g., using a rolling window, or a period that captures a full economic cycle). \* Detailing the adjustments made if the historical period is not representative (e.g., stress testing, scenario analysis, or adjustments based on expert judgment). \* Providing examples of how the bank considers the variability of default rates in its LRA calculations.

## Requirement: REQ002

Description: Calibration has the purpose of ensuring that the estimates are reflective of the long-run average at a grade or pool level.

Reference: Not explicitly stated

Status: Satisfactory

Recommendations: 1. In Section 5.5, add a sentence explicitly stating that the purpose of calibration is to ensure that the PD estimates are reflective of the long-run average at a grade or pool level. 2. Consider adding a sentence in Section 5.4 to clarify that the LRA default rate is used to calibrate the PD model.

## Requirement: REQ001

Description: For LGD and LGD in-default, institutions also have to consider downturn conditions and use the estimates reflective of downturn conditions if these are more conservative than those based on the long-run average LGD.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Finally, for risk parameters for defaulted exposures, all requirements specified for LGD in Chapter 6 apply, unless explicitly specified otherwise.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: The risk parameters have to be regularly reviewed to ensure that adequate estimates are used both for own funds requirements calculation and for internal purposes.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Where, as a result of such review, institutions identify a need to change the model, such changes should be implemented in accordance with the requirements specified for the estimation of risk parameters.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: competent authorities will have to notify the EBA of whether or not they intend to comply with the GL.

Reference: Chapter 1

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: If a competent authority decides not to comply with the whole or part of the GL it has to justify its decision.

Reference: Chapter 1

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: These GL apply to all models for which an institution received permission to use under the IRB Approach.

Reference: Chapter 2

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Where institutions do not use own estimates of LGD (in accordance with the ‘Foundation’ IRB Approach) Chapters 6 and 7 do not apply, but all other requirements, including those specified in Chapters 4, 5, 8 and 9, apply with regard to PD estimates.

Reference: Chapter 2

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should agree with their competent authorities the latest date for submitting the application for the necessary changes in the rating systems.

Reference: Chapter 3

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should have adequate policies, processes and methods for assessing the representativeness of data used for the purpose of estimation of risk parameters, and they should pay particular attention to situations where data from different sources are used.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: For the purpose of calculating long-run average default rate and long-run average LGD, the definition of default has to strictly reflect the requirements of Article 178 of the CRR.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The non-comparability of the historical data underlying risk quantification should not lead to any data exclusions, but should trigger an appropriate adjustment and increased Mo C.

Reference: Not specified

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Reference Historical Data and Risk Quantification:\*\* Add a sentence to Section 3.3 or Section 9 explicitly mentioning that the non-comparability of historical data used for risk quantification should not lead to data exclusions, but should trigger appropriate adjustments and an increased MoC. 2. \*\*Provide Examples:\*\* Include specific examples of how non-comparability of historical data might manifest in the context of residential mortgage portfolios (e.g., changes in lending standards, economic conditions, or data collection methods) and how the bank intends to address these issues through adjustments and MoC.

## Requirement: REQ002

Description: Data exclusions may be a tool to quantify adjustments to the observed average default and loss rates where these are necessary; however, they should never be taken into account for the purpose of calculating the observed average default rate.

Reference: Not specified

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: While all defaulted observations, including those subject to the sale, have to be included in the calculation of long-run average LGD for the purpose of LGD calibration, institutions may decide not to include these observations in the sample used for the purpose of risk differentiation, for instance in the design of relevant pools.

Reference: Not specified

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: The LGD estimation methodology should be consistent with the collection and recovery policies adopted by the institution and adequate to the type of exposures to which LGDs are applied.

Reference: Not specified

Status: Satisfactory

Recommendations: 1. \*\*Explicit Linkage:\*\* Add a section or subsection within Section 6 that explicitly details how the LGD estimation methodology is aligned with and reflects the bank's specific collection and recovery policies. This should include how the methodology accounts for the bank's recovery processes, timelines, and costs. 2. \*\*Policy Review:\*\* Ensure that the LGD estimation methodology is reviewed and updated whenever there are material changes to the bank's collection and recovery policies.

## Requirement: REQ005

Description: Where (some of) the observations subject to the sale would not be included in the phase of model development, they should provide the basis for the adequate adjustment in the calibration phase in order to reflect the calibration target, i.e. the long-run average LGD, which should always be based on all observed defaults.

Reference: Not specified

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Address Non-Included Observations:\*\* Add a sentence or paragraph in Section 6.6, or a related section, that explicitly addresses the scenario where some observations are not included in the model development phase. This should clarify how the calibration phase is adjusted to account for these observations, ensuring that the LRA LGD is still based on all observed defaults. 2. \*\*Cross-reference:\*\* Add a cross-reference to Section 6.6 from the sections on model development (e.g., Section 4) to highlight the connection between model development and calibration.

## Requirement: REQ001

Description: When estimating risk parameters, institutions should identify any deficiencies that may lead to a bias in the quantification of risk parameters, or to increased uncertainty that is not fully captured by the general estimation error.

Reference: Treatment of deficiencies and margin of conservatism

Status: Satisfactory

Recommendations: 1. \*\*Enhance Examples:\*\* Include a more detailed list of potential deficiencies specific to residential mortgage portfolios, such as: \* Outdated property valuations. \* Inaccurate LTV data. \* Limited representativeness of external data sources (e.g., credit bureau scores). \* Biases in data collection or processing. \* Model misspecification. 2. \*\*Specify AA and MoC Application:\*\* Provide more concrete examples of how AAs and MoCs should be applied to address the identified deficiencies. For instance, if outdated property valuations are identified, the policy could specify a methodology for adjusting the valuation based on market trends or a specific haircut. 3. \*\*Strengthen Data Quality Focus:\*\* Reinforce the importance of data quality in mitigating bias and uncertainty. This could involve more detailed data quality checks and controls, especially for critical risk drivers.

## Requirement: REQ002

Description: Within category B, institutions should also consider whether or not any changes in legal environment may lead to changes in default or loss rates, in particular changes to bankruptcy law and any regulations related to legal collection processes.

Reference: Treatment of deficiencies and margin of conservatism

Status: Satisfactory

Recommendations: 1. \*\*Monitoring Legal Environment:\*\* Establish a process for proactively monitoring changes in bankruptcy law and legal collection processes. This could involve subscribing to legal updates, engaging with legal experts, or conducting regular reviews of relevant legislation and regulations. 2. \*\*Impact Assessment:\*\* Develop a methodology for assessing the potential impact of changes in the legal environment on default and loss rates. This could involve scenario analysis, stress testing, or incorporating legal risk drivers into the models. 3. \*\*Model Adjustments:\*\* Specify how the bank will adjust its IRB models (PD, LGD, etc.) to reflect the identified impacts of legal changes. This could involve recalibrating models, adjusting risk weights, or incorporating new risk drivers. 4. \*\*Documentation:\*\* Document the analysis, impact assessment, and model adjustments related to changes in the legal environment.

## Requirement: REQ003

Description: Categories A and B are expected to be non-overlapping, i.e. each identified deficiency should be classified in only one of the categories.

Reference: Treatment of deficiencies and margin of conservatism

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: As a general principle, institutions are required to address the identified deficiencies via appropriate adjustments and Mo C.

Reference: Treatment of deficiencies and margin of conservatism

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should be able to demonstrate that this objective has actually been achieved by a certain adjustment.

Reference: Not specified

Status: Satisfactory

Recommendations: \* Specifying the types of analyses (e.g., backtesting, performance monitoring) that will be used to assess the impact of AAs and MoC on risk parameter estimates. \* Detailing the reporting mechanisms for communicating the results of these analyses to relevant stakeholders (e.g., management, validation function). \* Providing examples of how the bank will track and document the impact of adjustments on capital requirements or risk-weighted assets.

## Requirement: REQ002

Description: They should also document any adjustments that have been applied, and regularly monitor their adequacy.

Reference: Not specified

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Mo C should be applied on top of the best estimate of the risk parameter (i.e. a parameter after applying all appropriate adjustments).

Reference: Not specified

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Mo C is applied on top of the parameters defined in the master scale.

Reference: Not specified

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: for own funds requirements calculation the final risk parameters, including Mo C, should be taken into account.

Reference: Not specified

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: Mo C should be quantified for all deficiencies that could not be rectified by appropriate adjustment.

Reference: Not specified

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ007

Description: Institutions should quantify Mo C related to the identified deficiencies in the same categories used to classify deficiencies (categories A and B).

Reference: Not specified

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ008

Description: In addition, they should quantify a general estimation error and present it in a separate category (category C).

Reference: Not specified

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ009

Description: The GL require that the final Mo C to be added to the best estimate of the risk parameter be the sum of Mo C for categories A, B and C.

Reference: Not specified

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: All methods used for quantification and aggregation of Mo C should be documented and regularly monitored.

Reference: Not explicitly stated, but implied within the context of Mo C quantification and aggregation.

Status: Satisfactory

Recommendations: 1. \*\*Explicit Documentation:\*\* Add a sentence to Section 9.3, or a new subsection, explicitly stating that the methods used for quantifying and aggregating the MoC, including the formulas, data sources, and assumptions, will be documented.

## Requirement: REQ001

Description: Each natural or legal person that has exposures within the scope of the IRB Approach should be rated including where there is unfunded credit protection.

Reference: Chapter 5: PD estimation

Status: Major Gaps

Recommendations: 1. \*\*Explicitly Address Unfunded Credit Protection:\*\* The policy should be amended to include a specific section or subsection that addresses the rating of exposures with unfunded credit protection. This section should detail the methodologies used to incorporate the effects of unfunded credit protection into the rating process. 2. \*\*Define Unfunded Credit Protection:\*\* The policy should define what constitutes unfunded credit protection within the context of the bank's IRB approach. 3. \*\*Describe Rating Process for Protected Exposures:\*\* The policy should describe how the rating process is adapted for exposures with unfunded credit protection. This should include how the credit protection is factored into the PD, LGD, and CCF estimations. 4. \*\*Data Requirements:\*\* Specify the data requirements for assessing and incorporating unfunded credit protection into the rating process. 5. \*\*Validation:\*\* The policy should include validation procedures to ensure the accuracy and effectiveness of the rating process for exposures with unfunded credit protection.

## Requirement: REQ002

Description: Even in the case of a rating transfer from a third party to the obligor, therefore, the initial rating of the obligor without taking into account the support of a third party should be available.

Reference: Chapter 5: PD estimation

Status: Missing Requirement

Recommendations: \* Adding a section to the policy specifically addressing rating transfers. \* Specifying the documentation requirements for rating transfers, including the initial rating. \* Ensuring that the bank's systems are capable of storing and retrieving the initial rating.

## Requirement: REQ003

Description: The selection of certain risk drivers and rating criteria should be based not only on statistical analysis, but that the relevant business experts should be consulted on the business rationale and risk contribution of the risk drivers under consideration.

Reference: Chapter 5: PD estimation

Status: Satisfactory

Recommendations: 1. \*\*Enhance Consultation Process:\*\* The policy should explicitly describe the process for consulting with business experts. This should include: \* \*\*Identification of Experts:\*\* Specify which business units or individuals are considered "relevant business experts" for residential mortgage risk modeling. \* \*\*Formal Consultation:\*\* Outline a formal process for consultation, such as regular meetings, workshops, or documented feedback sessions. \* \*\*Documentation:\*\* Mandate the documentation of expert input, including their rationale for the risk contribution of specific risk drivers. \* \*\*Incorporation:\*\* Describe how the expert input is incorporated into the model development, risk driver selection, and rating criteria. 2. \*\*Expand on Risk Driver Examples:\*\* While the policy lists some risk drivers, it could provide more detailed examples of how business experts contribute to the selection and validation of these drivers. For example, how do business experts assess the relevance of LTV ratios or geographical location? 3. \*\*Training:\*\* Ensure that business experts receive adequate training on the IRB model development process and their role in it.

## Requirement: REQ001

Description: Where an institution chooses for its retail portfolios to assign PDs at exposure level and to identify default at facility level, it should be ensured that the PDs are adequate for PD estimates by obligor grade or pool, as required in Article 180(1)(a) and 180(2)(a) of the CRR.

Reference: Article 180(1)(a) and 180(2)(a) of the CRR

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: If, for example, an institution considers days-past-due buckets as pools in its rating model, it nevertheless has to ensure that the ranking model for the pool of obligors without any past due obligations provides PD estimates appropriate for a one-year time horizon, as this is the relevant time horizon for the application portfolio.

Reference: Guidelines on PD Estimation

Status: Missing Requirement

Recommendations: \* Adding a section or subsection within the PD Model Development and Quantification section (5) that specifically addresses the requirement. \* Stating that the bank's rating model must ensure that the PD estimates for obligors without past due obligations are appropriate for a one-year time horizon. \* Describing the methods used to validate and calibrate the PD estimates for this specific group of obligors. \* Including procedures for monitoring and reviewing the performance of the PD estimates for obligors without past due obligations.

## Requirement: REQ001

Description: it is required that any changes to the rating of the third party should be reflected in the PD estimate incorporating the third party rating in a timely manner.

Reference: PD Estimation Guidelines

Status: Satisfactory

Recommendations: 1. Defining "timely manner" with a specific timeframe (e.g., within X days/weeks of a third-party rating change). 2. Specifying the process for updating PD estimates when third-party ratings change, including the systems and personnel involved. 3. Including a process for monitoring the timeliness of these updates.

## Requirement: REQ002

Description: the GL allow institutions to decide on the philosophy underlying the grade or pool assignment and the risk drivers, but require that a number of criteria be taken into account, including, among others, that institutions need to monitor their choice of rating philosophy, to apply that philosophy consistently over time, to understand its impact on the dynamics and volatility of capital requirements, and to take the rating philosophy into account for back-testing purposes.

Reference: PD Estimation Guidelines

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Define Monitoring of Rating Philosophy:\*\* Add a section or amend existing sections (e.g., Section 10.3, Ongoing Monitoring and Review of Estimates) to explicitly detail how the bank will monitor its chosen rating philosophy. This should include the frequency of reviews, the metrics used to assess the philosophy's effectiveness, and the process for making adjustments if necessary. 2. \*\*Enhance Consistency Procedures:\*\* Strengthen the policy's language regarding the consistent application of the rating philosophy. Specify the controls and procedures in place to ensure that the philosophy is applied uniformly across the residential mortgage portfolio and over time. This could include training programs, regular audits, and clear documentation of any deviations from the established philosophy. 3. \*\*Expand on Impact on Capital Requirements:\*\* While the policy mentions the need to understand the impact on capital requirements, it could be more explicit. Add a section or amend existing sections (e.g., Section 5, Probability of Default (PD) Model Development and Quantification) to describe how the bank analyzes the impact of its rating philosophy on the dynamics and volatility of capital requirements. This could include stress testing scenarios and sensitivity analyses. 4. \*\*Strengthen Back-testing Procedures:\*\* While the policy mentions back-testing, it could be more specific about how the rating philosophy is considered in back-testing. Add a section or amend existing sections (e.g., Section 10.1, Internal Validation) to describe how the bank incorporates its rating philosophy into its back-testing framework. This should include how the bank assesses the performance of its models against its chosen philosophy and how it uses back-testing results to refine its philosophy.

## Requirement: REQ001

Description: Where relevant risk drivers or rating criteria are missing, for example because the relevant information has not been collected from the obligors in the past, institutions should apply appropriate adjustments and increase Mo C.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: 1. \*\*Specificity:\*\* Add specific examples of scenarios where missing risk drivers or rating criteria would necessitate an increase in MoC. For instance, explicitly state that if historical data lacks information on a specific risk driver (e.g., energy efficiency ratings for a property), the MoC should be increased to reflect the uncertainty. 2. \*\*Cross-referencing:\*\* Enhance cross-referencing between Section 3.3 (Data Representativeness) and Section 9 (AA and MoC) to ensure a clear link between data deficiencies and the application of MoC.

## Requirement: REQ002

Description: institutions should ensure that obligors or exposures are appropriately assigned to grades and pools, taking into account the identified risk drivers and rating criteria.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: all data relevant for identifying the non-defaulted exposures at the beginning of a one-year observation period has to be available, in addition to all relevant default information as required in Article 178 of the CRR.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: 1. \*\*Explicitly State Data Availability:\*\* Add a sentence or paragraph in Section 3 (Data Standards and Management) or Section 5 (PD Model Development and Quantification) that explicitly states how the bank ensures that all necessary data for identifying non-defaulted exposures at the beginning of the one-year observation period is available. This should include details on data collection, storage, and accessibility. 2. \*\*Link Data to Article 178:\*\* In Section 3.5 (Definition of Default), expand the discussion to explicitly link the data collected for non-defaulted exposures to the default information required by Article 178 of the CRR. This could involve a cross-reference to the data quality framework or a description of how the data is used in the default definition process. 3. \*\*Enhance Data Vetting:\*\* In Section 3.3 (Data Representativeness and Vetting), add a sentence or paragraph that explicitly mentions the importance of vetting data for non-defaulted exposures at the beginning of the observation period.

## Requirement: REQ004

Description: the denominator should contain the obligors of the relevant model or calibration segment, with any credit obligation at the beginning of the observation period.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: the information stemming from defaults of guarantors or any other relevant data on external default rates should be taken into account in the estimation of the long-run average default rates if this is necessary to meet the requirements in Section 5.3.4

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Missing Requirement

Recommendations: 1. \*\*Incorporate External Data Consideration:\*\* Amend the policy to explicitly state that when estimating the LRA default rate, the bank will consider information stemming from defaults of guarantors and/or external default rates if necessary to meet the requirements of Section 5.3.4. 2. \*\*Define Data Sources and Methodology:\*\* Specify the acceptable sources of external default data (e.g., industry reports, credit bureaus, etc.) and the methodology for incorporating this data into the LRA default rate calculation. This should include how the bank will assess the representativeness of the external data and make appropriate adjustments. 3. \*\*Address Guarantor Defaults:\*\* Include specific guidance on how the bank will account for defaults of guarantors, if applicable to the residential mortgage portfolio. This should include how the bank will obtain and incorporate data on guarantor defaults into the LRA default rate calculation. 4. \*\*Cross-reference Section 5.3.4:\*\* Explicitly reference Section 5.3.4 (PD Quantification: One-Year Default Rate and Long-Run Average (LRA)) within the policy to ensure that the requirement is addressed in the context of LRA default rate calculation.

## Requirement: REQ001

Description: Institutions should refer to the obligors assigned to grades or pools at the beginning of the one-year observation period, where the assignment to a grade may be based on an override.

Reference: Not specified

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: All obligors carrying a credit obligation at the beginning of the observation period should be included in the denominator and, if applicable, the numerator of the default rate, calculated for the grade the obligor has been assigned to at the beginning of the observation period.

Reference: Not specified

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The GL require institutions to justify their approach to calculating the average of one-year default rates taking into account, in particular, analysis of the effect of short-term contracts or specific calculation dates.

Reference: Calculation of the observed average default rate

Status: Major Gaps

Recommendations: 1. \*\*Enhance Justification Methodology:\*\* The policy should be updated to include a detailed methodology for justifying the approach to calculating the average default rate. This should include a specific analysis of how short-term contracts are handled. For example, the policy should clarify whether short-term contracts are excluded, weighted, or otherwise accounted for in the calculation. 2. \*\*Address Calculation Dates:\*\* The policy should address how specific calculation dates are considered. This could involve specifying the frequency of default rate calculations, the time windows used, and how the bank ensures that the chosen calculation dates do not introduce biases. 3. \*\*Document Analysis:\*\* The policy should mandate the documentation of the analysis performed to assess the impact of short-term contracts and calculation dates. This documentation should be reviewed and updated regularly. 4. \*\*Provide Examples:\*\* Include examples of how the bank addresses the impact of short-term contracts and calculation dates in the policy.

## Requirement: REQ002

Description: Institutions should estimate the long-run average default rate by estimating an appropriate adjustment to the average of observed one-year default rates.

Reference: Long-run average default rate

Status: Satisfactory

Recommendations: 1. \*\*Explicit Methodology:\*\* Include a section or expand on the existing sections (e.g., 5.4. PD Quantification: One-Year Default Rate and Long-Run Average (LRA)) to explicitly describe the methodology for adjusting the average of observed one-year default rates. This should include the specific techniques used (e.g., averaging, weighting, statistical modeling) and the rationale behind them. 2. \*\*Adjustment Factors:\*\* Detail the factors considered when making adjustments to the observed one-year default rates. This should include how the bank accounts for economic cycles, changes in lending standards, and any other relevant factors that might influence the long-run average default rate. 3. \*\*Documentation:\*\* Ensure that the methodology and any adjustments made are thoroughly documented, including the data sources, assumptions, and calculations used.

## Requirement: REQ003

Description: Institutions may consider downward adjustments of the observed average of default rates, based on an appropriate method taking into account the correlation between economic indicators relevant for the considered portfolio and the underlying observed default rates.

Reference: Long-run average default rate

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Institutions may still estimate long-run average default rates below this benchmark, but this should be duly justified and eventually trigger additional Mo C

Reference: Long-run average default rate

Status: Satisfactory

Recommendations: 1. \*\*Specify the Benchmark:\*\* The policy should explicitly state the benchmark for long-run average default rates. This could be a regulatory benchmark, an industry average, or a specific internal target. 2. \*\*Explicitly Link to MoC:\*\* The policy should explicitly state that if the bank's estimated LRA default rates are below the benchmark, this should be duly justified and, if the justification is not sufficient, it should trigger an increase in the Margin of Conservatism (MoC). 3. \*\*Enhance Justification Requirements:\*\* The policy should provide more detail on what constitutes "duly justified" in the context of LRA default rates below the benchmark. This could include specific requirements for the analysis, documentation, and validation of the justification.

## Requirement: REQ001

Description: Institutions may still estimate long-run average default rates below this benchmark, but this should be duly justified and eventually trigger additional Mo C.

Reference: Calibration to the long-run average default rate

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: An institution might use a more complex combination, for example by using risk drivers that are quite sensitive to economic conditions in a statistical default prediction model providing PD estimates for individual obligors, (i.e. a PIT rating philosophy), but applying a two-step approach for the purpose of calibration, namely by evaluating these PD estimates on a more recent point in time and subsequently adjusting them such that the average of these estimates reflects the long-run average default rate at the level of the relevant calibration segment (or even portfolio – if there is only one calibration segment).

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: The chosen point in time would need to reflect a sample comparable to the current portfolio and representative of the likely range of variability of one-year default rates.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Experts would need to historically review every rating of every obligor subject to the ranking method within the historical observation period.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: The PD estimates based on the available grades and pools would be adjusted to reflect a long-run average default rate of the relevant pool, covering the whole historical observation period.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: 1. \*\*Explicit Adjustment Methodology:\*\* Add a section or expand on Section 5.4 to explicitly describe the methodology for adjusting PD estimates based on grades and pools to reflect the LRA default rate. This should include how the LRA is used in the calibration process. 2. \*\*Calibration Process Details:\*\* Provide more detail on the calibration process, including how the LRA default rate is used to calibrate the PD model at the grade/pool level or calibration segment level. 3. \*\*Documentation:\*\* Ensure that the process for adjusting PD estimates is well-documented, including the data sources, methodologies, and assumptions used.

## Requirement: REQ001

Description: the GL require that institutions perform additional calibration tests at the level of the calibration segment where calibration is performed at the grade or pool level, and vice versa.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Where calibration includes steps performed on a portfolio level, and on a grade or pool level, the additional calibration tests should be applied to the last calibration step.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Calibration should be performed before the application of Mo C and floors on PD, as required by Articles 160(1) and 163(1) of the CRR (PD floors), and after taking overrides into account.

Reference: Articles 160(1) and 163(1) of the CRR

Status: Satisfactory

Recommendations: 1. In Section 5.5, "PD Calibration," explicitly reference Articles 160(1) and 163(1) of the CRR. 2. Consider adding a specific section or subsection within the PD Calibration section that explicitly addresses the requirements of Articles 160(1) and 163(1) of the CRR, ensuring that the calibration process adheres to these articles.

## Requirement: REQ001

Description: Institutions should not use methodologies that are based only on external data, such as so called market LGD and market implied LGD, which are based on the market prices of financial instruments such as marketable loans, bonds or credit default instruments.

Reference: General requirements for LGD estimation

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should ensure that the estimates are sufficiently robust.

Reference: An alternative methodology that is available for retail exposures and purchased corporate receivables is that of deriving LGD estimates from realised losses and appropriate estimates of PD. However, in this case too, institutions should ensure that the estimates are sufficiently robust.

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Detail Robustness Measures:\*\* Add a section or expand existing sections (e.g., 6.1, 6.6) to explicitly detail the methods used to ensure the robustness of LGD estimates derived from realized losses and PD estimates. This should include specific techniques for validating the consistency between LGD and PD estimates, sensitivity analyses, and stress testing. 2. \*\*Strengthen Data Representativeness Assessment:\*\* While the policy mentions data representativeness, it could be strengthened by providing more specific guidance on how the bank assesses the representativeness of data used for LGD estimation, especially when deriving LGD from realized losses and PD. This could include examples of statistical tests or other methods used to compare the characteristics of the data used for LGD estimation with the characteristics of the application portfolio. 3. \*\*Enhance Documentation:\*\* Ensure that the documentation for LGD models, especially those deriving LGD from realized losses and PD, clearly outlines the steps taken to ensure the robustness of the estimates. This should include details on the data used, the methodologies employed, the assumptions made, and the results of any validation or sensitivity analyses.

## Requirement: REQ003

Description: Institutions should assess whether two defaults related to the same exposure are independent.

Reference: In accordance with point (b) of Article 52 of the RTS on IRB assessment methodology, and to achieve correct LGD estimates, institutions should assess whether two defaults related to the same exposure are independent.

Status: Missing Requirement

Recommendations: \* Defining what constitutes "the same exposure" in the context of residential mortgages (e.g., a single mortgage, multiple mortgages to the same borrower). \* Outlining the methodology for assessing default independence. This could involve: \* Analyzing the correlation of default events. \* Identifying common risk factors that could lead to correlated defaults (e.g., regional economic downturns, property market collapses). \* Considering the time elapsed between default events. \* Specifying how the assessment of default independence impacts LGD estimation. For example, if defaults are found to be correlated, the bank may need to adjust its LGD estimates to reflect the increased risk. \* Documenting the assessment process and the rationale behind the conclusions.

## Requirement: REQ004

Description: Institutions cannot consider a new default on an exposure, occurring within nine months from the return to non-defaulted status, independent from with the first default.

Reference: In particular, it was specified that institutions cannot consider a new default on an exposure, occurring within nine months from the return to non-defaulted status, independent from with the first default.

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: For the purpose of LGD estimation, they should treat this situation as if the exposure was constantly defaulted from the first moment when default occurred.

Reference: For the purpose of LGD estimation, they should treat this situation as if the exposure was constantly defaulted from the first moment when default occurred.

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The reference data set (RDS) should include all information necessary for the model development as well as for calibration.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: The RDS should include complete information for all defaulted facilities observed during the historical observation period.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: 1. \*\*Explicitly State RDS Requirement for PD Models:\*\* Add a sentence to Section 3.3, "Data Representativeness and Vetting," or Section 5.1, "PD Model Structure and Risk Differentiation," clarifying that the RDS used for PD model development and calibration must also include complete information for all defaulted facilities observed during the historical observation period. 2. \*\*Cross-reference:\*\* In Section 6.2, "Data Requirements for LGD Estimation," add a cross-reference to the sections in the policy that describe the data requirements for PD models.

## Requirement: REQ003

Description: Institutions should use the values of risk drivers from before the moment of default in the estimation of LGD.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: The RDS should include all relevant information about the collaterals and the process of their realisation.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: 1. Incorporate explicit references to the RDS and its contents (collateral information and realization processes) in sections related to model performance assessment, validation, and ongoing monitoring (e.g., Sections 10.1, 10.3). This will ensure that the information is consistently reviewed and updated. 2. Consider adding a specific section or subsection within the LGD model development section (Section 6) that focuses solely on the details of collateral and the realization process. This could include information on valuation methodologies, legal frameworks, and recovery procedures.

## Requirement: REQ005

Description: The relevant information about costs and recoveries has to be adequately allocated to individual exposures whenever this is a necessary step for the purpose of LGD model development and, in any case, for the calculation of the long-run average in the calibration phase.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions may allocate the value of recoveries (i.e. part of the sale price) to the existing collaterals.

Reference: Sale of secured credit obligations

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: For the purpose of LGD estimation, the recoveries realised with the use of collaterals have to be treated as such regardless of the form of the realisation of the collateral.

Reference: Recoveries from collaterals

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Institutions should also be recognised by institutions to identify cash flows stemming from realising the collaterals.

Reference: Recoveries from collaterals

Status: Fully Compliant

Recommendations: 1. \*\*Enhance Specificity:\*\* Add a specific section or subsection within Section 6 (or a related section) that explicitly addresses the identification and tracking of cash flows from the realization of collaterals. This should include details on how the bank identifies, records, and monitors these cash flows. 2. \*\*Define "Realization":\*\* Clarify the definition of "realizing the collaterals" within the context of the bank's processes. This should include the specific actions and events that constitute collateral realization (e.g., sale of the property, transfer of ownership). 3. \*\*Data and Systems:\*\* Specify the data sources and IT systems used to capture and track these cash flows. 4. \*\*Integration with LGD Calculation:\*\* Clearly explain how the identified cash flows from collateral realization are integrated into the LGD calculation.

## Requirement: REQ004

Description: This uncertainty should be addressed by applying an appropriate haircut to the value of repossession.

Reference: Recoveries from collaterals

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: The haircut should be estimated on the assumption that the institution intends to sell the repossessed asset as soon as reasonably possible.

Reference: Recoveries from collaterals

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: Wherever sufficient past experience with regard to repossession of collaterals exists, the haircuts should be supported by historical observations and regularly back-tested

Reference: Recoveries from collaterals

Status: Satisfactory

Recommendations: 1. \*\*Expand on Back-Testing Methodology:\*\* The policy should elaborate on the back-testing methodology for haircuts. This should include: \* Frequency of back-testing (e.g., annually, quarterly). \* Specific historical data to be used (e.g., repossession sales data, market values at the time of repossession, recovery costs). \* Statistical methods for comparing actual losses with haircut estimates (e.g., comparing realized losses to haircut-adjusted collateral values). \* Thresholds for triggering a review of the haircut methodology. 2. \*\*Define "Historical Observations":\*\* Provide more detail on what constitutes "historical observations." Specify the minimum length of the observation period and the types of data that should be included. 3. \*\*Address Downturn Scenarios:\*\* Consider including specific guidance on how haircuts are adjusted to reflect potential downturn scenarios in the property market.

## Requirement: REQ001

Description: In any case, realised LGD has to be calculated for each defaulted observation, and all observations have to be taken into account in calculating long-run average LGD.

Reference: Model development in LGD estimation

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: It is important that institutions duly analyse potential risk drivers and choose those that meaningfully differentiate risk of transactions.

Reference: Risk drivers

Status: Satisfactory

Recommendations: 1. \*\*Enhance Specificity:\*\* Provide concrete examples of the statistical methods used to analyze risk drivers and assess their ability to differentiate risk within the residential mortgage portfolio. 2. \*\*Discriminatory Power Assessment:\*\* Explicitly mention the use of statistical tests (e.g., Kolmogorov-Smirnov test, Gini coefficient) to assess the discriminatory power of the chosen risk drivers and rating criteria. 3. \*\*Documentation:\*\* Ensure that the analysis of risk drivers and the assessment of their discriminatory power are thoroughly documented, including the methodology, data sources, and results.

## Requirement: REQ003

Description: In addition, the risk drivers should be analysed at an appropriate reference date that is representative of the realisations of the given risk driver within a year before default.

Reference: Risk drivers

Status: Satisfactory

Recommendations: 1. In Section 4.2, Risk Drivers Selection and Ageing of Information, add a sentence explicitly stating that the analysis of risk drivers for PD models should also be performed at an appropriate reference date, typically within a year before default.

## Requirement: REQ001

Description: Institutions are required to incorporate in their LGD estimates all relevant data, information and methods in accordance with Article 179(1)(a) of the CRR.

