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Final report

Guidelines

on credit risk mitigation for institutions applying the IRB approach with own estimates of LGDs

Contents

1. Executive summary

The EBA's review of the IRB approach aims, overall, to reduce unjustified variability stemming from different supervisory and institution-specific practices, while preserving the higher risk sensitivity associated with internal models. The credit risk mitigation (CRM) framework is an integral part of IRB framework and consequently the application of CRM methods can be a source of variability. These guidelines aim to clarify the CRM framework in the context of the advanced IRB (A-IRB) approach. They thereby complement the EBA report on the credit risk mitigation framework, which was focused on the standardised approach (SA) and the foundation IRB (F-IRB) approach.

The industry, as well as the EBA in previous work, has identified a clear need for these guidelines. The EBA and the industry have flagged that the complexity of the current provisions under Regulation (EU) No 575/2013 (the Capital Requirements Regulation, CRR) on the CRM framework raises a significant number of implementation issues. The abovementioned EBA report provided some clarity on the application of the CRM framework in the context of the SA and the F-IRB approach, but the analysis carried out by the EBA also noted the limited guidance provided in the current CRR provisions on CRM under the A-IRB approach.

Consequently, these guidelines provide additional clarity on the application of the CRM approach for A-IRB institutions, focusing on clarifying the application of the current CRR provisions for the eligibility and methods of different CRM techniques, namely funded and unfunded credit protection, available to institutions under the A-IRB approach. This is supplemented by additional detailed guidance on eligibility requirements and treatment of funded and unfunded credit protection.

The guidelines were subject to a three-month consultation period and have been developed in dialogue with the industry, which provided significant input on the current practices. It is the EBA's belief that these guidelines should help eliminate the unwarranted differences in approaches remaining in the area of CRM due to either different supervisory practices or institution-specific choices.

Finally, it has to be noted that while developing these guidelines the EBA took into account the final Basel III framework published in December 2017, which also includes revisions of some specific aspects of the CRM framework. Therefore, in order to avoid potential inconsistencies with the final Basel III framework, some parts of the CRM framework are excluded from the scope of the guidelines and are instead considered in the context of the EBA's response to the call for advice on the implementation of the Basel III framework in the EU.

2. Background and rationale

2.1 Introduction

1. The European Banking Authority (EBA) has previously outlined its programme on the review of the IRB approach in the EBA's report and opinion on the implementation of the regulatory review of the IRB approach published in February 2016.[1] After (i) reviewing supervisory practices, (ii) harmonising the definition of default and (iii) providing more clarity on how to model probability of default (PD), loss given default (LGD) and defaulted exposures, including the estimation of downturn LGD, the credit risk mitigation (CRM) framework constitutes the fourth and last phase of this programme. Although these guidelines (GL) were not originally envisaged as part of the review, the need for these GL has been identified in the course of work aiming to clarify the CRM framework in the context of the advanced IRB (A-IRB) approach.[2] They thereby complement the EBA's report on the credit risk mitigation framework[3] (the CRM report), which was focused on the standardised approach (SA) and the foundation IRB (F-IRB) approach.

2. In accordance with Article 108 of Regulation (EU) No 575/2013 (the Capital Requirements Regulation, CRR), for exposures to which an institution applies the SA or F-IRB approach, the institution may use CRM in accordance with Part Three, Title II, Chapter 4 of the CRR (Chapter 4) in the calculation of risk-weighted exposure amounts (RWEAs). For exposures to which an institution applies the IRB approach with own estimates of LGDs and conversion factors, i.e. exposures under the A-IRB approach, the institution may use CRM in accordance with Part Three, Title II, Chapter 3 of the CRR (Chapter 3). Due to these different requirements for the SA and F-IRB approach on the one hand and for the A-IRB approach on the other hand, the requirements for the use of CRM have to be considered separately.

[1] Please refer to the Opinion of the European Banking Authority on the implementation of the regulatory review of the IRB approach (https://www.eba.europa.eu/documents/10180/1359456/EBA-Op-2016-01+Opinion+on+IRB+implementation.pdf) and its accompanying report (https://www.eba.europa.eu/documents/10180/1360107/EBA+Report+on+the+regulatory+review+of+the+IRB+Approach.pdf).

[2] As clarified in the EBA's report on the credit risk mitigation framework, the Basel capital framework refers, for non-retail exposures, to the foundation IRB (F-IRB) approach, i.e. where institutions provide their own PD estimates and rely on regulatory parameters for the other risk components (LGD and credit conversion factors (CCFs)). In contrast, under the advanced IRB approach, institutions provide their own estimates not only of PD but also of LGDs and CCFs for estimating the exposure value for off-balance-sheet (OBS) items, subject to meeting minimum requirements, and calculate the remaining effective maturity where permitted. The CRR, however, does not explicitly refer to F-IRB or A-IRB, but instead talks of the IRB approach, whereby institutions have the permission to use their own estimates of LGD and conversion factors. The latter differs from the A-IRB approach, commonly referred to in the Basel capital framework, in that it also includes retail exposures (for which own estimates of LGDs and CCFs are mandatory, either as direct estimates or, for LGDs, derived from an estimate of expected losses and an own estimate of PD). These draft GL refer to the terms used under the CRR with relevant abbreviations where appropriate, for consistency and to avoid misunderstandings. Therefore, these GL use the term A-IRB to refer to the IRB approach with own estimates of LGDs and CCFs, and F-IRB to refer to the IRB approach without own estimates of LGD and CCFs.

[3] https://eba.europa.eu/documents/10180/2087449/EBA+Report+on+CRM+framework.pdf

3. Increased clarity of the CRM framework is considered an integral part of the IRB review and reflects the feedback received from the stakeholders to the discussion paper on 'The future of the IRB approach' published in March 2015[4]. One of the main takeaways from the consultation was that, while the EBA had been given mandates to develop technical standards on selected issues,[5] there was an overall need to consider the functioning of the CRM framework as a whole. More specifically, the industry flagged the complexity of the current CRR provisions due to numerous references and cross-references that make it difficult to understand which provisions apply under which approach to credit risk.

4. In the case of the A-IRB approach, some clarifications on the use of CRM have already been provided as part of the guidance for the LGD estimation in the EBA Guidelines on PD estimation, LGD estimation and the treatment of defaulted exposures (EBA GL on PD and LGD estimation) published in November 2017.[6] However, there are still certain outstanding issues, which have not been addressed and where different interpretations and practices are observed.

5. At the same time, the recent changes introduced through the final Basel III framework[7] should also be taken into account to the extent possible. Indeed, in May 2018 the EBA received from the European Commission a call for advice (CfA) on the impact and implementation of the final Basel III framework. The revisions in the scope of the CfA include the revised standards in the areas of credit risk and, in particular, on some specific aspects of the CRM framework. In this context, any issues that may lead to inconsistencies with the current CRR rules or to a deviation from the final Basel III framework have been addressed in the EBA's response to the CfA[8] (CFA report) and are therefore not included in these GL.

6. With a view to supporting implementation of the legislation that is clear and consistent across institutions and jurisdictions, these GL therefore clarify the application of current CRR provisions regarding CRM under the A-IRB approach and should help eliminate the unwarranted differences in approaches remaining in the area of CRM due to either different supervisory practices or institution-specific choices.

7. These GL are structured in three main parts: (i) Section 4, with general provisions, which aims to provide clarity on the scope of application of the CRM provisions of Chapter 3; (ii) Section 5, providing guidance on eligibility requirements for both funded credit protection (FCP) and unfunded credit protection (UFCP); and (iii) Section 6, on the treatment of FCP and UFCP.

[4] https://eba.europa.eu/sites/default/documents/files/documents/10180/1003460/9a61536d-0585-4644-b75b-f36d45f528b6/EBA-DP-2015-01%20DP%20on%20the%20future%20of%20IRB%20approach.pdf.

[5] The mandates included in the CRR for the EBA to develop technical standards in the area of CRM are focused on only a few selected aspects of the CRM framework and, in particular, include (i) RTS under Article 183(6) of the CRR on the recognition of conditional guarantees; (ii) RTS under Article 194(10) of the CRR on liquid assets; and (iii) RTS under Article 221(9) of the CRR on the internal models approach for master netting agreements.

[6] https://www.eba.europa.eu/documents/10180/2033363/Guidelines+on+PD+and+LGD+estimation+%28EBA-GL-2017-16%29.pdf/6b062012-45d6-4655-af04-801d26493ed0

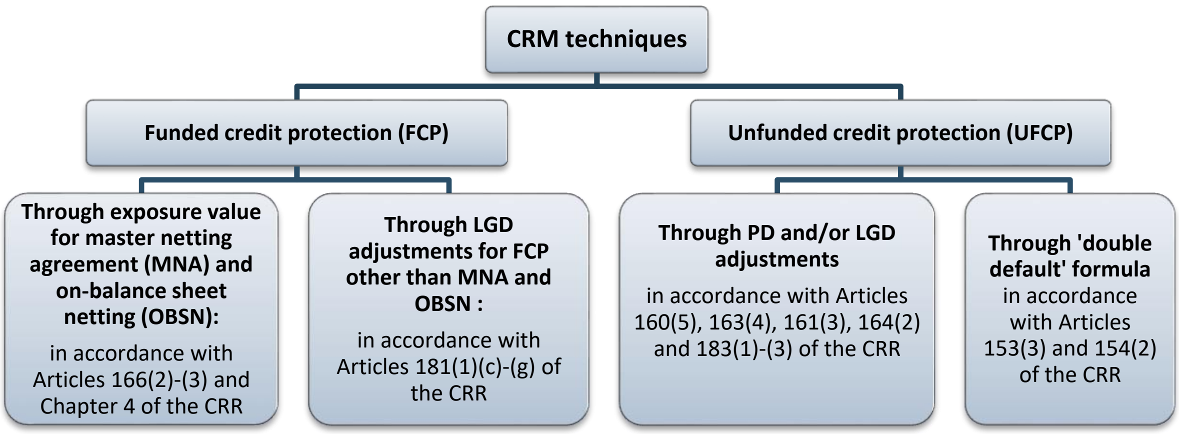
[7] Text of the final Basel III framework (December 2017): https://www.bis.org/bcbs/publ/d424.htm

[8] https://eba.europa.eu/risk-analysis-and-data/quantitative-impact-study/basel-iii-monitoring-exercise/call-for-advice

2.2 General provisions

8. This section focuses on carrying out a mapping of the articles in Chapter 3 detailing the provisions for the eligibility and methods of CRM at institutions' disposal for exposures under the A-IRB approach. The aim of this mapping is to shed light on the CRM framework as provided in the CRR, as stakeholders have raised concerns regarding the clarity of the framework as it currently stands.

