EBA Draft Guidelines on Credit Conversion Factors (CCF)

Key Changes and Implications for Banks

November 2026

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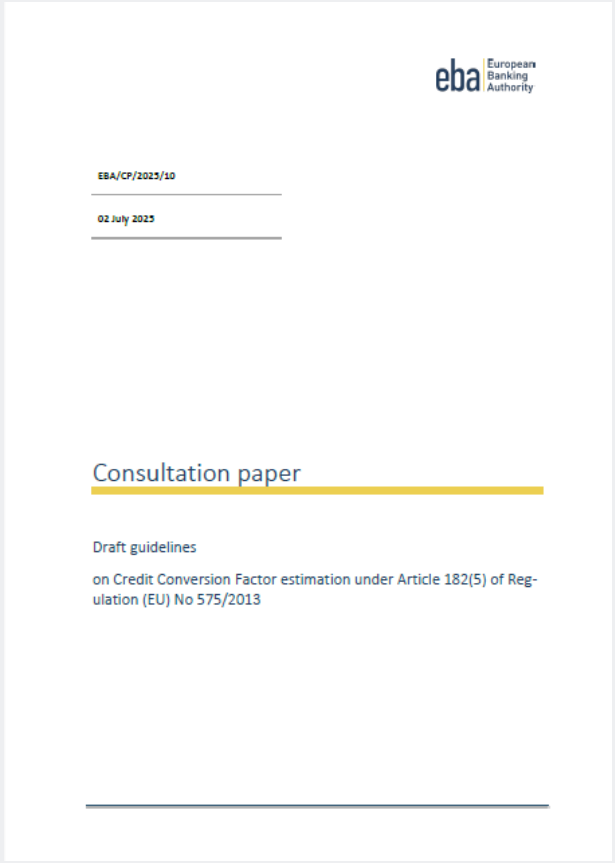
Executive Summary

- EBA published the **draft guidelines (GL) for CCF estimation** in July 2025 **building on CRR3** and **aligning with existing PD and LGD** estimation requirements
- Proposals covering model scope, historical data, realized CCF calculation and downturn estimation **may necessitate substantial changes** to existing model frameworks
- The GL also raises concerns of **excessive conservatism** including proposed minimum 100% fixed CCF and flooring of negative realized CCF values
- EBA's February 2026 discussion paper on **'Simplification and assessment of the credit risk framework'** explores additional simplification proposals on multiple CCF topics such as **facility definition, broader use of fixed CCFs** and **flexibility in choice of reference dates**
- Given the developments over past one year, **further changes** may be observed in the final GL expected to be published by end of **2026**



Banks should perform targeted gap and impact assessments now, prioritizing material issues to prepare for adherence to the final regulations.

Regulatory Background

Evolving requirements for IRB CCF models



1	**Before 2025** No explicit CCF guidelines from EBA	• Core requirements were outlined by regulatory framework • PD & LGD guidelines were used as reference for CCF modelling • Banks retained significant methodological discretion
2	**CRR3 | From Jan 2025** Binding changes to eligibility	• IRB-CCF restricted on eligible revolving commitments • Introduction of revised CCF input floors • Greater emphasis on facility level characteristics
3	**EBA CP | Jul 2025** Proposed regulatory harmonization	• Detailed guidance on model scope and RDS construction • More prescriptive requirements for realized CCF, calibration and DT estimation • Introduction of fixed CCF concept to be applied under specific circumstances



The regulatory discussion has evolved since the publication of the draft guidelines questioning whether some of the requirements generate additional complexity for banks compared to the risk sensitivity that would be achieved.

Key Requirements

EBA draft CCF GL



1	**Narrower scope**	IRB CCFs for eligible revolving commitments, one CCF per facility, based mainly on own data.
2	**Prescriptive realized CCF**	12-month reference date, detailed requirements on product transformations, and mandatory post-default drawings for non-retail.
3	**Long-run CCF**	Built from closed drawing processes at facility level and adjusted for open ones; arithmetic average of realized CCFs over a historical observation period weighted by the number of facilities to be used.
4	**Explicit downturn CCF**	Aligned with LGD downturn rules; fallback of LRA CCF plus 15 pp when impact cannot be reliably estimated.
5	**In-default CCF**	Required where post default drawings are considered in CCF estimation.
6	**Stricter conservatism**	MoC by category A, B and C with remediation plans; fixed CCF of atleast 100% under specific circumstances.