Reference: Article 179(1)(a) of the CRR

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: For the main types of collaterals the requirement of Article 181(1)(f) of the CRR will have to be met as specified above.

Reference: Article 181(1)(f) of the CRR

Status: Missing Requirement

Recommendations: 1. \*\*Incorporate Article 181(1)(f) Requirements:\*\* Amend the policy to explicitly state how the bank meets the requirements of Article 181(1)(f) of the CRR for the main types of collaterals used. This should include details on how the bank ensures that the LGD estimates for the main types of collaterals are appropriately conservative and reflect the economic substance of the collateral. 2. \*\*Specify Collateral Types:\*\* The policy should identify the main types of collaterals used for residential mortgages and how the bank addresses the specific requirements for each type. 3. \*\*Address Collateral Valuation and Realization:\*\* The policy should detail the bank's approach to collateral valuation, including the frequency of valuations, the methodologies used, and the treatment of any haircuts applied. It should also describe the processes for collateral realization and how these processes are considered in the LGD estimation. 4. \*\*Documentation:\*\* Ensure that the documentation for the LGD models includes the specific details required by Article 181(1)(f), such as the rationale for the chosen methodologies, the data used, and the results of any validation exercises.

## Requirement: REQ003

Description: Institutions should calculate the loss realised on these exposures in the same manner as for all other defaulted observations, with the only difference being that an artificial cash flow is added to the calculation in the amount of the outstanding obligation at the moment of the return to non-defaulted status.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: All fees and interest outstanding at the moment of default should be included in the amount of outstanding obligation at the moment of default.

Reference: Treatment of fees, interest and additional drawings after default

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Where additional drawings after default are included in the conversion factors, the outstanding amount in the denominator of the realised LGD should also include such drawings.

Reference: Treatment of fees, interest and additional drawings after default

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: In the case of retail exposures, where the conversion factors do not include any drawings after the moment of default, the denominator of the realised LGD should also reflect only the outstanding amount at the moment of default.

Reference: Treatment of fees, interest and additional drawings after default

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Where these additional fees cover costs that were incurred by the institution, these should be included in the calculation of economic loss as costs.

Reference: Treatment of fees, interest and additional drawings after default

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: All recovery cash flows realised on a given exposure should be included in the calculation of realised LGDs.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: As additional drawings after default are related to an outflow of cash from an institution, they should always be included in the calculation of economic loss in the numerator of realised LGD.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Major Gaps

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: For exposures in currencies other than the euro, and for observations from before the adoption of euro, an equivalent interest rate should be used that is applicable for the currency of the exposure.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should look into costs not only after the moment of default but also before that date.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Mention Pre-Default Cost Analysis:\*\* Add a section or modify existing sections (e.g., Section 6.4 Calculation of Economic Loss and Realised LGD) to explicitly mention the importance of analyzing and considering costs incurred before the default event. This could include costs related to loss mitigation strategies, early intervention programs, or other pre-default activities. 2. \*\*Expand on Data Requirements:\*\* Enhance Section 6.2 (Data Requirements for LGD Estimation) to specify the need to collect and analyze data on pre-default costs. This could involve adding specific data fields or categories for tracking these costs. 3. \*\*Include Pre-Default Costs in Economic Loss Calculation:\*\* Ensure that the definition of economic loss (Section 6.4) explicitly includes pre-default costs, even if they are not directly recoverable.

## Requirement: REQ002

Description: If the costs incurred by the institution due to diminished credit quality of the exposures but before recognition of default are not included in the exposure value at the moment of default, they should be taken into account in the calculation of economic loss.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: It was specified that all available internal data should be taken into account in the long-run average LGD.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: The long-run average should be calculated as an arithmetic average of realised LGDs on all observations from the specified historical observation period, and that it should be weighted by the number of defaults

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions may apply higher weights to more recent data in the case of retail exposures. However, the use of this exemption requires appropriate justification and evidence that it leads to better LGD estimates.

Reference: Article 181(2) of the CRR

Status: Missing Requirement

Recommendations: \* A clear justification for using this approach, demonstrating that it leads to better LGD estimates. This should include a discussion of the benefits of using more recent data, such as capturing changes in market conditions or borrower behavior. \* A detailed description of the methodology for applying higher weights to more recent data. This should include the specific weighting scheme to be used, the time period to which the weights will be applied, and the rationale for choosing the weighting scheme. \* A process for validating the use of higher weights, including back-testing and performance monitoring. This should include a discussion of how the bank will assess the accuracy of its LGD estimates and how it will adjust the weighting scheme if necessary. \* A requirement to document the use of higher weights, including the justification, methodology, and validation results.

## Requirement: REQ002

Description: All observed defaults have to be taken into account in the calculation of long-run average LGD; hence, incomplete recovery processes should also be included.

Reference: Article 181(1)(a) of the CRR

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Institutions should also calculate the ‘observed average LGD’ taking into account realised LGDs only on those defaults that are related to closed recovery processes, including those that are treated as closed because they have reached a certain threshold in terms of the time in default, i.e. a maximum length of the recovery process during which additional recoveries can be reasonably expected.

Reference: None

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Institutions should estimate the most likely future recoveries on cases where the processes are not yet complete.

Reference: None

Status: Satisfactory

Recommendations: 1. \*\*Enhance Methodological Specificity:\*\* Provide more detailed guidance on the methodologies used to estimate future recoveries. This should include specific examples of the types of information considered (e.g., estimated collateral value, legal costs, expected time to recovery) and the techniques used to estimate these values (e.g., statistical modeling, expert judgment, historical data analysis). 2. \*\*Define Maximum Recovery Period:\*\* Clearly define the criteria and process for determining the "defined maximum recovery period." This should include factors such as the type of collateral, the legal jurisdiction, and the bank's recovery procedures. 3. \*\*Strengthen Justification and Back-testing:\*\* Elaborate on the requirements for justifying the underlying assumptions used in estimating future recoveries and the methods for back-testing these assumptions. This should include details on the frequency of back-testing, the metrics used to assess the accuracy of the estimates, and the actions to be taken if the estimates are found to be inaccurate.

## Requirement: REQ005

Description: Institutions should estimate future recoveries only until a certain point in time, i.e. the maximum length of the recovery process during which a sufficient number of recoveries were actually observed in similar cases

Reference: None

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Where the calculation of realised LGD results in a negative number, i.e. where profit has been realised on a defaulted exposure, this should be floored at zero in the calculation of observed average LGD and long-run average LGD.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: The floor should be applied at the level of individual observation, as it would not be appropriate to allow any netting effects in that regard between the observations included in the RDS, especially where these observations may have been observed in different periods of time.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: In accordance with Article 181(1)(b) of the CRR, these estimates reflecting the long-run average LGD should be used whenever they are more conservative than the estimates reflecting the downturn conditions.

Reference: Article 181(1)(b) of the CRR

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: For the purpose of computing realised LGDs for defaulted exposures, institutions should use reference points in time that will be relevant for the current outstanding obligations of defaulted exposures.

Reference: Chapter 7

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should set discrete relevant reference dates at which the realised LGDs should be computed.

Reference: Chapter 7

Status: Satisfactory

Recommendations: 1. A detailed description of the methodology for selecting discrete reference dates. This should include the factors considered (e.g., recovery patterns, legal processes, market conditions). 2. Specific examples of how these reference dates are applied in the context of residential mortgage portfolios. 3. A process for reviewing and updating these reference dates to ensure their continued relevance. 4. Clarification on how the bank ensures the chosen reference dates are aligned with the economic loss definition and the timing of recoveries.

## Requirement: REQ003

Description: To ensure adequacy of the estimates, institutions should set the reference dates according to the recovery patterns observed on a specific type of exposures.

Reference: Chapter 7

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Define Reference Date Setting:\*\* Add a section or expand existing sections (e.g., 6.3 Risk Drivers for LGD and Collateral Modelling, 7.1 General Requirements) to explicitly describe the process for setting reference dates based on observed recovery patterns for residential mortgages. This should include: \* How the bank will analyze historical recovery data to identify patterns. \* How the bank will segment exposures (e.g., by product type, collateral type, region) to identify specific recovery patterns. \* How the bank will determine the appropriate reference date for each segment, considering the observed recovery patterns. \* How the bank will ensure the reference dates are reviewed and updated periodically to reflect changes in recovery patterns. 2. \*\*Include Examples:\*\* Provide specific examples of how the bank applies this principle to residential mortgages. 3. \*\*Cross-reference:\*\* Cross-reference the section on reference dates with the sections on LGD estimation and data requirements to ensure consistency.

## Requirement: REQ001

Description: For the purpose of the treatment of defaulted exposures, institutions should additionally store data including relevant risk drivers, which may become relevant after default, and outstanding exposure amounts and values of collaterals at each reference date.

Reference: Data requirements for ELBE and LGD in-default

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should first evaluate which reference date is relevant for the exposure under consideration.

Reference: For the purpose of application of the estimated LGD in-default and ELBE to a given defaulted exposure in the current portfolio

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Institutions should additionally store data including relevant risk drivers, which may become relevant after default, and outstanding exposure amounts and values of collaterals at each reference date.

Reference: Data requirements for ELBE and LGD in-default

Status: Satisfactory

Recommendations: 1. \*\*Explicitly State Reference Date Storage:\*\* Add a sentence or paragraph in Section 6.2 or 6.3 to explicitly state that the required data (risk drivers, exposure amounts, and collateral values) will be stored at each reference date. This will ensure full compliance with the regulatory requirement.

## Requirement: REQ004

Description: The relevance of risk drivers should be re-evaluated for the relevant periods after default, until the date of termination of the recovery process.

Reference: Model development in the estimation of ELBE and LGD in-default

Status: Major Gaps

Recommendations: 1. \*\*Explicitly Address Re-evaluation:\*\* Amend the policy to explicitly state that the relevance of risk drivers used in LGD and ELBE models will be re-evaluated for defaulted exposures at defined intervals throughout the recovery process, until the termination of the recovery process. 2. \*\*Define Re-evaluation Process:\*\* Detail the process for re-evaluating risk drivers. This should include: \* Frequency of re-evaluation (e.g., quarterly, semi-annually, or based on significant events in the recovery process). \* Specific risk drivers to be re-evaluated (e.g., changes in property value, obligor's financial situation, market conditions). \* Methodology for re-evaluation (e.g., statistical analysis, expert judgment, updated data). \* Documentation requirements for the re-evaluation process. 3. \*\*Integrate with Existing Processes:\*\* Integrate the re-evaluation process with the existing model performance assessment and review processes (Section 10). 4. \*\*Training:\*\* Ensure that model developers, validators, and relevant stakeholders are trained on the re-evaluation process.

## Requirement: REQ001

Description: Institutions should calculate for each defaulted exposure in the RDS the realised LGDs according to each reference date that is relevant for estimation purposes.

Reference: Chapter 6

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Incomplete recovery processes should be used only for those reference dates for which observations of recoveries and costs are available at least until the next reference date.

Reference: Section 6.4

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Incomplete recovery processes on which ELBE and LGD in-default are estimated should not take part in the estimation itself and will be therefore excluded, if only those incomplete recovery processes for which later reference dates are relevant are taken into account.

Reference: Section 6.4

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: No further recoveries should be estimated beyond the maximum length of the recovery processes specified for the specific type of exposures.

Reference: Section 6.4

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The ELBE estimation methods should take into account all currently available and relevant information and, in particular, consider current economic circumstances and exposure status.

Reference: Article 181(1)(h) of the CRR

Status: Satisfactory

Recommendations: 1. \*\*Enhance Methodological Specificity:\*\* The policy should be updated to include specific methodologies or examples of how the bank will consider current economic circumstances and exposure status when estimating ELBE. This could include: \* Describing the types of economic data (e.g., unemployment rates, house price indices, interest rates) that will be used. \* Outlining how these economic factors will be incorporated into the ELBE calculation (e.g., through macroeconomic scenario analysis, adjustments to loss given default (LGD) estimates, or other methods). \* Specifying how the bank will assess and incorporate the current exposure status of the residential mortgage portfolio (e.g., loan-to-value ratios, payment history, and other relevant risk drivers). 2. \*\*Provide Examples:\*\* Include concrete examples of how the ELBE estimation process would be adjusted based on different economic scenarios or changes in exposure status. 3. \*\*Strengthen Documentation:\*\* Ensure that the methodologies used to incorporate economic circumstances and exposure status are thoroughly documented, including the rationale behind the chosen approach and any limitations.

## Requirement: REQ002

Description: The ELBE should not include any Mo C, as this would not be in line with the best estimate concept.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should take into account economic factors, including macroeconomic and credit factors, that are relevant for the type of exposures under consideration.

Reference: Current economic circumstances

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Integrate Economic Factors:\*\* Add specific sections or modify existing ones to detail how macroeconomic and credit factors are considered in the model development and calibration processes. This could include: \* Describing how economic scenarios (e.g., recession, housing market downturn) are used in stress testing and model validation. \* Specifying how macroeconomic variables (e.g., GDP growth, unemployment rate, interest rates) are incorporated as risk drivers or used to adjust model parameters. \* Outlining how the bank monitors and responds to changes in economic conditions that could impact the risk profile of residential mortgage portfolios. 2. \*\*Enhance Risk Driver Selection:\*\* Expand the discussion on risk drivers to include specific macroeconomic and credit factors that are relevant to residential mortgages. For example, include house price indices, interest rate trends, and unemployment rates. 3. \*\*Strengthen Monitoring and Review:\*\* Enhance the section on ongoing monitoring and review of estimates to include a specific focus on the impact of economic factors on model performance. This could involve regular analysis of model outputs in relation to economic indicators and adjustments to the model or its parameters as needed.

## Requirement: REQ002

Description: Institutions should obtain their ELBE estimates through an adjustment to the long-run average LGD for defaulted exposures, where necessary, consistently with the estimation of LGD in-default, such that a meaningful application of the risk weight formula is ensured.

Reference: Current economic circumstances

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Where the adjustment is applied, it should be adequately documented, including its rationale and calculation.

Reference: Current economic circumstances

Status: Satisfactory

Recommendations: 1. \*\*Enhance Documentation Requirements:\*\* Explicitly state within Section 9.2 (Methodology for Appropriate Adjustment (AA)) that the rationale and calculation for each AA must be documented. 2. \*\*Provide Examples:\*\* Include examples of the types of adjustments that might be made and the level of detail required in the documentation (e.g., for data deficiencies, changes in underwriting standards, etc.). 3. \*\*Cross-reference:\*\* Add a cross-reference to Section 9.2 in other relevant sections where adjustments might be applied (e.g., Section 3.3 Data Representativeness and Vetting, Section 5.4 PD Quantification: One-Year Default Rate and Long-Run Average (LRA), Section 6.6 Long-Run Average (LRA) LGD).

## Requirement: REQ001

Description: Institutions should reflect in their LGD in-default estimates at least downturn conditions.

Reference: Article 54(2)(a) of the RTS on IRB assessment methodology

Status: Satisfactory

Recommendations: 1. \*\*Enhance Definition of Downturn Conditions:\*\* The policy should include a more detailed description of how the bank identifies and defines "downturn conditions" within its residential mortgage portfolio. This could include specific economic indicators, market trends, or other relevant factors that the bank will use to determine when a downturn is occurring. 2. \*\*Specify Methodology for Downturn LGD Calculation:\*\* The policy should provide more detail on the methodology used to derive LGD estimates appropriate for downturn conditions. This could include specifying the data sources used, the statistical methods employed, and the assumptions made. 3. \*\*Document the Reference Value:\*\* The policy should explicitly state the reference value used for comparison with the final downturn LGD estimates, including the period used to calculate the reference value. 4. \*\*Regular Review and Update:\*\* The policy should mandate a regular review and update of the downturn LGD methodology to ensure its continued relevance and accuracy.

## Requirement: REQ002

Description: Institutions should always be able to document: the breakdown of the LGD in-default into its components: the ELBE and the add-on; and the breakdown of the add-on into its components: the downturn adjustment, Mo C, and, where relevant, any component covering for additional unexpected losses during the recovery period

Reference: Article 181(1)(h) of the CRR

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: to the extent that the reason for overriding the ELBE also applies to the LGD in-default an override of the LGD in-default should be triggered.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 42

Status: Missing Requirement

Recommendations: \* Adding a statement that if the rationale for an ELBE override also affects the LGD in-default, an override of the LGD in-default must be triggered. \* Providing guidance on how to determine when the rationale for an ELBE override applies to the LGD in-default. \* Establishing a process for documenting and reviewing such correlated overrides.

## Requirement: REQ001

Description: Institutions should be able to detect and monitor these situations to make sure that the risk is reflected correctly, including additional conservatism where necessary.

Reference: Chapter 8

Status: Satisfactory

Recommendations: \* Explicitly state how the bank will monitor for specific risk situations (e.g., changes in the housing market, economic downturns, specific loan characteristics). \* Provide examples of how additional conservatism will be applied in specific risk situations (e.g., increasing the MoC, adjusting LGD estimates, or applying overlays). \* Strengthen the section on "Model Performance Assessment and Review" (Section 10) to include specific monitoring metrics and triggers for identifying potential risks.

## Requirement: REQ002

Description: In any case, where institutions want to apply the overrides, this should be based on an appropriate internal framework to make sure that the weaknesses of the assignment are identified consistently, that the overrides are applied within certain limits and that they are appropriately justified, approved and monitored.

Reference: Chapter 8

Status: Satisfactory

Recommendations: 1. \*\*Enhance the Override Framework:\*\* The policy should explicitly define the components of the internal framework for overrides. This should include: \* \*\*Specific Criteria for Overrides:\*\* Detail the circumstances under which overrides are permitted (e.g., situations where the model doesn't fully capture creditworthiness, specific data limitations). \* \*\*Override Limits:\*\* Establish clear limits on the extent to which model outputs can be overridden (e.g., a maximum percentage deviation from the model output). \* \*\*Override Approval Process:\*\* Specify the levels of authority required for approving overrides, based on the materiality of the override. \* \*\*Override Justification Requirements:\*\* Provide detailed guidance on the documentation required to justify an override, including the specific data or rationale supporting the override. \* \*\*Monitoring Metrics:\*\* Define specific metrics to monitor the frequency, impact, and justification of overrides. 2. \*\*Integrate Override Framework into Model Risk Management:\*\* Explicitly link the override framework to the model risk management framework, ensuring that overrides are considered in model performance assessments and validation activities. 3. \*\*Training:\*\* Ensure that personnel involved in the override process receive adequate training on the override policy and procedures.

## Requirement: REQ003

Description: Where necessary, such analysis should result in the improvement of the model, for instance by including additional risk drivers, increasing granularity of categorisation or changing the weights of risk drivers, or in the improvement of data collection or data quality management processes.

Reference: Chapter 8

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Define Model Improvement Process:\*\* Add a section or modify existing sections (e.g., Model Performance Assessment and Review, Model Changes and Extensions) to explicitly outline the process for implementing model improvements. This should include: \* How the results of model validation, performance monitoring, and data quality assessments will be used to identify areas for improvement. \* The process for prioritizing model improvements. \* The steps involved in implementing model changes, including testing, documentation, and approval. \* How the bank will incorporate additional risk drivers, increase granularity of categorization, or change the weights of risk drivers based on the analysis. 2. \*\*Strengthen Data Quality Link:\*\* Reinforce the link between data quality management and model improvement. The policy already has a strong data quality framework, but it could be enhanced by explicitly stating how data quality issues identified through the framework will trigger model reviews and potential improvements.

## Requirement: REQ004

Description: In any case, however, the rank ordering of obligors or exposures should remain the same as used for the purpose of own funds requirements, apart from possibly different grouping of exposures into grades.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: Article 159 of the CRR requires institutions to calculate the difference between, on one hand, credit risk adjustments, additional value adjustments, and, on the other hand, own funds reductions and expected loss amounts.

Reference: Article 159 of the CRR

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The difference should be calculated at an aggregate level separately for the portfolio of defaulted exposures and the portfolio of exposures that are not in default.

Reference: Article 73(h) of the RTS on assessment methodology

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: The IRB excess resulting from the calculation performed for the defaulted portfolio is not used to offset IRB shortfall resulting from the calculation performed for the portfolio of exposures that are not in default, as prescribed in Article 159 of the CRR.

Reference: Article 159 of the CRR

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: If the calculation required by Article 159 of the CRR results in an IRB excess for both the defaulted and the non-defaulted portfolio, the limit for adding the overall IRB excess to Tier 2 capital set out in Article 62(d) of the CRR, i.e. up to 0.06% of risk-weighted exposure amounts, should be applied to the sum of the two IRB excesses.

Reference: Article 62(d) of the CRR

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions are required to define a cycle for a fundamental review of models depending on the materiality of the models considered.

Reference: Chapter 9

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: The review of estimates is required when new information comes to light, and at least on an annual basis.

Reference: Chapter 9

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Competent authorities and financial institutions must make every effort to comply with the guidelines.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 47, paragraph 1

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Competent authorities should comply by incorporating them into their practices as appropriate (e.g. by amending their legal framework or their supervisory processes), including where guidelines are directed primarily at institutions.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 47, paragraph 2

Status: Satisfactory

Recommendations: 1. \*\*Explicitly State Incorporation:\*\* Add a section or amend existing sections to explicitly state how the bank will incorporate the EBA Guidelines on PD and LGD into its legal framework and supervisory processes. This could include a statement about reviewing and updating internal policies and procedures to reflect the guidelines. 2. \*\*Process for Updates:\*\* Detail the process for updating the policy to reflect changes in the EBA Guidelines or other relevant regulations.

## Requirement: REQ003

Description: In accordance with Article 16(3) of Regulation (EU) No 1093/2010, competent authorities must notify the EBA as to whether they comply or intend to comply with these guidelines, or otherwise give reasons for non-compliance, by ([dd.mm.yyyy]).

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 47, paragraph 3

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Notifications should be sent by submitting the form available on the EBA website to compliance@eba.europa.eu with the reference ‘EBA/GL/201 x/xx’.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 47, paragraph 3

Status: Non Compliant

Recommendations: \* A statement that the bank will comply with the notification requirements of EBA/GL/201x/xx. \* Instructions on how to submit notifications, including the correct email address (compliance@eba.europa.eu) and the required reference (EBA/GL/201 x/xx). \* A process for identifying when notifications are required (e.g., for model changes, new models, etc.). \* Designation of the responsible party or department for submitting the notifications.

## Requirement: REQ005

Description: Any change in the status of compliance must also be reported to the EBA.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 47, paragraph 3

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should incorporate the requirements of these guidelines in their rating systems by that time [1 January 2021].

Reference: 3.1 Date of application, paragraph 9

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: The internal validation function should verify the changes which are applied to the rating systems as a result of the application of these guidelines and the regulatory technical standards to be developed in accordance with Article 144(2) of Regulation (EU) No 575/2013, and the classification of the changes in accordance with Commission Delegated Regulation (EU) No 529/2014.

Reference: 3.2 First application of the Guidelines, paragraph 10

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Institutions that need to obtain prior permission from competent authorities in accordance with Article 143(3) of Regulation (EU) No 575/2013 and Regulation (EU) No 529/2014 for the changes in the rating systems required to incorporate these guidelines for the first time by the deadline referred to in paragraph 9 should agree with their competent authorities the final deadline for submitting the application for such prior permission.

Reference: 3.2 First application of the Guidelines, paragraph 11

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: For the purpose of quantification of various risk parameters within a rating system, institutions should apply the same definition of default for the same historical observations used in different models. Institutions should also apply the same treatment of multiple defaults of the same obligor or exposure across internal, external and pooled data sources.

Reference: 4.1 Principles for specifying the range of application of the rating systems, paragraph 14

Status: Satisfactory

Recommendations: 1. Explicitly state in Section 3.5 that the same definition of default (as defined in CRR Article 178) is applied for the same historical observations used in different models. 2. Expand Section 6.5 to provide more detail on the treatment of multiple defaults across internal, external, and pooled data sources, ensuring consistency in the approach.

## Requirement: REQ005

Description: In order to comply with the requirement of Article 76 of the RTS on IRB assessment methodology that institutions should have sound policies, processes and methods for assessing and improving the quality of data used for the purpose of credit risk measurement and management processes, institutions should ensure that those policies apply to all data used in model development and calibration, as well as to the data used in the application of the risk parameters.

Reference: 4.2.1 Quality of data, paragraph 15

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: In order for the data used in the model development and in the application of risk parameters as inputs into the model to meet the requirements of accuracy, completeness and appropriateness specified in Article 174(b) of Regulation (EU) No 575/2013, it should be sufficiently precise to avoid material distortions of the outcome of the assignment of exposures to obligors or facility grades or pools, and it should not contain any biases which make the data unfit for purpose.

Reference: 4.2.1 Quality of data, paragraph 16

Status: Satisfactory

Recommendations: 1. \*\*Explicitly State Data Precision and Bias Mitigation:\*\* Add a specific section or enhance existing sections (e.g., 3.3 Data Representativeness and Vetting, 3.2 Data Quality Management Framework) to explicitly state how the bank ensures data precision and mitigates biases in the data used for model development and application. This could include specific data quality checks, validation procedures, and bias detection and correction mechanisms. 2. \*\*Detail Data Quality Checks:\*\* Expand on the data quality checks and controls mentioned in Section 3.2 to provide more specific examples of the checks performed to ensure data accuracy, completeness, and appropriateness. 3. \*\*Document Bias Detection and Correction:\*\* Include a description of the methods used to detect and correct potential biases in the data. This could include statistical techniques, expert review, and other relevant methods.

## Requirement: REQ007

Description: In order to comply with the requirement of the representativeness of data used in the PD and LGD models specified in Articles 174(c), 179(1)(d) and 179(2)(b) of Regulation (EU) No 575/2013 as well as in Articles 40 and 45 of the RTS on IRB assessment methodology, institutions should have sound policies, processes and methods for assessing the representativeness of data used for the purpose of estimation of risk parameters. Institutions should specify in their internal policies the statistical tests and metrics to be used for the purpose of assessing the representativeness of data used for risk differentiation and, separately, for data underlying the risk quantification. Institutions should also specify methods for qualitative assessment of data for the cases, defined in their policies, where the application of statistical tests is not possible.

Reference: 4.2.2 Governance for data representativeness, paragraph 17

Status: Satisfactory

Recommendations: 1. \*\*Specify Statistical Tests and Metrics:\*\* The policy should include a list of specific statistical tests and metrics that will be used to assess data representativeness for risk differentiation and risk quantification. Examples include tests for distributional similarity (e.g., Kolmogorov-Smirnov test), tests for differences in means or medians, and metrics for assessing the coverage of risk drivers. 2. \*\*Detail Qualitative Assessment Methods:\*\* The policy should provide more detail on the methods for qualitative assessment of data, especially for cases where statistical tests are not possible. This could include a description of the factors to be considered, the process for documenting the assessment, and the roles and responsibilities of the personnel involved. 3. \*\*Document the Assessment Process:\*\* The policy should describe the process for documenting the assessment of data representativeness, including the frequency of the assessment, the individuals responsible for the assessment, and the reporting of the results.

## Requirement: REQ008

Description: Institutions should use the same standards and methods for the assessment of representativeness of data stemming from different sources, including internal, external and pooled data or a combination of these, unless different methods are justified by the specificity of the data source or availability of information.

Reference: 4.2.2 Governance for data representativeness, paragraph 18

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Define Consistent Methodologies:\*\* The policy should be enhanced to explicitly state the specific methodologies and standards used to assess data representativeness across all data sources (internal, external, and pooled). This could include specific statistical tests, validation techniques, or other methods used to ensure consistency in the assessment process. 2. \*\*Document Justifications for Different Methods:\*\* If different methods are justified due to data source specificity, the policy should require documented justifications for these deviations. This documentation should explain why a different approach is necessary and how it maintains the overall goal of assessing representativeness. 3. \*\*Provide Examples:\*\* Include examples of how the representativeness assessment is performed for different data sources, such as internal historical default data, external credit bureau data, and pooled data. This would provide clarity and practical guidance.

## Requirement: REQ009

Description: Where external or pooled data are used institutions should obtain sufficient information from the data providers to assess the representativeness of such external or pooled data to the institutions’ own portfolios and processes.

Reference: 4.2.2 Governance for data representativeness, paragraph 19

Status: Satisfactory

Recommendations: 1. \*\*Enhance Section 13.4:\*\* Add a subsection or expand the existing text in Section 13.4 to explicitly detail the process for obtaining "sufficient information" from data providers. This should include: \* Specifying the types of information required (e.g., data definitions, data collection methodologies, sample characteristics, validation processes, and any limitations of the data). \* Describing how the bank evaluates the information received from the data providers to assess the representativeness of the external or pooled data. \* Detailing the documentation requirements for the information obtained and the representativeness assessment. 2. \*\*Cross-reference:\*\* Add a cross-reference to Section 13.4 in Section 3.3 (Data Representativeness and Vetting) to highlight the importance of assessing representativeness when using external or pooled data.

## Requirement: REQ010

Description: Institutions should analyse the representativeness of data in the case of statistical models and other mechanical methods used to assign exposures to grades or pools, as well as in the case of statistical default prediction models generating default probability estimates for individual obligors or facilities. Institutions should select an appropriate dataset for the purpose of model development to ensure that the performance of the model on the application portfolio, in particular its discriminatory power, is not significantly hindered by insufficient representativeness of data.

Reference: 4.2.3 Representativeness of data for model development, paragraph 20

Status: Satisfactory

Recommendations: 1. \*\*Enhance Specificity:\*\* Provide more concrete examples of how the bank assesses the representativeness of data for statistical models and mechanical methods. This could include detailing the statistical tests or methodologies used to compare the development data with the application portfolio. 2. \*\*Document the Process:\*\* Clearly document the specific steps and criteria used to ensure data representativeness in model development, including the selection of the appropriate dataset. 3. \*\*Address Model-Specific Considerations:\*\* Tailor the representativeness assessment to the specific statistical models and mechanical methods used for assigning exposures to grades or pools, and for default prediction models.

## Requirement: REQ011

Description: For the purposes of ensuring that the data used in developing the model for assigning obligors or exposures to grades or pools is representative of the application portfolio covered by the relevant model, as required in Article 174(c) of Regulation (EU) No 575/2013 and Article 40(2) of the RTS on IRB assessment methodology institutions should analyse the representativeness of the data at the stage of model development in terms of all of the following: (a) the scope of application; (b) the definition of default; (c) the distribution of the relevant risk characteristics; (d) lending standards and recovery policies.

Reference: 4.2.3 Representativeness of data for model development, paragraph 21

Status: Satisfactory

Recommendations: 1. \*\*Enhance Methodology for Representativeness Assessment:\*\* The policy should explicitly describe the methods used to assess data representativeness for each of the four areas (scope, DoD, risk characteristics, lending/recovery). This could include statistical tests, comparative analysis, and the use of benchmarks. 2. \*\*Define Actions for Non-Representativeness:\*\* The policy should clearly outline the actions to be taken if data is found to be non-representative. This should include the use of appropriate adjustments, increased MoC, or, in extreme cases, data exclusion. 3. \*\*Provide Examples for Residential Mortgages:\*\* Include specific examples of how representativeness is assessed for residential mortgages, such as analyzing the distribution of risk drivers (region, property type, LTV, obligor characteristics) and comparing the development data sample to the application portfolio.

## Requirement: REQ012

Description: For the purpose of paragraph 21(a) institutions should analyse the segmentation of exposures and consider whether there were any changes to the scope of application of the considered model over the period covered by the data used in developing the model for assigning obligors or exposures to grades or pools. Where such changes were observed institutions should analyse the risk drivers relevant for the change of the scope of application of the model by comparing their distribution in the RDS before and after the change as well as with the distribution of those risk drivers in the application portfolio. For this purpose institutions should apply statistical methodologies such as cluster analysis or similar techniques to demonstrate representativeness. In the case of pooled models the analysis should be performed with regard to the part of the scope of the model that is used by an institution.