Figure 1: CRM techniques and methods under Chapter 3 of the CRR



9. As mentioned above, the scope of application of the CRM framework is defined in Article 108 of the CRR. In particular, for exposures to which an institution applies the SA and F-IRB approach the CRM techniques may be recognised in accordance with Chapter 4, whereas for exposures to which an institution applies the A-IRB approach the CRM techniques may be recognised in accordance with Chapter 3. In this respect, the GL clarify that the requirements of Chapter 4 apply to exposures treated under the A-IRB approach only where explicitly cross-referenced in Chapter 3. Therefore, Chapter 3 applies to exposures under the A-IRB approach and, in particular (as also clarified in Figure 1):

- Article 166(2) and (3) of the CRR state that institutions may recognise the effects of **master netting agreements (MNA)** and **on-balance sheet netting (OBSN)** respectively through modifications of the exposure value; in this respect, these GL clarify that the CRM effects of such techniques may be recognised only through adjustment of the exposure value subject to all the requirements of Chapter 4, including eligibility requirements and methods.

- Article 181(1)(c)–(g) of the CRR state that institutions may recognise the effects of **FCP other than MNA and OBSN** only in their LGD estimates; in this context, it is clarified that, for the purposes of estimating LGD according to Article 181(1)(c)–(g) of the CRR, the references to 'collateral' should be understood as references to FCP other than MNA and OBSN. As MNA and OBSN are already recognised in the exposure value in accordance with Article 166(2) and (3) of the CRR, their effect should not be recognised again through LGD and hence they are also considered out of the scope of application of Article 181(1) of the CRR on own estimates of LGDs. Requirements of Article 181(1)(c)–(g) of the CRR are also not applicable to UFCP, as these are governed separately in Article 183 of the CRR.

- While the term ‘collateral’ is not defined in the CRR, the definitions of FCP and UFCP are provided in Article 4(1)(58) and (59) of the CRR. According to the definitions provided, the fundamental difference between the two types of credit protection lies in the type of risk the protection receiver is exposed to: in the case of FCP, the lending institution bears the risk that the collateral received deteriorates in value, thereby resulting in a lower level of protection, while, in the case of UFCP, the lending institution bears the risk that the protection provider is not able to pay upon default of the obligor. For this reason separate requirements have been specified regarding the recognition of these two different types of credit protection.

- The method for the recognition of UFCP by institutions using the A-IRB approach has been specified in Article 160(5) and Article 161(3) of the CRR for non-retail exposures and in Article 163(4) and Article 164(2) of the CRR for retail exposures. These articles clarify that **UFCP** may be recognised by adjusting PD or LGD estimates in accordance with Article 183(2) and (3) of the CRR and under the constraint that the resulting adjusted risk weight should not be lower than the risk weight that the institution would assign to a comparable direct exposure to the guarantor[9] (the risk weight floor). Alternatively, where the requirements under Articles 202 and 217 of the CRR are met, institutions may recognise the effects of UFCP in accordance with Article 153(3) and Article 154(2) of the CRR, the ‘double default’ formula (applicable to exposures under both the F-IRB and A-IRB approaches). In this respect, Article 161(4) and Article 164(3) of the CRR provide clarifications on the LGD to be used in the double default formula provided by Article 153(3) of the CRR. Finally, it is clarified that the recognition of UFCP in accordance with Article 160(4) and Article 161(1)(c) of the CRR is applicable only where institutions use the F-IRB approach and are therefore out of the scope of these GL.

10. An additional clarification relates to treatment of credit insurance. In particular, focusing on the economic substance of the financial agreement, in accordance with paragraph 36 of the CRM report and Q&A 2014_768,[10] it is clarified that, in the context of the A-IRB approach, credit insurance may be recognised as a guarantee (or a credit derivative) where it effectively functions in an equivalent manner. Since the CRR does not give a definition of guarantees or credit derivatives, it is furthermore clarified that in order to consider credit insurance equivalent to UFCP, and therefore as requiring the same eligibility and adjustment criteria for UFCP as included in Article 183(1)–(3) of the CRR, the credit insurance has to meet the UFCP definition given in Article 4(1)(59) of the CRR. In particular, which specific point of Article 183

[9] It should be noted that in line with the CRR wording the terms ‘guarantor’ and ‘guarantee’ are sometimes used to include both guarantees in the strict sense as well as credit derivatives and, therefore, as synonyms for ‘protection provider’ and ‘UFCP’ respectively. In this respect, for example, the reference to comparable direct exposures to guarantor should be understood as referring to comparable direct exposures to protection provider.

[10] This Q&A (https://eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2014_768) specifies that credit insurance can qualify as a guarantee, but that this depends on the circumstances of the individual case and on the intrinsic characteristics of the contract and its economic substance.

of the CRR should apply (i.e. points (1) and (2) for guarantees or point (3) for credit derivatives) will depend on the substance of the contract.

11. Regarding the scope of application of these GL, it is moreover clarified that it does not include potential support from third parties to the obligor, which can be reflected in accordance with paragraphs 62 to 64 of the EBA GL on PD and LGD estimation, as it does not constitute a CRM technique. Therefore, the treatment of rating of third parties is not considered a method for recognising CRM. In particular, the rating transfer of paragraph 62(a) of those guidelines, i.e. the reference to 'appropriate guarantee', reflects support provided by the third party to the obligor and not to the institution itself, as would be the case under the definition of UFCP as a form of CRM technique given in points (57) and (59) of Article 4(1) of the CRR.

12. It should be noted in this context that providing support by a third party to the obligor does not require any action from the lending institution and if it is efficient it may decrease the PD of the obligor. In contrast, CRM is a protection provided for the lending institution and, in accordance with Article 178(1) of the CRR, as further clarified in the EBA Guidelines on the application of the definition of default, the use of CRM is an indication of default of the obligor.

2.3 Eligibility requirements

13. For exposures to which institutions apply the A-IRB approach, the CRR specifies the eligibility requirements for (i) FCP (other than MNA and OBSN) in Article 181(1)(f) and (ii) UFCP in Article 183(1). In accordance with these provisions the A-IRB institutions are required to ensure that the CRM meets the fundamental elements of the eligibility criteria, while at the same time the hierarchy of the approaches is maintained by allowing a broader range of CRM techniques to be recognised under the A-IRB approach than under the less sophisticated approaches. Under the SA and F-IRB approach, the eligibility requirements of Chapter 4 are very restrictive considering the limitations of the methods for the recognition of CRM. Under the A-IRB approach, the risk sensitivity is enhanced through broader eligibility of CRM techniques provided that institutions can adequately reflect their effects in the LGD estimates.

2.3.1 Eligibility requirements for funded credit protection

14. With regard to FCP (other than OBSN and MNA), Article 181(1)(f) of the CRR establishes that, if collateral is taken into account in the LGD estimation, institutions should set internal requirements for collateral management, legal certainty and risk management that are 'generally consistent with those set out in Chapter 4, Section 3'. The lack of guidance on the concept of general consistency is an issue that has been highlighted by the industry as being a source of uncertainty and variability in the application of the CRR provisions with respect to CRM for exposures treated under the A-IRB approach (A-IRB exposures). Some clarification has already been provided in Article 55 of the Final draft regulatory technical standards on the specification of the assessment methodology for competent authorities regarding compliance of an institution with the requirements to use the IRB Approach in accordance with

Articles 144(2), 173(3) and 180(3)(b) of Regulation (EU) No 575/2013 (RTS on AM),[11] which specifies that, for the purposes of Article 181(1)(f) of the CRR, general consistency should be understood as, or would be fulfilled by, full consistency with the requirements for collateral valuation and legal certainty. In other words, if the institution's policies are fully consistent with those specified in Chapter 4, Section 3, for collateral valuation and legal certainty, this ensures that they meet the general consistency requirement of Article 181(1)(f) of the CRR.

15. Moreover, an implication of Article 181(1)(f) of the CRR is that institutions should provide appropriate internal requirements for collateral management, legal certainty and risk management for any collateral agreement taken into account in the LGD estimation and not only for those types of collateral that are listed in Chapter 4, Section 3.

16. These GL therefore provide the following two clarifications:

- General eligibility principles on legal certainty and collateral valuation should apply to all collaterals used for the purposes of LGD estimation. In other words, these principles form a minimum set of eligibility requirements that is meant to ensure that all collateral types, even those that are not explicitly included in any of the broad categories described in Chapter 4, Section 3, are subject to the assessment of legal certainty and collateral valuation. In particular:

    i. In terms of general principles on legal certainty applicable to all collateral used in LGD estimation, institutions should establish internal requirements that ensure that the collateral agreement is legally effective and enforceable, i.e. ensuring the power of the creditor to enforce the realisation of the collateral. Institutions should have the right to liquidate or take legal possession of the collateral even in the event of the bankruptcy or insolvency of the obligor and, where applicable, of the custodian holding the collateral (i.e. where the bankruptcy or insolvency of the custodian coincides with the default of the obligor). The enforced liquidation or repossession of collateral should be possible in a 'reasonable timeframe (in line with Article 210(a))' considering the market and legal environment in a relevant jurisdiction.

    ii. In terms of general principles on collateral valuation applicable to all types of collateral used in the LGD estimation, institutions should specify in their internal policies the rules governing the revaluation of the collateral, including methods and frequency of monitoring of the value of the collateral, which should be consistent with the type of collateral, taking into account the volatility of the value. Moreover, more frequent monitoring should be carried out where the market is subject to significant changes in conditions.

- A mapping of Chapter 4, Section 3, to legal certainty and collateral valuation is tailor-made for a subset of broad categories of collateral, i.e. the minimum criteria that the A-IRB

[11] https://eba.europa.eu/documents/10180/1525916/Final+Draft+RTS+on+Assessment+Methodology+for+IRB.pdf/e8373cbc-cc4b-4dd9-83b5-93c9657a39f0

institutions should consider in satisfying the requirement of full consistency in Article 55 of the RTS on AM and, consequently, in satisfying the requirement of general consistency in Article 181(1)(f) of the CRR. It is worth noting that the general principles provided for all types of collateral are based on the eligibility requirements of Chapter 4, Section 3. This implies that full compliance with the legal certainty and collateral valuation requirements of Chapter 4, Section 3, for those collaterals that are included in one of the broad categories presented in that section, would ensure also compliance with these general principles. The GL do not provide any specific mapping for risk management requirement, as ensuring legal certainty, valuation of collateral and regular review of the value is considered to be part of overall risk and collateral management. Finally, further requirements on valuation of eligible collaterals are included in line with Article 229 of the CRR. While the reference in Article 181(1)(f) is only to Section 3 of Chapter 4, the requirements in this section referring to 'valuation', especially those of Article 208(3) and Article 210(g) relevant to immovable property and other physical collaterals, have to be read together with Article 229 of the CRR. Therefore, in order to ensure consistency and comprehensiveness of the requirements it is clarified that the principles specified in Article 229 of the CRR always apply to both initial valuation and any subsequent re-evaluation under all approaches, including under the A-IRB approach. However, while Article 208(2) and (3) of the CRR always applies, the requirements of paragraph 19(b) of the GL on valuation and revaluation of immovable property collaterals should be understood as applying only to valuation and revaluation of immovable property collaterals conducted after the application date of these GL (1 January 2022), consistently with the Guidelines on loan origination and monitoring[12].