Current scenario

Key challenges observed for CCF modelling

1

Data gaps

Issues with quality of historical limits, utilizations, contract changes and transactional data

2

Product complexity

Potential interdependencies existing between products of the same customer can distort CCF calculations

3

Modelling challenges

Definition of region of instability to segregate extreme realized CCF, 12-month fixed horizon approach[1]

4

Scarce defaults

Lack of sufficient defaults limits model granularity and robust statistical inference.

5

Downturn estimation

Weak relationships between economic factors and drawdown behavior complicate estimation

6

MoC appropriateness

Completeness of MoC identification and calculation

[1] Requirement in the draft CCF GL

Key Implications

Priority assessment for banks

		Focus areas
1	**Model scope**	Potential **changes to model boundaries; facility definition and product mappings** of existing CCF models would require **re-assessment**
2	**Data readiness**	**Reconstruction of historical facility information** (linkage of restructured facilities, accurate data on unadvised limits, product changes etc) would require **substantial data remediation**
3	**Methodological complexity**	Guidelines on **methodological choices** (e.g., definition of region of instability, treatment of negative CCFs and additional drawings) will increase **estimation complexity; feasibility** assessment of proposed changes is key
4	**Increase in conservatism**	The proposed **fixed CCF constraints**, downturn and MoC requirements **indicate towards potential increase** in capital requirements for certain portfolios; **capital impact assessment** to be performed for portfolios likely to be affected
5	**Regulatory uncertainty**	**Potential simplification discussions** by EBA post publication of the draft GL create **uncertainty around final implementation** decisions; **Prioritize actions** subject to minimal regulatory uncertainty

Scope and Application

Scope and Framework

Topics	Important considerations	Assessment focus
IRB CCF eligibility 1	• **Appropriate identification of the revolving product universe** in line with regulations • Eligible if revolving at any point in time in the 12 months prior to default including fully drawn commitments	• **Contractual characteristics** and product mappings (attention should be given to treatment of **non-standard** and **hybrid products**) • Materiality of scope changes
Level of Modelling and Application 2	• **Potential difference in LGD and CCF level of modelling** since LGD 'facility' definition would cover both revolving and non-revolving products • **Identification of linkages** between original and restructured facilities is key	• **Existing facility definitions** and historical linkages • **Consistency** between CCF estimation and application
Advised vs Unadvised Limits 3	• **Advised and unadvised limits should be clearly defined** with appropriate documentation • Evidence of appropriate data quality for unadvised limits is important	• **Availability and quality** of historical limit information • **Appropriate treatment** of unconditionally cancellable commitments (UCC)

[1] Based on proposals discussed in EBA/DP/2026/01 for 'Simplification and assessment of the credit risk framework'

Reference Dataset

Data Requirements

Topics	Important considerations	Assessment focus
History of relevant information 1	• **Availability of detailed data** (scoping variables, risk drivers, transactional information) at **facility level over time** • Additional information on **nature of commitments**, advised and unadvised limit amounts, dynamic limits, accounts with zero limits	• **Completeness and quality** of historical data • Feasibility of reconstructing missing information and **materiality of data gaps**
Choice of Reference dates 2	• Choice of reference dates limited to using a **12-month fixed horizon approach** in the draft GL • However, later EBA **proposed to potentially relax** this requirement in EBA/DP/2026/01[1]	• **Impact** of fixed horizon approach on **sample composition** and realized CCFs • **Materiality** of **'fast defaults'** in the data
Data Representativeness 3	• Historical data **should adequately reflect** the characteristics of **application** portfolio • Data coverage for key **material subsegments** of the application portfolio	• **Representativeness assessment** of data used for CCF modelling • **Methodological adjustments** vs **regulatory fallbacks** for segments with limited data