Reference: 4.2.3 Representativeness of data for model development, paragraph 22

Status: Major Gaps

Recommendations: 1. \*\*Enhance the policy to explicitly address changes to the scope of application:\*\* The policy should include a section dedicated to analyzing changes in the scope of application of the IRB model. This section should mandate the analysis of segmentation of exposures and the consideration of any changes to the scope of application of the model over the period covered by the data used in developing the model. 2. \*\*Mandate the comparison of risk driver distributions:\*\* The policy should require the comparison of risk driver distributions before and after any observed changes to the scope of application of the model. This comparison should be performed using the distribution of those risk drivers in the application portfolio. 3. \*\*Specify the use of statistical methodologies:\*\* The policy should mandate the use of statistical methodologies, such as cluster analysis or similar techniques, to demonstrate representativeness. The policy should provide guidance on the appropriate statistical methodologies to be used and the criteria for assessing representativeness. 4. \*\*Address pooled models specifically:\*\* The policy should include specific instructions on how the analysis should be performed for pooled models, with regard to the part of the scope of the model that is used by the institution. 5. \*\*Provide detailed procedures:\*\* The policy should include detailed procedures for performing the required analyses, including data sources, methodologies, and reporting requirements.

## Requirement: REQ013

Description: For the purpose of paragraph 21(b) institutions should ensure that the definition of default underlying the data used for model development is consistent over time and, in particular, that it is consistent with all of the following: (a) that adjustments have been made to achieve consistency with the current default definition where the default definition has been changed during the observation period; (b) that adequate measures have been adopted by the institution, where the model covers exposures in several jurisdictions having or having had different default definitions; (c) that the definition of default in each data source has been analysed separately; (d) that the definition of default used for the purposes of model development does not have a negative impact on the structure and performance of the rating model, in terms of risk differentiation and predictive power, where this definition is different from the definition of default used by the institution in accordance with Article 178 of Regulation (EU) No 575/2013.

Reference: 4.2.3 Representativeness of data for model development, paragraph 23

Status: Satisfactory

Recommendations: 1. \*\*Enhance DoD Change Procedures:\*\* Add a specific section or expand the existing section on "Adjustments for DoD Changes" (Section 3.5) to explicitly detail the procedures for adjusting historical data when the DoD is changed. This should include how the bank ensures consistency with the current DoD definition, the methods used for data transformation, and the documentation requirements for these adjustments. 2. \*\*Jurisdictional Considerations:\*\* While the policy mentions different jurisdictions, it could be strengthened by providing more detail on how the bank addresses different default definitions across jurisdictions. This could include a description of the methodologies used to ensure consistency and the specific controls in place. 3. \*\*Explicitly Address Negative Impact:\*\* While the policy mentions the negative impact of the DoD on the model, it could be improved by providing more detail on how the bank assesses and mitigates this risk. This could include a description of the methods used to evaluate the impact of the DoD on the model's risk differentiation and predictive power.

## Requirement: REQ014

Description: For the purpose of paragraph 21(c) institutions should analyse the distribution and range of values of key risk characteristics of the data used in developing the model for risk differentiation in comparison with the application portfolio. With regard to LGD models, institutions should perform such analysis separately for non-defaulted and defaulted exposures.

Reference: 4.2.3 Representativeness of data for model development, paragraph 24

Status: Satisfactory

Recommendations: 1. \*\*Enhance Specificity:\*\* The policy should explicitly state the key risk characteristics (e.g., LTV, property type, region) that will be analyzed for distribution and range of values in LGD models. 2. \*\*Define Methodology:\*\* The policy should describe the methodology for analyzing the distribution and range of values. This could include statistical measures (e.g., mean, standard deviation, percentiles) and visual representations (e.g., histograms, box plots). 3. \*\*Specify Frequency:\*\* The policy should specify the frequency with which this analysis will be performed (e.g., annually, as part of model validation). 4. \*\*Include Examples:\*\* Provide examples of how the analysis will be used to inform model development, calibration, and validation.

## Requirement: REQ015

Description: Institutions should analyse the representativeness of the data in terms of the structure of the portfolio by relevant risk characteristics based on statistical tests specified in their policies to ensure that the range of values observed on these risk characteristics in the application portfolio is adequately reflected in the development sample. Where the application of statistical tests is not possible, institutions should carry out at least a qualitative analysis on the basis of the descriptive statistics of the structure of the portfolio, taking into account the possible seasoning effects referred to in Article 180(2)(f) of Regulation (EU) No 575/2013. When considering the results of this analysis, institutions should take into account the sensitivity of the risk characteristics to economic conditions. Material differences in the key risk characteristics between the data sample and the application portfolio should be addressed, for example by using another data sample or a subset of observations or by adequately reflecting these risk characteristics as risk drivers in the model.

Reference: 4.2.3 Representativeness of data for model development, paragraph 25

Status: Satisfactory

Recommendations: 1. \*\*Specify Statistical Tests:\*\* The policy should explicitly list the statistical tests that will be used to assess the representativeness of the data in terms of the structure of the portfolio. Examples include Kolmogorov-Smirnov tests, chi-squared tests, or other relevant statistical methods. 2. \*\*Detail Remediation Strategies:\*\* The policy should provide more detail on how material differences in key risk characteristics between the data sample and the application portfolio will be addressed. This could include specific examples of using another data sample, a subset of observations, or reflecting these risk characteristics as risk drivers in the model. 3. \*\*Document Qualitative Analysis:\*\* If statistical tests are not possible, the policy should explicitly state the process for carrying out qualitative analysis based on descriptive statistics, including the consideration of seasoning effects.

## Requirement: REQ016

Description: For the purpose of paragraph 21(d) institutions should analyse whether, over the relevant historical observation period, there were significant changes in their lending standards or recovery policies or in the relevant legal environment, including changes in insolvency law, legal foreclosure procedures and any legal regulations related to realisation of collaterals, which may influence the level of risk or the distribution or ranges of the risk characteristics in the portfolio covered by the considered model. Where institutions observe such changes they should compare the data included in the RDS before and after the change of the policy. Institutions should ensure comparability of the current underwriting or recovery standards with those applied to the observations included in the RDS and used for model development.

Reference: 4.2.3 Representativeness of data for model development, paragraph 26

Status: Satisfactory

Recommendations: 1. \*\*Enhance Policy Language:\*\* Explicitly state that the bank will analyze the impact of changes in the legal environment (insolvency law, foreclosure procedures, collateral realization regulations) on the RDS. 2. \*\*Detail the Analysis:\*\* Provide more detail on how the bank will compare data before and after policy changes, including specific methodologies or statistical tests. 3. \*\*Expand on Comparability:\*\* Elaborate on the methods used to ensure comparability of current underwriting and recovery standards with those used in the RDS and model development.

## Requirement: REQ001

Description: Institutions should analyse the comparability of the data used for the purpose of calculating long-run average default rates or long-run average LGDs as referred to in Article 179(1)(d) of Regulation (EU) No 575/2013 and, where relevant, the representativeness of the pool in accordance with Article 179(2)(b) of that Regulation, in terms of all of the following: (a) the scope of application; (b) the definition of default; (c) the distribution of the relevant risk characteristics; (d) the current and foreseeable economic or market conditions; (e) lending standards and recovery policies.

Reference: Section 6 of Chapter 3 in Part Three of Regulation (EU) No 575/2031 and Article 45(2) of the RTS on IRB assessment methodology

Status: Satisfactory

Recommendations: 1. \*\*Enhance Data Comparability Analysis:\*\* The policy should include a section detailing the specific methodologies and processes for analyzing the comparability of data used for calculating long-run average default rates and LGDs. This should include how the bank will assess the five elements listed in REQ001 (scope, definition of default, risk characteristics, economic/market conditions, and lending/recovery policies) and document the findings. 2. \*\*Specific Examples for Residential Mortgages:\*\* Provide concrete examples of how the bank will assess data comparability and representativeness within the residential mortgage portfolio. This could include examples of how the bank will compare data from different geographical regions, property types, or loan products. 3. \*\*Documentation Requirements:\*\* Specify the documentation requirements for the comparability analysis, including the frequency of the analysis, the individuals responsible, and the review process.

## Requirement: REQ002

Description: For the purpose of paragraph 28(a) institutions should perform an analysis as specified in paragraph 22.

Reference: Paragraph 29

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: For the purpose of paragraph 28(b) and in order to ensure that the definition of default underlying the data used for risk quantification from each data source is consistent with the requirements of Article 178 of Regulation (EU) No 575/2013, institutions should compare the definition of default applied by the institution currently with the definitions used for the observations included in the dataset used for risk quantification.

Reference: Paragraph 30

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Where the definition of default has changed during the historical observation period institutions should assess the representativeness of historical data included in the RDS and used for risk quantification in the same way as specified for external data in Chapter 6 of the EBA Guidelines on the application of the definition of default under Article 178 of Regulation (EU) No 575/2013.

Reference: Paragraph 30

Status: Major Gaps

Recommendations: 1. \*\*Develop a specific procedure:\*\* Create a dedicated section or add to Section 3.3 a detailed procedure for assessing the representativeness of historical data in the RDS when the DoD has changed. This procedure should explicitly reference and align with Chapter 6 of the EBA Guidelines on the application of the definition of default under Article 178 of Regulation (EU) No 575/2013. 2. \*\*Define assessment criteria:\*\* Specify the criteria for assessing representativeness, including the factors to be considered (e.g., the impact of DoD changes on default triggers, the consistency of data collection methods, and the comparability of the historical data with the current portfolio). 3. \*\*Outline handling of non-representativeness:\*\* Detail the actions to be taken if non-representativeness is identified. This should include the use of appropriate adjustments to the data or the risk parameters, and the application of an increased MoC, as per the EBA guidelines. 4. \*\*Documentation:\*\* Ensure that the assessment process and any adjustments or MoC applied are thoroughly documented.

## Requirement: REQ005

Description: Where the definition of default has changed during the historical observation period more than once, institutions should perform the analysis of each of the past definitions of default separately.

Reference: Paragraph 30

Status: Missing Requirement

Recommendations: 1. \*\*Add a specific section or subsection:\*\* Include a new section or subsection within Section 3.5 (Definition of Default) or within the Model Development sections (e.g., Section 5.4 PD Quantification or Section 6.6 LGD) that explicitly addresses the analysis of past DoD definitions. 2. \*\*Define the process for historical analysis:\*\* Detail the steps to be taken when the DoD has changed during the historical observation period. This should include: \* Identifying all past DoD definitions used during the historical observation period. \* Segmenting the historical data based on the applicable DoD definition. \* Performing separate analyses (e.g., default rate calculations, LGD estimations) for each DoD definition. \* Comparing the results across different DoD definitions to assess the impact of the changes. \* Documenting the methodology and findings. 3. \*\*Address data mapping and reconciliation:\*\* Provide guidance on how to map or reconcile data across different DoD definitions, if necessary. 4. \*\*Address the impact on model calibration:\*\* Explain how the analysis of past DoD definitions will be incorporated into the model calibration process, including any adjustments or MoC that may be required. 5. \*\*Include examples:\*\* Provide practical examples of how to implement the analysis of past DoD definitions.

## Requirement: REQ006

Description: For the purpose of paragraph 28(c) institutions should perform an appropriate analysis to ensure that at the level of the calibration segment the ranges of values of the key risk characteristics in the application portfolio are comparable to those in the portfolio constituting the reference data set for risk quantification to the degree required to ensure that the risk quantification is not biased.

Reference: Paragraph 31

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ007

Description: For the purpose of paragraph 28(d) institutions should perform the analysis of the market and economic conditions underlying the data in the following manner: (a) with regard to the PD estimation, in accordance with section 5.3.4; (b) with regard to the LGD estimation, in accordance with section 6.3.2 and taking into account the consideration of economic downturn as required by Article 181(1)(b) of Regulation (EU) No 575/2013.

Reference: Paragraph 32

Status: Satisfactory

Recommendations: 1. Enhance sections 5.3.4 and 6.3.2 to explicitly describe the methodologies used for analyzing market and economic conditions in PD and LGD estimation, respectively. 2. Provide examples of how economic downturns are considered in the LGD estimation process, as required by Article 181(1)(b).

## Requirement: REQ001

Description: Where the representativeness of data assessed in accordance with paragraphs 28 to 33 is insufficient and leads to a bias or increased uncertainty of risk quantification, institutions should introduce an appropriate adjustment to correct the bias and they should apply a margin of conservatism in accordance with section 4.4.

Reference: Paragraph 34

Status: Satisfactory

Recommendations: 1. \*\*Enhance Specificity on AA and MoC Calculation:\*\* Provide more detailed guidance on the methodologies used to calculate AAs and MoCs when data representativeness is deemed insufficient. Include specific examples relevant to residential mortgage portfolios. 2. \*\*Define Triggers for Insufficient Representativeness:\*\* Clearly define the criteria and thresholds that will trigger an assessment of insufficient representativeness. This could include statistical tests, comparisons of key risk driver distributions, or other relevant metrics. 3. \*\*Document AA and MoC Application:\*\* Ensure that the application of AAs and MoCs is thoroughly documented, including the rationale, the methodology used, and the impact on risk parameter estimates. 4. \*\*Regular Review and Validation:\*\* Include a process for regularly reviewing the effectiveness of AAs and MoCs, and validating their appropriateness.

## Requirement: REQ002

Description: In order for institutions to complement their statistical models with human judgement, as referred to in Articles 174(b), 174(e), 175(4), 179(1)(a) and 180(1)(d) of Regulation (EU) No 575/2013, they should do all of the following: (a) assess the modelling assumptions and whether the selected risk drivers contribute to the risk assessment in line with their economic meaning; (b) analyse the impact of the human judgement on the performance of the model and ensure that any form of human judgement is properly justified; (c) document the application of human judgement in the model, including at least the criteria for the assessment, rationale, assumptions, experts involved and description of the process.

Reference: Paragraph 35

Status: Satisfactory

Recommendations: 1. \*\*Enhance Specificity on Assessing Modelling Assumptions and Risk Drivers:\*\* Add a section or expand existing sections (e.g., 4.3, 5.1, 6.3) to explicitly outline the criteria and processes for assessing modelling assumptions and whether selected risk drivers align with their economic meaning. Provide examples relevant to residential mortgage portfolios. 2. \*\*Strengthen Analysis of Human Judgment's Impact:\*\* Include more detail on how the bank analyzes the impact of human judgment on model performance. This could involve specific metrics, backtesting procedures, or sensitivity analyses to quantify the effect of overrides or judgmental adjustments. 3. \*\*Provide Concrete Examples:\*\* Include concrete examples of how human judgment is applied in the model development and application processes, including the types of criteria used, the rationale behind the judgment, the experts involved, and a description of the process.

## Requirement: REQ003

Description: Institutions should identify all deficiencies related to the estimation of risk parameters that lead to a bias in the quantification of those parameters or to an increased uncertainty that is not fully captured by the general estimation error, and classify each deficiency into one of the following categories: (a) Category A: Identified data and methodological deficiencies; (b) Category B: Relevant changes to underwriting standards, risk appetite, collection and recovery policies and any other source of additional uncertainty.

Reference: Paragraph 36

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: For the purposes of identifying and classifying all deficiencies referred to in paragraph 36 institutions should take into account all relevant deficiencies in methods, processes, controls, data or IT systems that have been identified by the credit risk control unit, validation function, internal audit function or any other internal or external review and should analyse at least all of the following potential sources of additional uncertainty in risk quantification: (a) under category A: (i) missing or materially changed default triggers in historical observations, including changed criteria for recognition of materially past due credit obligations; (ii) missing or inaccurate date of default; (iii) missing, inaccurate or outdated rating assignment used for assessing historical grades or pools for the purpose of calculation of default rates or average realised LGDs per grade or pool; --- --- GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 58 (iv) missing or inaccurate information on the source of cash flows; (v) missing, inaccurate or outdated data on risk drivers and rating criteria; (vi) missing or inaccurate information used for the estimation of future recoveries as referred to in paragraph 159; (vii) missing or inaccurate data for the calculation of economic loss; (viii) limited representativeness of the historical observations due to the use of external data; (ix) potential bias stemming from the choice of the approach to calculating the average of observed one year default rates in accordance with paragraph 80; (x) necessity of adjusting the average of observed one-year default rates in accordance with paragraph 86; (xi) missing information for the purpose of estimating loss rates or for the purpose of reflecting economic downturn in LGD estimates; (b) under category B: (i) changes to underwriting standards, collection or recovery policies, risk appetite or other relevant internal processes; (ii) unjustified deviations in the ranges of values of the key risk characteristics of the application portfolio compared with those of the dataset used for risk quantification; (iii) changes to market or legal environment; (iv) forward-looking expectations regarding potential changes in the structure of the portfolio or the level of risk, especially based on actions or decisions that have already been taken but which are not reflected in the observed data.

Reference: Paragraph 37

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Reference REQ001 Items:\*\* Amend Section 9.1 ("Identification and Classification of Deficiencies") to explicitly list and address each of the potential sources of uncertainty outlined in REQ001 (a)(i) through (a)(xi) and (b)(i) through (b)(iv). This could be achieved by adding a table or bulleted list within Section 9.1 that cross-references the policy's existing provisions to the specific regulatory items. 2. \*\*Enhance Data Quality Checks:\*\* Strengthen the data quality management framework (Section 3.2) to include specific checks for the data elements mentioned in REQ001, such as "missing or inaccurate date of default" (a)(ii), "missing, inaccurate or outdated rating assignment" (a)(iii), and "missing or inaccurate information on the source of cash flows" (a)(iv). 3. \*\*Strengthen Documentation:\*\* Ensure that the documentation standards (Section 2.3) explicitly require documentation of how the bank addresses the potential sources of uncertainty listed in REQ001.

## Requirement: REQ002

Description: In order to overcome biases in risk parameter estimates stemming from the identified deficiencies referred to in paragraphs 36 and 37, institutions should apply adequate methodologies to correct the identified deficiencies to the extent possible.

Reference: Paragraph 38

Status: Satisfactory

Recommendations: 1. \*\*Specificity in AA Methodologies:\*\* Enhance Section 9.2, "Methodology for Appropriate Adjustment (AA)," by including specific examples of methodologies that the bank will use to correct biases. This should include examples relevant to the types of deficiencies identified in the bank's model development and validation processes. 2. \*\*Cross-reference to Deficiencies:\*\* Explicitly reference the types of deficiencies that are identified in the bank's model development and validation processes (as mentioned in paragraphs 36 and 37 of the regulatory reference) within Section 9.1, "Identification and Classification of Deficiencies." This will strengthen the link between the identified deficiencies and the corrective actions.

## Requirement: REQ001

Description: Institutions should implement a framework for quantification, documentation and monitoring of estimation errors.

Reference: 41

Status: Satisfactory

Recommendations: 1. Explicitly state that the bank will document estimation errors. 2. Expand on the framework for monitoring estimation errors, including the frequency of monitoring and the metrics used.

## Requirement: REQ002

Description: In order to quantify Mo C institutions should do all of the following: (a) quantify Mo C for the identified deficiencies referred to in paragraphs 36 and 37, to the extent not covered by the general estimation error, at least for each of the categories A and B at the level of the calibration segment ensuring that: (i) where appropriate adjustments in the sense of paragraph 38 are used, the Mo C accounts for any increase in the uncertainty or additional estimation error associated with these adjustments; (ii) the Mo C at category level related to the appropriate adjustments is proportionate to the uncertainty around these adjustments; (iii) the Mo C is applied to address the uncertainty of the risk parameter estimate stemming from any deficiencies among those referred to in paragraphs 36 and 37 that have not been corrected via appropriate adjustments as referred to in point (i); (b) quantify the general estimation error of category C referred to in paragraph 42 associated with the underlying estimation method at least for every calibration segment; the Mo C for the general estimation error should reflect the dispersion of the distribution of the statistical estimator.

Reference: 43

Status: Satisfactory

Recommendations: 1. \*\*Enhance Quantification Methodologies:\*\* Provide more detailed descriptions of the methodologies used to quantify the MoC for each category (A, B, and C). Include examples of how the bank assesses the impact of adjustments and deficiencies on uncertainty and how this is translated into a MoC. 2. \*\*Document Proportionality Assessment:\*\* Detail the process for ensuring that the MoC applied to address the uncertainty of the risk parameter estimate stemming from any deficiencies is proportionate to the uncertainty around these adjustments. 3. \*\*Calibration Segment Specificity:\*\* Provide examples of how the MoC is applied at the calibration segment level, ensuring that the MoC reflects the specific risks and uncertainties within each segment.

## Requirement: REQ001

Description: Institutions should quantify the final Mo C as the sum of: (a) the Mo C under category A as referred to in paragraph 43(a); (b) the Mo C under category B as referred to in paragraph 43(a); (c) the Mo C for the general estimation error (category C) as referred to in paragraph 43(b).

Reference: 45

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should add the final Mo C to the best estimate of the risk parameter.

Reference: 46

Status: Satisfactory

Recommendations: 1. Add a sentence in Section 9.3 explicitly stating that the final risk parameter used for regulatory capital calculations is the best estimate plus the MoC.

## Requirement: REQ003

Description: Institutions should ensure that the impact of the final Mo C does not result in lowering the risk parameter estimates and in particular that: (a) the Mo C stemming from the general estimation error is greater than zero; (b) the Mo C stemming from each of the categories A and B is proportionate to the increased uncertainty in the best estimate of risk parameters caused by the identified deficiencies listed in each category. In any case, the Mo C under each of the categories A and B should be greater than or equal to zero.

Reference: 47

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Institutions should consider the overall impact of the identified deficiencies and the resulting final Mo C on the soundness of the model and ensure that the estimates of the risk parameters and the resulting own funds requirements are not distorted by the necessity for excessive adjustments.

Reference: 48

Status: Satisfactory

Recommendations: 1. Add a sentence to Section 9.3, "Quantification and Aggregation of Margin of Conservatism (MoC)," explicitly stating that the bank will ensure that the estimates of the risk parameters and the resulting own funds requirements are not distorted by the necessity for excessive adjustments. 2. Review the MoC calculation methodology to ensure that the aggregation of MoCs from different categories does not lead to excessive adjustments that distort risk parameter estimates.

## Requirement: REQ005

Description: For each rating system, the Mo C applied should be documented in the relevant model documentation and methodology manuals. The documentation should contain at least the following: (a) a complete list of all identified deficiencies, including errors and uncertainties, and the potentially affected model components or risk parameters; (b) the category under which these deficiencies are classified, as referred to in paragraph 42; (c) a description of the methods for quantification of the Mo C related to identified deficiencies as referred to in paragraph 43(a) and in particular the methodologies used to quantify the Mo C per category.

Reference: 49

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: Institutions should regularly monitor the levels of the Mo C.

Reference: 50

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ007

Description: Following an assessment of the deficiencies or the sources of uncertainty, institutions should develop a plan to rectify the data and methodological deficiencies as well as any other potential source of additional uncertainty and reduce the estimation errors within a reasonable timeframe, taking into consideration the materiality of the estimation error and the materiality of the rating system.

Reference: 50

Status: Satisfactory

Recommendations: \* Expand Section 9.4 to include details on the process for identifying and classifying deficiencies (e.g., using a risk matrix). \* Specify the roles and responsibilities for remediating deficiencies. \* Include a timeline for remediation, considering the materiality of the error. \* Detail the escalation process for unresolved deficiencies.

## Requirement: REQ001

Description: Institutions should ensure that each and every natural or legal person towards whom an IRB exposure exists is rated by the institution with the model approved to be used on a given type of exposures.

Reference: Paragraph 53

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should ensure that each and every IRB exposure is rated by the institution with the model approved to be used on a given type of exposures.

Reference: Paragraph 54

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: For the purpose of model development, institutions should ensure that the RDS contains the values of the risk drivers for appropriate points in time.

Reference: Paragraph 56

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: When reviewing the levels of the Mo C institutions should ensure all of the following: (a) that the Mo C stemming from categories A and B referred to in paragraphs 36 and 37 is included in internal reporting separately for each category and may be reduced over time and eventually eliminated once the deficiencies are rectified in all parts of the rating system that were affected; (b) that the Mo C stemming from the general estimation error referred to in paragraph 43(b) is included in internal reporting in a separate category (’C’); (c) that the level of the Mo C is assessed as part of the regular reviews referred to in Chapter 9 and in particular that the level of Mo C related to the general estimation error remains appropriate after the inclusion of the most recent data relevant for the risk parameter estimation.

Reference: Paragraph 51

Status: Satisfactory

Recommendations: 1. \*\*Specify Review Frequency:\*\* Explicitly state the frequency of the regular reviews mentioned in Chapter 9 (Appropriate Adjustment (AA) and Margin of Conservatism (MoC)) and Section 10 (Model Performance Assessment and Review). 2. \*\*Detail MoC Assessment Procedures:\*\* Provide more detail on the specific procedures for assessing the level of MoC related to the general estimation error, ensuring that the assessment remains appropriate after the inclusion of the most recent data relevant for risk parameter estimation. This could include specific metrics or tests to be performed.

## Requirement: REQ005

Description: Institutions should ensure that necessary changes in the Mo C are implemented in a timely manner.

Reference: Paragraph 52

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should ensure that for the purpose of selecting risk drivers and rating criteria the relevant experts from business areas of the institution are consulted with respect to the business rationale and risk contribution of the considered risk drivers and rating criteria.

Reference: 58

Status: Satisfactory

Recommendations: 1. \*\*Enhance Consultation Process Details:\*\* The policy should be expanded to include specific details about the consultation process. This includes: \* Defining the roles and responsibilities of the "relevant business experts." \* Specifying the frequency and timing of consultations (e.g., during initial model development, model updates, and ongoing monitoring). \* Describing the methods for documenting the consultation process, including the input received from experts and how it was considered in the selection of risk drivers and rating criteria. \* Clarifying how disagreements or differing opinions from experts are resolved and documented. 2. \*\*Examples of Experts:\*\* Provide examples of the relevant business areas and experts that should be consulted (e.g., lending, underwriting, portfolio management, market risk, etc.).

## Requirement: REQ002

Description: Institutions should ensure that the decrease of reliability of information over time, for instance of information on obligor characteristics obtained at the time of the loan origination, is appropriately reflected in the PD estimation.

Reference: 59

Status: Satisfactory

Recommendations: \* Specifying the methods used to adjust for outdated information (e.g., time decay functions, recalibration based on updated data). \* Defining the frequency with which information is reviewed and updated. \* Providing examples of how the model or assignment process provides for adequate and conservative adjustments.

## Requirement: REQ003

Description: Institutions should also ensure that the model estimates the proper level of risk with respect to all relevant, currently available and most up- to-date information and that an adequate Mo C is applied where a higher degree of uncertainty exists due to the lack of up-to-date information.

Reference: 59

Status: Satisfactory

Recommendations: 1. \*\*Enhance Data Freshness Procedures:\*\* Explicitly detail the processes for ensuring the use of the most up-to-date information. This should include the frequency of data updates, the sources of information, and the procedures for incorporating new data into the models. 2. \*\*Strengthen MoC Guidance:\*\* Provide more specific guidance on the quantification of the MoC, particularly in situations where there is a lack of up-to-date information. This could include examples of how to assess the degree of uncertainty and how to translate that into an appropriate MoC. 3. \*\*Address Market Dynamics:\*\* Include a section on how the bank addresses rapidly changing market conditions and their impact on risk assessments. This could involve stress testing, scenario analysis, or other methods to ensure the models remain accurate and reliable.

## Requirement: REQ004

Description: in accordance with Article 24(1)(g) of the RTS on IRB assessment methodology, in case of financial statements older than 24 months where information stemming from these financial statements is a relevant risk driver

Reference: 59(a)

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: in the case of credit bureau information that is older than 24 months, if still relevant at that point in time, where credit bureau information is a relevant risk driver.

Reference: 59(b)

Status: Satisfactory

Recommendations: 1. Explicitly mention "credit bureau information" and the 24-month timeframe in Section 4.2. 2. Provide examples of how the bank will assess the continued relevance of credit bureau information older than 24 months.

## Requirement: REQ006

Description: Institutions should use the risk drivers and rating criteria consistently, in particular with respect to the considered time horizon, in model development, model calibration and model application.

Reference: 60

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should analyse the level of risk of such customers compared with customers carrying only one facility of the relevant type and, where necessary, reflect the difference in the level of risk in the model through appropriate risk drivers.

Reference: 61

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should have clear policies specifying the conditions under which the rating of a third party who has a contractual or organisational relation with an obligor of the institution may be taken into account in the assessment of risk of the considered obligor.

Reference: 62

Status: Satisfactory

Recommendations: \* Explicitly state the conditions under which a third-party rating may be taken into account in the assessment of risk of the obligor. This could include criteria such as the reliability of the third-party rating, the relevance of the rating to the specific obligor and exposure, and the integration of the third-party rating with internal information. \* Expand on the specific circumstances where third-party ratings are used and how they are integrated into the overall risk assessment process.

## Requirement: REQ003

Description: In order for an internal or external ratings of a third party to be incorporated into a PD model, institutions should ensure all of the following: (a) that the rating of a third party fulfils all the requirements for relevant risk drivers set out in section 5.2.2; (b) that other relevant obligor and transaction risk characteristics are properly reflected in the model in accordance with Articles 170(1)(a) and 170(3)(a) of Regulation (EU) No 575/2013, and that no material biases are introduced by a high weighting of the internal or external rating information; (c) that there is no double counting of effects of any relations to third parties.

Reference: 63

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Reference Section 5.2.2:\*\* Add a sentence or paragraph in Section 5.2 (Treatment of Third-Party Ratings or Scores) that explicitly references Section 5.2.2 (Risk Drivers Selection and Ageing of Information) and states that the bank ensures that third-party ratings fulfill the requirements for relevant risk drivers as set out in that section. 2. \*\*Enhance Detail on Risk Characteristics:\*\* Expand on how the policy ensures that other relevant obligor and transaction risk characteristics are properly reflected in the model. Provide examples of how the bank incorporates these characteristics and how it prevents material biases. 3. \*\*Strengthen Double Counting Prevention:\*\* Add more detail on the measures taken to prevent double counting of effects related to third parties. This could include examples of how the bank identifies and mitigates potential double-counting issues.

## Requirement: REQ004

Description: Rating transfers should be set up in such a way that any changes to a rating of a third party which is material information on the obligor or exposure with regard to Article 173(1)(b) of Regulation (EU) No 575/2013 is reflected in all influenced ratings in a timely manner.

Reference: 64

Status: Satisfactory

Recommendations: 1. \*\*Define "Material Information":\*\* The policy should explicitly define what constitutes "material information" in the context of third-party ratings, aligning with Article 173(1)(b) of Regulation (EU) No 575/2013. This definition should include examples relevant to residential mortgage portfolios. 2. \*\*Establish Procedures for Material Changes:\*\* The policy should outline specific procedures for identifying and reflecting changes in third-party ratings that are deemed material. This could include: \* A process for monitoring third-party rating changes. \* A mechanism for assessing the materiality of each change. \* Defined timelines for updating internal ratings based on the materiality assessment. \* Escalation procedures for material changes requiring immediate attention. 3. \*\*Integration with Change Management:\*\* Ensure that the change management policy (Section 12) incorporates the procedures for handling material changes in third-party ratings.

## Requirement: REQ001

Description: Institutions should choose an appropriate philosophy underlying the assignment of obligors or exposures to grades or pools (‘rating philosophy’) taking into account all of the following principles:

Reference: 5.2.4, 66

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should assess whether the method used to quantify the risk parameter is adequate for the rating philosophy and understand the characteristics and dynamics of the assignment of obligors or exposures to grades or pools (‘rating assignment’) and of the risk parameter estimates that result from the method used.

Reference: 5.2.4, 66(a)

Status: Satisfactory

Recommendations: \* Explicitly state the methods used to assess the adequacy of the risk parameter quantification method. \* Provide examples of how the bank understands the characteristics and dynamics of rating assignments and risk parameter estimates. \* Include specific examples of how the bank ensures that the rating philosophy is aligned with the risk parameter estimates.

## Requirement: REQ003

Description: Institutions should assess the adequacy of the resulting characteristics and dynamics of the rating assignment and risk parameter estimates that result from the method used, with regard to their various uses and should understand their impact on the dynamics and volatility of own funds requirements.