17. Notwithstanding the non-applicability of Article 194 of the CRR to A-IRB exposures,[13] the GL clarify that, in order to verify the legal certainty requirements for FCP, institutions should obtain a legal opinion confirming the legal effectiveness (i.e. the fact that the collateral arrangement is valid and binding) and enforceability of the FCP in all relevant jurisdictions. Moreover, the GL specify that the opinion should be provided in a written form by a legal counsel who is independent from the credit decision process and is not responsible for originating or renewing the exposures under consideration.

18. It is further clarified that the legal opinion should be obtained by the institution at least for each type of collateral arrangement rather than for each specific collateral arrangement. Where a single legal opinion is issued for multiple collateral arrangements, that legal opinion must relate to the same applicable law and must be in relation to the same type of obligor. Any substantive variation to the terms of the collateral arrangement that could affect the legal effectiveness and enforceability of the specific collateral arrangement should trigger the need for an additional legal opinion. In this respect the GL clarify that, at a minimum, changes in the legal framework applicable to the collateral arrangements and application of the collateral arrangement to other types of exposures or to obligors classified to other exposure classes should always be considered cases of substantive variation to the terms of the contract. Moreover, specifically

[12] https://eba.europa.eu/regulation-and-policy/credit-risk/guidelines-on-loan-origination-and-monitoring.

[13] This requires institutions to obtain an 'independent, written and reasoned' legal opinion confirming that the credit protection is 'legally effective and enforceable in all relevant jurisdictions'.

within the retail exposure class, institutions should differentiate between private individuals and legal entities, as in these cases different legal regulations may apply. Therefore, as an example, the application of the collateral arrangement, which is normally used for exposures to individual persons, to an exposure to an SME should be considered a substantive variation of the contract and should be accompanied by a new legal opinion. On the contrary, the application of such collateral arrangements to exposures to other individual persons should not be considered a substantive variation of the contract and would not require a new legal opinion.

19. While it is important to ensure legal certainty of the CRM techniques, especially when they are recognised in the calculation of own funds requirements, the EBA recognises that assessing legal certainty may be challenging, in particular in cases where the collateral has the form of a movable physical asset. The GL provide principles for institutions on how to achieve a sufficient level of legal certainty while avoiding excessive burden and unjustified costs. In particular, the GL specify a minimum list of jurisdictions that should be considered relevant for a given physical collateral other than immovable property, and for which the legal opinion should be provided. In addition, institutions should consider whether for a given collateral there are also other jurisdictions that should be considered relevant.

20. The list of jurisdictions that should be considered relevant includes the jurisdiction where it is most likely that the realisation of the collateral would be carried out, should this be necessary. While in some cases it may not be easy to foresee the place of realisation of collateral, the choice of this most likely jurisdiction could be based on one of the following considerations:

- contractual specification of the location to which the obligor is obliged to move the collateral in the event of non-payment;
- legal obligation of the obligor to move the collateral to a location specified by the creditor, stemming from international regulations or conventions;
- previous experience with regard to realising collateral of the same type;
- in cases such as leasing exposures, where the asset is owned by the institution, the most likely choice of the institution.

In some cases, it may be difficult to specify just one jurisdiction where the potential realisation of collateral would take place. In such case, where there are two or more jurisdictions where the realisation of collateral is equally likely, institutions should include jurisdictions considered relevant, as specified in paragraph 23(e) of the GL.

21. It should be noted that the GL do not require a separate legal opinion for each relevant jurisdiction. Where possible, institutions may rely on a single legal opinion covering several jurisdictions. This may be possible in particular in those cases where international regulations have been adopted that provide a robust international framework enforcing creditors’ rights over their collateral. Such regulations would typically have a form of an international convention that has been adopted or confirmed by a number of jurisdictions. The assessment based on

international regulations should therefore include a clear identification of whether these regulations cover all jurisdictions relevant for a given collateral and an assessment of whether they ensure legal effectiveness and enforceability of the collateral, as well as the types of collateral that are subject to the regulations.

2.3.2 Eligibility requirements for unfunded credit protection

22. With regard to UFCP, Article 183(1)(c) of the CRR establishes legal certainty requirements for the assessment of guarantees and credit derivatives. In particular, it requires that the guarantee[14] is (i) documented in writing; (ii) non-cancellable on the part of the guarantor; (iii) in force until the obligation is satisfied in full (to the extent of the amount and tenor of the guarantee); and (iv) legally enforceable against the guarantor. These requirements aim to ensure that the guarantees are binding on all parties (i.e. legally effective) and that the creditor has the power to realise the guarantee (i.e. it is legally enforceable). In addition, Article 183(1)(a) and (b) of the CRR provide rules related to the eligibility of the guarantors.

23. Consistently with the guidance provided for FCP, notwithstanding the non-applicability of Article 194 of the CRR to A-IRB exposures, the GL clarify that, in order to verify the legal certainty requirements for UFCP, institutions should obtain a legal opinion confirming the legal effectiveness (i.e. the fact that the UFCP arrangement is valid and binding) and the enforceability of the UFCP in all relevant jurisdictions, as required in Article 183(1)(c) of the CRR. In particular, the GL clarify that this legal opinion should be obtained by the institution for each type of UFCP contract rather than for each specific UFCP contract (noting that a single legal opinion can be obtained for multiple UFCP contracts, if they are subject to the same applicable law). The opinion should be provided in written form by a legal counsel who is independent from the credit decision processes responsible for originating or renewing the exposures under consideration.

2.4 The effects of credit risk mitigation

24. The focus of these GL is on providing guidance on how institutions may recognise the CRM effects of UFCP and FCP such as MNA and OBSN. Guidance on how FCP other than MNA and OBSN should be recognised in the institutions' LGD estimates has already been provided in the EBA GL on PD and LGD estimation. It is important to highlight that the relevant requirements with respect to the estimation of risk parameters also apply when recognising CRM techniques using own LGD estimates, including that the relevant data must be collected and stored, the estimates must be based on material risk drivers and empirical evidence and not only on judgemental considerations, and the estimates must be validated against the observed loss experience. The burden of proof of adequacy and compliance with these requirements rests on the institutions.

[14] As clarified before, in line with the CRR wording of Article 183(1), the term 'guarantee' is here used to include both guarantees in the strict sense as well as credit derivatives.

25. These GL do not prescribe any specific methodology that should be used in order to recognise the effects of CRM in the estimation of risk parameters. It is recognised that various estimation methodologies may be valid, depending on specific circumstances, portfolios and processes. However, it is considered appropriate to specify certain principles that should be adhered to regardless of the methodology that is chosen.

2.4.1 The effects of funded credit protection

26. The GL also clarify that FCP other than MNA and OBSN cannot be recognised in the exposure value but may be recognised in the institutions' LGD estimates in accordance with letters (c)–(g) of Article 181(1) of the CRR and the guidance provided in the EBA GL on PD and LGD estimation. It should be noted that, whereas institutions are required to collect information about the cash flows and allocate them to the specific collateral in accordance with paragraph 114 of the EBA GL on PD and LGD estimation, this should not constitute a constraint on the institutions' design of LGD models, which are not required to be based on components such as secured LGD and unsecured LGD.

27. Article 166(2) and (3) of the CRR clarifies that the effects of MNA and OBSN should be recognised in the exposure value in accordance with Chapter 4. For MNA this implies that institutions may use the supervisory volatility adjustments approach or the own estimates volatility adjustments approach in Article 220 of the CRR or, subject to the permission of the competent authority, the internal model approach in Article 221 of the CRR in order to calculate the fully adjusted exposure value (E*) to be used for the purposes of RWEA and expected loss (EL) calculation. For OBSN, as clarified in the GL, institutions may also calculate the E* to be used for the purposes of RWEA and EL calculation. However, in contrast to the treatment of MNA, for OBSN the E* should be calculated in accordance with Article 223(5) of the CRR. In both cases (MNA and OBSN), the effects of netting are directly recognised in the E* and do not affect the LGD.

28. In this respect, it is important to ensure that, for exposures that are covered by either OBSN or MNA, the netting is not double counted and that the associated LGD is estimated properly by institutions. Therefore, for both OBSN and MNA, for the purposes of RWEA calculation the E* obtained in accordance with Chapter 4 is multiplied by the risk weight assigned to the original exposure as if the exposure were not secured by OBSN or MNA. The same exposure value and risk parameters should be used for the calculation of the RWEA and the EL amount. In order to ensure proper estimation of the LGD, the GL clarify how to calculate the numerator and denominator of the realised LGD for exposures that are covered by netting arrangements. In particular:

- in order to keep consistency between the exposure value used for the calculation of the realised LGD and the adjusted exposure value used for the computation of RWEA, both the economic loss (i.e. the numerator of the realised LGD) and the amount outstanding at default used as denominator of the realised LGD should be computed according to the adjusted exposure value but, in accordance with paragraph 131 of the EBA GL on PD and LGD estimation, should include any amount of principal, interest or fee realised so far;

- since the starting point of the economic loss is an adjusted exposure value that already reflects the netting effects, no cash flows from netting should be included as recoveries in the calculation of the economic loss.

29. The following example presents the treatment applicable for both OBSN and MNA:

- An institution has an exposure of 100 to a retail client, which is secured by a netting agreement with a deposit of 30 from this retail client (no maturity mismatch).

- The PD assigned to this client is 0.5%.

- The LGD estimate for this exposure is 75%. The LGD estimate is based on realised LGDs of past exposures: a similar exposure had a gross exposure value (E) of 50 and an E* of 20. Discounted cash flows from recoveries (excluding netting cash flows) were 5. The realised LGD is thus $\frac{20-5}{20} = 75\%$.

For the calculation of the RWEA and EL amount, the institution should use 70 (E*) as the exposure value. The PD and LGD for calculating the risk weight should not contain any cash flows from the deposit of 30. Therefore, for the exposure in the example, institutions should calculate RWEA and EL amount in the following manner:

RWEA = $70 \cdot RWformula(PD = 0.5\%; LGD = 75\%)$

EL amount = $70 \cdot 0.5\% \cdot 75\%$.

The cash flows from the deposit of 30 used for netting are considered neither in the LGD estimate nor in the realised LGD.

30. Finally, additional guidance is provided in order to ensure that the criteria specified by institutions for adjusting LGD are consistent with Article 181(1) of the CRR. In particular the following aspects are pointed out:

- In accordance with Article 181(1)(c) of the CRR, in cases where there is a significant degree of dependence between the risk of the obligor and the risk of the collateral, such dependence should be addressed by institutions in a conservative manner. When the collateral provided by the obligor corresponds to one of its own liabilities (e.g. obligor’s own bonds or equity) that ranks lower than or pari passu with the obligation of the obligor that they collateralise, in terms of seniority of the claim, this dependence is full. If the obligation is secured by the obligor’s own equity, the dependence is always full. Therefore, consistently with the fact that such liabilities are residual claims with respect to the main obligation, the GL clarify that such collateral should not lead to any reduction in the institutions’ LGD estimates. As an example, where an institution invests in a corporate bond that is collateralised by the institution's own equity, the presence of such collateral should not reduce the LGD that the institution would assign to the uncollateralised corporate bond.