[1] Discussion paper on 'Simplification and assessment of the credit risk framework'

Deep-dive: Reference Dataset

Common challenges observed

Topics	Issues encountered
Scoping variables 1	• **Incorrect classifications** of **facility** and product **types** in historical data • Lack of a **revolving product indicator** or **data quality issues** with such indicators (even if available)
Limit information 2	• **Unadvised limit** information has not been systematically stored in historical databases in many banks and even available data • Certain product types in historical data recorded the outstanding exposure in limit fields **instead of actual limit** information (e.g., deferred credit cards); **proxies for limit** need to be calculated in these situations • **Overall limit** defined at facility level **having multiple products** (e.g., mix of lending and guarantee products); **allocation of limit** is needed at product level in such cases • **Identification of administrative limits** is generally a challenge since there are no separate indicators available
CCF outliers in data 3	• In SME or wholesale portfolios, complex product structures with **interfacility transfers** can distort realized CCF • Systematic **linkage of restructured/rebooked facilities** is often not available and have to be addressed via certain algorithms • **Increase in limit amount** between reference moment and default date can lead to outliers without appropriate adjustment

Customer Product Mix

Changes in customer product profile

1

Identify product transformations

Identify product profile changes between reference and default dates, including restructuring.

2

Track the facility

Allocate drawings and repayments to the right contract(s) at reference and default dates.

3

Justify unrelated product changes

Explain why any product-mix change is treated as unrelated.

Areas requiring attention

- **Identify restructurings** and revolving-to-non-revolving product conversions in the data
- Assess **treatment of inter facility transfers** to ensure unbiased CCF estimated
- **Document and substantiate** cases where **new contracts** are considered unrelated to the revolving commitment existing at reference date



CCF Methodology

Modelling and Testing Requirements

Topics	Important considerations	Assessment focus
Risk Differentiation 1	• Definition of **region of instability** (RoI) to segregate extreme realized CCF values • Treatment of cases with **negative realized CCF values** • Treatment of **additional drawings after default**	• Any gaps in existing methodology for **defining RoI** with respect to proposed process • **Approach** to establish the **RoI threshold** • **Alignment** of additional drawing calculations with proposed guidelines
Risk Quantification 2	• LRA CCF to be calculated using an **arithmetic average** of realized CCFs over a historical observation period **weighted by the number of facilities** • LRA CCF should be calculated using facilities with completed drawing process with an **adjustment** applied **for incomplete cases**	• Approach to **estimate future drawings** for **incomplete cases** • **MoC calculation** to address uncertainty of incomplete drawing estimation
Model performance & Testing 3	• Out-of-sample and out-of-time tests for discriminatory power made explicit • Requirements on homogeneity and heterogeneity tests	• Model stability, discrimination and performance across **material subsegments**

Region of Instability

Treatment of facilities with high utilization

1

Standard CCF

Drawn at default minus drawn at reference, over the undrawn amount at reference date.

2

Alternative CCF (limit factor)

For fully drawn and region-of-instability facilities: drawn amount at default as a percentage of the limit at reference date.

3

Set the threshold

Define a relative utilisation threshold by policy, tied to the dispersion of realised CCFs; no regulatory value is prescribed.

Areas requiring attention

- Suitability of **single vs multiple relative thresholds** and potential requirement of **absolute thresholds**
- **RoI materiality** and its effectiveness in isolating unstable observations
- **Model performance** within and outside RoI considering both CCF and implied EAD estimates



Additional drawings after default

Treatment in CCF estimation and calibration

1

Treatment across portfolios

Non-retail: mandatory in the CCF. Retail: CCF or LGD, kept consistent with the LGD.

2

Calculation approach

Difference between the exposure at default and the highest discounted drawn amount during the default period

3

Treatment of unresolved cases

Simple approach if low materiality; otherwise model drawings within the recovery period.