Reference: 5.2.4, 66(b)

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Address Impact Assessment:\*\* Include a section or expand existing sections (e.g., Model Performance Assessment and Review, Model Use) to explicitly describe the methods used to assess the impact of rating assignment and risk parameter estimates on own funds requirements. This should include stress testing methodologies, sensitivity analyses, and scenario planning to understand the potential volatility of own funds. 2. \*\*Documented Procedures:\*\* Ensure that the procedures for assessing the impact on own funds are documented and integrated into the model validation and review processes. 3. \*\*Regular Review:\*\* The policy should mandate a regular review of the impact assessment methodologies to ensure their continued effectiveness and relevance.

## Requirement: REQ004

Description: Institutions should apply the chosen rating philosophy consistently over time.

Reference: 5.2.4, 67

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: In order to comply with the requirements of Article 170(1) and 170(3)(c) of Regulation (EU) No 575/2013 and of Article 38 of the RTS on IRB assessment methodology, institutions should check the homogeneity of obligors or exposures assigned to the same grades or pools.

Reference: 5.2.5, 69

Status: Satisfactory

Recommendations: 1. \*\*Enhance the policy with specific methodologies:\*\* Include details on the statistical methods or validation techniques used to assess and ensure homogeneity within grades/pools. This could include examples of tests used to compare the distribution of risk drivers within each grade/pool. 2. \*\*Specify frequency of homogeneity checks:\*\* Clarify how often the bank will review the homogeneity of the grades and pools.

## Requirement: REQ002

Description: Institutions should ensure the completeness of the quantitative and qualitative data and other information in relation to the denominator and numerator as outlined in paragraphs 73 and 74 and used for the calculation of the observed average default rate.

Reference: 5.3.1, 70

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Link Completeness to Observed Average Default Rate:\*\* Add a sentence or paragraph in Section 3.2 or 5.4 that explicitly connects the completeness of data to the accurate calculation of the observed average default rate. For example, "The completeness of data, as defined in Section 3.2, is crucial for the accurate calculation of the observed average default rate, as outlined in Section 5.4." 2. \*\*Cross-reference Paragraphs 73 and 74:\*\* In Section 5.4, add a cross-reference to paragraphs 73 and 74 of the relevant regulatory document (Regulation (EU) No 575/2013) to ensure the policy directly addresses the specific requirements outlined in those paragraphs.

## Requirement: REQ003

Description: Institutions should ensure that at least the following data for the relevant observation period referred to in paragraphs 82 to 83 is properly stored and available: (a) the criteria for identifying the relevant type of exposures covered by the PD model under consideration; (b) the criteria for identifying the calibration segments; (c) the risk drivers used for risk differentiation; where a newly relevant risk driver has been included in the model for which no historical data is available institutions should, make efforts to minimise missing data on risk drivers over time as outlined in paragraph 51(a), and apply an appropriate adjustment and a Mo C in accordance with section 4.4; (d) all identification numbers of obligors and exposures relevant for default rate calculation, taking into account situations where the identification number has changed over time, including changes due to restructuring of exposures.

Reference: 5.3.1, 70

Status: Satisfactory

Recommendations: 1. \*\*Explicit Data Retention Policy:\*\* Include a section or amend the existing data governance section to specify the data retention period for all data used in IRB models, aligning with regulatory requirements and internal policies. 2. \*\*IT Systems and Infrastructure:\*\* Expand Section 3.4 (IT Systems and Infrastructure) to explicitly mention the IT systems and infrastructure used for storing the data required by REQ003, including details on data backups, access controls, and data security measures. 3. \*\*Newly Relevant Risk Drivers:\*\* Add a specific clause in the "Risk Drivers Selection and Ageing of Information" section (4.2) to address the handling of newly relevant risk drivers, referencing the need to minimize missing data and apply appropriate adjustments and MoC, as outlined in paragraph 51(a) of the regulatory reference. 4. \*\*Cross-reference:\*\* Add a cross-reference to Section 9 (Appropriate Adjustment (AA) and Margin of Conservatism (MoC)) in the Data Standards and Management section (3) to highlight the importance of MoC in addressing data deficiencies.

## Requirement: REQ001

Description: Institutions should document all data cleansing in accordance with Article 32(3)(b) of the RTS on IRB assessment methodology, with respect to the one-year default rate calculation and in particular:

Reference: Paragraph 72

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: for non-retail PD models, a list of all observations within the dataset that were excluded according to paragraph 71, with a case-by-case justification;

Reference: Paragraph 72(a)

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: for retail PD models, information on the reasons and quantity of exclusions of observations made in accordance with paragraph 71.

Reference: Paragraph 72(b)

Status: Missing Requirement

Recommendations: 1. \*\*Amend the Policy:\*\* Add a new section or amend an existing one (e.g., within Section 3.3 Data Representativeness and Vetting, or Section 5.1 PD Model Structure and Risk Differentiation) to specifically address the documentation of observation exclusions in retail PD model development. 2. \*\*Specify Documentation Requirements:\*\* Detail the required information for each exclusion, including: \* The reason(s) for the exclusion (e.g., data quality issues, outliers, missing values, non-representative data). \* The quantity of observations excluded (e.g., number of records, percentage of the dataset). \* The impact of the exclusions on the model's performance and representativeness. 3. \*\*Establish a Reporting Process:\*\* Define a process for documenting and reporting observation exclusions, including the frequency of reporting (e.g., as part of model development documentation, validation reports, or model change logs). 4. \*\*Include in Model Documentation:\*\* Ensure that the reasons and quantity of exclusions are documented within the model documentation, as per Section 2.3 Documentation Standards.

## Requirement: REQ001

Description: Institutions should ensure both of the following: (a) that the denominator consists of the number of non-defaulted obligors with any credit obligation observed at the beginning of the one-year observation period; in this context a credit obligation refers to both of the following: (i) any on balance sheet item, including any amount of principal, interest and fees; (ii) any off-balance sheet items, including guarantees issued by the institution as a guarantor.

Reference: paragraph 73

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should ensure both of the following: (b) that the numerator includes all those obligors considered in the denominator that had at least one default event during the one-year observation period.

Reference: paragraph 73

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Institutions should calculate the one-year default rate also for the subset of obligors with any credit obligation that did not have a rating at the start of the relevant observation period, but which were within the range of application of the model under consideration (‘missing ratings’), even if these obligors were assigned to a rating grade or pool in a conservative manner for the purpose of calculation of own funds requirements.

Reference: paragraph 75

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should ensure that each defaulted obligor is counted only once in the numerator and denominator of the one-year default rate calculation, even where the obligor defaulted more than once during the relevant one-year period.

Reference: 77

Status: Satisfactory

Recommendations: 1. \*\*Enhance Clarity:\*\* In Section 5.4, explicitly mention that the denominator of the one-year default rate calculation includes all obligors at the beginning of the period, regardless of subsequent default events. 2. \*\*Reinforce the Rule:\*\* Add a sentence to Section 5.4 to emphasize that even if an obligor defaults multiple times within the one-year period, they are still counted only once in both the numerator and denominator.

## Requirement: REQ002

Description: Institutions should choose an appropriate approach between an approach based on overlapping and an approach based on non-overlapping one-year time windows, to calculate the observed average default rate based on a documented analysis.

Reference: 80

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Institutions should calculate the observed average default rates as the arithmetic average of all one year default rates calculated in accordance with paragraphs 73 to 76.

Reference: 81

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should ensure that, as a result of the adjustments referred to in points (a) and (b), the adjusted long-run average default rate reflects the likely range of variability of default rates.

Reference: Paragraph 85

Status: Satisfactory

Recommendations: 1. Explicitly state how the adjustments referred to in points (a) and (b) of paragraph 85 are implemented.

## Requirement: REQ002

Description: Institutions should justify the direction and magnitude of the adjustment, including the adequacy of the considered Mo C, in line with the requirement in Article 49(4)(b) of the RTS on IRB assessment methodology and section 4.4

Reference: Guideline 70

Status: Satisfactory

Recommendations: 1. \*\*Enhance Justification:\*\* Explicitly incorporate a section or amend existing sections (e.g., Section 9) to detail the process for justifying the direction and magnitude of adjustments. This should include specific examples of how the bank will demonstrate the adequacy of the MoC in relation to identified deficiencies and estimation errors. 2. \*\*Provide Examples:\*\* Include concrete examples of how the bank will justify adjustments in different scenarios, such as when using external data, addressing data scarcity, or incorporating expert judgment. 3. \*\*Reference RTS:\*\* Explicitly reference Article 49(4)(b) of the RTS on IRB assessment methodology and section 4.4 within Section 9 to ensure alignment with the regulatory requirements.

## Requirement: REQ001

Description: Institutions should have sound and well-defined processes in place which ensure sound calibration by including all of the following in their calibration process: (a) quantitative calibration tests by rating grade or pool; (b) quantitative calibration tests on calibration segment level; (c) supplementary qualitative analyses such as expert judgements on the shape of the resulting obligor distribution, minimum obligor numbers per grade and avoidance of undue concentration in certain grades or pools.

Reference: 5.3.5, 87

Status: Satisfactory

Recommendations: 1. \*\*Enhance Calibration Testing:\*\* The policy should be updated to explicitly describe the quantitative calibration tests performed by rating grade or pool and at the calibration segment level. This should include specific methodologies, metrics, and acceptance criteria. 2. \*\*Incorporate Qualitative Analyses:\*\* The policy should be updated to include details on the supplementary qualitative analyses performed during calibration. This should include how expert judgments are used to assess the shape of the resulting obligor distribution, minimum obligor numbers per grade, and avoidance of undue concentration in certain grades or pools. 3. \*\*Provide Examples:\*\* Include specific examples of the quantitative tests and qualitative analyses that will be used in the calibration process.

## Requirement: REQ002

Description: In order to ensure compliance with Article 180(1)(a) or 180(2)(a) of Regulation (EU) No 575/2013, institutions should find an appropriate balance between the comparability of the calibration sample with the application portfolio in terms of obligor and transaction characteristics and its representativeness of the likely range of variability of default rates as referred to in section 5.3.4.

Reference: 88

Status: Satisfactory

Recommendations: 1. \*\*Enhance Specificity on Comparability and Representativeness:\*\* The policy should include specific methodologies for assessing and ensuring the comparability of the calibration sample with the application portfolio. This could include defining key obligor and transaction characteristics to be compared and outlining statistical methods for assessing the representativeness of the calibration sample. 2. \*\*Detail Adjustment Mechanisms:\*\* The policy should provide more detail on the specific adjustments that will be made if the calibration data is not fully representative. This should include examples of the types of adjustments and how they will be quantified.

## Requirement: REQ003

Description: Institutions should conduct the calibration after taking into account any overrides applied in the assignment of obligors to grades or pools, and before the application of Mo C or floors to PD estimates as referred to in Articles 160(1) and 163(1) of Regulation (EU) No 575/2013.

Reference: 89

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should choose an appropriate method to perform the calibration in accordance with the following principles:

Reference: Paragraph 91

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions may choose one of the following types of calibration: (i) a calibration in accordance with Article 180(1)(a) or 180(2)(a) of Regulation (EU) No 575/2013; (ii) a calibration in accordance with Article 169(3) of Regulation (EU) No 575/2013 in combination with Article 180(1)(a) or 180(2)(a) of that Regulation if a continuous rating scale is used;

Reference: Paragraph 91(a)

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: for exposures to corporates, institutions, central governments and central banks and for equity exposures where an institution uses the PD/LGD approach set out in Article 155(3) of Regulation (EU) No 575/2013, institutions may choose one of the following types of calibration: (i) a calibration based on a mapping to the rating scale used by an external credit assessment institution (ECAI) or similar organisation in accordance with Article 180(1)(f) of Regulation (EU) No 575/2013; (ii) for a statistical default prediction model, in accordance with Section 4 of the RTS on IRB assessment methodology, where the PDs are estimated as simple averages of default probability estimates for individual obligors in a given grade or pool in accordance with Article 180(1)(g) of Regulation (EU) No 575/2013, a calibration at the level of appropriate calibration segments of the relevant default probability estimates;

Reference: Paragraph 91(b)

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: for retail exposures institutions may choose a calibration based on total losses and LGDs in accordance with Articles 180(2)(b) and 180(2)(d) of Regulation (EU) No 575/2013;

Reference: Paragraph 91(c)

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: for corporate purchased receivables institutions may choose a calibration based on expected losses and LGDs in accordance with Articles 180(1)(b) and 180(1)(c) of Regulation (EU) No 575/2013.

Reference: Paragraph 91(d)

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: the calibration should consider either: (a) the long-run average default rate at the level of grade or pool, in which case institutions should provide additional calibration tests at the level of the relevant calibration segment; or (b) the long-run average default rate at the level of the calibration segment, in which case institutions should provide additional calibration tests at the level of the relevant grades or pools or, where they use direct PD estimates in accordance with Article 169(3) of Regulation (EU) No 575/2013, at a level that is appropriate for the application of the probability model.

Reference: Paragraph 92

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ007

Description: Irrespective of which of the approaches mentioned in paragraph 92 institutions choose, they should assess the potential effect of the chosen calibration method on the behaviour of PD estimates over time.

Reference: Paragraph 93

Status: Missing Requirement

Recommendations: 1. \*\*Add a specific section or subsection to the policy addressing the requirement.\*\* This section should mandate the assessment of the chosen calibration method's impact on PD estimates over time. 2. \*\*Specify the methods for assessing the impact.\*\* The policy should outline the techniques to be used for this assessment, such as: \* \*\*Trend analysis:\*\* Monitoring PD estimates over time to identify any systematic trends or shifts. \* \*\*Backtesting:\*\* Comparing the model's PD estimates with realized default rates over different time periods. \* \*\*Stability analysis:\*\* Assessing the sensitivity of PD estimates to changes in the calibration data or methodology. 3. \*\*Define the frequency of the assessment.\*\* The policy should specify how often this assessment should be performed (e.g., annually, as part of the model validation process). 4. \*\*Require documentation of the assessment.\*\* The policy should mandate that the results of the assessment, including any findings and conclusions, are documented and reported to relevant stakeholders (e.g., model validation function, senior management). 5. \*\*Include a process for addressing identified issues.\*\* The policy should outline the steps to be taken if the assessment reveals any issues with the calibration method's impact on PD estimates (e.g., model recalibration, adjustments to the MoC).

## Requirement: REQ001

Description: Where institutions derive PD estimates from the estimates of losses and LGDs in accordance with Articles 161(2) and 180(2)(b) of Regulation (EU) No 575/2013 they should use a RDS that includes realised losses on all defaults identified during the historical observation period specified in accordance with section 6.3.2.1 and relevant drivers of loss.

Reference: Paragraph 95

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: In order to use direct PD estimates for the calculation of own funds requirements in accordance with Article 169(3) of Regulation (EU) No 575/2013, institutions should demonstrate that the theoretical assumptions of the probability model underlying the estimation methodology are met to a sufficient extent in practice and that the long-run average default rate is retained.

Reference: Paragraph 96

Status: Satisfactory

Recommendations: \* Describing the specific tests and analyses performed to validate the model's assumptions (e.g., tests for linearity, independence of variables, etc.). \* Specifying the documentation required to support these validations. \* Outlining the process for addressing any identified deviations from the theoretical assumptions.

## Requirement: REQ003

Description: In particular, all data and representativeness requirements should be met, including those in Article 174(c) of Regulation (EU) No 575/2013, and the definition of default should be applied in accordance with Article 178 of Regulation (EU) No 575/2013.

Reference: Paragraph 96

Status: Satisfactory

Recommendations: 1. \*\*Strengthen Data Representativeness Assessment:\*\* While the policy mentions data representativeness, it could be improved by explicitly detailing the methods used to assess representativeness in model development and calibration. This should include specific examples of statistical tests or analyses used to compare the development and application portfolios, and the calibration data. 2. \*\*Enhance Documentation of DoD Application:\*\* The policy states that the DoD must be applied consistently. It would be beneficial to include specific examples of how the bank ensures consistent application across different business units or systems, including the monitoring of common obligors. 3. \*\*Clarify Adjustments for Non-Representativeness:\*\* The policy mentions adjustments for non-representativeness, but it could be more specific about the types of adjustments that will be made and how they will be quantified.

## Requirement: REQ004

Description: Under no circumstances should the use of continuous PDs or any smoothening of default rates be adopted in order to overcome the lack of data, low discriminatory capacity or any other deficiencies in the rating assignment or PD estimation process, or to reduce the own funds requirements.

Reference: Paragraph 96

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: For this purpose institutions should use relevant segmentation drivers and they should justify and document the use and scope of the calibration segments.

Reference: Paragraph 97

Status: Satisfactory

Recommendations: \* Provide specific examples of the documentation that will be used to justify the calibration segments. \* Include a section that describes the process for reviewing and updating the calibration segments.

## Requirement: REQ006

Description: where there is a change in the scoring method used, the institutions consider whether it is necessary to recalculate scores of obligors or exposures based on the original dataset instead of using scores that were calculated based on previous versions of the scoring method, and, where such recalculation is not possible, that institutions assess potential effects and take those effects into account via an appropriate increase of the Mo C to their PD estimates

Reference: Paragraph 98(a)

Status: Major Gaps

Recommendations: 1. \*\*Develop Specific Procedures for Scoring Method Changes:\*\* The policy should be updated to include a dedicated section addressing changes in scoring methods. This section should outline the process for determining whether recalculation of scores using the original dataset is necessary. 2. \*\*Recalculation and Impact Assessment:\*\* If recalculation is deemed necessary, the policy should detail the steps involved. If recalculation is not possible, the policy must mandate a thorough assessment of the potential effects of the scoring method change on existing obligors and exposures. 3. \*\*MoC Application:\*\* The policy should explicitly state that any identified adverse effects from the scoring method change must be addressed through an appropriate increase in the Margin of Conservatism (MoC) applied to PD estimates. The policy should provide guidance on how to quantify this increase. 4. \*\*Documentation:\*\* The policy should require comprehensive documentation of the decision-making process, including the rationale for recalculation (or not), the assessment of potential effects, and the calculation of the MoC adjustment.

## Requirement: REQ007

Description: where Article 180(1)(g) of Regulation (EU) No 575/2013 applies, the PD estimates which were derived as a simple average of individual PD estimates are adequate for relevant grades, by applying calibration tests to these estimates at a grade level, on the basis of one-year default rates representative of the likely range of variability of default rates.

Reference: Paragraph 98(b)

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions that have obtained permission to use own estimates of LGD in accordance with Article 143(2) of Regulation (EU) No 575/2013 should assign an LGD estimate to each non-defaulted exposure and an estimate of LGD in-default and ELBE to each defaulted exposure within the range of application of the rating system subject to such permission in accordance with Articles 172 and 173 of Regulation (EU) No 575/2013.

Reference: Paragraph 100

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should estimate LGDs for all facility grades of the distinct facility rating scale or for all pools that are incorporated in the rating system.

Reference: Paragraph 100

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: For the purpose of LGD estimation institutions should treat each defaulted facility as a distinct default observation, unless more than one independent defaults were recognised on a single facility which do not meet the conditions of paragraph 101.

Reference: Paragraph 100

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: For the purpose of LGD estimation, with regard to defaults recognised on a single facility, where the time between the moment of the return of the exposure to non-defaulted status and the subsequent classification as default is shorter than nine months, institutions should treat such exposure as having been constantly defaulted from the first moment when the default occurred.

Reference: Paragraph 101

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: Institutions may specify a period longer than nine months for the purpose of considering two subsequent defaults as a single default in the LGD estimation, if this is adequate to the specific type of exposures and reflects the economic meaning of the default experience.

Reference: Paragraph 101

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: Institutions should estimate their own LGDs based on their own loss and recovery experience, as it is reflected in historical data on defaulted exposures.

Reference: Paragraph 102

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ007

Description: Institutions may supplement their own historical data on defaulted exposures with external data.

Reference: Paragraph 102

Status: Satisfactory

Recommendations: 1. \*\*Explicitly State Use of External Data:\*\* Add a section or modify existing sections (e.g., Section 6.1, 6.6, 13.4) to explicitly state how the bank supplements its historical data on defaulted exposures with external data. This should include the types of external data used (e.g., industry benchmarks, pooled data, credit bureau data), the purposes for which it is used (e.g., model calibration, validation, benchmarking), and the methodologies for integrating it with the bank's internal data. 2. \*\*Detail Data Integration:\*\* Provide more detail on how the bank integrates external data with its historical data. This should include the processes for data cleansing, validation, and transformation. 3. \*\*Specify Data Sources:\*\* List the specific external data sources that the bank uses or intends to use. 4. \*\*Address Data Scarcity:\*\* Given the absence of publicly available statistics in the residential mortgage sector (EBA/EBA-RESPONSE/7934), the policy should explicitly address how the bank mitigates the risks associated with data scarcity when using external data. This could include a higher MoC or other conservative measures.

## Requirement: REQ008

Description: Institutions should not derive their LGD estimates only from the market prices of financial instruments, including, but not limited to, marketable loans, bonds or credit default instruments, but they may use this information to supplement their own historical data.

Reference: Paragraph 102

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ009

Description: Where in the case of retail exposures and purchased corporate receivables institutions derive LGD estimates from realised losses and appropriate estimates of PDs in accordance with Articles 161(2) and 181(2)(a) of Regulation (EU) No 575/2013 they should ensure that: (a) the process for estimating total losses meets the requirements of Article 179 of Regulation (EU) No 575/2013 and the outcome is consistent with the concept of LGD as set out in Article 181(1)(a) of this Regulation, as well as with the requirements specified in

Reference: Paragraph 103

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: the process for estimating PD meets the requirements of Articles 179 and 180 of Regulation (EU) No 575/2013 as well as the requirements specified in Chapter 5.

Reference: 104

Status: Satisfactory

Recommendations: 1. \*\*Explicitly mention Articles 179 and 180:\*\* While the policy references the CRR, it could explicitly mention Articles 179 and 180 in Section 1.3 (Regulatory Framework) and in Section 5 (Probability of Default (PD) Model Development and Quantification) to directly link the policy to the specific regulatory requirements. 2. \*\*Enhance detail on specific requirements:\*\* While the policy covers the general principles of PD estimation, it could provide more specific details on how the bank ensures compliance with the requirements of Articles 179 and 180. For example, the policy could include more detail on how the bank addresses the requirements for risk driver selection, data representativeness, and model validation. 3. \*\*Strengthen the link between the policy and the ECB Guide:\*\* The policy references the ECB Guide, but it could strengthen the link between the policy and the ECB Guide by explicitly referencing specific sections of the ECB Guide that are relevant to PD estimation.

## Requirement: REQ002

Description: Institutions should be able to demonstrate that the methods that they choose for the purpose of LGD estimation are appropriate to their activities and the type of exposures to which the estimates apply and they should be able to justify the theoretical assumptions underlying those methods.

Reference: 105

Status: Satisfactory

Recommendations: \* Include a specific section or subsection detailing how the bank ensures that the LGD estimation methods are appropriate for its activities and the type of residential mortgage exposures. This should include a description of the process for selecting and validating the methodologies. \* Provide examples of how the bank justifies the theoretical assumptions underlying the LGD estimation methods, including the use of statistical analysis, expert judgment, and backtesting.

## Requirement: REQ003

Description: The methods used in the LGD estimation should in particular be consistent with the collection and recovery policies adopted by the institution and should take into account possible recovery scenarios as well as potential differences in the legal environment in relevant jurisdictions.

Reference: 105

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Link LGD to Collection and Recovery Policies:\*\* Add a section or modify existing sections (e.g., 6.1, 6.3, 6.4) to explicitly state how the LGD estimation methodologies are consistent with the bank's collection and recovery policies. This should include a description of how the policies influence the inputs and assumptions used in LGD modeling. 2. \*\*Detail Recovery Scenarios:\*\* Expand on how different recovery scenarios are considered in LGD estimation. This could include scenarios related to the type of collateral, the legal jurisdiction, and the economic environment. 3. \*\*Address Legal Environment Differences:\*\* Include a more detailed discussion of how potential differences in the legal environment across relevant jurisdictions are taken into account. This could involve segmenting the LGD model by jurisdiction or incorporating jurisdiction-specific risk drivers.

## Requirement: REQ004

Description: For the purpose of LGD estimation institutions should use an RDS covering all of the following items: (a) all defaults identified during the historical observation period specified in accordance with section 6.3.2.1; (b) all data necessary for calculating realised LGDs in accordance with section 6.3.1; (c) relevant factors that can be used to group the defaulted exposures in meaningful ways and relevant drivers of loss, including their values at the moment of default and at least within the year before default when available.

Reference: 107

Status: Satisfactory

Recommendations: 1. Explicitly state in Section 6.2, "Data Requirements for LGD Estimation," that the RDS must include the values of relevant loss drivers at the moment of default and at least within the year before default when available.

## Requirement: REQ005

Description: Institutions should include in the RDS information on the results of the recovery processes, including recoveries and costs, related to each individual defaulted exposure.

Reference: 108

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Where institutions use various valuation approaches with regard to immovable properties that secure exposures included in the range of application of a certain rating system, they should collect and store in the RDS the information on the type of valuation and they should use this information consistently in the LGD estimation and in the application of LGD estimates.

Reference: Paragraph 110

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Where institutions derive LGD estimates from realised losses and appropriate estimates of PDs in accordance with Articles 161(2) and 181(2)(a) of Regulation (EU) 575/2013 they should use a RDS that includes realised losses on all defaults identified during the historical observation period specified in accordance with section 6.3.2.1 and relevant drivers of loss.

Reference: 111

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Where aggregated information is collected and stored, institutions should develop an appropriate methodology for the allocation of recoveries and costs to individual defaulted exposures and should apply this methodology consistently across exposures and over time.

Reference: 112

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: In any case institutions should demonstrate that the process of allocation of recoveries and costs is effective and that it does not lead to biased LGD estimates.

Reference: 112

Status: Satisfactory

Recommendations: 1. \*\*Enhance the policy with specific methodologies and controls:\*\* The policy should include specific methodologies and controls to ensure the effective allocation of recoveries and costs. This could involve: \* Detailed procedures for tracking and allocating recoveries and costs to specific facilities. \* Regular reviews of the allocation process to identify and correct any potential biases. \* Independent validation of the allocation process to ensure its effectiveness. 2. \*\*Provide examples of how the bank ensures the allocation process is effective:\*\* The policy should provide examples of how the bank ensures that the allocation process is effective and does not lead to biased LGD estimates. This could include examples of how the bank handles different types of recoveries and costs, and how it ensures that these are allocated appropriately. 3. \*\*Include specific monitoring and reporting requirements:\*\* The policy should include specific monitoring and reporting requirements to ensure that the allocation process is effective. This could include regular reports on the allocation of recoveries and costs, and any potential biases that have been identified.

## Requirement: REQ004

Description: Institutions should demonstrate that they collect and store in their databases all information required to calculate direct and indirect costs.

Reference: 113

Status: Satisfactory

Recommendations: 1. \*\*Explicitly State Data Collection for Costs:\*\* Add a sentence or paragraph in Section 3, or a relevant subsection, explicitly stating that the bank collects and stores all data necessary to calculate direct and indirect costs associated with residential mortgage exposures. 2. \*\*Cross-reference:\*\* In Section 6.4 (Calculation of Economic Loss and Realised LGD), add a cross-reference to Section 3, highlighting the importance of data collection for cost calculation.

## Requirement: REQ005

Description: All material indirect costs should be allocated to the corresponding exposures.

Reference: 113

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: This cost allocation process should be based on the same principles and techniques that institutions use in their own cost accounting systems.

Reference: 113

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ007

Description: Institutions should take reasonable steps to recognise the sources of the cash flows and allocate them adequately to the specific collateral or unfunded credit protection that has been realised.

Reference: 114

Status: Non Compliant

Recommendations: 1. \*\*Develop a specific methodology:\*\* The bank should develop a detailed methodology for recognizing the sources of cash flows (e.g., from collateral liquidation, credit protection payouts) and allocating them to the specific collateral or credit protection that has been realized. This methodology should be integrated into the LGD and CCF models. 2. \*\*Define cash flow recognition triggers:\*\* Establish clear triggers for recognizing cash flows related to collateral and credit protection. This should include the timing and method of recognition. 3. \*\*Document the process:\*\* The methodology for recognizing and allocating cash flows should be thoroughly documented, including the data sources, calculation methods, and any assumptions made. 4. \*\*Integrate into existing models:\*\* The methodology should be integrated into the existing LGD and CCF models, ensuring that the allocation of cash flows is reflected in the risk parameter estimates. 5. \*\*Validation and Monitoring:\*\* The process should be subject to regular validation and monitoring to ensure its accuracy and effectiveness.

## Requirement: REQ008

Description: Where the source of the cash flows cannot be identified, institutions should specify clear policies for the treatment and allocation of such recovery cash flows, which should not lead to a bias in LGD estimation.

Reference: 114

Status: Non Compliant

Recommendations: 1. \*\*Develop a Specific Policy:\*\* Create a dedicated section or addendum to the policy that explicitly addresses the treatment and allocation of recovery cash flows when the source cannot be identified. 2. \*\*Define Clear Procedures:\*\* Establish clear procedures for handling unidentified cash flows. This should include how these cash flows are categorized, allocated, and incorporated into the LGD calculation. 3. \*\*Prevent Bias:\*\* Ensure that the procedures are designed to prevent any bias in LGD estimation. This could involve conservative assumptions, independent review, or specific allocation rules. 4. \*\*Documentation:\*\* Document the procedures and assumptions used for handling unidentified cash flows. 5. \*\*Validation:\*\* Include the procedures for handling unidentified cash flows in the model validation process.

## Requirement: REQ009

Description: Institutions should recognise the recoveries as stemming from collaterals in all of the following situations: (a) the collateral is sold by the obligor and the obtained price has been used to cover parts or all of the outstanding amount of the defaulted credit obligation; (b) the collateral is repossessed or sold by the institution, the parent undertaking or any of its subsidiaries on behalf of the institution; (c) the collateral is sold in a public auction of the property by court order or in a similar procedure in accordance with the applicable legal framework; (d) the credit obligation is sold together with the collateral and the sale price for the credit obligation included the existing collateral; (e) in the case of leasing, the leasing object is sold by the institution; (f) the collateral is realised by any other method that is eligible under the legal framework of the relevant jurisdiction.

Reference: 115

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Where these values are different institutions should consider the lower of the two the value of repossession.

Reference: paragraph 116

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: In all other cases institutions should apply an appropriate haircut to the value of repossession and include in the calculation of economic loss a recovery in the amount of the value of repossession after applying the appropriate haircut

Reference: paragraph 117

Status: Satisfactory

Recommendations: 1. \*\*Enhance Haircut Methodology:\*\* The policy should elaborate on the methodology for determining the "appropriate haircut." This should include details on how the haircut is calculated (e.g., based on historical loss data, market conditions, and recovery costs), the factors considered in determining the haircut (e.g., property type, location, market volatility), and the frequency of review and adjustment of the haircut. 2. \*\*Specify Back-testing:\*\* The policy should explicitly state the back-testing process for the haircuts. This should include the frequency of back-testing, the metrics used to assess the performance of the haircuts (e.g., comparing the haircut value to the actual sale price), and the actions to be taken if the back-testing reveals that the haircuts are not adequate.