- For other than first rank claims, institutions should ensure that the valuation carried out is sufficiently risk sensitive to properly reflect the effects on LGD of the subordinated position of the institution in relation to the collateral.

- For other physical collateral, especially where the collateral is likely to move between jurisdictions during the lifetime of the loan, institutions should consider whether the potential location of the collateral at the moment when there is a need to realise it could influence the institutions' ability to expeditiously gain control over it. If uncertainty exists with regard to the ability to gain control over the collateral to the length of time it might take to realise it, such uncertainty should be reflected appropriately in the LGD estimates.

2.4.2 The effects of unfunded credit protection

Methods available to institutions

31. This section aims to outline the scope of methodologies that can be used for the purposes of recognising the effects of UFCP under the A-IRB approach. In particular, as clarified in the GL and also shown in Figure 2, three options are envisaged in the CRR:

    - In accordance with Article 160(5), Article 161(3) and Article 164(2) of the CRR, institutions may **adjust PD or LGD estimates** based on the criteria specified by institutions. In particular, Article 183(2) and (3) of the CRR specifies how institutions may adjust their risk parameters in order to recognise the effects of guarantees and credit derivatives. In this context, without prejudice to the constraint that the resulting adjusted risk weight should not be lower than the risk weight floor, the GL clarify that institutions have three alternative approaches in order to perform such adjustments:

        i. The **modelling approach**. This reflects the effects of the UFCP by estimating new risk parameters and, in particular, by considering the UFCP in the estimation of LGD, and in some cases also in the estimation of PD.

        ii. The **substitution of risk parameters approach**. This is understood as an extreme adjustment of PD and LGD, in which both the PD and LGD of the obligor are substituted with the PD and LGD that the institution would assign to comparable direct exposures to the guarantor whose direct exposures are treated under the A-IRB or F-IRB approach (A-IRB guarantor and F-IRB guarantor respectively).

        iii. The **override**. In accordance with Article 172(3) of the CRR and Section 8.2 of the EBA GL on PD and LGD estimation, if there are individual and exceptional circumstances related to a given UFCP that the model cannot reasonably take into account, institutions have the option of adjusting risk parameters in the application of the model, through overrides in the grade assignment process.

- In the case of guarantors whose direct exposures are treated under the SA (SA guarantors), in accordance with Article 183(4) of the CRR, institutions may recognise the UFCP in accordance with the requirements (eligibility criteria and methods) of Chapter 4 and therefore by applying the SA risk weight that the institutions would assign to comparable direct exposures to the guarantor (the **substitution of risk weight approach**).

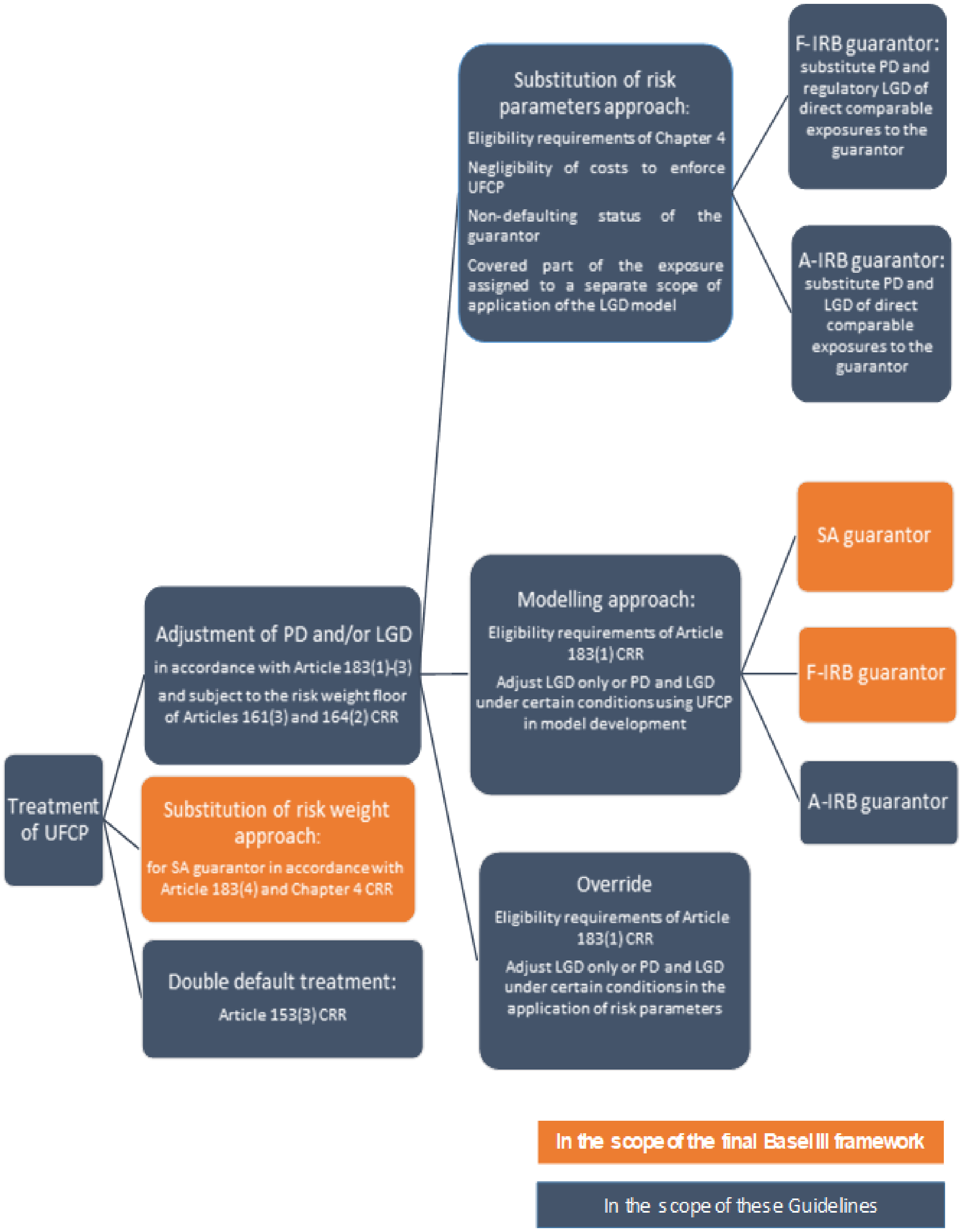
- Finally, UFCP may be recognised via the treatment proposed under Article 153(3), Article 154(2), Article 161(4) and Article 164(3) of the CRR (the **double default treatment**) provided that the requirements under Articles 202 and 217 of the CRR are met.

Institutions’ policies and criteria

32. Having clarified the methods and approaches to recognise CRM in the institutions’ risk parameters, it is important to ensure that institutions cannot choose arbitrarily among these approaches in order to reduce capital requirements. In this respect, rather than requiring institutions to use one of the specific methodologies described above, the GL clarify that institutions should have policies for assessing and recognising the effects of UFCP that are clear, consistent with their risk management practices and applied by institutions consistently over time and for a specific type of exposures. This means, for instance, that the substitution of risk parameters approach may be applied for the type of guaranteed exposures in which the collection and recovery processes assume these guarantees to be the first and main source of recovery. These policies should include a clear specification of the scope of application of each specific method/approach described above, i.e. for each rating system institutions should specify which approach applies. Consistency in the application of the methods for the recognition of UFCP is important in order to reduce arbitrage opportunities.

33. Moreover, in order to ensure appropriate LGD estimation it was considered necessary to specify the treatment of ineligible UFCP. Similarly to the case of ineligible collateral, the inclusion of cash flows from ineligible UFCP in the calculation of realised LGD could potentially bias the unsecured LGD, if not monitored properly. It is therefore proposed to align the treatment of cash flows from ineligible UFCP to the treatment of cash flows from ineligible collateral as specified in paragraph 127 of the EBA GL on PD and LGD estimation. In particular, as clarified in the GL, if the UFCP is ineligible, it should not be recognised using any of the methods specified above. Moreover, for the purposes of LGD estimation the cash flows received from ineligible UFCP should be treated as if they had been received without the use of UFCP, i.e. as if they were unsecured. However, institutions should in any case collect the information on these cash flows, monitor their levels and where necessary perform appropriate adjustments to avoid any bias in the LGD estimates.

Figure 2: Alternative approaches to recognise the effects of UFCP



Modelling approach

34. The GL also clarify that where institutions adopt the modelling approach to assess and recognise the effects of UFCP they should consider and take into account, if relevant, in their LGD estimates in a conservative manner the following elements:

- potential currency mismatches between the underlying obligation and the UFCP; this is to ensure consistency with the requirement of Article 181(1)(d) of the CRR in the case of FCP;
- the correlation between the guarantor's ability and willingness to perform under the obligation and the obligor's ability to repay; this is to ensure consistency with Article 181(1)(c) of the CRR in the case of FCP;
- the defaulted status of the guarantor and its resulting reduced ability to repay; in particular, in case there are limited data for modelling the effect of a defaulted guarantor, an appropriate level of conservatism has to be reflected either through margin of conservatism in the estimation or through additional conservatism in the application of risk parameters.

35. The GL clarify that, in adopting the modelling approach, institutions may adjust either the LGD only or both PD and LGD. Moreover, it is clarified that the simultaneous adjustment of PD and LGD should be limited to those cases where the adjustment of only the LGD does not fully reflect the effects of the UFCP and so the adjustment of the PD does not lead to double counting. The adjustment of only the PD parameters is not allowed in any circumstances, as this would be inconsistent with the requirement of Article 178 of the CRR that the need of the institution to realise any collateral or UFCP indicates default of the obligor (this applies also in cases where the guarantor takes over the original schedule of payments from the obligor). Based on this principle, any observations from past realisations of UFCP should be reflected in the estimation of LGD, and not PD, of the obligor. The UFCP may also have an effect on the PD of the obligor only if institutions can provide empirical evidence that the existence of the UFCP influences the behaviour of the obligor in such a way that the obligor is more likely to pay its obligations on time.

36. Bearing in mind that the recognition of CRM effects under the A-IRB approach is ruled by Chapter 3 of Part Three, Title II, of the CRR, an important clarification included in the GL is that the adjustments of the LGD estimates should be performed based on historical experience (i.e. cash flows received from guarantors and costs associated with the realisation of the UFCP). According to Article 179(1)(a) of the CRR, LGD estimates should not be based purely on judgemental considerations. Therefore, institutions are not allowed to use pure theoretical models for the purposes of recognising the effects of UFCP in their risk parameters. That said, if historical experience and empirical evidence are the main driver of the adjustments of the grades, pools or LGD estimates, human judgement is also important in ensuring the appropriateness of the models and assumptions, as specified in Section 4.3 of the EBA GL on PD and LGD estimation. Any theoretical assumptions used should be adequately calibrated and back-tested by the institutions.