Areas requiring attention

- **Calculation methodology**, discounting assumptions and **treatment of multiple defaults**
- **Consistency** between LGD and CCF models
- **Materiality** of **incomplete** drawing process
- Potential **MoC implications**



Downturn CCF

Methodological requirements

Topics	Important considerations	Assessment focus
Estimation approaches 1	• **Three eligible approaches** to be considered in the following order: Observed impact, estimated impact and conservative fallback • Extrapolation approach is allowed **only at the level of the CCF**	• Potential **gaps in current approach** and impact analysis • Data availability for downturn CCF requirements • **Possible simplification** of the current methodology
Downturn sensitivity & Calibration 2	• **Annual default rates to be considered** as a key downturn indicator to identify the downturn period • Downturn CCF estimates should be calibrated atleast at the same level as LRA CCF	• **Appropriate sensitivity analysis** to adequately reflect impact of macroeconomic factors on CCF • **Calibration segmentation** for downturn CCF
Downturn for in-default exposures 3	• **Same relevant downturn period** to be used as for **non-defaulted facilities** • Downturn component may be estimated independently or derived from non-defaulted facilities	• Applicability of simplified treatment as proposed in the draft GL

Margin of Conservatism (MoC)

Quantification and treatment of deficiencies

Topics	Important considerations	Assessment focus
MoC quantification framework 1	• The MoC framework (including categories) in **CCF** estimation **is similar to** the framework applicable **for PD and LGD estimation** • EBA is considering **adding optional fallback approach** incase quantification is too complex (as stated in EBA/DP/2026/01[1])	• Review of **current MoC** quantification process to **identify any gaps** with proposed framework
CCF specific deficiencies 2	• Address **CCF related uncertainties** (e.g. historical drawing data, estimation of future drawings etc) via appropriate conservatism	• Identification of **material CCF specific** deficiencies • Adequacy of conservative adjustments applied
Conservative treatment for data scarcity 3	• For portfolios with insufficient data, the draft GL proposes conservative CCF estimate of atleast 100% including MoC • EBA also later proposed to expand the use of fixed CCF in EBA/DP/2026/01[1]	• **Identify portfolios** or segments where this conservative treatment may be applicable • Evaluate potential **capital impact**

[1] Discussion paper on 'Simplification and assessment of the credit risk framework'

Assessing CCF requirements via case studies (1/2)

Case 1: Bank assessing readiness for adopting 12-month fixed horizon approach

Background: An IRB bank currently uses cohort approach to construct its CCF RDS. Prior to potential regulatory changes, the bank evaluates feasibility and impact of adopting fixed horizon approach.

Assessment performed

1 **Historic data readiness**: Reviewed if existing data systems support reconstruction of limit, drawn amounts and risk drivers for 12-month history prior to default of each facility.

2 **Analysis of fast defaults**: Identified materiality of defaults occurring within 12 months of origination including investigation of these cases and reviewed any gaps in eligible default population.

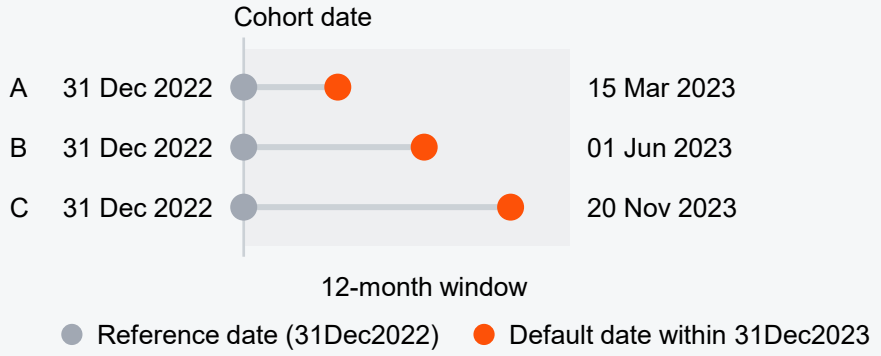
3 **Impact on CCF distribution:** Quantified differences in CCF derived using different reference date approaches for material segments where information was available to recreate12-month history; documented rationale for the observed differences.