## Requirement: REQ001

Description: Institutions should estimate this haircut taking into account all of the following conditions: (a) the haircut should reflect possible errors in the valuation of the collateral at the moment of repossession taking into account the type of the valuation available at the moment of repossession, the date it was performed and the liquidity of the market for this type of asset; (b) the haircut should be estimated with the assumption that the institution intends to sell the repossessed collateral to an independent third party and should reflect the potential price that could be achieved from such sale, the costs of the sale and the discounting effect for the period from the sale to the moment of repossession taking into account the liquidity of the market for this type of assets; (c) where there are observations available regarding the repossessions and subsequent sales of similar types of collaterals the estimation of the haircut should be based on these observations and should be regularly backtested; for this purpose institutions should take into account all of the following: (i) the difference between the value of repossession and the sale price, especially where there were no significant changes in market and economic conditions between the moment of the repossession and the moment of the sale; (ii) any income and costs related to this asset that were observed between the date of repossession and the moment of the sale; (iii) discounting effects; (iv) whether the institution repossessed the collateral with the intention of immediate sale or whether another strategy was adopted. (d) where historical observations regarding the repossessions and subsequent sales of similar types of collaterals are not available the estimation of the haircut should be based on a case-by-case assessment, including the analysis of the current market and economic conditions; (e) the fewer data an institution has on previous repossessions and the less liquid the market for the given type of assets is, the more uncertainty is attached to the resulting estimates, which should be adequately reflected in the Mo C in accordance with section 4.4.3.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: 1. \*\*Enhance Haircut Calculation Methodology:\*\* The policy should include a detailed description of the methodologies used to calculate haircuts. This should include: \* Specific guidance on the types of valuation available at the moment of repossession (e.g., appraisals, broker price opinions) and how the haircut varies based on the valuation method. \* A clear explanation of how the costs of sale (e.g., legal fees, marketing expenses) are incorporated into the haircut calculation. \* A defined approach for calculating the discounting effect for the period from the sale to the moment of repossession, considering market liquidity. 2. \*\*Strengthen Backtesting Procedures:\*\* The policy should provide more detail on the backtesting procedures for haircut estimations. This should include: \* The frequency of backtesting. \* The specific metrics used to assess the accuracy of haircut estimations (e.g., comparing the estimated haircut to the actual difference between repossession value and sale price). \* The actions to be taken if backtesting reveals significant discrepancies. 3. \*\*Clarify MoC Application:\*\* While the policy mentions the use of MoC, it should provide more specific guidance on how the MoC is applied to haircut estimations, particularly in situations with limited data or market illiquidity.

## Requirement: REQ002

Description: In any case the repossession of collateral should be recognised at the moment of repossession and should not prevent the institution from closing the recovery process in accordance with paragraph 155.

Reference: paragraph 118, 119

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Where institutions regularly sell credit obligations as part of their recovery processes, they should appropriately reflect the observations related to credit obligations subject to the sale in the model development process.

Reference: paragraph 119(a)

Status: Non Compliant

Recommendations: 1. \*\*Amend the policy to include a section specifically addressing the sale of credit obligations.\*\* This section should outline how the bank will incorporate data and observations from the sale of credit obligations into the model development process. 2. \*\*Specify the types of data to be collected and analyzed.\*\* This should include, but not be limited to, sale prices, the characteristics of the sold obligations, and the reasons for the sale. 3. \*\*Describe how the data will be used in model development.\*\* This could involve adjusting LGD estimates, refining risk driver selection, or improving the model's ability to predict recovery rates. 4. \*\*Establish a process for regularly reviewing and updating the model based on the observations from the sale of credit obligations.\*\*

## Requirement: REQ002

Description: Institutions should not treat recoveries from the sales of the secured credit obligations as recoveries realised without the use of collaterals unless they can demonstrate that the recoveries related to these collaterals are immaterial.

Reference: paragraph 119(c)

Status: Non Compliant

Recommendations: \* A definition of what constitutes a "secured credit obligation" in the context of residential mortgages. \* A clear statement that recoveries from the sale of secured credit obligations should generally be treated as recoveries realized with the use of collateral. \* Specific criteria for determining when recoveries related to collateral are considered immaterial. This could include a materiality threshold based on the percentage of the outstanding exposure or a specific monetary amount. \* Procedures for documenting the rationale for treating recoveries as immaterial, including supporting analysis and approvals. \* Guidance on how to handle situations where the sale of the secured credit obligation results in a loss.

## Requirement: REQ003

Description: In any case institutions should include all observations, including the sales of credit obligations, in the calculation of long-run average LGD.

Reference: paragraph 119(d)

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: When recognising such other forms of realising collateral, institutions should take into account the fact that the collateral may take various forms and that various forms of collaterals may be related to the same asset.

Reference: paragraph 120

Status: Satisfactory

Recommendations: 1. \*\*Enhance Specificity on Collateral Realization:\*\* Add a section or expand existing sections (e.g., 6.3 Risk Drivers for LGD and Collateral Modelling, 6.4 Calculation of Economic Loss and Realised LGD) to explicitly address the process of realizing different forms of collateral and their interrelation. This should include how the bank accounts for the value of each collateral type and their combined effect on the loss given default. 2. \*\*Address Multiple Collateral Types:\*\* Include specific guidance on how the bank handles situations where multiple collateral types secure the same asset. This could involve prioritizing collateral types, aggregating values, or using a weighted approach. 3. \*\*Detail the Realization Process:\*\* Provide more detail on the bank's procedures for realizing collateral, including the steps involved, the parties responsible, and the timelines.

## Requirement: REQ005

Description: Where different forms of collateral refer to the same asset but the realisation of one of the collaterals does not decrease the value of the other, institutions should consider them separate collaterals in the process of LGD estimation.

Reference: paragraph 120

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: Institutions should identify and analyse potential risk drivers that are relevant to their specific circumstances and to the specific characteristics of the type of exposures covered by the rating system.

Reference: paragraph 121

Status: Satisfactory

Recommendations: 1. \*\*Enhance Specificity in LGD Analysis:\*\* Provide more detailed examples of how the bank analyzes the impact of specific risk drivers (e.g., LTV, property type, geographical location) on LGD estimation. This could include describing the statistical methods used to assess the significance of these drivers and how they are incorporated into the LGD model. 2. \*\*Document the Process:\*\* Clearly document the process for identifying and analyzing risk drivers, including the frequency of review and the individuals responsible for this analysis.

## Requirement: REQ001

Description: Institutions should analyse the risk drivers not only at the moment of default but also at least within a year before default.

Reference: Paragraph 122

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should use a reference date for a risk driver that is representative of the realisations of the risk driver within a year before default.

Reference: Paragraph 122

Status: Satisfactory

Recommendations: 1. In Section 4.2, "Risk Drivers Selection and Ageing of Information," add a sentence emphasizing that the reference date for all risk drivers should be representative of the realizations of the risk driver within a year before default. 2. In Section 6.3, "Risk Drivers for LGD and Collateral Modelling," expand the discussion to explicitly state that the reference date for all risk drivers, not just those related to LGD, should be representative of the realizations of the risk driver within a year before default.

## Requirement: REQ003

Description: When choosing the appropriate reference date for a risk driver institutions should take into account its volatility over time.

Reference: Paragraph 122

Status: Missing Requirement

Recommendations: \* Defining "volatility" in the context of risk drivers. \* Describing methods for assessing the volatility of risk drivers (e.g., time series analysis, historical data analysis). \* Providing guidance on how to select reference dates that account for the volatility of risk drivers (e.g., using more recent data for volatile drivers, averaging data over a period for less volatile drivers). \* Including a process for reviewing and updating reference dates based on changes in risk driver volatility.

## Requirement: REQ004

Description: Institutions should apply these practices also with regard to the reference date of the valuation of collateral; the value of the collateral at the reference date should not reflect the impact of the decrease in credit quality of the exposure shortly before default.

Reference: Paragraph 122

Status: Non Compliant

Recommendations: 1. \*\*Introduce a specific section or addendum to the policy addressing the reference date for collateral valuation.\*\* This section should explicitly state the bank's approach to determining the reference date for collateral valuation, ensuring it is not unduly influenced by the borrower's declining credit quality shortly before default. 2. \*\*Define "shortly before default"\*\* in the context of the bank's definition of default and recovery processes. This will provide clarity on the timeframe to be considered when assessing the impact of credit quality deterioration. 3. \*\*Specify methodologies for determining the appropriate reference date.\*\* This could include guidelines on using valuation dates that predate any significant decline in credit quality, or using independent valuations that are not influenced by the borrower's current financial situation. 4. \*\*Include controls and validation procedures.\*\* The policy should outline controls to ensure that the chosen reference date is appropriate and that the collateral valuation accurately reflects the value at that date, independent of the borrower's credit deterioration. This should be part of the internal validation function's responsibilities. 5. \*\*Address the impact of market conditions.\*\* The policy should consider how to address market conditions that may affect collateral values, ensuring that the valuation reflects the market value at the reference date, but not the impact of the borrower's credit deterioration.

## Requirement: REQ005

Description: Institutions should specify or calculate the risk drivers in the application of LGD estimates in the same way as they are specified or calculated in the estimation of LGD.

Reference: Paragraph 123

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: To the extent that LGD estimates take into account the existence of unfunded credit protection institutions should specify the criteria and methodology for recognising and including in their LGD estimates the protection in the form of guarantees and credit derivatives that meet the criteria specified in Article 60 of the RTS on IRB assessment methodology.

Reference: Paragraph 125

Status: Non Compliant

Recommendations: 1. \*\*Incorporate Specific Methodology:\*\* Add a section to the policy that explicitly outlines the criteria and methodology for recognizing and including unfunded credit protection (guarantees and credit derivatives) in LGD estimates. This section should align with Article 60 of the RTS on IRB assessment methodology. 2. \*\*Define Eligible Credit Protection:\*\* Clearly define the types of guarantees and credit derivatives that are eligible for inclusion in LGD calculations, referencing Article 60. 3. \*\*Specify Data Requirements:\*\* Detail the data requirements for assessing and incorporating the impact of unfunded credit protection, including the necessary information on the guarantor or protection provider. 4. \*\*Outline Calculation Methods:\*\* Describe the methods used to adjust LGD estimates based on the presence of eligible unfunded credit protection. 5. \*\*Validation and Monitoring:\*\* Include provisions for validating the effectiveness of the credit protection and monitoring its ongoing performance.

## Requirement: REQ002

Description: Institutions should clearly define in their internal policies the main and other types of collaterals used for the type of exposures covered by the rating system and should ensure that, to the extent that LGD estimates take into account the existence of collateral, the policies regarding the management of these types of collateral comply with the requirement of Article 181(1)(f) of Regulation (EU) No 575/2013.

Reference: Paragraph 126

Status: Satisfactory

Recommendations: 1. Explicitly reference Article 181(1)(f) of Regulation (EU) No 575/2013 in Section 6.3 and/or Section 6.2. 2. Expand on the description of collateral management policies and how they ensure compliance with Article 181(1)(f). This could include details on valuation frequency, eligibility criteria, and the process for monitoring collateral values. 3. Consider adding a dedicated section or subsection within Section 6 (LGD Model Development and Quantification) specifically addressing collateral management policies and their alignment with regulatory requirements.

## Requirement: REQ003

Description: Collaterals which do not meet the requirement of Article 181(1)(f) of Regulation (EU) No 575/2013 cannot be included as a risk driver in the LGD estimation and the cash flows received from those collaterals should be treated as if they had been received without the use of collaterals.

Reference: Paragraph 127

Status: Non Compliant

Recommendations: 1. \*\*Explicitly Address Article 181(1)(f):\*\* Amend the policy to include a specific section or clause that directly references Article 181(1)(f) of Regulation (EU) No 575/2013. 2. \*\*Define Non-Compliant Collaterals:\*\* The policy should define what constitutes a collateral that does not meet the requirements of Article 181(1)(f). 3. \*\*Exclude Non-Compliant Collaterals as Risk Drivers:\*\* The policy must state that collaterals that do not meet the requirements of Article 181(1)(f) cannot be included as risk drivers in the LGD estimation. 4. \*\*Adjust Cash Flow Treatment:\*\* The policy should specify how cash flows received from collaterals that do not meet the requirements of Article 181(1)(f) will be treated, i.e., as if they had been received without the use of collaterals. 5. \*\*Validation and Monitoring:\*\* Include procedures for the internal validation function to verify compliance with this requirement and for ongoing monitoring to ensure that non-compliant collaterals are not inadvertently included in LGD estimations.

## Requirement: REQ004

Description: Regardless of this treatment in the LGD estimation, institutions should collect the information about the source of the cash flows related to those collaterals and allocate them as related to those collaterals.

Reference: Paragraph 127

Status: Non Compliant

Recommendations: 1. \*\*Amend Section 6.3 (Risk Drivers for LGD and Collateral Modelling):\*\* Add a subsection or modify the existing text to explicitly state that the bank will collect information about the source of cash flows related to collaterals. 2. \*\*Add a new section or subsection:\*\* Include a section or subsection within the LGD model development and quantification section (e.g., 6.3.x) that details the methodology for allocating cash flows to the respective collaterals. This should include the types of cash flows to be collected (e.g., sale proceeds, rental income, insurance payouts) and how they will be linked to the collateral. 3. \*\*Data Governance:\*\* Ensure the data governance framework (Section 3.1) is updated to include the collection, storage, and management of collateral-related cash flow data. 4. \*\*Documentation:\*\* Update the documentation standards (Section 2.3) to include the collection and allocation of cash flow information.

## Requirement: REQ005

Description: Institutions should regularly monitor the levels of such cash flows as well as the extent to which the relevant types of collaterals are used.

Reference: Paragraph 127

Status: Satisfactory

Recommendations: 1. \*\*Enhance Specificity:\*\* Add a section or expand existing sections to explicitly address the monitoring of cash flows and the use of collaterals. This should include: \* \*\*Frequency:\*\* Specify how often cash flows and collateral values are monitored (e.g., monthly, quarterly, annually). \* \*\*Methods:\*\* Describe the methods used for monitoring, such as reviewing loan performance, collateral valuations, and any changes in collateral status. \* \*\*Scope:\*\* Define the scope of monitoring, including the types of cash flows and collaterals covered (e.g., all residential mortgages, specific segments). \* \*\*Triggers:\*\* Establish triggers for further investigation or action based on monitoring results (e.g., significant changes in cash flows, declines in collateral value). 2. \*\*Integrate with Existing Frameworks:\*\* Integrate the monitoring of cash flows and collateral into the existing model risk management framework, data quality management framework, and model performance assessment processes. 3. \*\*Documentation:\*\* Ensure that the monitoring processes are well-documented, including the responsibilities of different stakeholders.

## Requirement: REQ006

Description: Where necessary, institutions should perform appropriate adjustments in order to avoid any bias in the LGD estimates.

Reference: Paragraph 127

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should avoid the bias that may stem from including the cash flows related to realisation of collateral in the estimation of recoveries that are realised without the use of collaterals and vice versa.

Reference: 129(a)

Status: Missing Requirement

Recommendations: 1. \*\*Explicitly Address the Requirement:\*\* Include a specific section or paragraph within the LGD model development and quantification section (6. Loss Given Default (LGD) Model Development and Quantification) that directly addresses the need to avoid bias in LGD estimation related to collateral. 2. \*\*Define Clear Methodologies:\*\* Outline the methodologies used to separate and account for cash flows related to collateral realization versus those from recoveries without collateral. This should include guidance on data segregation, the treatment of costs, and the discounting of cash flows. 3. \*\*Validation and Monitoring:\*\* Add a validation step to ensure that the LGD model does not include the cash flows from collateral realization in the estimation of recoveries that are realized without collaterals and vice versa. 4. \*\*Documentation:\*\* Ensure that the model documentation clearly explains how the bank addresses this requirement.

## Requirement: REQ002

Description: Where institutions estimate separate recovery rates for specific types of collaterals, they should avoid a bias that may stem from including in the estimation sample the observations where the exposure was secured by only a part of the value of the collateral.

Reference: 129(b)

Status: Missing Requirement

Recommendations: \* A clear statement acknowledging the potential for bias when estimating LGD for partially collateralized exposures. \* A description of the methodology used to identify and exclude or appropriately adjust observations where the exposure was secured by only a part of the collateral value. This could involve: \* Defining criteria for identifying partially collateralized exposures. \* Specifying how these exposures will be treated in the LGD estimation process (e.g., excluded from the sample, or adjusted using a specific methodology). \* Documentation of the chosen methodology and its rationale. \* Regular review and validation of the methodology to ensure its effectiveness in mitigating bias.

## Requirement: REQ003

Description: For this purpose institutions should take reasonable steps to obtain the data on the total value of the collateral and total sale price of the collateral and include this information in the estimation where it is available

Reference: 129(b)

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Where institutions estimate separate recovery rates for specific types of collaterals they should recognise and include in this estimation direct costs related to the collection on each of these specific types of collaterals separately as well

Reference: 129(c)

Status: Major Gaps

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: Where institutions estimate separate recovery rates for specific types of collaterals they should include in this estimation all recoveries realised from a specific type of collateral including those realised on exposures where the realisation of the collateral has been completed but the overall recovery process has not yet been closed

Reference: 129(d)

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: Where the same collateral covers several exposures, institutions should specify an adequate allocation methodology in order to avoid double counting of collaterals; the allocation methodology should be consistent between the LGD estimation and the application of LGD estimates and with the methodology used for accounting purposes

Reference: 129(e)

Status: Satisfactory

Recommendations: 1. \*\*Explicit Allocation Methodology:\*\* The policy should explicitly describe the allocation methodology used when the same collateral covers several exposures. This should include how the collateral value is allocated across different exposures. 2. \*\*Consistency Statement:\*\* Add a specific statement confirming that the allocation methodology is consistent between LGD estimation, the application of LGD estimates, and the methodology used for accounting purposes. 3. \*\*Cross-reference:\*\* Include a cross-reference to the bank's accounting policy or relevant documentation that details the methodology used for accounting purposes.

## Requirement: REQ007

Description: the estimates should not be based solely on the estimated market value of the collateral but they should also take into account the realised recoveries from past liquidations and the potential inability of an institution to gain control and liquidate the collateral.

Reference: 129(f)

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ008

Description: For this purpose, institutions should take into account in the estimation those historical observations where the collateral could not be realised or where the recovery process was longer than expected, due to inability or difficulty to gain control or liquidate the collateral

Reference: 129(f)

Status: Satisfactory

Recommendations: \* Explicitly mention in Section 6.6, or a related section, the scenarios described in REQ008 (inability or difficulty to gain control or liquidate the collateral). \* Provide more detailed guidance on how to incorporate these scenarios into the LGD estimation process, including specific examples of how historical observations of such events are to be considered. \* Consider adding a section or subsection specifically addressing the treatment of collateral realization challenges, including the impact on LGD and MoC.

## Requirement: REQ001

Description: Where institutions estimate the recovery rates related to specific types of collaterals, they should take into account the time between the moment of default and the time when the cash flows related to the collection on these types of collaterals have been received and should include in the estimation those observations where the collateral has not been realised as a result of inability to gain control.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 82

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: the estimates should take into account the potential decreases in collateral value from the point of LGD estimation to the eventual recovery, in particular those resulting from changes in the market conditions, the state and age of the collateral and, where relevant, currency fluctuations.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 82 (g)

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Mention Currency Fluctuations and Collateral State/Age:\*\* Add specific language to Section 6.3 to explicitly mention currency fluctuations and the state and age of the collateral as factors that should be considered when assessing potential decreases in collateral value. For example, the policy could be updated to state: "The approach to including collateral effects in LGD estimation shall avoid bias from inappropriate treatment of cash flows or valuation. This includes taking into account potential decreases in collateral value (e.g., due to market conditions, currency fluctuations, the state and age of the collateral) from the point of LGD estimation to eventual recovery, but not potential increases."

## Requirement: REQ003

Description: Where institutions have experienced decreases in values of collaterals and these are already reflected in observed recoveries, no further adjustments to the LGD estimates based on these observations should be made.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 82 (g)

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Where potential decreases in values of collaterals are not reflected in historical observations or where institutions predict further, potentially more severe decreases in the future, they should be included in the quantification of LGD estimates by means of an appropriate adjustment based on forward-looking expectations.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 82 (g)

Status: Major Gaps

Recommendations: 1. \*\*Explicitly Address Forward-Looking Expectations:\*\* Amend the policy to include a section specifically addressing the incorporation of forward-looking expectations of collateral value decreases into LGD estimates. This section should detail the methodologies for identifying and quantifying potential future decreases, especially when not reflected in historical data. 2. \*\*Define Triggers and Methodologies:\*\* Establish clear triggers for when forward-looking adjustments are necessary (e.g., based on macroeconomic forecasts, property market analyses, or specific risk factors). Define the methodologies for making these adjustments, which could include scenario analysis, stress testing, or the use of external data sources. 3. \*\*Link to MoC:\*\* Explicitly link the forward-looking adjustments to the Margin of Conservatism (MoC). The policy should state that the MoC should be increased to account for the uncertainty associated with forward-looking estimates, particularly when the potential for significant collateral value decreases exists. 4. \*\*Regular Review and Validation:\*\* Include a requirement for regular review and validation of the forward-looking adjustments, including back-testing against actual outcomes. 5. \*\*Training and Documentation:\*\* Ensure that all relevant personnel (model developers, validators, risk managers) are trained on the new procedures and that the methodologies are thoroughly documented.

## Requirement: REQ005

Description: However, the LGD estimates should not be adjusted to take into account any potential increases in collateral value.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 82 (g)

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: the estimates should take into account in a conservative manner the degree of dependence between the risk of the obligor and the risk of the diminishing value of the collateral as well as the cost of liquidating the collateral.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 82 (h)

Status: Satisfactory

Recommendations: \* Adding a section that specifically addresses the dependence between obligor risk and collateral value. \* Providing examples of how this dependence is considered in the LGD model. \* Specifying how the cost of liquidating the collateral is considered.

## Requirement: REQ007

Description: In order to fulfil the requirement of Article 38 of the RTS on IRB assessment methodology, institutions should assess the homogeneity of exposures assigned to the same grades or pools based on the data in the RDS and they should ensure, in particular, that grades are defined in such a manner that individual grades are sufficiently homogeneous with respect to loss characteristics.

Reference: 6.2.4 Homogeneity of facility grades or pools 130

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Reference RDS Data:\*\* Add a sentence or paragraph in Section 6.3. Risk Drivers for LGD and Collateral Modelling, or Section 5.1. PD Model Structure and Risk Differentiation, explicitly stating that the assessment of homogeneity will be based on the data available in the Reference Data Set (RDS). 2. \*\*Detail Homogeneity Assessment:\*\* Expand on how the bank assesses homogeneity. Include examples of statistical methods or analyses used to ensure that exposures within a grade or pool have similar loss characteristics.

## Requirement: REQ008

Description: For the purpose of LGD estimation as referred to in Article 181(1)(a) of Regulation (EU) No 575/2013, institutions should calculate realised LGDs for each exposure, as referred to in point (55) of Article 4(1) of that Regulation, as a ratio of the economic loss to the outstanding amount of the credit obligation at the moment of default, including any amount of principal, interest or fee.

Reference: 6.3.1.1 Definition of economic loss and realised LGD 131

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: For the purpose of calculation of the economic loss realised on an exposure in accordance with paragraph 132 institutions should take into account all realised recoveries including the recoveries from unknown sources and recoveries related to collaterals that do not meet the requirement of Article 181(1)(f) of Regulation (EU) No 575/2013.

Reference: Paragraph 133

Status: Satisfactory

Recommendations: 1. Explicitly mention "recoveries from unknown sources" in Section 6.4 to ensure clarity. 2. Provide more detail on the specific procedures for handling recoveries from sources that do not meet the requirements of Article 181(1)(f) of Regulation (EU) No 575/2013. This could include how these recoveries are identified, measured, and incorporated into the economic loss calculation.

## Requirement: REQ002

Description: Where, relating to a default event, any part of exposure has been forgiven or written off before or at the date of default and the amount forgiven or written off is not included in the outstanding amount of the credit obligation at the moment of default the amount of the exposure that was forgiven or written off should be added to the outstanding amount of the credit obligation at the moment of default for both the calculation of economic loss as specified in paragraph 132 in the numerator, and the calculation of the outstanding amount of credit obligation in the denominator of the realised LGD.

Reference: Paragraph 134

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: In the case of exposures that return to non-defaulted status, institutions should calculate economic loss as for all other defaulted exposures with the only difference that an additional recovery cash flow should be added to the calculation as if a payment had been made by the obligor in the amount that was outstanding at the date of the return to non-defaulted status, including any principal, interests and fees (‘artificial cash flow’).

Reference: Paragraph 135

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Where institutions open new facilities to replace previously defaulted facilities as part of restructuring or for technical reasons, they should calculate the realised LGDs based on the originally defaulted facilities.

Reference: Paragraph 136

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: For this purpose, institutions should have a sound mechanism to allocate observed costs, recoveries and any additional drawings to original facilities

Reference: Paragraph 136

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: For the purpose of Article 181(1)(i) of Regulation (EU) No 575/2013, institutions should take into account in the calculation of realised LGD any fees for delays in payments that have been capitalised in the institution’s income statement before the moment of default by including them in the outstanding amount of the credit obligation at the moment of default in the numerator and denominator of the realised LGD.

Reference: Paragraph 137

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Where the fees were extended to the obligor in order to recover direct costs already incurred by the institution and these costs are already included in the calculation of the economic loss, institutions should not add these amounts to the economic loss or outstanding amount again.

Reference: Paragraph 137

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Any fees capitalised after the moment of default should not increase the amount of economic loss or amount outstanding at the moment of default.

Reference: Paragraph 137

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Institutions should apply the treatment specified in paragraph 137 to any interest capitalised in the institution's income statement before and after the moment of default.

Reference: Paragraph 138

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: In accordance with Article 182(1)(c) of Regulation (EU) No 575/2013 institutions that obtained permission to use own estimates of LGD and conversion are required to reflect the possibility of additional drawings by the obligor up to and after the time of default in their estimates of conversion factors.

Reference: Paragraph 139

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: Where institutions include additional drawings by the obligor after the moment of default in their conversion factors they should calculate realised LGD as a ratio of the economic loss to the outstanding amount of the credit obligation at the moment of default increased by the amount of additional drawings by the obligor after the moment of default discounted to the moment of default.

Reference: Paragraph 140

Status: Non Compliant

Recommendations: 1. A clear statement that additional drawings after default are included in the economic loss numerator. 2. A statement that these additional drawings must be discounted to the moment of default. 3. A description of the discounting methodology, including the discount rate (e.g., the same rate used for discounting recoveries and costs, as specified in Section 6.4).

## Requirement: REQ001

Description: Institutions should calculate the economic loss used in the numerator of the realised LGD including the additional drawings after the moment of default and all realised recoveries discounted to the moment of default.

Reference: Paragraph 142

Status: Satisfactory

Recommendations: 1. \*\*Explicitly mention discounting of additional drawings:\*\* Add a sentence in Section 6.4 to explicitly state that additional drawings after default should also be discounted to the moment of default when calculating economic loss.

## Requirement: REQ002

Description: Institutions should discount all recoveries, costs and additional drawings after the moment of default using an annual discounting rate composed of a primary interbank offered rate applicable at the moment of default increased by an add-on of 5%-points.

Reference: Paragraph 143

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Institutions should consider all direct costs as material.

Reference: Paragraph 145

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Institutions should include in their estimation of indirect costs an appropriate percentage of other ongoing costs, such as institutions’ overheads related to the recovery processes, unless they can demonstrate that these costs are immaterial.

Reference: Paragraph 146

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: For this purpose institutions should at a minimum select a historical observation period in such a way that:

Reference: Paragraph 147

Status: Missing Requirement

Recommendations: 1. \*\*Define Selection Criteria:\*\* The policy should be updated to include specific criteria for selecting the historical observation period. This should include guidance on the length of the period, the need for representativeness of economic cycles, and any considerations for data availability and quality. 2. \*\*Document the Selection Process:\*\* The policy should mandate the documentation of the rationale behind the selection of the historical observation period, including the specific years or timeframes chosen and the justification for their inclusion. 3. \*\*Address Representativeness:\*\* The policy should explicitly address how the bank ensures the representativeness of the selected historical observation period, including how it accounts for potential biases or limitations in the data. 4. \*\*Reference Paragraph 147:\*\* Explicitly reference Paragraph 147 in the policy to ensure alignment with the regulatory requirement.

## Requirement: REQ001

Description: Institutions are required to calculate the long-run average LGD separately for each facility grade or pool.

Reference: Article 181(1) of Regulation (EU) No 575/2013, paragraph 149

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: In the calculation of long-run average LGD institutions should use all defaults observed in the historical observation period that fall within the scope of the LGD model.

Reference: paragraph 149

Status: Satisfactory

Recommendations: 1. \*\*Explicit Statement:\*\* Add a sentence to Section 6.6, "Long-Run Average (LRA) LGD," explicitly stating that all defaults observed in the historical observation period that fall within the scope of the LGD model must be used in the calculation. For example: "The historical observation period for LRA LGD shall be as broad as possible, containing data from various economic circumstances, and include all available internal data, \*specifically including all defaults observed within the scope of the LGD model\* (EBA GL on PD and LGD, Section 6.3.2.1, para 147; ECB Guide, Credit Risk, Section 17.3.2, para 288)."

## Requirement: REQ003

Description: Institutions should calculate the long-run average LGD as an arithmetic average of realised LGDs over a historical observation period weighted by a number of defaults.

Reference: paragraph 150

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Where institutions do not give equal importance to all historical data for retail exposures in accordance with Article 181(2) of Regulation (EU) No 575/2013 they should be able to demonstrate in a documented manner that the use of higher weights for more recent data is justified by better prediction of loss rates.

Reference: Paragraph 151

Status: Non Compliant

Recommendations: 1. \*\*Develop a Specific Methodology:\*\* The bank should develop a documented methodology for justifying the use of higher weights for more recent data. This methodology should include: \* Clear criteria for determining when higher weights are appropriate (e.g., periods of significant economic change, changes in lending practices). \* Statistical tests and analyses to demonstrate that the use of higher weights improves the prediction of loss rates (e.g., back-testing, out-of-time validation). \* Documentation requirements, including the rationale for the weighting scheme, the data used, the results of the analyses, and the conclusions. 2. \*\*Incorporate into Model Development and Validation:\*\* Integrate the methodology into the model development and validation processes. This includes: \* Specifying the circumstances under which the methodology will be applied. \* Ensuring that the validation function reviews and approves the use of higher weights. \* Documenting the use of higher weights in the model documentation. 3. \*\*Regular Review and Update:\*\* The methodology should be reviewed and updated regularly to ensure its continued effectiveness and relevance.

## Requirement: REQ002

Description: In particular where zero or very small weights are applied to specific periods this should be duly justified or lead to more conservative estimates.

Reference: Paragraph 151

Status: Missing Requirement

Recommendations: 1. \*\*Incorporate a specific section or clause:\*\* Add a section to the policy that explicitly addresses the application of zero or very small weights to specific periods in model development and calibration. 2. \*\*Require Justification:\*\* Mandate that any use of zero or very small weights be thoroughly justified, including a clear explanation of the rationale and the potential impact on risk estimates. 3. \*\*Specify Conservative Measures:\*\* Outline the conservative measures that must be taken when zero or very small weights are used. This could include: \* Increasing the Margin of Conservatism (MoC). \* Using a more conservative approach in other areas of the model. \* Conducting sensitivity analyses to assess the impact of the weights. \* Providing a detailed explanation of the impact of the weights on the model's performance. 4. \*\*Documentation:\*\* Require that the justification for the weights and the conservative measures taken be thoroughly documented. 5. \*\*Validation:\*\* Ensure that the internal validation function reviews the use of zero or very small weights as part of its validation process.

## Requirement: REQ003

Description: For the purposes of letter (a) of Article 181(1) of Regulation (EU) No 575/2013, in relation to the use of all defaults observed during the historical observation period within the data sources for LGD estimation, institutions should ensure that the relevant information from incomplete recovery processes is taken into account in a conservative manner.

Reference: Paragraph 153

Status: Satisfactory

Recommendations: 1. \*\*Define "Incomplete Recovery Processes":\*\* The policy should explicitly define what constitutes an "incomplete recovery process" within the context of residential mortgages. This should include examples of scenarios where the recovery process is ongoing at the time of LGD estimation. 2. \*\*Specify Methodologies:\*\* Detail the specific methodologies used to estimate future recoveries and costs for incomplete recovery processes. This should include the types of data used, the assumptions made, and the techniques employed (e.g., statistical modeling, expert judgment). 3. \*\*Enhance Back-testing Details:\*\* While the policy mentions back-testing, it should provide more detail on how the bank back-tests the assumptions and estimates related to incomplete recovery processes. This should include the frequency of back-testing, the metrics used, and the process for addressing any discrepancies. 4. \*\*Provide Examples:\*\* Include specific examples of how the bank applies conservatism in its LGD estimation for incomplete recovery processes, such as adjusting recovery rates or extending the recovery period.

## Requirement: REQ004

Description: Institutions should calculate the observed average LGD for each facility grade or pool and at the level of the portfolio covered by the LGD model taking into account realised LGDs on all defaults observed in the historical observation period related to closed recovery processes in accordance with paragraphs 155 to 157 without including any expected future recoveries.