Substitution of risk parameters approach

37. The substitution of risk parameters approach is understood for A-IRB exposures as an extreme adjustment of the PD and LGD of the original exposure that implies the treatment of a guaranteed exposure as if it were a direct exposure to the guarantor. In order to ensure consistency with the application of the same approach to exposures that are treated under the F-IRB approach, the GL clarify that, for the purposes of applying the substitution of risk parameters approach, the UFCP should be eligible in accordance with the requirements of Chapter 4. Moreover, two additional conditions for the use of the substitution of risk parameters approach are envisaged. The first additional condition is that the costs of exercising the UFCP should be expected to be negligible compared with the amount of the credit protection provided. Otherwise, it would be more prudent to reflect the effects of such UFCP and related costs through adjustment of the LGD estimates via the modelling approach. The second additional condition is that the guarantor is in a non-defaulted status. In this respect it is important to clarify that, in the event of default of the guarantor during the lifetime of the loan, institutions applying the substitution of risk parameters approach should treat the exposure as unsecured (i.e. not covered by this UFCP). It is considered inappropriate to use risk parameters of a defaulted guarantor for an exposure to a performing obligor. Furthermore, as the rating system is subject to the substitution of risk parameters approach, institutions would not be able to reflect the effect of such guarantee in the LGD of the obligor. It can be noted that, under the modelling approach too, such cases should be treated with caution, as it is expected that limited data are available to support the estimates where both obligor and guarantor default.

38. A number of specific clarifications are provided for the application of both the substitution of risk parameters approach and the substitution of risk weight approach. In particular:

- Institutions should continue to collect and store information related to the classification and performance of the obligor and the exposure (i.e. all data relevant to PD and LGD estimation) and use this information in the estimation of the PD of the obligor. This aspect has also been clarified in Chapter 5 of the EBA GL on PD and LGD estimation. This is to ensure that institutions use all relevant information and all available default observations in the estimation of the PD of the obligor.

- Institutions should consider the nature of the obligor for internal risk management purposes, recognising the different nature and, therefore, separately assessing direct and indirect exposures towards the guarantors. Given that the exposures guaranteed by certain entities may have significantly different risk profiles from direct exposures to such entities, institutions should be able to analyse these different risk profiles and, if necessary, adapt their credit policies. Institutions should also be able to analyse whether the processes of collecting the payments are similarly efficient in cases of direct and indirect exposures and hence they should be able to assess whether the use of the substitution approach is appropriate

- Institutions should define *ex ante* a separate scope of application of the LGD model and calculate separately the risk weight for the type of guaranteed exposures or part of exposures that will be treated in accordance with the substitution of risk parameters approach or the substitution of risk weight approach and that will therefore be assigned to the PD and LGD of a comparable direct exposure to the guarantor or the risk weight of the guarantor respectively.

  This is supported by the fact that institutions are treating the part of the exposure that is covered by the UFCP as a direct exposure towards the guarantor for risk management purposes. Assigning different PDs to different parts of the exposure (as in the substitution of risk parameters approach, where the guaranteed part receives the PD of the guarantor and the unguaranteed part the PD of the obligor) implies that the calculation of risk weight should be performed separately for the part of the exposure that is covered by the UFCP and also, therefore, the computation of the LGD. This is supported by Article 172(1)(e)(ii) of the CRR, which allows different PDs to be assigned to the parts of exposures covered by a guarantee. The separate calculation of risk weight is a direct consequence of the use of a different PD and is equivalent to using a different risk weight under the substitution of risk weight approach envisaged in Article 183(4) of the CRR for A-IRB exposures covered by UFCP provided by SA guarantor.

  It is important to note that using a different risk weight for a part of exposure due to the existence of a guarantee is an exception to the general rule that the risk weight should be calculated in accordance with the formula laid out in Articles 153 and 154 of the CRR and taking into consideration the full amount of the exposure. In fact, as also clarified in Q&A 2016_2560[15] for retail exposures secured by immovable property, in cases of exposures that are partially secured by FCP, institutions should calculate the RWEA in accordance with either Article 153 or Article 154 considering the full exposure.

  It should be noted that the exception made for exposures that are partially secured by UFCP and to which institutions apply the substitution of risk parameters approach goes in the direction of the treatment proposed for F-IRB exposures covered by a guarantee (Article 236 of the CRR), which is proposed to be an option open to A-IRB institutions in the final Basel III framework published in December 2017. Finally, it is important to note that the exception described above refers only to the use of risk parameters and the calculation of the risk weight and EL.

39. While the PD estimates are relevant to the obligors and hence all observations should be used regardless of the approach used to recognise the UFCP, the LGD estimates are specific to specific types of facilities. The facilities covered by UFCP may be treated as under the scope of a separate LGD model. Therefore, it is clarified that, for such guaranteed exposures under the substitution of risk parameters approach, institutions are not required to estimate the LGD parameters other than the LGDs of comparable direct exposures to the guarantor.

[15] https://eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2016_2560

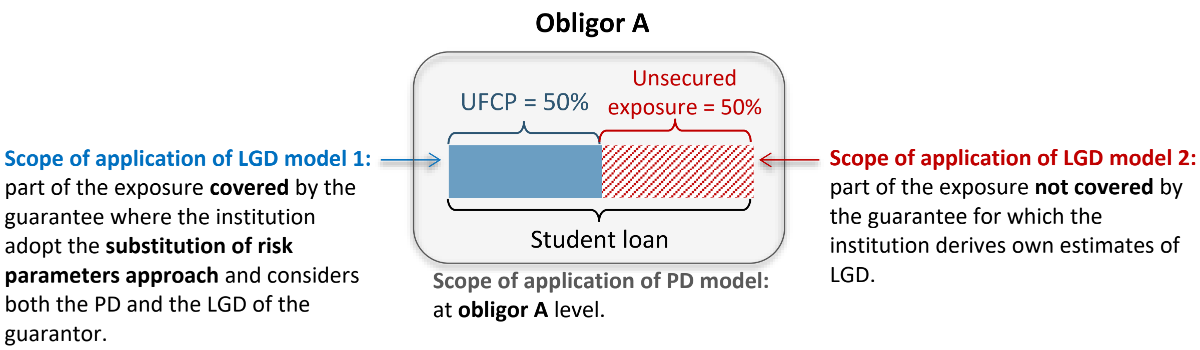
40. The GL provide clarifications on how to apply the substitution of risk parameters approach in the case of guarantees that only partially cover the exposure value. This is also presented in the example in Figure 3, which describes a student loan that benefits from a guarantee covering 50% of the loan. The GL clarify that institutions should be able to split the exposure into two separate parts:

- The part of the exposure covered by the UFCP, to which they apply the substitution of risk parameters approach, and which will be within the separate scope of application of the LGD model. In Figure 3 the 50% of the student loan towards obligor A will be assigned to the scope of application of LGD model 1 for exposures to which the substitution of risk parameters approach is applied, where the PD and the LGD of comparable direct exposures to the guarantor are used.

- The part of the exposure that is not covered by the UFCP (in the example, the remaining 50% of the student loan, which does not benefit from the guarantee), to which institutions should assign the PD and LGD estimates applicable to exposures that do not benefit from UFCP, and which is assigned to the scope of application of the LGD model relevant to exposures that do not benefit from UFCP. For the purposes of LGD estimation this part of the exposure will be treated as if it were a separate facility.

  The PD of the obligor is estimated at the level of the obligor and hence for this purpose the exposure should not be split. In Figure 3 the whole student loan is in the scope of application of the PD model and should be treated as one observation. However, this PD estimate is used only in the calculation of the risk weight for the unsecured part of the exposure. The risk weight for the part of the exposure covered by the UFCP under the substitution of risk parameters approach is calculated separately, with the use of risk parameters of the comparable direct exposure to the guarantor. It has to be stressed that such split of exposure and separate calculation of the risk weight is possible only due to the existence of a UFCP and the use of the substitution of risk parameters approach, and that it is not allowed under the modelling approach.

Figure 3: Scope of application of PD and LGD model for a student loan to obligor A that benefits from a 50% guarantee



41. For the purposes of properly estimating the LGD on the part of the exposure that is not covered by the UFCP, institutions should be able to adequately split the cash flows and costs. This will allow the calculation of realised LGD only on the part of exposure not covered by the UFCP, as if it were a separate facility. The GL provide guidance on how institutions should split cash flows and costs between the part of the exposure that is covered by the UFCP, and to which the substitution of risk parameters approach is applied, and the part of the exposure that is not covered by the UFCP.

42. It is important to note that, in cases of a UFCP provided by a SA guarantor that only partially covers the exposure, under the substitution of risk weight approach, the risk weight of the guaranteed part of the exposure is applied in accordance with the SA while the risk weight of the remaining part of the exposure is calculated in accordance with the A-IRB approach. In this case, in order to correctly calculate the RWEA for each part of the exposure, it is necessary not only to calculate the appropriate risk weight but also to determine the exposure value, which is defined differently under the SA and under the IRB approach. Under the SA the appropriate portion of specific credit risk adjustments (SCRA) should be deducted from the exposure value while under the IRB approach the SCRA are part of the exposure value. The allocation of SCRA between the guaranteed and not guaranteed parts of the exposure is therefore important, since it affects the final RWEA. Whereas the GL provide guidance on how to allocate CRM, costs and cash flows, they do not include guidance on how to allocate SCRA. This is addressed in the CfA report, where the suggestion was to allocate SCRA first to the unsecured part. However, since the GL should not pre-empt any potential decision that may be taken in that regard by the Commission, it has been decided to keep this issue out of the scope of the GL.

43. The substitution of risk parameters approach assumes the treatment of a guaranteed exposure as if it were a direct exposure to the guarantor. In order to appropriately reflect such treatment in the resulting risk weight, it is necessary to substitute both the PD and LGD parameters. In a specific case of an exposure to a defaulted obligor that still benefits from a valid guarantee, the same principle can be followed only by directly applying a risk weight applicable to a comparable direct exposure to the guarantor. Consequently, as the EL will be allocated as for a comparable direct exposure to the guarantor, there is no need to estimate another EL_{BE} in this case.

44. However, regardless of the use of the risk weight and the EL of a comparable direct exposure to the guarantor, the whole exposure to a defaulted obligor should be considered defaulted for the purposes of the calculation of the IRB shortfall or excess in accordance with Article 159 of the CRR. This is consistent with the treatment of these exposures as impaired in accounting.

45. Irrespective of the methods and approaches chosen to recognise the effects of UFCP, institutions need to comply with Article 185 of the CRR and perform the back-testing of the risk parameters. This implies that institutions should back-test the adjusted risk parameters, PD and LGD, including the effects of the UFCP. This is straightforward if institutions apply the modelling approach and, therefore, the adjusted PD and LGD estimates reflect the risk characteristics of the guaranteed exposure. If institutions apply the substitution of risk parameters approach

instead, the adjusted parameters reflect the risk characteristics of comparable direct exposures to the guarantor. In this case, back-testing the PD and LGD based on the performance of the exposure to the obligor would be meaningless. In particular, the observed default rate associated to the obligor would not correspond to the PD estimated for the guarantor. Therefore, the GL give more clarity on what additional quantitative validation tools can be used in order to ensure that the substitution of risk parameters approach has been applied correctly and that no bias stems from the utilisation of such approach.