Key Takeaway

Prioritize assessing data gaps, sample adequacy and potential RWA impact;
Defer material redevelopment decisions until the final requirements are clarified.

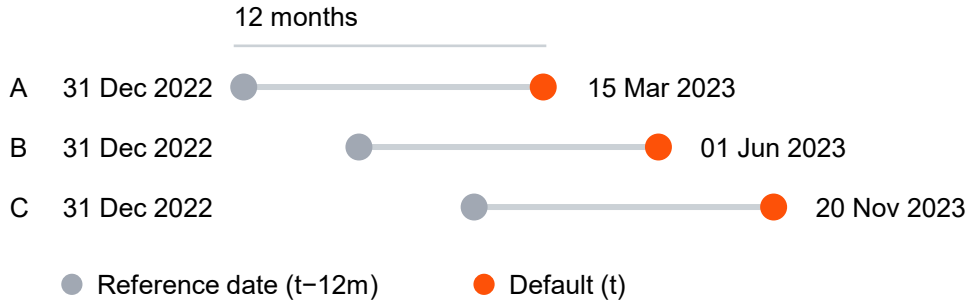
Cohort approach

Fixed reference date; defaults within the next 12 months



Fixed horizon approach

Default-anchored: Reference date exactly 12 months earlier



Assessing CCF requirements via case studies (2/2)

Case 2: Bank assessing region of instability for realized CCF

Background: An IRB bank currently applies both relative and absolute thresholds to define the region of instability (RoI) for its CCF models. Based on the draft CCF guidelines, the bank evaluates alignment of the existing approach with GL requirements.

Assessment performed

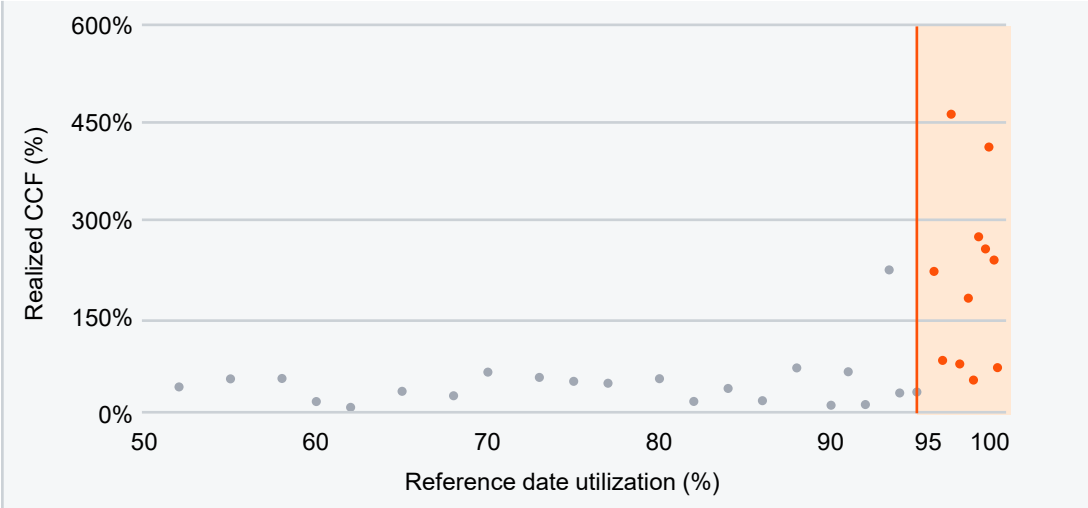
1 **Threshold determination**: Reviewed existing methodology to identify RoI against CCF guideline requirements; documented rationale for applying both relative and absolute thresholds and any expert judgement that was used in the process.

2 **Threshold adequacy**: Quantified statistical evidence to demonstrate that the RoI appropriately segregates outliers while remaining sufficiently restrictive.