Reference: Paragraph 154

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: Institutions should clearly specify in their internal policies the moment of closing the recovery processes.

Reference: Paragraph 155

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: All recovery processes that have been closed should be treated as such for the purpose of the calculation of the observed average LGD.

Reference: Paragraph 155

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ007

Description: Institutions should define the maximum period of the recovery process for a given type of exposures from the moment of default that reflects the expected period of time observed on the closed recovery processes during which the institution realises the vast majority of the recoveries, without taking into account the outlier observations with significantly longer recovery processes.

Reference: Paragraph 156

Status: Satisfactory

Recommendations: 1. \*\*Specify Methodology:\*\* The policy should explicitly describe the methodology for determining the maximum recovery period. This should include: \* The data sources used (e.g., historical recovery data, internal records). \* The criteria for defining a "closed recovery process." \* The statistical methods used to identify and exclude outlier observations (e.g., winsorization, trimming). \* The process for calculating the maximum recovery period, ensuring it reflects the period during which the vast majority of recoveries are realized. 2. \*\*Define "Vast Majority":\*\* The policy should define what constitutes the "vast majority" of recoveries. This could be a specific percentage (e.g., 90%, 95%) of the total recoveries. 3. \*\*Documentation:\*\* The policy should mandate that the determination of the maximum recovery period is documented, including the data used, the methodology applied, and the rationale for the chosen period. 4. \*\*Regular Review:\*\* The policy should specify the frequency with which the maximum recovery period will be reviewed and updated, considering changes in recovery processes, economic conditions, and regulatory guidance.

## Requirement: REQ008

Description: The specification of the maximum period of the recovery process should be clearly documented and supported by evidence of the observed recovery patterns, and should be coherent with the nature of the transactions and the type of exposures

Reference: Paragraph 156

Status: Satisfactory

Recommendations: 1. \*\*Enhance Documentation:\*\* Explicitly state the maximum recovery period used in LGD calculations for residential mortgages. 2. \*\*Provide Evidence:\*\* Include specific examples or references to observed recovery patterns that support the chosen maximum recovery period. This could include data on the time taken to recover losses on defaulted residential mortgages. 3. \*\*Specificity for Residential Mortgages:\*\* Add a section or subsection within the LGD section (6.6) that specifically addresses the maximum recovery period for residential mortgages, detailing how the period is determined, documented, and supported by evidence. 4. \*\*Cross-reference:\*\* Cross-reference the maximum recovery period with the downturn LGD calculations in Section 6.7.

## Requirement: REQ001

Description: For the purpose of the calculation of the observed average LGD, institutions should recognise without undue delay as closed recovery processes all exposures in default which fall into at least one of the following categories: (a) exposures for which the institution does not expect to take any further recovery actions; (b) exposures that remain in defaulted status for a period of time longer than the maximum period of the recovery process specified for this type of exposures; (c) exposures fully repaid or written-off; (d) exposures that have been reclassified to non-defaulted status.

Reference: Paragraph 157

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should obtain the long-run average LGD by adjusting the observed average LGD taking into account the information related to processes that were not closed (‘incomplete recovery processes’) and where the time from the moment of default until the moment of estimation is shorter than the maximum period of the recovery process specified for this type of exposures.

Reference: Paragraph 158

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: they should take into account all observed costs and recoveries;

Reference: Paragraph 158(a)

Status: Satisfactory

Recommendations: 1. \*\*Explicitly State the Inclusion of All Observed Costs and Recoveries:\*\* Add a sentence or two in Section 6.4 (Calculation of Economic Loss and Realised LGD) to explicitly state that the bank's LGD models are designed to capture all observed costs and recoveries related to residential mortgages. 2. \*\*Enhance Discussion on Incomplete Recovery Processes:\*\* Expand the discussion in Section 6.6 (Long-Run Average (LRA) LGD) to provide more detail on how the bank handles incomplete recovery processes. This could include examples of how future recoveries and costs are estimated, and how the MoC is used to account for any uncertainty.

## Requirement: REQ004

Description: they may estimate future costs and recoveries, both those stemming from the realisation of the existing collaterals and those to be realised without the use of collaterals within the maximum period of the recovery processes.

Reference: Paragraph 158(b)

Status: Satisfactory

Recommendations: 1. \*\*Explicitly State the Time Horizon:\*\* Amend the policy to explicitly state that the estimation of future costs and recoveries, both those stemming from the realisation of the existing collaterals and those to be realised without the use of collaterals, must be performed within the maximum period of the recovery processes. 2. \*\*Define Maximum Recovery Period:\*\* Define and document the bank's maximum recovery period for residential mortgages. This should be based on historical data and industry best practices, and it should be reviewed periodically. 3. \*\*Detailed Guidance on Estimation:\*\* Provide more detailed guidance on how to estimate future costs and recoveries. This should include: \* Specific methodologies for estimating costs, such as legal fees, property maintenance costs, and other expenses associated with the recovery process. \* Specific methodologies for estimating recoveries, including the valuation of collateral and the expected timing of recoveries. \* Guidance on discounting future cash flows to the present value, using an appropriate discount rate. \* Guidance on how to handle incomplete recovery processes. 4. \*\*Documentation:\*\* Ensure that the methodologies and assumptions used for estimating future costs and recoveries are thoroughly documented. 5. \*\*Back-testing:\*\* Include back-testing of the LGD model to ensure that the estimates of future costs and recoveries are accurate.

## Requirement: REQ005

Description: for the purpose of estimation of the future costs and recoveries institutions should analyse the costs and recoveries realised on these exposures until the moment of estimation, in comparison with the average costs and recoveries realised during a similar period of time on similar exposures; for this purpose institutions should analyse the recovery patterns observed on both closed and incomplete recovery processes, taking into account only costs and recoveries realised up to the moment of estimation;

Reference: Paragraph 159(a)

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: the assumptions underlying the expected future costs and recoveries as well as the adjustment to the observed average LGD should be: i. proven accurate through back-testing; ii. based on a reasonable economic rationale; iii

Reference: Paragraph 159(b)

Status: Satisfactory

Recommendations: 1. \*\*Enhance Back-testing Procedures:\*\* The policy should be updated to include specific details on how back-testing will be conducted to validate the assumptions underlying expected future costs, recoveries, and LGD adjustments. This should include the frequency of back-testing, the metrics used, and the criteria for assessing the results. 2. \*\*Provide Examples of Economic Rationale:\*\* The policy should provide examples of the economic rationale used to support the assumptions related to costs, recoveries, and LGD adjustments. This could include examples of how economic conditions, such as interest rates or property market trends, are considered. 3. \*\*Clarify the Link between Back-testing and MoC:\*\* The policy should clarify how the results of back-testing will be used to inform the Margin of Conservatism (MoC). For example, if back-testing reveals significant estimation errors, the MoC should be adjusted accordingly.

## Requirement: REQ001

Description: Where institutions observe that they realised profit on their observations of defaults, the realised LGD on these observations should equal zero for the purpose of calculation of the observed average LGD and the estimation of the long-run average LGD.

Reference: 6.3.2.4

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should calibrate their LGD estimates to the long run average LGD calculated in accordance with section 6.3.2.

Reference: 6.3.3

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: In this case institutions should at least compare this long-run average LGD with the average LGD estimate applied to the same set of observations as those used for calculating the long-run average LGD and, where necessary, correct the individual LGD estimates for the application portfolio accordingly, for instance by using a scaling factor.

Reference: Article 169(3)

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Where realised values are higher than estimated values at the level of calibration segment, institutions should correct the estimates upwards or readjust their estimation in order to reflect their loss experience.

Reference: Article 169(3)

Status: Non Compliant

Recommendations: 1. A process for comparing realised LGD values with estimated LGD values at the calibration segment level. 2. A defined threshold or materiality level for triggering a review and potential adjustment. 3. A methodology for correcting LGD estimates upwards or readjusting the estimation process to reflect the loss experience. This could involve recalibration of the LGD model, adjustments to risk drivers, or an increase in the Margin of Conservatism (MoC). 4. Documentation requirements for the review, analysis, and any resulting adjustments.

## Requirement: REQ003

Description: Where institutions observe extremely high values of realised LGDs much above 100%, especially for exposures with small outstanding amounts at the moment of default, they should identify relevant risk drivers to differentiate these observations and adequately reflect these specific characteristics in the assignment to grades or pool.

Reference: 162

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Address Differentiation:\*\* The policy should be amended to explicitly state that when extremely high LGD values (e.g., significantly above 100%) are observed, especially for exposures with small outstanding amounts at the moment of default, the bank will identify the relevant risk drivers that differentiate these observations. 2. \*\*Reflect in Grading/Pooling:\*\* The policy should be updated to clarify how the bank will reflect the specific characteristics of exposures with extremely high LGDs in the assignment to grades or pools. This could involve creating specific segments or adjusting risk weights for these exposures. 3. \*\*Enhance Monitoring:\*\* The policy should include a process for monitoring LGD values, particularly for exposures with small outstanding amounts, to identify and investigate outliers.

## Requirement: REQ004

Description: In order to comply with the requirement of Article 181(1)(a) of Regulation (EU) No 575/2013 to use all observed defaults in LGD quantification, institutions should not exclude any defaults observed in the historical observation period that fall within the scope of application of the LGD model.

Reference: 163

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: In the analysis of the representativeness of data in accordance with section 4.2.4, institutions should take into account not only the current characteristics of the portfolio but also, where relevant, the changes to the structure of the portfolio that are expected to happen in the foreseeable future due to specific actions or decisions that have already been taken.

Reference: 164

Status: Satisfactory

Recommendations: 1. Explicitly mention "foreseeable future" in Section 3.3, Data Representativeness and Vetting. 2. Provide examples of how the bank will consider expected changes in the portfolio structure due to specific actions or decisions that have already been taken. This could include examples like changes in lending criteria, product offerings, or geographic focus. 3. Incorporate a process to identify and document expected changes in the portfolio structure and how these changes are considered in the data representativeness assessment.

## Requirement: REQ006

Description: Adjustments made on the basis of the changes expected in the foreseeable future should not lead to a decrease in the estimates of LGD parameter.

Reference: 164

Status: Satisfactory

Recommendations: 1. \*\*Explicitly mention foreseeable future:\*\* Add a sentence to Section 6.6 and 6.3.3, or create a new section, that explicitly states that adjustments made on the basis of changes expected in the foreseeable future should not lead to a decrease in the estimates of LGD parameter.

## Requirement: REQ007

Description: Institutions that have obtained permission to use own estimates of LGD in accordance with Article 143(2) of Regulation (EU) No 575/2013, should assign an ELBE estimate and an LGD in-default estimate to each defaulted exposure within the range of application of the rating system subject to such permission.

Reference: 165

Status: Missing Requirement

Recommendations: 1. \*\*Explicitly State Assignment Requirement:\*\* Add a clause to Section 7, or a new section, explicitly stating that for defaulted exposures within the scope of the IRB model, the bank \*must\* assign both an ELBE estimate and an LGD in-default estimate. 2. \*\*Define Assignment Process:\*\* Describe the process for assigning ELBE and LGD in-default estimates. This should include the frequency of assignment, the data sources used, and the systems involved. 3. \*\*Cross-Reference with Default Definition:\*\* Ensure the assignment process is integrated with the bank's definition of default (DoD) as defined in Section 3.5. 4. \*\*Validation and Monitoring:\*\* Include the assignment of ELBE and LGD in-default estimates in the internal validation process (Section 10.1) and ongoing monitoring (Section 10.3).

## Requirement: REQ008

Description: Institutions should estimate ELBE and LGD in-default for each of the facility grades of the distinct facility rating scale or for each of the pools that are used within the rating system.

Reference: 166

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ009

Description: For the purposes of ELBE and LGD in-default estimation, and unless otherwise specified in this Chapter, institutions should use the same estimation methods used for estimating LGD on non-defaulted exposures, as set out in Chapter 6.

Reference: 167

Status: Satisfactory

Recommendations: 1. Explicitly reference Chapter 6 of the relevant regulatory framework (e.g., CRR) in Section 7.1 to directly address the requirement. 2. Expand on Section 7.1 to provide more detail on the specific methods used for LGD estimation on non-defaulted exposures (as outlined in Chapter 6) and how these methods are adapted or applied to ELBE and LGD in-default calculations. 3. Include a cross-reference to the sections in the policy that detail the LGD estimation methodologies for non-defaulted exposures (e.g., Section 6).

## Requirement: REQ010

Description: Institutions should take into consideration all relevant post-default information in their ELBE and LGD in-default estimates in a timely manner, in particular where events from the recovery process invalidate the recovery expectations underlying the most recent estimates.

Reference: 168

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ011

Description: Institutions should assess and duly justify situations where the estimates of LGD in- default shortly after the date of default systematically deviate from the LGD estimates immediately before the date of default at the facility grade or pool, where these deviations do not stem from the use of risk drivers that are applicable only from the date of default onwards.

Reference: 169

Status: Satisfactory

Recommendations: 1. Monitor LGD estimates in-default shortly after the date of default. 2. Assess and document any systematic deviations from LGD estimates immediately before the date of default. 3. Justify any such deviations, ensuring they do not stem from the use of risk drivers that are applicable only from the date of default onwards. 4. Detail the methodology for identifying and addressing such deviations, including potential model adjustments or increased conservatism.

## Requirement: REQ012

Description: Institutions should perform back-testing and benchmarking of their ELBE and LGD in- default estimates in accordance with points (b) and (c) respectively, of Article 185 of Regulation (EU) No 575/2013.

Reference: 170

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ013

Description: For the purposes of ELBE and LGD in-default estimation, institutions should set the reference dates to be used for grouping defaulted exposures in accordance with the recovery patterns observed.

Reference: 171

Status: Satisfactory

Recommendations: 1. \*\*Enhance Specificity:\*\* Add a section or expand on Section 7.1 to detail the methodologies used to analyze recovery patterns (e.g., statistical analysis of recovery timelines, segmentation of exposures based on recovery characteristics). 2. \*\*Define Criteria for Reference Date Setting:\*\* Clearly define the criteria used to determine the discrete reference dates. This should include how the bank will ensure the dates are aligned with observed recovery patterns and how often the dates will be reviewed and updated. 3. \*\*Provide Examples:\*\* Include examples of how the bank applies the reference dates in practice, including how the bank ensures that the reference dates are aligned with observed recovery patterns.

## Requirement: REQ014

Description: These reference dates should be used in the estimation of ELBE and LGD in- default instead of the date of default.

Reference: 171

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ015

Description: For the purposes of setting the reference dates institutions should use information only on closed recovery processes taking into account costs and recoveries only if observed up to the date of estimation.

Reference: 171

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ016

Description: For the purposes of ELBE and LGD in-default estimation the same defaulted exposures in the RDS should be used at all relevant reference dates considered in the model.

Reference: 173

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ017

Description: Institutions should monitor on a regular basis potential changes in the recovery patterns and in the relevant recovery policies which may affect the estimation of ELBE and LGD in- default at each reference date.

Reference: 174

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Mention Monitoring of Recovery Patterns and Policies:\*\* Add a sentence or paragraph in Section 7 or 10 that explicitly states the bank will monitor changes in recovery patterns and policies and assess their impact on ELBE and LGD in-default estimates. 2. \*\*Specify Frequency of Monitoring:\*\* Clarify the frequency of monitoring recovery patterns and policies. 3. \*\*Detail the Assessment Process:\*\* Provide more detail on how the bank will assess the impact of changes in recovery patterns and policies on ELBE and LGD in-default. This could include specific metrics or methodologies.

## Requirement: REQ018

Description: For the purposes of ELBE and LGD in-default estimation, institutions should use the same RDS referred to in section 6.1.2, complemented by any relevant information observed during the recovery process and at each reference date, specified in accordance with paragraphs 171 to 174 and, in particular at least the following additional information:

Reference: 175

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ019

Description: For the purpose of ELBE and LGD in-default estimation, institutions should analyse the potential risk drivers referred to in paragraph 121 not only until the moment of default but also after the date of default and until the date of termination of the recovery process.

Reference: 177

Status: Major Gaps

Recommendations: No specific recommendations provided.

## Requirement: REQ020

Description: Institutions should analyse also other potential risk drivers that might become relevant after the date of default, including in particular the expected length of the recovery process and the status of the recovery process.

Reference: 177

Status: Major Gaps

Recommendations: 1. \*\*Enhance LGD Model Development:\*\* The policy should be updated to explicitly incorporate the expected length of the recovery process and the status of the recovery process as risk drivers in the LGD model development. This could involve: \* Identifying and analyzing factors that influence the recovery timeline (e.g., legal processes, property market conditions, borrower cooperation). \* Segmenting defaulted exposures based on the stage of the recovery process. \* Developing methodologies to estimate LGD based on the expected length of the recovery process. 2. \*\*Integrate into Risk Assessment:\*\* The policy should be updated to integrate the analysis of the expected length of the recovery process and the status of the recovery process into the overall risk assessment framework. This could involve: \* Regularly monitoring the progress of recovery processes. \* Adjusting LGD estimates based on the status of the recovery process. \* Incorporating the expected length of the recovery process into the calculation of expected loss. 3. \*\*Documentation:\*\* Ensure that the methodologies and processes for incorporating the expected length of the recovery process and the status of the recovery process are thoroughly documented.

## Requirement: REQ021

Description: Institutions should use the values of risk drivers as well as the values of collateral adequate to the reference dates specified in accordance with paragraphs 171 to 174.

Reference: 177

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ022

Description: For the purposes of ELBE and LGD in-default estimation, institutions should calculate the realised LGDs for defaulted exposures, in accordance with section 6.3.1 with the only difference that this should be done with regard to each of the reference dates specified in accordance with paragraphs 171 to 174, rather than the date of default.

Reference: 178

Status: Major Gaps

Recommendations: No specific recommendations provided.

## Requirement: REQ023

Description: In the calculation of the realised LGD at a given reference date institutions should include all fees and interest capitalised before the reference date and they should discount all subsequent cash flows and drawings to the reference date.

Reference: 178

Status: Satisfactory

Recommendations: 1. Explicitly mention the "reference date" in Section 6.4 and its role in the discounting of cash flows and drawings. 2. Consider adding a sentence to Section 6.4 to clarify that the discounting is performed to the reference date.

## Requirement: REQ001

Description: For the purpose of considering the possible adverse change in economic conditions during the expected length of the recovery processes referred to in Article 54(2)(a) of the RTS on IRB assessment methodology the LGD in-default should reflect at least downturn conditions, where the estimates of LGD in-default that are appropriate for an economic downturn are more conservative than the long-run average LGD for defaulted exposures, referred to in paragraph 180.

Reference: Paragraph 189

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: For the purpose of Article 181(1)(h) of Regulation (EU) No 575/2013 the LGD in-default should be increased above the level referred to in paragraph 189 where this is necessary to ensure that the difference between the LGD in-default and the ELBE covers for any increase of loss rate caused by possible additional unexpected losses during the recovery period.

Reference: Paragraph 190

Status: Satisfactory

Recommendations: \* Describing the methodology used to estimate the potential for additional unexpected losses. \* Specifying the data sources used to inform this estimation (e.g., historical loss data, expert judgment). \* Providing examples of how the LGD in-default is calculated, including the ELBE and the add-on for unexpected losses. \* Mentioning the use of stress testing to assess the adequacy of the LGD in-default under different scenarios.

## Requirement: REQ003

Description: For the purpose of ensuring that the LGD in-default is higher than the ELBE, or is in exceptional cases equal to the ELBE for individual exposures, in accordance with Article 54(2)(d) of the RTS on IRB assessment methodology institutions should analyse and correct the LGD in-default in those situations where the ELBE was obtained using specific credit risk adjustments, in accordance with paragraph 186, and is above the LGD in-default obtained --- --- GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 95 through direct estimation in accordance with Article 54(1)(a) of the RTS on IRB assessment methodology.

Reference: Paragraph 191

Status: Major Gaps

Recommendations: 1. \*\*Incorporate a specific section or addendum to Section 7 addressing the comparison and correction of LGD in-default.\*\* This section should outline the process for identifying instances where ELBE, derived using specific credit risk adjustments, exceeds the directly estimated LGD in-default. 2. \*\*Define "specific credit risk adjustments"\*\* within the context of the bank's residential mortgage models. Provide examples of such adjustments. 3. \*\*Detail the methodology for correcting LGD in-default\*\* in the identified scenarios. This should include how the bank will ensure that LGD in-default is at least equal to or, in exceptional cases, equal to ELBE. 4. \*\*Include a process for documenting and justifying any instances\*\* where LGD in-default is equal to ELBE, as per the regulatory guidance. 5. \*\*Update the policy to explicitly reference Article 54(2)(d) of the RTS on IRB assessment methodology and Paragraph 191 of the EBA Guidelines on PD Estimation, LGD Estimation and Treatment of Defaulted Exposures.\*\*

## Requirement: REQ004

Description: To the extent that the reasons for overriding the outputs of ELBE estimation are relevant also to LGD in-default a consistent override should also be applied to the assignment of LGD in-default in such a way that the add-on to the ELBE covers for any increase of loss rate caused by possible additional unexpected losses during the recovery period in accordance with

Reference: Paragraph 192

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should document separately all of the following: (a) the break-down of the LGD in-default into its components: the ELBE and the add-on; (b) the break-down of the add-on into all of the following components: (i) the downturn conditions component calibrated on the downturn adjustment to the long-run average LGD as specified in paragraph 189; (ii) the Mo C component, referred to in section 4.4; (iii) any component covering for potential additional unexpected losses during the recovery period referred to in Article 181 (1)(h) of Regulation (EU) No 575/2013; this component should only be included in exceptional circumstances where the potential additional losses are not sufficiently reflected in the components referred to in points (i) and (ii).

Reference: Article 181(1)(h) of Regulation (EU) No 575/2013, paragraph 193

Status: Major Gaps

Recommendations: 1. \*\*Enhance Documentation Requirements:\*\* Amend Section 7.3 to explicitly state that the breakdown of LGD in-default into ELBE and the add-on, including the components specified in REQ001 (downturn conditions, MoC, and any component for unexpected losses), must be documented separately. 2. \*\*Define Exceptional Circumstances:\*\* Add a section or amend Section 7.3 to define the exceptional circumstances under which a component covering potential additional unexpected losses during the recovery period should be included. Provide examples and clear criteria for its inclusion. 3. \*\*Cross-reference:\*\* Ensure that the documentation standards outlined in Section 2.3 are explicitly applied to the documentation of the LGD in-default breakdown.

## Requirement: REQ002

Description: In the application of the PD or LGD model and where institutions receive new information with respect to a relevant risk driver or rating criterion, they should take this information into account in the rating assignment in a timely manner, in particular by ensuring both of the following: (a) that the relevant IT systems are updated as soon as possible and that the corresponding rating and PD or LGD assignment is reviewed as soon as possible; (b) where the new information relates to the default of an obligor, that the PD of the obligor is set to 1 in all relevant IT systems in a timely manner and in accordance with paragraph 108 of the Guidelines on the application of the definition of default under Article 178 of Regulation (EU) No 575/2013.

Reference: paragraph 194

Status: Satisfactory

Recommendations: 1. \*\*Explicit Timeframe:\*\* Amend Section 3.4 and Section 10.3 to explicitly state that IT systems must be updated and rating assignments reviewed "as soon as possible" upon receiving new information. 2. \*\*Default PD Setting:\*\* Add a specific clause to Section 10.3 or a new section addressing the default of an obligor. This clause should state that when new information relates to the default of an obligor, the PD of the obligor must be set to 1 in all relevant IT systems in a timely manner and in accordance with paragraph 108 of the EBA Guidelines on the application of the definition of default under Article 178 of Regulation (EU) No 575/2013.

## Requirement: REQ003

Description: For the purpose of Article 171(2) of Regulation (EU) No 575/2013 institutions should apply additional conservatism to the outcomes of the rating assignment where any deficiencies are identified related to the implementation of the model in the IT system or to the process of assignment of risk parameters to obligors or facilities in the current portfolio (application of risk parameters), especially when those deficiencies relate to data used in the rating assignment process. They should do so by establishing a framework that consists of the following phases: (a) identification of deficiencies of implementation of the model in the IT system or application of risk parameters; (b) specification of the form of conservatism to be applied and quantification of the appropriate level of conservatism; (c) monitoring of the deficiencies and correcting them; (d) documentation.

Reference: paragraph 195

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Link IT System and Risk Parameter Application to MoC:\*\* While the policy addresses deficiencies and MoC, it could be strengthened by explicitly stating that deficiencies related to the IT system implementation or the application of risk parameters (as defined in REQ003) will be addressed through the MoC framework. This could be achieved by adding a sentence in Section 9.3, "Quantification and Aggregation of Margin of Conservatism (MoC)," or in Section 9.1, "Identification and Classification of Deficiencies," to clarify this link. 2. \*\*Provide Examples:\*\* Include specific examples of deficiencies related to the IT system and application of risk parameters in Section 9.1, "Identification and Classification of Deficiencies," to provide clarity and guidance to the personnel.

## Requirement: REQ004

Description: For the purpose of paragraph 195(a) institutions should have a robust process for identifying all implementation and application deficiencies in the assignment process, whereby each deficiency leads to additional conservative treatment in the affected assignment to a grade or pool. Institutions should consider at least the following triggers for additional conservatism: (a) missing data in the application portfolio; (b) missing updates of financial statements or credit bureau data as referred to in paragraph 59(h); (c) outdated ratings in the application portfolio; where outdated rating should be understood as specified in Article 25(2)(b) of the RTS on IRB methodology; (d) missing ratings, whereby an exposure is considered as being within the scope of application of the IRB model but is not rated by it.

Reference: paragraph 196

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Define Conservative Treatment:\*\* The policy should explicitly state how the bank will apply additional conservative treatment (e.g., assigning a higher PD, increasing LGD) in the affected assignment to a grade or pool when deficiencies are identified. This could be achieved by providing examples of how the MoC will be applied based on the type and severity of the deficiency. 2. \*\*Detail the Process:\*\* Provide more detail on the process for identifying and classifying deficiencies. This could include a checklist or a defined methodology for assessing the impact of each deficiency. 3. \*\*Cross-reference:\*\* Cross-reference the relevant sections of the policy (e.g., Section 9.3 on Quantification and Aggregation of Margin of Conservatism (MoC)) to the specific triggers mentioned in REQ004.

## Requirement: REQ005

Description: For the purpose of paragraph 195(b) institutions should ensure that the occurrence of any of the triggers referred to in paragraph 196 results in the application of additional conservatism to the risk parameter for the purpose of the calculation of risk-weighted exposure amounts. Where more than one trigger occurs, the estimate should be more conservative. The additional conservatism related to each trigger should be proportionate to the uncertainty in the estimated risk parameter introduced by the trigger.

Reference: paragraph 197

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: Institutions should consider the overall impact of the identified deficiencies and the resulting conservatism at the level of portfolio covered with the relevant model on the soundness of the assignments to grades or pools and ensure that the own funds requirements are not distorted by the necessity of excessive adjustments.

Reference: paragraph 198

Status: Satisfactory

Recommendations: 1. \*\*Explicit Portfolio-Level Consideration:\*\* Add a statement to Section 9.3 or a new subsection within Section 9 that explicitly addresses the requirement to consider the overall impact of deficiencies and conservatism at the portfolio level. This should include a process to assess whether the combined effect of AAs and MoCs results in a distortion of own funds requirements. 2. \*\*Documentation of Portfolio-Level Assessment:\*\* Require documentation of the portfolio-level assessment, including the rationale for the chosen MoC levels and any adjustments made to ensure that own funds requirements are not distorted.

## Requirement: REQ007

Description: For the purpose of paragraph 195(c) institutions should regularly monitor the implementation and application deficiencies and the levels of additional conservatism applied in relation to them. Whenever possible, institutions should take steps to address the identified deficiencies. Following its assessment, the institution should develop a plan to rectify the deficiencies within a reasonable timeframe, taking into consideration the magnitude of the impact on the own funds requirements.

Reference: paragraph 199

Status: Satisfactory

Recommendations: 1. \*\*Explicitly mention own funds requirements:\*\* Add a sentence to Section 9.4, "Monitoring and Remediation," to explicitly state that the remediation plan should consider the magnitude of the impact of the deficiencies on own funds requirements. For example: "MoC levels shall be regularly monitored. The Bank shall develop and implement a plan to rectify underlying deficiencies, correct models, and reduce estimation errors within a reasonable timeframe, considering the materiality of the error and the rating system, as well as the magnitude of the impact on own funds requirements."

## Requirement: REQ008

Description: For the purpose of paragraph 195(d) institutions should specify adequate manuals and procedure for applying additional conservatism and should document the process applied in addressing implementation and application deficiencies. Such documentation should contain at least the triggers considered and the effects that the activation of such triggers had on the final assignment to a grade or pool, the level of risk parameter and on the own funds requirements.

Reference: paragraph 200

Status: Satisfactory

Recommendations: 1. \*\*Explicitly State Documentation Content:\*\* Amend Section 9 (Appropriate Adjustment (AA) and Margin of Conservatism (MoC)) and Section 2.3 (Documentation Standards) to explicitly state that documentation related to conservatism will include the triggers considered and the effects that the activation of such triggers had on the final assignment to a grade or pool, the level of risk parameter and on the own funds requirements. 2. \*\*Cross-reference:\*\* Add a cross-reference between Section 9 and Section 2.3 to ensure that the documentation requirements are linked to the application of conservatism.

## Requirement: REQ009

Description: Institutions should specify clear criteria for the use of qualitative model inputs and they should ensure a consistent application of such inputs by all relevant personnel and a consistent assignment of obligors or facilities posing similar risk to the same grade or pool as required by Article 171(1)(a) of Regulation (EU) No 575/2013.

Reference: paragraph 202

Status: Satisfactory

Recommendations: 1. Explicitly define "qualitative model inputs" within the policy. 2. Provide specific criteria for the use of qualitative model inputs, including how they are documented, justified, and integrated into the model. 3. Add a section or modify existing sections to explicitly address the consistent assignment of obligors or facilities posing similar risk to the same grade or pool. This could include guidelines for ensuring homogeneity within grades/pools and avoiding overlaps in default rate distributions.

## Requirement: REQ010

Description: For the purpose of Article 172(3) of Regulation (EU) No 575/2013 institutions should specify the policies and criteria for the use of overrides in the rating assignment process. These policies should refer both to possible overrides of inputs and outputs of such process and should be specified in a conservative manner such that the scale of conservative overrides should not be limited. In contrast, the scale of potential decreases of the estimates resulting from the model, either by overriding the inputs or outputs of the rating assignment process, should be limited. In applying the overrides institutions should take into account all relevant and up-to-date information.

Reference: paragraph 203

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ011

Description: Institutions should document the scale and rationale of each override. Wherever possible institutions should specify a predefined list of possible justifications of the overrides to choose from. Institutions should also store information on the date of override and the person that performed and approved it.

Reference: paragraph 204

Status: Satisfactory

Recommendations: 1. \*\*Enhance Justification Framework:\*\* Explicitly state that the bank will use a predefined list of possible justifications for overrides. This list should be comprehensive and cover the most common reasons for overrides. 2. \*\*Provide Examples:\*\* Include examples of the types of information that should be documented for each override, such as the specific model input being overridden, the original model output, and the revised output.

## Requirement: REQ012

Description: Institutions should regularly monitor the level and justifications for overrides of inputs and outputs of the rating assignment process. They should specify in their policies the maximum acceptable rate of overrides for each model. Where those maximum levels are breached, adequate measures should be taken by the institution. The rates of overrides should be specified and monitored at the level of calibration segment. Where there is a high number of overrides institutions should adopt adequate measures to improve the model.

Reference: paragraph 205

Status: Satisfactory

Recommendations: 1. \*\*Specify Maximum Acceptable Override Rates:\*\* The policy should explicitly define maximum acceptable override rates for each model or calibration segment. 2. \*\*Define Remediation Measures:\*\* The policy should outline specific actions to be taken if the maximum override rates are breached. This could include model recalibration, review of the override process, or enhanced training for personnel. 3. \*\*Specify Override Monitoring at Calibration Segment Level:\*\* The policy should explicitly state that override rates will be monitored at the calibration segment level, as required by the regulation.