46. This additional validation tool consists of a comparison between (i) the observed loss rate on exposures where the obligors defaulted and that were considered guaranteed at the moment of default and (ii) the EL of comparable direct exposures towards the guarantor. This requirement covers the gap remaining after the application of the normal back-testing approach, which is performed only on the portfolio of direct exposures to entities such as the guarantor, but not to indirect exposures. Furthermore, the aim of this additional validation tool is to check the effectiveness of the guarantee and of the guarantor. If the results of this additional validation tool are negative, the institution should analyse whether this might be the result of lower than expected efficiency of the guarantee or the guarantor and whether the eligibility requirements are met. It should be stressed that, as the substitution of risk parameters approach is a method of PD and LGD adjustment, all relevant requirements for risk parameters estimates apply and institutions should verify, in particular, that the assumptions under which this method is used are met.

Recognising UFCP through overrides

47. The GL clarify that, in order to recognise the effects of the UFCP through overrides, institutions should be able to show that the nature and the non-modellable characteristics of the UFCP do not allow the use of either the modelling approach or the substitution of risk parameters approach. It is important to note that in most of the cases the override will affect the LGD of the exposure. If the PD is also adjusted through overrides, it is important to underline that the final PD is still a parameter of the obligor and does not reflect the PD of the guarantor. The PD of the obligor can be adjusted only if the factor taken into account through overrides is not reflected in the model, but influences the obligor's ability or willingness to pay.

Calculation of the risk weight floor

48. Article 161(3) and Article 164(2) of the CRR require that, where the effects of UFCP are recognised through adjusting the risk parameters, institutions should not assign an adjusted risk weight to the guaranteed exposure that is below the risk weight of a comparable direct exposure to the guarantor, which therefore acts as a risk weight floor. The GL clarify that the risk weight floor should apply any time the eligible UFCP affects the estimates of any of the risk parameters in such a way that it leads to a lower risk weight, i.e. any time institutions recognise the effect of the UFCP with any of the methods described in paragraph 31(a) of the GL. In this context it is important to clarify that the estimates may be affected in various ways, not only if there is an explicit risk driver in the model, but also indirectly in the calibration of LGD, if recoveries from guarantees are included in the realised LGDs of past observations and in this

way lead to a different level of LGD estimates. However, the application of the floor should not lead to a higher risk weight than that which would apply if the institution did not use the UFCP.

49. The starting point for a proper application of the risk weight floor should be the determination of the exposure covered by the UFCP, i.e. the value of the UFCP. The GL clarify that, for the purposes of applying the substitution of risk parameters approach and for calculating the risk weight floor, the value of the protection should be specified in accordance with Article 233 and Article 239(3) of the CRR in order to properly include the effects of currency and maturity mismatches between the protection and the original exposure. In this way, like for the eligibility requirements, it is ensured that the substitution of risk parameters approach is applied consistently across exposures under the A-IRB and F-IRB approaches. It is moreover clarified in the GL that, after having included any maturity mismatch consideration in the calculation of the value of the UFCP, in order to avoid a double counting of the maturity mismatch, in the calculation of the risk weight of a comparable direct exposures to the guarantor the maturity parameter should be the same as the maturity of the exposure to the obligor.

50. Where the UFCP covers only residual amounts remaining after pursuing the obligor and other forms of CRM, the amount that the guarantor has undertaken to pay is not defined *ex ante* in the contract. The GL clarify in this respect that institutions should estimate the value of the UFCP based on past experience in a conservative manner. This implies, for example, that, where institutions do not have enough data to perform reliable estimates of the residual amount, the amount of the UFCP should be assumed to be zero. Consistently with the requirements of Chapter 4 there are two exceptions from this general principle: (i) for residential mortgage loans under conditions specified in Article 215(1)(a); and (ii) for guarantees provided in the context of mutual guarantee schemes or provided by or counter-guaranteed by an entity treated as a sovereign under conditions specified in Article 215(2). In these two cases the UFCP value may be the maximum amount that the protection provider has undertaken to pay. These exceptions ensure that the GL would not create stricter rules for the A-IRB approach than those already existing for the SA and the F-IRB approach.

51. The application of the risk weight floor to the adjusted risk weight obtained through the PD or LGD adjustment is straightforward in the case of UFCP that covers the whole exposure. On the other hand, additional guidance is necessary on how to calculate the risk weight floor in the case of a UFCP that only partially covers the exposure. In such a case the risk weight floor should be computed as an exposure-weighted average of the risk weight of a comparable direct exposure to the guarantor, weighted by the exposure value covered by the UFCP, and the risk weight of an exposure towards the obligor without the effects of the UFCP, weighted by the exposure value that is not covered by the UFCP. As an example, in the case of an exposure of 100 that is covered by a UFCP of 80 and where the risk weight of a comparable direct exposure to the guarantor is 15% and the risk weight of an exposure towards the obligor without the effect of the UFCP is 30%, the risk weight floor should be computed as follows: $\frac{15\% * 80 + 30\% * 20}{100} = 18\%$. The risk weight floor always applies to the risk weight calculated for the whole exposure, as under the modelling approach and in the use of overrides the split of exposures is not

allowed. In the case of the substitution of risk parameters approach, in the calculation of risk weight the part of exposure covered by a UFCP is treated as a separate exposure to the protection provider. In this context, it has to be noted that the rules for deriving the parameters for comparable direct exposures to the guarantor have been specified in a consistent manner for the purposes of the substitution of risk parameters approach and for the risk weight floor.

52. Following the same logic, the GL also clarify how institutions should compute the risk weight floor in cases of multiple UFCPs covering different parts of the exposure. In such a case, the risk weight floor should be the exposure-weighted average of the risk weights of comparable direct exposures to each guarantor and, if relevant (i.e. if the sum of the UFCP does not cover the full exposure, e.g. UFCP(A) + UFCP(B) < exposure value), the risk weight of an exposure towards the obligor without the effects of UFCP. As an example, in the case of an exposure of 100, where 40 of this exposure is covered by a UFCP provided by guarantor A and another portion of 40 is covered by a UFCP provided by guarantor B, and where the risk weights of comparable direct exposures to guarantors A and B are 10% and 15% respectively, and the risk weight of an exposure towards the obligor without the effect of the UFCP is 30%, the risk weight floor should be computed as follows: $\frac{10\%*40+15\%*40+30\%*20}{100} = 16\%$.

53. Finally, the GL clarify how institutions should compute the risk weight floor in cases of multiple UFCPs securing the same part of the exposure. In particular, institutions should calculate the risk weight floor for this part of the exposure as the lowest of the risk weights of comparable direct exposure to each guarantor. In other words, institutions should perform the calculation of the risk weight separately with respect to each guarantor, considering the effect of the other existing UFCP in the LGD estimates of comparable direct exposures to the guarantor, and pick the lowest.

54. As an example, consider an exposure of 100, where 40 of this exposure is covered by a UFCP provided by guarantor A, while 80 (including the 40 covered by guarantor A) is covered by guarantor B and the remaining 20 is unsecured. Therefore, in this example 40 is covered by both guarantors A and B, 40 is covered only by guarantor B and 20 is not covered by any guarantee. In order to compute the appropriate risk weight floor, the institution has to determine the risk weights of comparable direct exposures to both guarantors A and B. For the part of the exposure covered by both guarantees, these risk weights may take into account the existence of the other guarantee. In other words, the risk weight associated with comparable direct exposure to guarantor A may assume that this exposure benefits from UFCP provided by guarantor B. The risk weight associated with comparable direct exposure to guarantor B may assume that this exposure benefits from the UFCP provided by guarantor A, but only for the part covered by both guarantees. For the remaining 40 covered only by guarantor B, the risk weight of a comparable direct exposure to guarantor B should be calculated on the assumption that this exposure is unsecured. As a result: assuming that the risk weight for comparable direct exposures to guarantor A is 5% (and 3% when also considering the effect of guarantor B) and 10% for comparable direct exposures to guarantor B (6% when also considering the effect of guarantor A), the institution should pick 3% for the 40 of the exposure that is covered by both

UFCPs, while for the remaining 40 of the exposure covered only by guarantor B it should use the risk weight of comparable direct exposures to that guarantor, i.e. 10%. Moreover, assuming that the risk weight of an exposure towards the obligor without the effect of the UFCP is 30%, the risk weight floor applicable to the full exposure should be computed as follows: $\frac{3\%*40+10\%*40+30\%*20}{100} = 11.2\%$.

Treatment of exposures benefiting from multiple forms of protection

55. Another important clarification included in the GL relates to the recognition of CRM for exposures that benefit from multiple forms of credit protection, including cases where a single exposure is covered by both FCP and UFCP or multiple UFCP. In order to ensure consistent application of the modelling approach, the substitution of risk parameters approach and overrides, the GL provide a set of general principles that institutions should comply with, including the following:

    - Institutions should have clear policies for the allocation of the FCP to different parts of the exposure, determining for example whether the FCP overlaps with the UFCP for which the substitution of risk parameters approach is applied; these policies should be consistent with the internal recovery and collection process.

    - Institutions should not recognise the effects of CRM techniques more than once; this implies that, in allocating the FCP between the part of the exposure that is also covered by UFCP and the part of the exposure that is not, double counting of the FCP should not be allowed. Using as an example allocation A of FCP and UFCP in Figure 4, the application of the substitution of risk parameters approach should be such that, as depicted in Figure 5, the FCP of 80 should be considered in estimating the LGD of comparable exposures to the guarantor for the purposes of applying the substitution of risk parameters approach to the exposure value of 80 also covered by UFCP, while the LGD on the remaining exposure value of 20 should be estimated considering the remaining FCP of 10; similarly, in cases of multiple UFCP covering the same exposure, in allocating the UFCP between the part of the exposure that is also covered by another UFCP and the part of the exposure that is not, double recognition of the UFCP should not be allowed.

    - In cases of multiple UFCPs that cover the same part of the exposure value, institutions should specify internal criteria to choose the UFCP on which they are basing the substitution of risk parameters approach.

    - Institutions must not split the UFCP into two parts and apply to one part the substitution of risk parameters approach while modelling the effect of the remaining part. In other words, the application of the substitution of risk parameters approach described in the second panels of Figure 5 and Figure 6 should not be allowed; only in cases of multiple UFCPs with partially overlapping UFCPs (e.g. as described in Figure 7 and Figure 8) are institutions allowed to split a UFCP (e.g. in Figure 4, UFCP provided by guarantor A) and apply the substitution of risk parameters approach to only one part of the UFCP (e.g., in the figures below, only for an exposure value of 60) while considering the effect of the remaining part of the UFCP in the application of substitution of risk parameters approach with respect to the other UFCP. In the example of Figure 7 and Figure 8, in applying the substitution of risk parameters approach to UFCP(B) institutions should consider the effect of the remaining part of UFCP(A) in the estimation of the LGD for a comparable direct exposure towards guarantor B; the rationale behind this is that in this second case that part of the UFCP(A) is considered anyway under the substitution of risk parameters approach of UFCP(B) and not under the modelling approach.