3 **Model performance:** Documented justification for observed weak model performance (in terms of both CCF and EAD estimates) with evidence of sufficient conservatism

Key Takeaway

Validate existing RoI boundaries empirically to ensure accurate segregation of unstable observations; ensure appropriate governance and documentation of the RoI definition and treatment in bank's internal policies.



Worked example: Near fully drawn facility

Illustrative amounts (€); RoI eligibility assumed

- **Reference date:** Limit €1,000
- **Drawn at reference** €995, **Undrawn** €5, **Utilization** 99.5%
- **Drawn at default:** €1,020

Standard realized CCF calculation

(1,020 – 995) / (1,000 – 995) = 500%

Alternative realized CCF calculation (limit factor)

1,020 / 1,000 = 102%

Next Steps

01

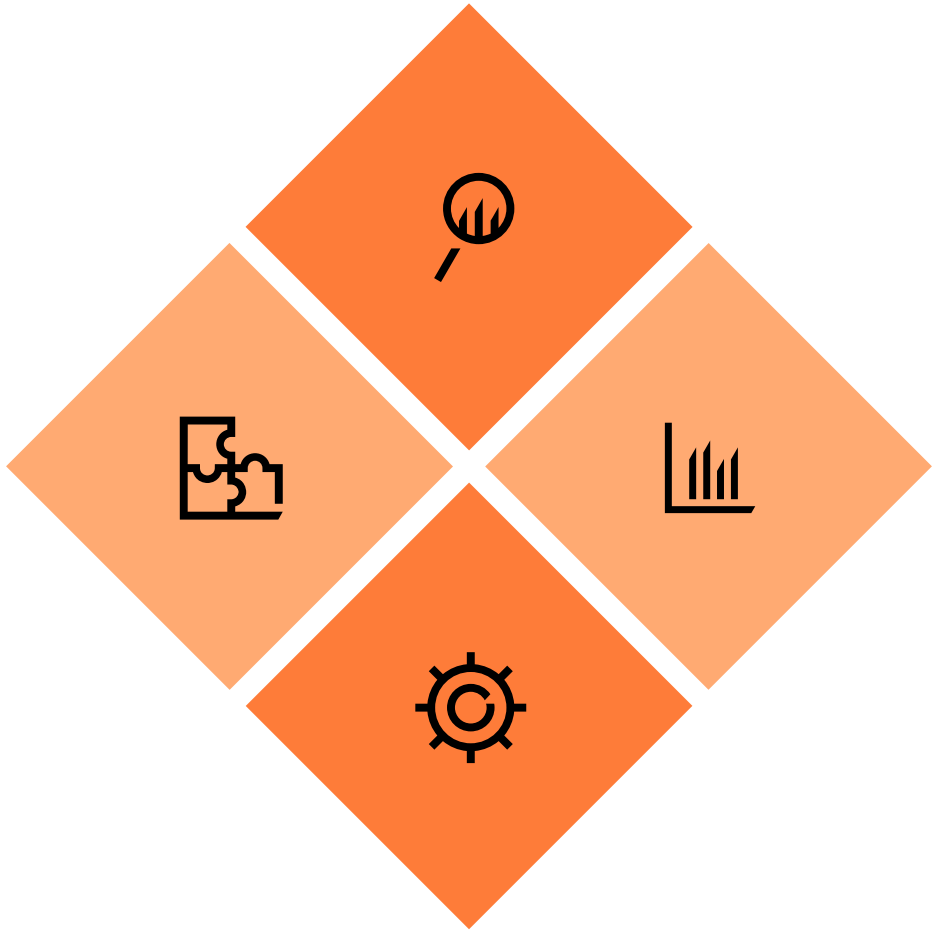
Conduct a regulatory gap assessment

Assess scope, data, estimation methodology and MoC against the proposed requirements

02

Assess and prepare data foundation

Review historical data coverage; close gaps in limit, drawing, post-default and product-change data



03

Quantify the impact

Estimate the implications on CCF levels, capital and MoC, including the downturn view

04

Plan for enhancements

Plan for required remediation and model changes with an indicative implementation roadmap

Thank you.

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