## Requirement: REQ013

Description: Institutions should regularly analyse the performance of exposures in relation to which an override of input or output of the rating assignment process has been performed in accordance with Article 172(3) of Regulation (EU) No 575/2013.

Reference: paragraph 206

Status: Major Gaps

Recommendations: 1. \*\*Implement a specific process for analyzing the performance of exposures with overrides:\*\* The bank should establish a process to specifically analyze the performance (e.g., default rates, LGDs) of exposures where overrides have been applied. This analysis should be conducted regularly (e.g., quarterly or annually) and compared to the performance of similar exposures without overrides. 2. \*\*Define metrics for performance analysis:\*\* The bank should define specific metrics to assess the performance of overridden exposures. These metrics should be aligned with the bank's risk management objectives and should include measures of accuracy, consistency, and stability. 3. \*\*Integrate the analysis into the model validation process:\*\* The results of the performance analysis should be integrated into the model validation process. This will help to identify any weaknesses in the model or the override process and to ensure that the model is performing as expected. 4. \*\*Document the analysis and findings:\*\* The bank should document the analysis of overridden exposures, including the methodology, results, and any actions taken. This documentation should be reviewed by the internal validation function and the internal audit function.

## Requirement: REQ014

Description: Institutions should regularly assess the performance of the model before and after the overrides of outputs of the rating assignment process. Where the assessment concludes that the use of overrides significantly decreased the model’s capacity to accurately quantify the risk parameters (‘predictive power of the model’), institutions should adopt adequate measures to ensure the correct application of overrides.

Reference: paragraph 207

Status: Satisfactory

Recommendations: 1. \*\*Enhance Override Impact Assessment:\*\* The policy should explicitly detail the methodology for assessing the impact of overrides on model performance. This should include specific metrics (e.g., changes in the model's discriminatory power, calibration statistics, or backtesting results) and thresholds that would indicate a significant decrease in predictive power. 2. \*\*Define Remedial Actions:\*\* The policy should specify the actions the bank will take if the assessment reveals that overrides significantly decrease the model's predictive power. This could include: \* Reviewing and revising the override policy and criteria. \* Providing additional training to personnel involved in overrides. \* Adjusting the model or recalibrating it to better reflect the information used in overrides. \* Limiting the use of overrides in specific situations. 3. \*\*Regular Review and Documentation:\*\* The policy should mandate regular reviews of the override process and the effectiveness of any remedial actions taken. All assessments and reviews should be thoroughly documented.

## Requirement: REQ015

Description: In accordance with Article 144(1)(b) of Regulation (EU) No 575/2013 and Articles 18 to 21 of the RTS on IRB assessment methodology institutions should use the same estimates of risk parameters for the purpose of own funds requirements calculation and for internal purposes, including risk management and decision-making processes, unless all of the following conditions are met:

Reference: paragraph 208

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ016

Description: Where institutions use for internal purposes estimates of risk parameters that are different from those used in the calculation of own funds requirements they should periodically reflect this in their internal reporting to senior management by providing information on both sets of parameters. In any case internal reporting should include all elements specified in Article 189(3) of Regulation (EU) No 575/2013 based on the estimates of risk parameters used for the purpose of calculation of own funds requirements.

Reference: paragraph 210

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should specify internal policies for changes of models and estimates of risk parameters used within a rating system.

Reference: Paragraph 215

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Such policies should provide that changes in the models should be made as a result of at least the following: (a) regular review of estimates; (b) independent validation; (c) changes in the legal environment; (d) internal audit review; (e) competent authority review.

Reference: Paragraph 215

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Where material deficiencies are identified as a result of the procedures referred to in paragraph 215 institutions should take appropriate actions depending on the severity of the deficiency and apply a Mo C in accordance with section 4.4.3.

Reference: Paragraph 216

Status: Satisfactory

Recommendations: 1. \*\*Define Severity Assessment:\*\* Add a section or amend Section 9.1 to explicitly define how the severity of a deficiency will be assessed (e.g., based on the impact on risk-weighted assets, capital requirements, or model performance). 2. \*\*MoC Application Based on Severity:\*\* Enhance Section 9.3 to clarify how the MoC will be applied based on the severity of the identified deficiencies. For example, the policy could specify that more severe deficiencies will result in a larger MoC.

## Requirement: REQ004

Description: For the purpose of regular reviews of estimates, institutions should have a framework in place which includes at least the following elements: (a) a minimum scope and frequency of analyses to be performed, including predefined metrics chosen by the institution to test data representativeness, model performance, its predictive power and stability; (b) predefined standards, including predefined thresholds and significance levels for the relevant metrics; (c) predefined actions to be taken in case of adverse results of the review, depending on the severity of the deficiency.

Reference: Paragraph 217

Status: Satisfactory

Recommendations: 1. \*\*Enhance Scope and Frequency:\*\* Explicitly define the minimum scope of analyses to be performed during regular reviews. This should include specific areas to be examined, such as data representativeness, model performance, predictive power, and stability. 2. \*\*Define Metrics:\*\* List the predefined metrics chosen by the institution to test data representativeness, model performance, its predictive power and stability. 3. \*\*Establish Standards and Thresholds:\*\* Define predefined standards, including predefined thresholds and significance levels for the relevant metrics. 4. \*\*Specify Actions:\*\* Detail the predefined actions to be taken in case of adverse results of the review, depending on the severity of the deficiency. This should include escalation procedures, timelines for remediation, and potential model adjustments.

## Requirement: REQ005

Description: The reviews of estimates to be performed at least annually in accordance with Article 179(1)(c) of Regulation (EU) No 575/2013 should be performed taking into account the metrics, standards and thresholds defined by the institution in accordance with paragraph 217.

Reference: Paragraph 218

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ006

Description: The scope of such reviews should comprise at least the following elements: (a) an analysis of data representativeness, including all of the following: (i) an analysis of potential differences between the RDS used to quantify the risk parameter and the application portfolio, including the analysis of any changes in the portfolio or any structural breaks, in the manners of analysing the representativeness described in section 4.2.4; (ii) an analysis of potential differences between the RDS used to develop the model and the application portfolio; for this purpose institutions should:  perform the analysis set out in paragraphs 24, 25, and 26;  consider that data used for model development is sufficiently representative in terms of points (a) and (b) of paragraph 21 if the performance of the model in the sense of paragraph 218(b) is sound;  perform the analysis set out in paragraphs 22 and 23 where the performance of the model in the sense of paragraph 218(b) is deteriorating; (b) an analysis of the performance of the model and its stability over time, which should have both of the following characteristics: (i) the analysis should identify any potential deterioration of the model performance, including the model’s discriminatory power, through the comparison of its performance at the time of the development against its performance on each subsequent observation period of the extended data set as well as against the predefined thresholds; this analysis should be performed on relevant subsets, for instance with and without delinquency status in the case of PD estimates, or for various recovery scenarios in the case of LGD estimates; (ii) the analysis should be performed with regard to the whole application portfolio, without any data adjustments or exclusions performed in model development; for comparison purposes, the performance at the time of development should also be obtained for the whole application portfolio, prior to any data adjustments or exclusions; (c) an analysis of the predictive power of the model, including at least: (i) an analysis of whether the inclusion of the most recent data in the dataset used to estimate risk parameters leads to materially different risk estimates and in particular:  for PD, whether including the most recent data leads to a significant change in the long-run average default rate; this analysis should take into account the appropriate redefinition of the period of likely range of --- --- GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 102 variability of default rates and of the mix of good and bad years, if necessary;  for LGD, whether including the most recent data leads to a significant change in the long-run average LGD or downturn LGD; (ii) a back-testing analysis, which should include a comparison of the estimates used for the calculation of own funds requirements against observed outcomes for each grade or pool; for this purpose institutions may take into account the results of back-testing performed as part of the internal validation in accordance with

Reference: Paragraph 218

Status: Satisfactory

Recommendations: 1. \*\*Enhance Specificity:\*\* Provide more detailed descriptions of the methodologies used for analyzing data representativeness, model performance, and predictive power. Specify the frequency of these analyses (e.g., quarterly, annually, or as needed). 2. \*\*Back-testing Details:\*\* Elaborate on the back-testing analysis, including the specific metrics used for comparison against observed outcomes for each grade or pool. 3. \*\*Data Adjustments and Exclusions:\*\* Clarify the policy regarding data adjustments or exclusions performed in model development and how they are handled in the context of the whole application portfolio analysis. 4. \*\*Alignment with EBA Guidelines:\*\* Explicitly reference and align the model performance assessment and review processes with the specific requirements outlined in the EBA Guidelines on PD Estimation, LGD Estimation and the Treatment of Defaulted Exposures (EBA GL on PD and LGD), particularly Section 9.

## Requirement: REQ001

Description: Institutions should specify conditions under which the analyses referred to in paragraph 218 should be performed more frequently than annually, such as major changes in the risk profile of the institution, credit policies or relevant IT systems.

Reference: Paragraph 219

Status: Satisfactory

Recommendations: \* Major changes in the risk profile of the residential mortgage portfolio (e.g., significant shifts in LTV ratios, geographic concentrations, or borrower demographics). \* Material changes to credit policies (e.g., changes to underwriting standards, approval processes, or collateral valuation methodologies). \* Significant upgrades or modifications to IT systems that impact the IRB models or the data used in those models. \* Identification of material model deficiencies during validation or audit. \* Significant changes in the economic environment or housing market conditions.

## Requirement: REQ002

Description: Institutions should perform the review of the PD or LGD model whenever they observe significant change in economic conditions as compared with the economic conditions underlying the dataset used for the purpose of model development.

Reference: Paragraph 219

Status: Non Compliant

Recommendations: 1. \*\*Explicitly State the Requirement:\*\* Amend the policy to include a specific section or clause that mandates the review of PD and LGD models when significant changes in economic conditions are observed, as compared to the conditions underlying the dataset used for model development. 2. \*\*Define "Significant Change":\*\* The policy should define what constitutes a "significant change" in economic conditions. This could be based on predefined thresholds for economic indicators (e.g., GDP growth, unemployment rate, house price indices) or a qualitative assessment by a designated team. 3. \*\*Specify Review Triggers and Procedures:\*\* Outline the triggers for a model review (e.g., when economic indicators cross a certain threshold). Detail the procedures for conducting the review, including the scope of the review, the personnel involved, and the documentation requirements. 4. \*\*Address Impact on Model Parameters:\*\* The policy should address how the review will assess the impact of changed economic conditions on model parameters (PD, LGD). This should include a process for recalibration, adjustments, or model updates if necessary. 5. \*\*Document Review Outcomes:\*\* The policy should require the documentation of all model review outcomes, including the rationale for any changes made to the model or its parameters.

## Requirement: REQ003

Description: For the purpose of performing the tasks referred to in Article 190(2) of Regulation (EU) No 575/2013 institutions should define a regular cycle for the full review of the rating systems, taking into consideration their materiality, and covering all aspects of model development, quantification of risk parameters and, where applicable, the estimation of model components.

Reference: Paragraph 220

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: Where the results of this review recommend changes to model design, appropriate actions should be taken following the results from this analysis.

Reference: Paragraph 220

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: For the purpose of the review specified in paragraphs 217 to 220 institutions should apply consistent policies for data adjustments and exclusions and ensure that any differences in the policies applied to the relevant datasets are justified and do not distort the results of the review.

Reference: Paragraph 221

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: In general, most competent authorities (CAs) confirm the requirement that conservatism should be applied for data and model issues.

Reference: PD estimation 23-35

Status: Satisfactory

Recommendations: 1. \*\*Explicitly State Conservatism Application:\*\* Add a section or modify existing sections to explicitly state how conservatism is applied in the context of data and model issues. This could include examples of conservative approaches taken in data validation, model development, and calibration. 2. \*\*Detail Conservative Measures:\*\* Provide more detail on the specific conservative measures that will be taken to address data and model issues. For example, specify how the MoC will be calculated and applied to account for data limitations or model uncertainties. 3. \*\*Strengthen Data Quality Framework:\*\* Enhance the data quality management framework to include specific checks and controls to ensure data accuracy, completeness, and consistency.

## Requirement: REQ001

Description: Institutions should generally include (i) good and bad economic periods, (ii) periods when higher credit losses are experienced, (iii) at least one recession period, (iv) a complete economic cycle (good and bad years), or (v) specific periods in the datasets (e.g. 1991–2008).

Reference: 64-67

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: In two Member States, there is a requirement that there should be risk drivers or rating criteria on some key groups of variables (such as characteristics of the borrower, terms of the transaction, collateral, unpaid amounts, etc).

Reference: 75-79

Status: Satisfactory

Recommendations: 1. In Section 4.2, explicitly list the key groups of variables (borrower characteristics, terms of the transaction, collateral, unpaid amounts) as examples of areas where risk drivers and rating criteria are to be defined. 2. In Section 4.2, cross-reference the sections of the policy where these key groups of variables are discussed in detail (e.g., Section 5.1, Section 6.3).

## Requirement: REQ003

Description: Related rules in some Member States require that the number of pools and grades should be high enough to allow adequate quantification and validation.

Reference: 75-79

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Address Number of Pools and Grades:\*\* The policy should be enhanced to explicitly address the requirement for a sufficient number of pools and grades. This could involve: \* Stating that the number of pools and grades should be high enough to allow for adequate quantification and validation of risk. \* Providing guidance on how to determine the appropriate number of pools and grades, considering factors such as portfolio size, risk profile, and data availability. \* Mentioning the need to regularly review the number of pools and grades to ensure they remain adequate. 2. \*\*Provide Examples:\*\* Include examples of how the bank determines the appropriate number of pools and grades for different segments of the residential mortgage portfolio. 3. \*\*Reference to Validation:\*\* Explicitly state that the internal validation function will assess the adequacy of the number of pools and grades as part of its validation process.

## Requirement: REQ004

Description: In one Member State, the concentration across the rating scale should be assessed by the Hirschman-Herfindahl index.

Reference: 75-79

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ005

Description: In another Member State, the concentration in one grade should not be greater than 30% unless the grade covers a reasonably narrow PD band

Reference: 75-79

Status: Non Compliant

Recommendations: 1. \*\*Introduce a Concentration Limit:\*\* The bank should add a section to the policy that explicitly addresses concentration risk within rating grades. This section should state that the concentration of exposures in any single grade within a residential mortgage portfolio should not exceed 30%. 2. \*\*Define Narrow PD Bands:\*\* The policy should define what constitutes a "reasonably narrow PD band" for residential mortgages. This definition should be based on statistical analysis and regulatory guidance, and it should specify the criteria for when a higher concentration in a grade is permissible. 3. \*\*Monitoring and Reporting:\*\* The policy should include provisions for monitoring and reporting on grade concentrations. This should include regular reviews of grade distributions and the identification of any grades that exceed the concentration limits. 4. \*\*Remediation Plan:\*\* The policy should outline a remediation plan for addressing instances where concentration limits are exceeded. This plan should include actions such as re-segmentation, model recalibration, or adjustments to risk weights.

## Requirement: REQ001

Description: One CA publicly requires ratings to be TTC.

Reference: Rating philosophy

Status: Missing Requirement

Recommendations: \* Adding a section or amending an existing section to address the CA's requirements on the public availability of ratings. \* Ensuring that the bank's rating philosophy and practices align with the CA's expectations regarding TTC ratings. \* Including a statement about the bank's commitment to complying with the CA's requirements on the public availability of ratings.

## Requirement: REQ002

Description: Around one third of the Member States have rules on this topic, some being public and binding, and some non- public. These rules usually mention the requirement of five years of representative data. When a shorter period is used, a Mo C must usually be added to address the data issue.

Reference: Calibration sample

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: one of them explicitly requires institutions to identify cure rates, and another imposes such a requirement where there is potentially a higher rate of technical defaults

Reference: LGD estimation

Status: Fully Compliant

Recommendations: 1. \*\*Explicitly Address Cure Rates:\*\* The policy should include a section or addendum that explicitly addresses the identification and analysis of cure rates. This should include: \* A definition of "cure" in the context of the bank's residential mortgage portfolio. \* The methodology for tracking and calculating cure rates (e.g., the percentage of defaulted loans that return to performing status within a specific timeframe). \* The data sources used to track cure rates. \* The frequency of cure rate analysis. \* How cure rates are used in the LGD estimation process, especially in the context of technical defaults. 2. \*\*Address Technical Defaults:\*\* The policy should include a section that specifically addresses the requirement related to technical defaults. This should include: \* A clear definition of "technical defaults" within the bank's context. \* The process for identifying and monitoring loans that are at risk of technical default. \* How the bank's LGD models account for the potential for higher technical defaults. This could involve: \* Segmenting the portfolio based on the likelihood of technical defaults. \* Adjusting LGD estimates for loans with a higher risk of technical default. \* Incorporating cure rates into the LGD estimation process for loans with technical defaults. 3. \*\*Enhance LGD Model Documentation:\*\* The policy should be updated to include more detail on how cure rates and technical defaults are incorporated into the LGD model.

## Requirement: REQ001

Description: Institutions have to estimate haircuts on the value of the collateral, taking into account the potential sale value and the time to sale.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: 1. A detailed methodology for calculating haircuts on collateral, including how potential sale price, costs, and discounting effects are considered. 2. Specific consideration of the time to sale in the haircut calculation, including how it is estimated and incorporated. 3. Reference to the specific sections of the EBA Guidelines on LGD Estimation that address haircut calculations and time to sale. 4. A process for regularly back-testing the haircuts.

## Requirement: REQ002

Description: Institutions are required to ensure adequate segmentation within each portfolio to ensure a proper risk differentiation.

Reference: 140-144 Risk differentiation

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Banks must establish internal standards for collateral management, consistent with those required under the Standardised Approach.

Reference: 145-155

Status: Non Compliant

Recommendations: 1. \*\*Develop a dedicated section or a separate policy on Collateral Management:\*\* This section should outline the bank's internal standards for collateral management, including but not limited to: \* Eligible collateral types. \* Collateral valuation methodologies. \* Haircuts applied to collateral values. \* Collateral monitoring and revaluation processes. \* Legal certainty requirements for collateral. \* Procedures for managing collateral in different jurisdictions. 2. \*\*Ensure Consistency with Standardised Approach:\*\* The internal standards should be consistent with the requirements of the Standardised Approach as outlined in the CRR (Articles 197-208). This includes aligning with the eligible collateral types, haircuts, and other relevant provisions. 3. \*\*Cross-reference with IRB Model Policy:\*\* The existing IRB Model Policy should be updated to cross-reference the new Collateral Management policy, ensuring that the two policies are aligned and that collateral management practices are integrated into the IRB model framework, particularly in the context of LGD estimation.

## Requirement: REQ002

Description: One CA requires including the downturn period of the 1990 s.

Reference: 145-155

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: One CA requires specifically that Mo C should cover additionally significant differences between the debtors and their guarantors, positive correlations, and currency mismatches between exposures and collaterals.

Reference: 23-35

Status: Major Gaps

Recommendations: 1. \*\*Explicitly Address Specific Risk Factors in MoC:\*\* Amend Section 9.3 to include specific methodologies for quantifying and aggregating MoC to address significant differences between debtors and their guarantors, positive correlations, and currency mismatches. This should include details on how these factors are identified, measured, and incorporated into the MoC calculation. 2. \*\*Define Methodologies for Addressing Risk Factors:\*\* Add a new section or subsection within Section 9 (Appropriate Adjustment (AA) and Margin of Conservatism (MoC)) that details the methodologies used to identify and address significant differences between debtors and their guarantors, positive correlations, and currency mismatches. This should include the specific data sources, analytical techniques, and expert judgment used to assess these risks. 3. \*\*Currency Mismatch Specifics:\*\* If the bank has currency mismatches, the policy should include specific details on how these are identified, measured, and incorporated into the MoC calculation. 4. \*\*Review and Update:\*\* The policy should be reviewed and updated regularly to ensure that the methodologies for addressing these risk factors remain appropriate and effective.

## Requirement: REQ004

Description: In one Member State, it is required that Mo C should be applied on top of the estimates, and another specifies that Mo C can be established as an LGD floor (e.g. 45% in the case of large corporates) or specific add-ons (e.g. stressing the probability of incompletes)

Reference: 23-35

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The one-year default rate should be calculated at least monthly for all retail exposures, and at least quarterly for all other exposures.

Reference: 4.6

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: The one-year default rate should be calculated at least quarterly for all exposures.

Reference: 4.6

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Institutions should not estimate any future recoveries for the periods beyond the maximum length of the recovery process.

Reference: 5.6.3

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Netting of gains and losses would be allowed but only where this is consistent with the business model of the institution (subject to the assessment of the competent authority).

Reference: 5.6.4

Status: Non Compliant

Recommendations: 1. State the bank's policy on netting, if any. 2. Define the conditions under which netting is permitted, ensuring consistency with the bank's business model. 3. Outline the process for assessing the consistency of netting with the business model. 4. Specify that any netting practices are subject to the assessment and approval of the competent authority.

## Requirement: REQ001

Description: Some changes may still be necessary to comply with the more detailed requirements.

Reference: Final EBA GL on PD, LGD and defaulted exposures

Status: Satisfactory

Recommendations: 1. \*\*Explicit Compliance Statement:\*\* Add a specific section or subsection within the "Regulatory Framework" (Section 1.3) or within the introduction to each model-specific section (e.g., PD, LGD) that explicitly states how the bank ensures compliance with the detailed requirements of the EBA GL on PD, LGD, and defaulted exposures. This could include a cross-reference to specific sections of the policy that address the detailed requirements. 2. \*\*Detailed Cross-referencing:\*\* Within each section related to PD, LGD, and CCF, include a table or list that cross-references the specific requirements of the EBA guidelines and how the bank's policy addresses them. This will provide a clear audit trail and demonstrate compliance. 3. \*\*Regular Review and Updates:\*\* Establish a process for regularly reviewing the policy against updates to the EBA guidelines and other relevant regulations. This should include a schedule for updates and a clear process for incorporating changes.

## Requirement: REQ001

Description: The estimated LGD used to calculate capital requirements must not be less than zero.

Reference: GL 10

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Methodologies based purely on market data will no longer be allowed.

Reference: GL 10

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Market data may be used only to supplement internal data that reflects the institution’s own experience.

Reference: GL 10

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: LGD in-default should comply with all requirements for LGD estimation, and therefore it should also reflect downturn conditions.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES

Status: Satisfactory

Recommendations: 1. Strengthen Section 7.3 to explicitly state that LGD in-default \*must\* reflect downturn conditions, ensuring consistency with the overall requirement.

## Requirement: REQ001

Description: The GL will apply from 1 January 2021, which in the EBA’s view gives sufficient time for institutions and competent authorities to implement and assess the changes to the rating systems.

Reference: Not specified

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: …the minimum requirements must also be met to receive permission to use the IRB Approach…

Reference: Not specified

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: In order to receive permission to use the IRB Approach all minimum requirements have to be met.

Reference: CRR

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The models should serve purposes other than just calculating capital requirements.

Reference: Section 8.3

Status: Satisfactory

Recommendations: \* Risk management and monitoring of the portfolio. \* Credit decision-making and pricing. \* Stress testing and scenario analysis. \* Portfolio optimization.

## Requirement: REQ002

Description: These GL will be complementary to the revised Basel framework and will apply to all models that remain within the scope of the IRB Approach.

Reference: Section 8.3

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: The GL will be applicable to all institutions and competent authorities, including the SSM.

Reference: Section 8.3

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Regardless of the chosen model design, all the requirements specified in the CRR and in the GL will have to be met.

Reference: Not specified

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should analyse under the relevant categories.

Reference: GL

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should also create for each rating system a complete list of all identified deficiencies, including the categories in which these deficiencies are classified.

Reference: GL

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: An Mo C stemming from category C (general estimation error) should be greater than zero, whereas an Mo C corresponding to category A or B should be greater than or equal to zero.

Reference: paragraph 47

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: All internal models will have to comply with the final GL as well as the other aspects of the new regulatory framework by end- 2020.

Reference: EBA Opinion on the implementation of the revision of the IRB Approach

Status: Non Compliant

Recommendations: 1. \*\*Explicit Compliance Statement:\*\* Add a section or statement to the policy explicitly stating that all internal models will comply with the final GL and other aspects of the new regulatory framework by the end of 2020. 2. \*\*Implementation Plan:\*\* Include a high-level implementation plan or reference to a separate document outlining the steps, timelines, and responsibilities for achieving compliance with the new regulatory framework by the end of 2020. 3. \*\*Regular Monitoring:\*\* Include a process for regular monitoring and reporting on the progress of the implementation plan to ensure timely compliance.

## Requirement: REQ001

Description: Institutions should identify all possible deficiencies.

Reference: CRR

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: The GL specify that institutions should quantify an Mo C at least for each of the categories A, B and C at the level of the calibration segment, by taking into account the requirement specified in section 4.4.3.

Reference: GL section 4.4.3

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The GL further require that the total Mo C at parameter level should be derived as the sum of the Mo Cs of the individual categories A, B and C.

Reference: section 4.4

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The GL require that the final Mo C to be added to the best estimate of the risk parameter is the sum of the Mo Cs for categories A, B and C.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: All methods used for the quantification and aggregation of Mo Cs should be documented and regularly monitored.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES

Status: Satisfactory

Recommendations: 1. \*\*Explicit Documentation of Quantification and Aggregation Methods:\*\* Amend Section 9.3 to explicitly state that the methods used for quantifying and aggregating the MoC, including the formulas, assumptions, and data sources, are documented. 2. \*\*Enhance Monitoring Details:\*\* Expand Section 9.4 to include details on the frequency of MoC monitoring, the specific metrics used, and the reporting lines for the monitoring results.

## Requirement: REQ001

Description: Institutions should regularly monitor the level of the Mo C and, whenever possible, they should address the causes of errors or uncertainties, correct the models to ensure their full compliance with the CRR, and rectify data and methodological deficiencies.

Reference: final GL

Status: Satisfactory

Recommendations: 1. \*\*Specify MoC Monitoring Frequency:\*\* The policy should explicitly state the frequency at which MoC levels will be monitored (e.g., quarterly, semi-annually). 2. \*\*Define Remediation Actions:\*\* The policy should provide more detail on the specific actions to be taken when deficiencies are identified during MoC monitoring or model reviews. This could include a tiered approach based on the materiality of the deficiency, with escalating actions for more significant issues. 3. \*\*Include a section on model correction:\*\* The policy should include a section on model correction, detailing the process for correcting models to ensure their full compliance with the CRR, and rectifying data and methodological deficiencies.

## Requirement: REQ002

Description: The GL specify that obligors with missing ratings should be assigned to a separate grade or pool for the purpose of the calculation of the one-year default rate (DR).

Reference: GL

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Address Missing Ratings:\*\* Amend Section 5.4 (PD Quantification: One-Year Default Rate and Long-Run Average (LRA)) to explicitly state how obligors with missing ratings will be treated in the calculation of the one-year default rate. This should include assigning them to a separate grade or pool, as per the regulatory requirement. 2. \*\*Cross-Reference:\*\* Add a cross-reference in Section 11.3 (Non-rated Exposures and Outdated Ratings) to Section 5.4, clarifying how the management of non-rated exposures relates to the calculation of the one-year default rate.

## Requirement: REQ003

Description: If the institution performed calibration at grade or pool level, in which case additional calibration tests should be performed at portfolio level.

Reference: GL

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: When the new information relates to the default of an obligor, the PD of the obligor should be set to 1 in all relevant IT systems in a timely manner.

Reference: Changes to section 4.4.1

Status: Non Compliant

Recommendations: 1. \*\*Explicitly State the Requirement:\*\* Add a section or amend an existing one (e.g., within Section 3.4 IT Systems and Infrastructure, or Section 3.5 Definition of Default) to explicitly state that upon the occurrence of a default event, as defined in the policy, the PD of the obligor must be set to 1 in all relevant IT systems. 2. \*\*Define "Timely Manner":\*\* Define what constitutes a "timely manner" for updating the PD. Specify a maximum timeframe (e.g., within 24 hours, or at the end of the business day) for the update to be completed. 3. \*\*IT System Integration:\*\* Include a description of the IT systems involved in the PD update process. This should include the systems where the PD is stored and used (e.g., credit risk management system, loan origination system, reporting systems). 4. \*\*Automated Processes:\*\* If possible, describe automated processes to ensure the timely update of PDs. 5. \*\*Controls and Monitoring:\*\* Include controls and monitoring procedures to ensure the PD update is performed correctly and in a timely manner. This could include automated checks, regular audits, and reporting on the timeliness of PD updates. 6. \*\*Escalation Procedures:\*\* Define escalation procedures for situations where the PD update cannot be completed within the defined timeframe.

## Requirement: REQ001

Description: The GL do indeed require that the denominator of the one-year DR consists of the number of non- defaulted obligors with any credit obligation observed at the beginning of the one-year observation period.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: In accordance with the GL, institutions should consider splitting the obligors or exposures within the scope of application of a model into calibration segments where certain sub-portfolios represent fundamentally different levels of risk.

Reference: GL

Status: Satisfactory

Recommendations: 1. \*\*Enhance Segmentation Criteria:\*\* The policy should include more detailed criteria for determining when segmentation is necessary and how the bank assesses if sub-portfolios represent fundamentally different levels of risk. This could include specific statistical tests or thresholds used to justify segmentation. 2. \*\*Document Segmentation Rationale:\*\* The policy should require documentation of the rationale behind the chosen calibration segments, including the analysis performed to support the segmentation decisions. 3. \*\*Regular Review of Segmentation:\*\* The policy should mandate a periodic review of the calibration segments to ensure their continued appropriateness and effectiveness.

## Requirement: REQ001

Description: The one-year default rate should be an objective measure calculated as set out in the GL.

Reference: GL

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions should analyse whether migrations or sales of credit obligations lead to bias in the estimation of the PD and, if so, adjust this bias by applying an appropriate adjustment to the estimates and applying an Mo C as specified in section 4.4 of the GL.

Reference: GL, section 4.4

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: In any case, an appropriate adjustment should be documented and justified.

Reference: None

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions only to ‘evaluate the one- year DRs within the historical observation period at least quarterly’.

Reference: GL on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Where institutions calibrate at the level of the grade or pool additional calibration tests should be performed at the level of the relevant calibration segment, and where institutions calibrate at the level of the calibration segment, additional calibration tests should be performed at the level of the grade or pool.

Reference: Section on calibration

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: In order to perform these additional calibration tests, the long-run average DR at grade or pool level as well as at the level of the relevant calibration segment should be available.

Reference: Section on calibration

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: the historical observation period should cover at least five years.

Reference: Section 5.3.3

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: the PD estimates should reflect the probability that the obligor will default at least once within a one-year horizon, and this default may happen at any moment during the one-year period.

Reference: In relation to the comment that no specific treatment should be applied to short-term contracts because the maturity parameter contains a one-year floor

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should analyse, inter alia, if there is bias due to the share of short-term and terminated contracts that cannot be observed during the relevant one-year periods.

Reference: GL

Status: Non Compliant

Recommendations: 1. \*\*Introduce a specific section or addendum to the policy that addresses the analysis of bias related to short-term and terminated contracts.\*\* This section should outline the methodology for identifying and quantifying the impact of these contracts on the model's PD estimates. 2. \*\*Specify the data analysis techniques to be used.\*\* This could include cohort analysis, survival analysis, or other statistical methods to assess the impact of contract duration and termination on default rates. 3. \*\*Define the criteria for determining when adjustments or a Margin of Conservatism (MoC) are necessary.\*\* This should include thresholds for the percentage of short-term or terminated contracts and the magnitude of the potential bias. 4. \*\*Require documentation of the analysis and any adjustments made.\*\* This documentation should be included in the model validation reports.

## Requirement: REQ002

Description: If such bias is found to exist, institutions should apply appropriate adjustments and Mo C.

Reference: GL

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The GL require the observed average DR to be calculated in the way specified in the GL in order to achieve a metric that is comparable across institutions, portfolios and calibration segments, as well as grades or pools.

Reference: paragraph 81

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The proposed approach must, naturally, incorporate qualitative aspects, which the GL already tried to achieve in the guidance on assessing whether the historical observation period is representative of the likely range of variability of the default rates of a given type of exposures.