Figure 4: Possible allocations of credit risk mitigation for an A-IRB exposure (e.g. EUR 100 million) partially covered by UFCP (e.g. EUR 80 million) and by FCP (e.g. EUR 90 million)

Allocation A:

Allocation B:

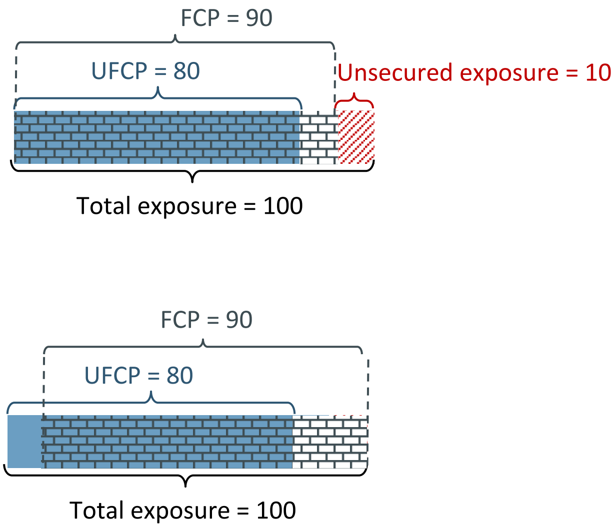


Figure 5: Application of the substitution of risk parameters approach based on allocation A described in Figure 4

Consistent application of the substitution of risk parameters approach

Inconsistent application of the substitution of risk parameters approach

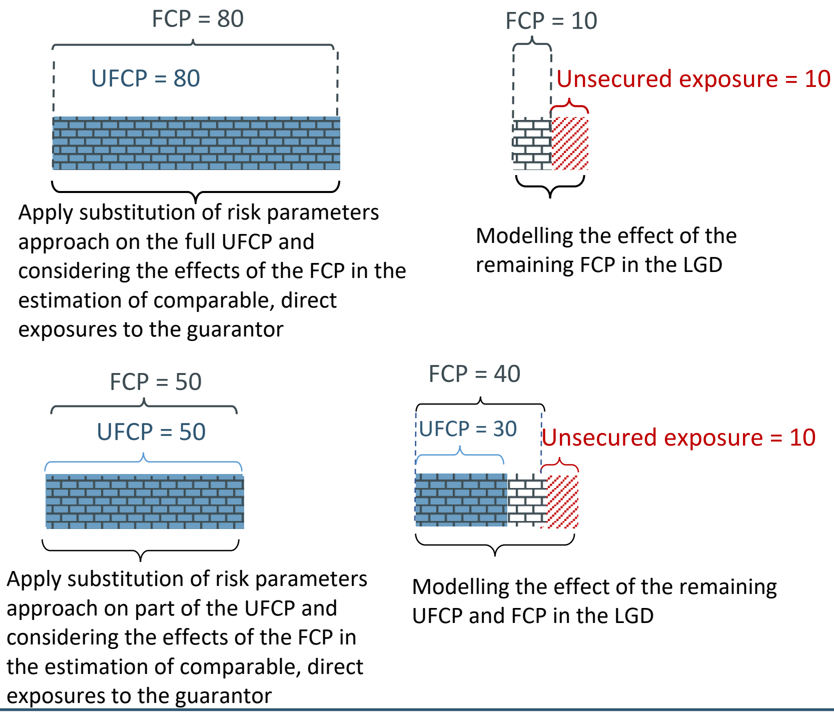


Figure 6: Application of the substitution of risk parameters approach based on allocation B described in Figure 4

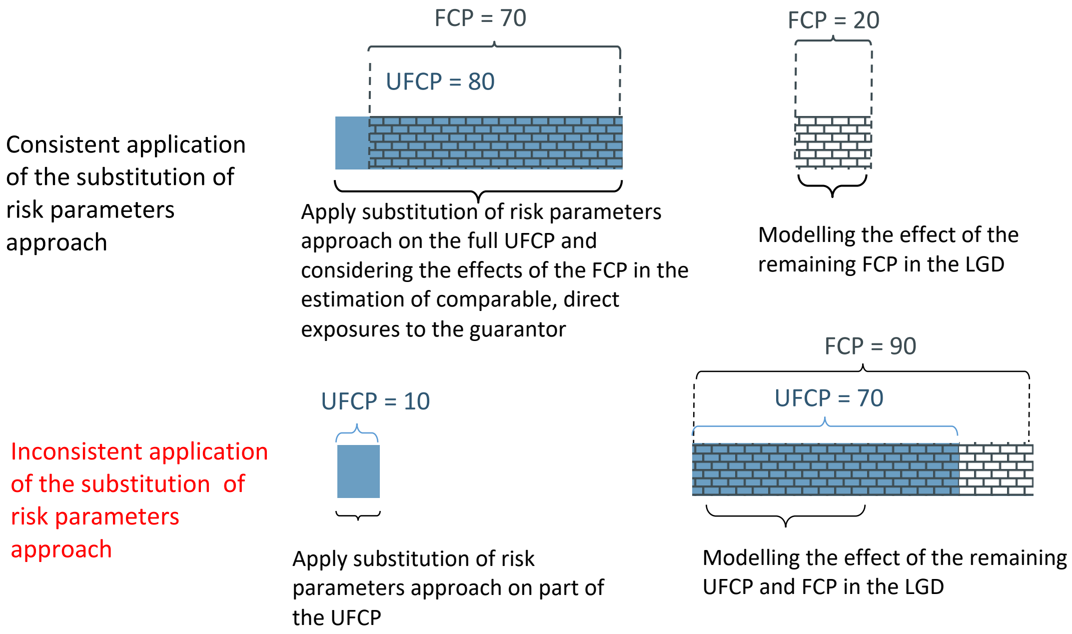


Figure 7: Allocation of credit risk mitigation for an AIRB exposure (e.g. EUR 100 million) partially covered by UFCP (e.g. EUR 80 million) provided by guarantor A and by UFCP (e.g. EUR 40 million) provided by guarantor B

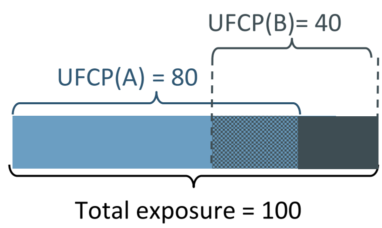
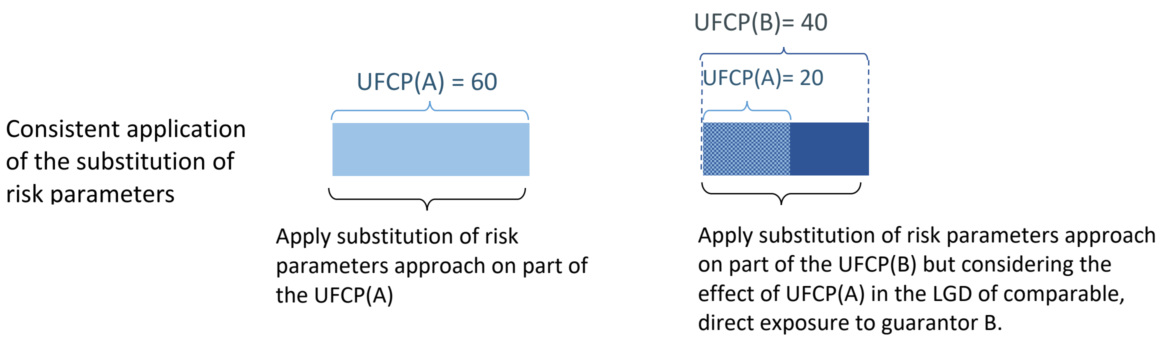


Figure 8: Application of the substitution of risk parameters approach based on the allocation described in Figure 7



56. In particular, as also summarised in Figure 9, for exposures covered by both FCP and UFCP, it is proposed that:

- If the direct exposures to the guarantor are treated under the F-IRB approach, institutions should reflect the overlapping FCP in the LGD of a comparable direct exposure to the guarantor by applying the relevant requirements of Chapter 4 of the CRR.

- If the direct exposures to the guarantor are treated under the A-IRB approach, institutions should try to estimate the LGD of comparable direct exposures to the guarantor including the effect of the overlapping FCP (this is presented in the example of allocation A in Figure 4 and Figure 5, where the LGD of comparable direct exposures to the guarantor providing the UFCP of 80 should include the effects of the FCP of 80). If institutions are not able to perform this estimation, the two following alternatives are considered:

    i. If the LGD of unsecured exposures to the guarantor is lower than or equal to the LGD of unsecured exposures to the obligor,[16] then the institution should use the LGD of the exposure to the obligor including the effect of FCP as LGD of a comparable direct exposure to the guarantor. Taking the example of allocation A in Figure 4 and Figure 5, if the LGD of direct unsecured exposures to the guarantor providing the UFCP for 80 is lower than or equal to the LGD of unsecured exposures to the original obligor, then the institution can use the LGD of the exposure of 80 considering only the effect of the FCP for 80. The rationale behind this proxy is that, while the PD depends solely on characteristics of the obligor, the LGD is often mostly derived from characteristics of the exposure; in extreme cases, if the LGD estimation of an institution is solely dependent on characteristics of the exposure, the LGD will be the same irrespective of whether the exposure is held against the obligor or the guarantor, because the risk drivers will be the same as for the exposure against the obligor.

    ii. If the LGD of unsecured exposures to the guarantor is higher than the LGD of unsecured exposures to the obligor, or if institutions are not able to perform such comparison, then:

        - For non-retail guarantors, institutions should use either the F-IRB framework of Chapter 4 in order to recognise the FCP in the LGD of direct exposures to the guarantor or use the LGD estimates applicable to unsecured exposures to the guarantor. Moreover, in order to avoid cherry picking, the GL clarify that this choice should be made consistently for the type of exposures and not at the level of the individual exposure.

        - For retail guarantors, institutions should use the LGD estimates applicable to unsecured exposures towards the guarantor. The option of using the F-IRB framework to reflect the CRM effects of the FCP is not available for

[16] If the cash flows from selling the collateral are not enough to cover the outstanding amount, then the amount the institution is able to get back from the guarantor is higher than the one that the institution would get from the obligor. Therefore, using the LGD of the original exposure to the obligor is a prudent approach.

retail guarantors, as it is not considered appropriate for the retail exposure class.

57. In particular, as also summarised in Figure 10, for exposures covered by multiple UFCPs that provide protection to the same part of the exposure, following the same rationale as for the case of exposures covered by both FCP and UFCP, the GL propose the following:

- If direct exposures to the guarantor are treated under the F-IRB approach, institutions should use the LGD values provided in Article 161(1) of the CRR.