Reference: Section 5.3.4

Status: Satisfactory

Recommendations: \* Explicitly list the qualitative aspects that should be considered when assessing the representativeness of the historical observation period. Examples include economic conditions, lending standards, portfolio composition, and any significant changes in the bank's risk management practices. \* Provide examples of the types of adjustments that should be made if the historical period is not representative.

## Requirement: REQ002

Description: The long-run average default rate should be calculated as the observed average of the one-year default rates in that period if the historical observation period is representative of the likely range of variability

Reference: Section 5.3.4

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: It should be ensured that the adjusted long-run average default rate reflects the likely range of variability of default rates.

Reference: Section 5.3.4

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Upward adjustments should be made whenever there are no or insufficient bad years in the historical observation period.

Reference: Section 5.3.4

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: institutions should ensure that risk drivers and rating criteria are used consistently, in particular with regard to the time horizon considered, in model development, calibration and application

Reference: paragraph 67

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: it is required that institutions analyse the appropriateness of the philosophy underlying the assignment of obligors or exposures to grades or pools (‘rating philosophy’), by taking into account, inter alia, the design of risk drivers.

Reference: None

Status: Satisfactory

Recommendations: 1. Add a specific section or subsection within the policy that explicitly states the bank's commitment to analyzing the appropriateness of its rating philosophy, considering the design of risk drivers. 2. Incorporate a process for regularly reviewing the rating philosophy, including the selection and effectiveness of risk drivers, and documenting the findings of these reviews.

## Requirement: REQ003

Description: the GL require an assessment of the potential effect of portfolio versus grade calibration on the behaviour of PD estimates.

Reference: None

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: the GL require institutions to find an appropriate balance between the comparability of the calibration sample to the application portfolio in terms of obligors and transaction characteristics and its representativeness of the likely range of variability of default rates.

Reference: None

Status: Satisfactory

Recommendations: \* The policy should include more specific guidance on the methodologies used to ensure the calibration sample is comparable to the application portfolio in terms of obligors and transaction characteristics. This could include details on segmentation strategies, risk driver analysis, and the use of statistical techniques to assess comparability. \* The policy should provide more detail on how the bank will assess the representativeness of the calibration sample in terms of the likely range of variability of default rates. This could include details on the use of historical data, stress testing, and scenario analysis. \* The policy should provide examples of the types of adjustments and MoCs that will be used when the calibration sample is not fully representative.

## Requirement: REQ001

Description: Institutions are to analyse whether the inclusion of the most recent data leads to a significant change in the long-run average default rate, and whether this leads to materially different risk estimates.

Reference: Chapter 9

Status: Satisfactory

Recommendations: 1. \*\*Enhance Methodology:\*\* Specify the methodologies (e.g., statistical tests, comparison of LRA default rates with and without recent data, backtesting) to be used in the analysis of the impact of recent data. 2. \*\*Define Materiality Thresholds:\*\* Define clear materiality thresholds for what constitutes a "materially different" outcome. This could be based on a percentage change in the LRA default rate or a change in risk-weighted assets. 3. \*\*Specify Remediation Actions:\*\* Outline the actions to be taken if the analysis reveals a material change in the long-run average default rate or risk estimates. This could include model recalibration, adjustments to the Margin of Conservatism (MoC), or a full model review.

## Requirement: REQ002

Description: Whenever institutions apply portfolio calibration, they should perform additional calibration tests at the grade or pool level, and whenever they perform grade or pool calibration, they should perform additional calibration tests at the portfolio level (or, more specifically, at the level of the relevant calibration segment).

Reference: section 5.3.5

Status: Satisfactory

Recommendations: \* The frequency with which these tests are performed (e.g., annually, quarterly). \* The methodology used for the tests (e.g., statistical tests, backtesting). \* The scope of the tests (e.g., which grades/pools/segments are covered). \* The criteria used to assess the results of the tests (e.g., tolerance levels, thresholds). \* The actions to be taken if the tests reveal issues (e.g., model recalibration, adjustments).

## Requirement: REQ003

Description: Institutions are required to assess the potential effect of the chosen calibration method on the behaviour of PD estimates over time.

Reference: section 5.3.5

Status: Satisfactory

Recommendations: 1. \*\*Explicitly State Assessment of PD Estimate Behavior:\*\* Add a sentence or paragraph in Section 5.3.5 or Section 10.3 that explicitly requires an assessment of how the chosen calibration method affects the behavior of PD estimates over time. This assessment should include an analysis of the stability and trends of PD estimates. 2. \*\*Detail the Assessment Process:\*\* Elaborate on the methods used to assess the behavior of PD estimates. This could include back-testing, trend analysis, and sensitivity analysis to changes in calibration parameters. 3. \*\*Document Findings:\*\* Ensure that the findings of the assessment are documented and used to inform model adjustments or recalibration.

## Requirement: REQ004

Description: Where institutions use different rating systems characterised by different rating philosophies, different levels of objectivity, accuracy, stability or conservatism, they ensure that the rating systems have an appropriate level of consistency and that any differences between them are well understood, such that they are able to define an appropriate way of combining or aggregating the information produced by the different rating systems when this is necessary.

Reference: paragraph 79

Status: Major Gaps

Recommendations: 1. \*\*Develop a specific section or addendum to the policy addressing the use of multiple rating systems.\*\* This section should detail the bank's approach to ensuring consistency across different rating systems, including: \* A clear definition of the different rating systems used (e.g., for different product types, geographies, or stages of the credit lifecycle). \* A description of the rating philosophies, levels of objectivity, accuracy, stability, and conservatism of each system. \* Procedures for identifying and understanding the differences between the rating systems. \* Specific methodologies for combining or aggregating information from different rating systems when necessary (e.g., for portfolio-level reporting, risk management, or capital calculations). This could include mapping, weighting, or other aggregation techniques. \* Processes for validating the consistency and accuracy of the aggregated information. 2. \*\*Establish clear documentation standards for each rating system.\*\* This should include documentation of the rating methodologies, data sources, and validation processes. 3. \*\*Implement regular reviews and audits to ensure the consistency and accuracy of the aggregated information.\*\* This should include a review of the methodologies used for combining or aggregating information from different rating systems.

## Requirement: REQ001

Description: In the case of M&A, institutions have to reconsider the scope of application of the model.

Reference: section 4.2.4

Status: Missing Requirement

Recommendations: 1. \*\*Add a Section on M&A and Model Scope:\*\* Include a new section or integrate relevant clauses within Section 12 (Model Changes and Extensions) to specifically address M&A events. 2. \*\*Define "M&A" for Policy Purposes:\*\* Clearly define what constitutes an M&A event for the bank's IRB models. 3. \*\*Mandate Reconsideration of Model Scope:\*\* State that in the event of an M&A, the bank \*must\* reconsider the scope of application of the IRB model. This should include an assessment of whether the existing model remains appropriate for the combined entity's portfolio. 4. \*\*Outline Assessment Procedures:\*\* Detail the procedures for reconsidering the model scope. This should include: \* Identifying the affected models. \* Assessing the impact of the M&A on the portfolio's risk profile. \* Evaluating the continued applicability of the model's risk drivers, segmentation, and calibration. \* Determining whether model recalibration, redevelopment, or a change in scope is necessary. 5. \*\*Specify Roles and Responsibilities:\*\* Assign clear roles and responsibilities for the M&A-related model scope review process (e.g., model development team, validation function, senior management). 6. \*\*Address Supervisory Notification:\*\* Include a clause addressing the need to notify the relevant supervisory authority of the M&A and any resulting model changes.

## Requirement: REQ002

Description: The calculation of the long-run average LGD should be based on all historical observations within the scope of application of the model.

Reference: section 4.2.4

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: This situation should be addressed by appropriate choices of model design and calibration methodology, for instance by the use of recovery scenarios and their probabilities.

Reference: section 4.2.4

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Where the representativeness of data is not sufficient in the sense that it may bias quantification of risk, an appropriate adjustment is necessary.

Reference: Chapter 4

Status: Satisfactory

Recommendations: 1. \*\*Enhance Data Representativeness Assessment:\*\* Include a more detailed section on how the bank will assess data representativeness. This should include specific methodologies, such as comparing the distribution of key risk drivers in the development and application portfolios. 2. \*\*Specify Adjustment Methodologies:\*\* Provide examples of the types of adjustments that will be used when data representativeness is insufficient. This could include weighting schemes, the use of external data, or adjustments to the MoC. 3. \*\*Include a section on the use of expert judgment:\*\* The policy should include a section on the use of expert judgment in the assessment of data representativeness and the determination of appropriate adjustments.

## Requirement: REQ002

Description: In order to correct the bias, institutions have to apply an appropriate adjustment.

Reference: Chapter 4

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: In order to address increased uncertainty, including uncertainty related to the appropriate adjustment, institutions should apply an Mo C.

Reference: Chapter 4

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Quantitative analysis of representativeness is required when possible.

Reference: 6.2

Status: Satisfactory

Recommendations: 1. \*\*Specify Quantitative Methods:\*\* The policy should be enhanced to explicitly mention the quantitative methods (e.g., statistical tests, metrics like the Kolmogorov-Smirnov test, or other goodness-of-fit measures) that will be used to assess data representativeness. 2. \*\*Define Thresholds:\*\* The policy should define acceptable thresholds for representativeness. For example, it should specify the acceptable level of difference between the development data and the application portfolio. 3. \*\*Detail the Analysis:\*\* The policy should provide more detail on the analysis of the distribution of risk drivers, including the specific risk drivers to be analyzed and the methods to be used. 4. \*\*External Data Guidance:\*\* The policy should provide specific guidance on how to quantitatively assess the representativeness of external data, including the methods to be used and the metrics to be considered.

## Requirement: REQ001

Description: Article 181(1)(i) of the CRR should be understood as referring to unpaid fees for delayed payments capitalised before default or, in the case of defaulted exposures, before the relevant reference date.

Reference: Article 181(1)(i) of the CRR

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Other late fees or interest capitalised after default or after the relevant reference date should not be taken into account in the calculation of realised LGD, i.e. they do not increase the amount outstanding at the moment of default or the economic loss.

Reference: Article 181(1)(i) of the CRR

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: However, any recoveries related to these fees and interest are included in the realised LGD as recovery cash flows.

Reference: Article 181(1)(i) of the CRR

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions are in any case required to estimate LGD using parameters consistent with economic downturn conditions.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: \* The policy should include a more detailed description of the specific methodologies and data sources the bank will use to identify and characterize economic downturns, in line with Commission Delegated Regulation (EU) No 2021/930. \* The policy should clarify the frequency with which the bank will review and update its downturn LGD estimates. \* The policy should provide more specific examples of the types of adjustments that may be necessary to ensure LGD estimates are appropriate for economic downturn conditions.

## Requirement: REQ001

Description: institutions are in any case required to estimate LGD using parameters consistent with economic downturn conditions.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: As the CRR requires that all observed defaults are taken into account, it is not possible to exclude incomplete recovery processes from the calculation of long-run average LGD.

Reference: CRR

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The requirement for the specification of the maximum length of the recovery process for a given type of exposures has the objective of ensuring robust and prudent LGD estimates.

Reference: Not explicitly stated

Status: Missing Requirement

Recommendations: 1. \*\*Incorporate a section on the maximum recovery period:\*\* Add a specific section to the LGD model development and quantification section (6. Loss Given Default (LGD) Model Development and Quantification) that explicitly addresses the maximum length of the recovery process. 2. \*\*Define the maximum recovery period:\*\* Define the maximum recovery period for residential mortgage exposures. This definition should be based on historical data, industry best practices, and regulatory guidance. 3. \*\*Justify the maximum recovery period:\*\* Provide a clear justification for the chosen maximum recovery period, including the data and methodologies used to determine it. 4. \*\*Document the maximum recovery period:\*\* Ensure that the maximum recovery period is clearly documented in the LGD model documentation. 5. \*\*Regularly review the maximum recovery period:\*\* Establish a process for regularly reviewing and updating the maximum recovery period to ensure its continued appropriateness.

## Requirement: REQ001

Description: Institutions should define the maximum period of the recovery process for a given type of exposures from the moment of default taking into account the period of time, observed in closed recovery processes, during which the institution realises the vast majority of recoveries.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: CAs should ensure that the concept of the maximum length of the recovery process is not misused and that the lengths specified by institutions are not excessively long for a specific type of exposures.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Missing Requirement

Recommendations: 1. \*\*Introduce a Section on Recovery Process Duration:\*\* Add a new section or integrate relevant content into the existing LGD model development and quantification section (Section 6) that specifically addresses the maximum length of the recovery process. 2. \*\*Define Acceptable Recovery Timeframes:\*\* Establish clear guidelines on acceptable recovery timeframes for residential mortgage exposures. This should consider the specific characteristics of the exposures, such as the type of collateral, the legal framework, and the recovery procedures. 3. \*\*Justification for Recovery Timeframes:\*\* Require documentation and justification for the chosen recovery timeframes, including an analysis of historical recovery data and an assessment of potential delays. 4. \*\*Monitoring and Review:\*\* Implement a process for monitoring the actual recovery times against the established timeframes. Regularly review the recovery process duration and make adjustments as needed. 5. \*\*Address Misuse and Excessiveness:\*\* Include specific measures to prevent the misuse of recovery timeframes and to ensure that the lengths specified are not excessively long. This could involve setting limits on the maximum recovery period or requiring senior management approval for any extensions beyond a predefined threshold.

## Requirement: REQ003

Description: The CRR requirement that all observed defaults have to be taken into account applies to all LGD models under the IRB Approach, and hence no data exclusions are possible in the calculation of long-run average LGD.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: In the case of low-default portfolios the minimum requirements have to be met in order to receive permission to use the IRB Approach, and the CRR does not envisage any exemptions from these requirements for such portfolios.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should be aware of the sources of cash flows in order to be able to choose the most appropriate estimation methodology and relevant risk drivers.

Reference: Section 6.6

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: In the calibration of LGD, in particular in the calculation of long-run average LGD, all observed defaults have to be used.

Reference: Not specified

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Realised LGD has to be calculated for each observation, i.e. each defaulted facility.

Reference: Not specified

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: However, any recoveries from collaterals covering several exposures have to be allocated to specific facilities in order to allow the calculation of realised LGD.

Reference: Not specified

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should make a reasonable effort to obtain the required information.

Reference: GL

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Institutions that estimate their own LGDs may use credit risk mitigation in accordance with Chapter 3.

Reference: Article 108(2) of the CRR

Status: Satisfactory

Recommendations: 1. Explicitly mention "credit risk mitigation" and reference Chapter 3 of the CRR in Section 6, "Loss Given Default (LGD) Model Development and Quantification," to directly address the regulatory requirement. 2. Consider adding a subsection within Section 6 that specifically addresses the treatment of credit risk mitigation techniques in LGD estimation, detailing how the bank incorporates CRM into its models. 3. Review the policy to ensure that the bank's approach to CRM in LGD estimation aligns with the specific requirements outlined in Chapter 3 of the CRR.

## Requirement: REQ003

Description: All collateral that meets the requirements of Article 181(1)(f) of the CRR are considered eligible to be recognised in own LGD estimates.

Reference: Article 108(2) of the CRR

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions should also monitor the extent of use of such collateral over time in order to avoid any bias.

Reference: GL

Status: Satisfactory

Recommendations: 1. \*\*Introduce a specific section or add a subsection to Section 6.3 (Risk Drivers for LGD and Collateral Modelling) or Section 10.3 (Ongoing Monitoring and Review of Estimates) that explicitly addresses the monitoring of collateral use.\*\* This section should outline: \* The metrics to be tracked (e.g., percentage of loans with collateral, types of collateral used, LTV ratios over time, changes in collateral values). \* The frequency of monitoring (e.g., quarterly, annually). \* The individuals or teams responsible for monitoring. \* The process for identifying potential biases (e.g., are certain types of collateral disproportionately used for specific borrower segments?). \* The escalation process and actions to be taken if biases are detected (e.g., model recalibration, adjustments to collateral valuation, changes to lending policies). 2. \*\*Enhance the discussion on data representativeness (Section 3.3) to include a specific focus on collateral.\*\* The policy should explicitly state that the representativeness of collateral types and valuations will be assessed regularly to ensure that the model is not biased towards certain types of collateral or valuation methodologies. 3. \*\*Incorporate the monitoring of collateral use into the internal validation process (Section 10.1).\*\* The validation function should assess whether the monitoring of collateral use is effective in identifying and mitigating potential biases.

## Requirement: REQ002

Description: Collateral that does not meet the requirements of Article 181(1)(f) of the CRR cannot be included in the LGD model as a risk driver.

Reference: Article 181(1)(f) of the CRR

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Increased time to recovery will influence the relevant recovery rates but cannot be used as a risk driver in the application of LGD.

Reference: GL

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ004

Description: In any case, the estimation methodology should be consistent with the institution’s collection and recovery policies.

Reference: GL

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Reference Collection and Recovery Policies:\*\* Add a section or modify existing sections to explicitly state that the estimation methodologies (PD, LGD, CCF) must be consistent with the bank's documented collection and recovery policies. This should include how the models account for the bank's specific processes, timelines, and costs associated with these activities. 2. \*\*Detail the Link between Estimation and Recovery:\*\* Provide more detail on how the LGD and CCF models incorporate the bank's collection and recovery processes. For example, how are recovery timelines, legal costs, and other factors considered in the LGD calculation? How are the bank's policies on collateral valuation and realization reflected in the models? 3. \*\*Include a Review Process:\*\* Add a review process to ensure that the estimation methodologies are updated when collection and recovery policies change. This should include a process for assessing the impact of policy changes on the models and making necessary adjustments.

## Requirement: REQ001

Description: it is required that the LGD estimation methodology is consistent with the collection and recovery policies of the institution.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Expected significant decreases in the value of collateral should be reflected in the LGD estimates.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Mention Market Conditions:\*\* Add a sentence to Section 6.3.3 to explicitly state that the LGD model should consider potential decreases in collateral value due to market conditions, economic downturns, or other factors that could impact the collateral's value. 2. \*\*Enhance Guidance on Valuation:\*\* Provide more detailed guidance on how the bank will assess and incorporate potential decreases in collateral value into its LGD estimates. This could include specifying the frequency of revaluations, the use of external valuation data, and the methodologies for incorporating market-based adjustments.

## Requirement: REQ001

Description: In the application of LGD, LGD in-default and ELBE, the most up-to-date value of collateral should be used.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The best estimate of LGD based on the long-run average LGD should not explicitly reflect the impact of adverse economic conditions.

Reference: GL specify principles

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Information on the sale prices should still be collected and used for the purpose of back-testing haircuts in order to make sure that they appropriately reflect the uncertainty of the value of the asset at the moment of repossession.

Reference: GUIDELINES ON PD ESTIMATION, LGD ESTIMATION AND TREATMENT DEFAULTED EXPOSURES 178

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Mention Repossession Sale Prices:\*\* Add a sentence to Section 6.4, "Repossessed Collateral Haircuts," to explicitly state that sale prices from repossessed assets will be collected and used for back-testing haircuts to ensure they appropriately reflect the uncertainty of the asset's value at the time of repossession. 2. \*\*Enhance Back-testing Details:\*\* Expand on the back-testing process in Section 6.4 to include specific details on how sale prices are used in the back-testing of haircuts. This could include the frequency of back-testing, the metrics used to assess the accuracy of the haircuts, and the actions taken if the haircuts are found to be inaccurate.

## Requirement: REQ001

Description: LGD estimates would not be comparable with LGD estimates based on the requirements included in the GL and therefore should not be allowed.

Reference: Not explicitly stated

Status: Missing Requirement

Recommendations: \* Specifying the methodologies used for LGD estimation. \* Defining the data sources used for LGD estimation. \* Outlining the validation processes used to ensure the accuracy of LGD estimates. \* Describing the adjustments made to LGD estimates to account for differences in methodologies or data sources.

## Requirement: REQ001

Description: Institutions should reclassify exposures from defaulted to non-defaulted status only when they have observed, during a probation period, a consistent improvement in the financial situation of an obligor, and hence subsequent classification back to defaulted status is less likely.

Reference: Guidelines on the application of the definition of default

Status: Major Gaps

Recommendations: 1. \*\*Explicitly Define Probation Period:\*\* The policy should include a section that defines the probation period required before reclassifying an exposure from defaulted to non-defaulted status. This period should be of sufficient length to observe a consistent improvement in the obligor's financial situation. 2. \*\*Define Consistent Improvement:\*\* The policy should detail what constitutes "consistent improvement in the financial situation of an obligor." This should include specific criteria, such as sustained payment performance, improved debt-to-income ratios, and other relevant financial indicators. 3. \*\*Document the Reclassification Process:\*\* The policy should outline the process for reclassifying exposures, including who is responsible for the decision, the documentation required, and the controls in place to ensure compliance. 4. \*\*Cross-reference:\*\* Add a specific cross-reference to the section on the definition of default (DoD) to highlight the requirements for reclassification.

## Requirement: REQ002

Description: Information about all default events still has to be stored by institutions.

Reference: Changes to paragraph 101

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Information about all default events still has to be stored by institutions.

Reference: Not specified

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Consistency with PD estimation should be ensured by the use of the same database of default events.

Reference: Not specified

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: The proposed 0% floor on realised LGDs has been retained. This floor is applicable in the calculation of long-run average LGD in order to ensure the appropriate calibration of the parameter.

Reference: Not specified

Status: Missing Requirement

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: The GL require institutions to use consistent methodologies for the estimation of LGD for defaulted and non-defaulted exposures, as in either cases the methodology should be appropriate for the particular type of exposures as well as the internal collection and recovery policies of the institution.

Reference: GL

Status: Satisfactory

Recommendations: 1. Explicitly state in Section 6 that the LGD estimation methodologies are appropriate for residential mortgage exposures and aligned with the bank's internal collection and recovery policies. 2. Consider adding a specific subsection within Section 6 that addresses the consistency of methodologies for defaulted and non-defaulted exposures, emphasizing the importance of applying the same principles and data standards.

## Requirement: REQ002

Description: The GL also explicitly require that all relevant risk drivers should be used, including those that may become relevant after the date of default.

Reference: GL

Status: Satisfactory

Recommendations: \* In Section 4.2 or 6.3, add a sentence explicitly stating that the bank will consider risk drivers that may become relevant after the date of default. \* Provide examples of risk drivers that may become relevant after the date of default, such as changes in property values, changes in marketability of collateral, or changes in the legal framework.

## Requirement: REQ001

Description: The estimation of parameters for defaulted exposures is required only of those institutions that use LGD models for non-defaulted exposures.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: The CRR requires the calculation of IRB excess/shortfall in order to ensure that the own funds reflect the expected loss estimated in accordance with prudential rules even where the accounting provisions do not meet prudential

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: 1. \*\*Enhance the description of the IRB excess/shortfall calculation:\*\* The policy should include a more detailed explanation of the methodology used to calculate the IRB excess/shortfall. This should include the specific formulas or processes used. 2. \*\*Explicitly link the calculation to prudential rules:\*\* The policy should explicitly state how the IRB excess/shortfall calculation ensures that own funds reflect the expected loss estimated in accordance with prudential rules. This could involve referencing the specific requirements of the CRR and EBA guidelines. 3. \*\*Provide examples or illustrations:\*\* Including examples or illustrations of the IRB excess/shortfall calculation, particularly in the context of residential mortgages, would enhance clarity and understanding.

## Requirement: REQ003

Description: Where all identified uncertainty and potential unexpected losses are sufficiently covered by the downturn adjustment and Mo C, the component of the add-on reflecting potential additional losses may be zero. However, these additional potential sources of unexpected losses have in any case to be analysed by the institution and reflected adequately where necessary

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: As LGD in-default and ELBE are in fact part of the LGD model, all the requirements for such models specified in the CRR have to be met.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Reference LGD in-default Requirements:\*\* Add a sentence or two in Section 7 (Expected Loss Best Estimate (ELBE) and LGD in-default) to explicitly state that the LGD in-default model must also adhere to all relevant CRR requirements, mirroring the general statement made in the introduction. 2. \*\*Cross-reference:\*\* In Section 6 (Loss Given Default (LGD) Model Development and Quantification), add a cross-reference to Section 7, highlighting the connection between LGD and LGD in-default.

## Requirement: REQ002

Description: institutions should also make sure that estimates of future recoveries on incomplete recovery processes are well justified and prudent in order to avoid any distortions in the final estimates of risk parameters due to the use of uncertain information.

Reference: Guidelines on PD Estimation, LGD Estimation and Treatment Defaulted Exposures

Status: Satisfactory

Recommendations: 1. \*\*Enhance Documentation:\*\* Explicitly state the requirement to document the methodologies used for estimating future recoveries and costs in incomplete recovery processes. 2. \*\*Detail Prudence Measures:\*\* Provide more detail on the specific measures taken to ensure the prudence of estimates, such as sensitivity analyses or stress testing of recovery assumptions. 3. \*\*Explicitly Link to Risk Parameters:\*\* Explicitly state how the estimates of future recoveries impact the final risk parameter estimates (LGD in this case) and how this is reflected in the MoC.

## Requirement: REQ001

Description: Where an adjustment to reflect current economic conditions is necessary, this may be done on the basis of a sample of data reflecting current economic conditions, for instance by selecting the most recent observations. However, this limited sample cannot be used as the sole basis for the estimates.

Reference: Changes to section 7.3.2.2

Status: Non Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: The analysis of economic conditions should be consistent for the purpose of ELBE (to reflect current economic conditions) and for the purpose of LGD and LGD in-default (to reflect downturn conditions).

Reference: Changes to section 7.3.2.2

Status: Satisfactory

Recommendations: 1. \*\*Enhance the policy to explicitly state the methodology for ensuring consistency.\*\* The policy should describe how the bank will ensure that the economic analysis used for ELBE and LGD in-default is consistent. This could include specifying the economic scenarios or data sources used for each, and how they are linked. 2. \*\*Provide examples of how the bank will implement the consistency.\*\* The policy should provide examples of how the bank will implement the consistency. This could include examples of how the bank will use the economic scenarios or data sources for each, and how they are linked. 3. \*\*Include a section on the review process.\*\* The policy should include a section on the review process. This section should describe how the bank will review the economic analysis used for ELBE and LGD in-default to ensure that it is consistent.

## Requirement: REQ001

Description: Models for accounting provisions can only be used for the purpose of ELBE estimation where these models meet all the requirements of the CRR and of these GL, in particular where the definition of economic loss underlying the estimates is consistent with the concept specified in these GL.

Reference: As specified in the GL

Status: Satisfactory

Recommendations: 1. \*\*Explicitly Define Economic Loss Consistency:\*\* Add a sentence or paragraph in Section 7.2 that explicitly states how the bank ensures the definition of economic loss used in its ELBE models aligns with the definition in the relevant EBA guidelines. This could involve referencing the methodology used to calculate economic loss, including the components considered (e.g., outstanding amount at default, recoveries, costs) and the discounting methodology. 2. \*\*Cross-Reference:\*\* In Section 7.2, add a cross-reference to the section of the policy that defines "economic loss" to ensure clarity and ease of navigation.

## Requirement: REQ002

Description: In this situation the final ELBE has to reflect the appropriate definition of economic loss.

Reference: Furthermore, in this situation

Status: Satisfactory

Recommendations: 1. \*\*Enhance ELBE Definition:\*\* Explicitly define the components of economic loss (principal, interest, fees, costs, recoveries) and the discounting methodology used in the ELBE calculation, referencing the relevant sections of the EBA guidelines. 2. \*\*Cross-Reference:\*\* Add a cross-reference to Section 6.4 (Calculation of Economic Loss and Realised LGD) to ensure consistency between the definition of economic loss used for LGD and ELBE.

## Requirement: REQ001

Description: LGD in-default should be estimated under the same requirements as those for LGD for non-defaulted exposures specified in Article 181 of the CRR.

Reference: Article 181(1)(h) of the CRR

Status: Satisfactory

Recommendations: 1. Explicitly reference Article 181 of the CRR in Section 7.3 to directly link the policy to the regulatory requirement. 2. Add a sentence in Section 7.3 to clarify how the bank ensures the use of consistent estimation methodologies for LGD in-default and LGD for non-defaulted exposures, as per Article 181 of the CRR.

## Requirement: REQ001

Description: that the estimates should reflect economic downturn if this is more conservative than the long-run average also applies.

Reference: Article 181(1)(b)

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions are able to identify these triggers in order to ensure that the risk estimates used in the calculation of own funds requirements are adequate and that any deficiencies are remedied without undue delay.

Reference: Section 8.1

Status: Satisfactory

Recommendations: \* Explicitly list specific triggers that would indicate the risk estimates are inadequate. These triggers could include: \* Significant changes in macroeconomic conditions (e.g., interest rate hikes, housing market downturns). \* Material changes in the bank's lending practices or risk appetite. \* Significant deviations between expected and realized default rates or loss given default. \* Identification of data quality issues that materially impact risk estimates. \* Findings from internal validation or audit that indicate model weaknesses. \* Detail the specific actions that will be taken when a trigger is identified. This should include: \* A process for escalating the issue to the appropriate level of management. \* A timeline for addressing the issue. \* Specific steps for reviewing and potentially revising the risk estimates. \* A process for documenting the issue and the actions taken.

## Requirement: REQ002

Description: Any changes in the institution’s policy on how and when this additional conservatism should be applied can be considered a change to the rating system and should be notified to the competent authority in accordance with the Regulation (EU) No 529/2014.

Reference: Section 8.1

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ003

Description: Institutions should take appropriate steps as a result of the review of estimates, depending on the nature and severity of the identified weaknesses.

Reference: Chapter 9

Status: Satisfactory

Recommendations: 1. \*\*Enhance Specificity:\*\* Provide more specific examples within Section 9.4 of the types of remediation actions that will be taken based on the severity of the identified weaknesses. For example, the policy could outline different levels of action depending on whether the weakness is a minor data issue, a significant methodological flaw, or a fundamental model limitation. 2. \*\*Define "Reasonable Timeframe":\*\* Clarify what constitutes a "reasonable timeframe" for remediation, providing guidelines or benchmarks for different types of deficiencies.

## Requirement: REQ004

Description: Institutions are requested to specify the situations in which reviews are to be performed more frequently than annually in their internal policies.

Reference: Chapter 9

Status: Non Compliant

Recommendations: \* Significant changes in the economic environment (e.g., a sharp increase in interest rates, a housing market downturn). \* Material changes to the bank's lending practices or portfolio composition. \* Identification of significant model weaknesses or performance issues during ongoing monitoring or validation. \* Regulatory changes or supervisory feedback that necessitate a more frequent review cycle. \* Use of ML techniques, which may require more frequent reviews due to their dynamic nature.

## Requirement: REQ005

Description: Institutions perform ad hoc reviews when necessary, in particular whenever a significant change in

Reference: Chapter 9

Status: Satisfactory

Recommendations: 1. Explicitly state in the policy that ad hoc reviews will be performed when significant changes occur, referencing the change policy in Section 12. 2. Clarify the scope and frequency of ad hoc reviews, specifying the types of changes that trigger them and the review process. 3. Provide examples of significant changes that would trigger an ad hoc review.

## Requirement: REQ006

Description: the reviews have to be performed at least on an annual basis.

Reference: Article 179(1)(c)

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ007

Description: the reviews of estimates should be performed at least annually in accordance with Article 179(1)(c) of the CRR.

Reference: Chapter 9

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: Institutions are required to define a regular cycle for the full review of rating systems, taking into consideration their materiality, covering all aspects of model development, quantification of risk parameters and, where applicable, the estimation of model components.

Reference: Chapter 9; paragraph 78

Status: Satisfactory

Recommendations: No specific recommendations provided.

## Requirement: REQ001

Description: reviews of estimates are performed at least annually.

Reference: Article 179(1)(c) of the CRR

Status: Fully Compliant

Recommendations: No specific recommendations provided.

## Requirement: REQ002

Description: Approval of material model changes will be required in accordance with Regulation (EU) No 529/2014 of 12 March 2014.

Reference: Regulation (EU) No 529/2014

Status: Fully Compliant

Recommendations: No specific recommendations provided.