- If direct exposures to the guarantor are treated under the A-IRB approach, institutions should try to estimate the LGD of comparable direct exposures to the guarantor including the effects of the other UFCPs. This is presented in the example in Figure 7 and Figure 8, where the LGD of comparable direct exposures to the guarantor providing the UFCP(B) of 40 should include the effects of the overlapping UFCP(A) of 20. If institutions are not able to perform this estimation, the two following alternatives are considered:

    i. If the LGD of unsecured exposures to the guarantor is lower than or equal to the LGD of unsecured exposures to the obligor, then the institution should use the LGD of the exposure including the effect of the other UFCPs as LGD of a comparable direct exposure to the guarantor. Taking the example in Figure 7 and Figure 8, this implies that, if the LGD of unsecured exposures to guarantor B is not higher than the LGD of unsecured exposures to the original obligor, the institution can use the LGD of the exposure of 40 backed only by the UFCP provided by guarantor A for 20; otherwise, institutions should use the LGD of unsecured exposures to guarantor B.

    ii. If the LGD of unsecured exposures to the guarantor is greater than the LGD of unsecured exposures to the obligor, or if institutions are not able to perform such comparison, then:

        - For non-retail guarantors, institutions should use either the LGD values provided in Article 161(1) of the CRR or the LGD applicable to unsecured exposures to the guarantor. Moreover, in order to avoid cherry picking, the GL clarify that this choice should be made consistently for the type of exposures and not at the level of the individual exposure.

        - For retail guarantors, institutions should use the LGD applicable to unsecured exposures to the guarantor. The option of using regulatory LGD values is not available for retail guarantors, as they are not considered appropriate for the retail exposure class.

Figure 9: How to derive LGD for a comparable direct exposure to the guarantor for A-IRB exposure with FCP and UFCP covering the same part of the exposure

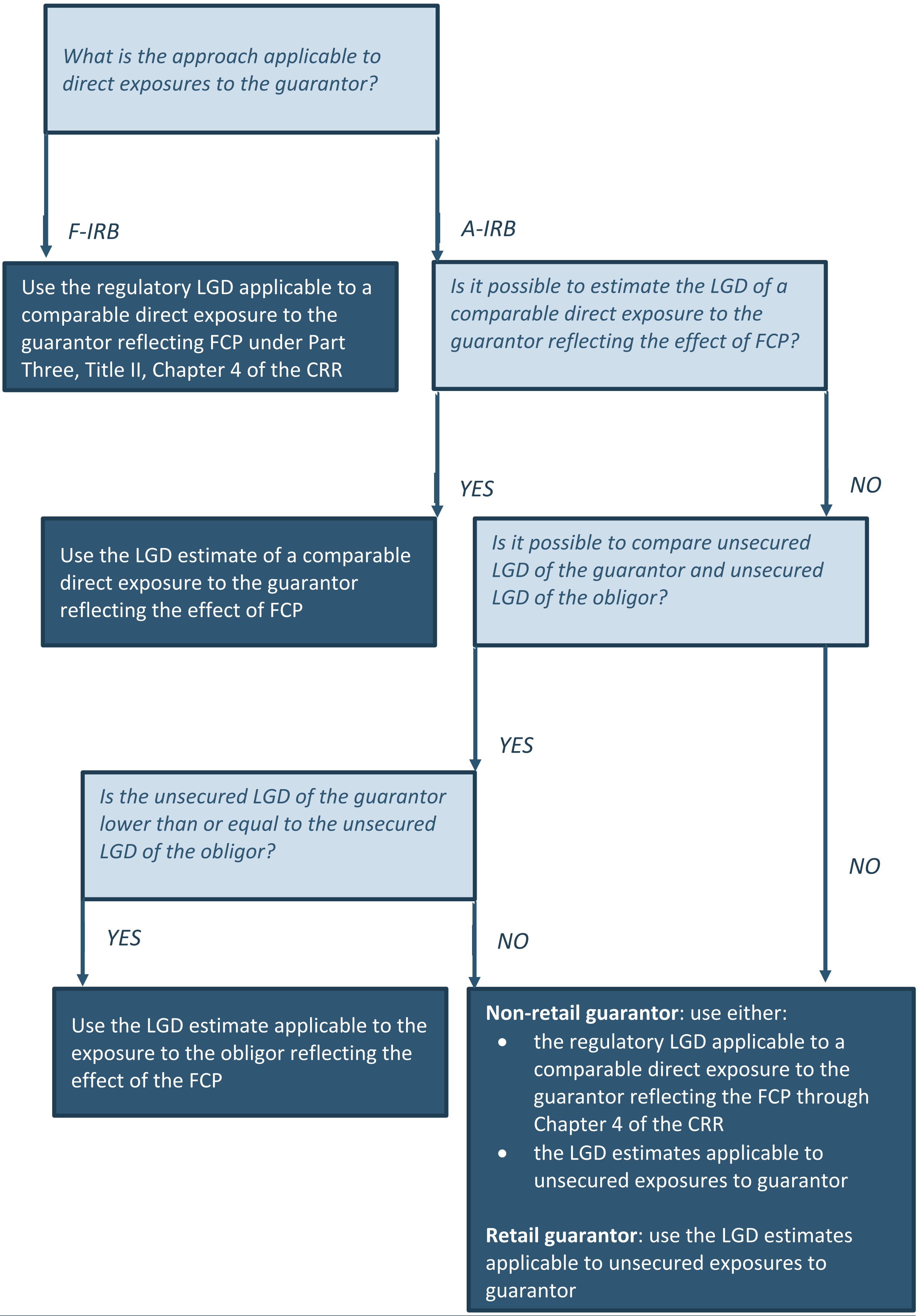
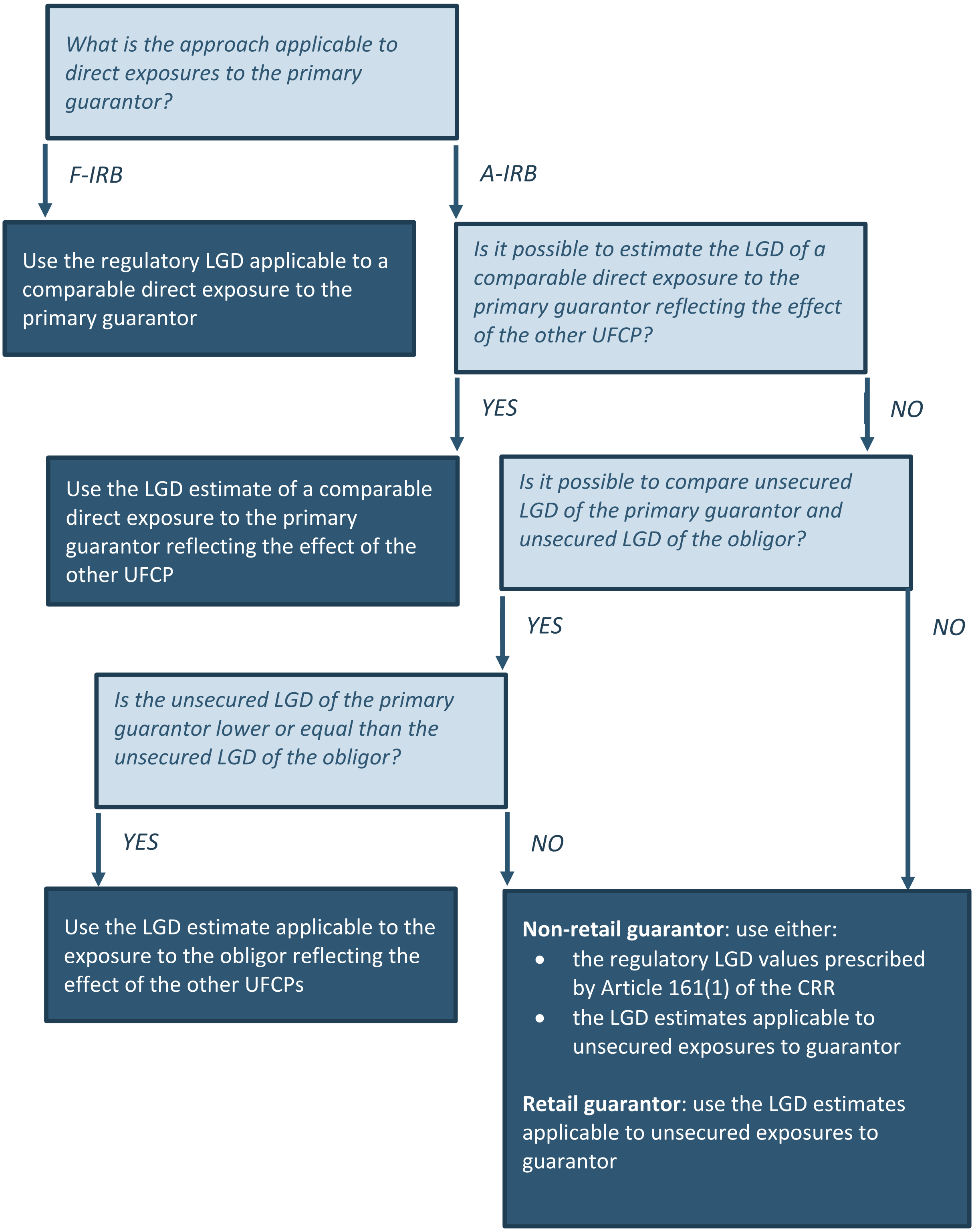


Figure 10: How to derive LGD for a comparable direct exposure to the guarantor for A-IRB exposure with multiple UFCP covering the same part of the exposure



3. Guidelines

EBA/GL/2020/05

06/05/2020

Guidelines

on credit risk mitigation for institutions applying the IRB approach with own estimates of LGDs

1. Compliance and reporting obligations

Status of these guidelines

1. This document contains guidelines issued pursuant to Article 16 of Regulation (EU) No 1093/2010.[17] In accordance with Article 16(3) of Regulation (EU) No 1093/2010, competent authorities and financial institutions must make every effort to comply with the guidelines.

2. Guidelines set the EBA's view of appropriate supervisory practices within the European System of Financial Supervision or of how Union law should be applied in a particular area. Competent authorities as defined in Article 4(2) of Regulation (EU) No 1093/2010 to which guidelines apply 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.

Reporting requirements

3. According to Article 16(3) of Regulation (EU) No 1093/2010, competent authorities must notify the EBA whether they comply or intend to comply with these guidelines, or otherwise with reasons for non-compliance, by 28.10.2020. In the absence of any notification by this deadline, competent authorities will be considered by the EBA to be non-compliant. Notifications should be sent by submitting the form available on the EBA website to compliance@eba.europa.eu with the reference 'EBA/GL/2020/05'. Notifications should be submitted by persons with appropriate authority to report compliance on behalf of their competent authorities. Any change in the status of compliance must also be reported to the EBA.

4. Notifications will be published on the EBA website, in line with Article 16(3) of Regulation (EU) No 1093/2010.

[17] Regulation (EU) No 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/78/EC (OJ L 331, 15.12.2010, p. 12).

2. Subject matter, scope and definitions

2.1 Subject matter

5. These guidelines specify the requirements for using credit risk mitigation in accordance with the relevant provisions of Part Three, Title II, Chapter 3 of Regulation (EU) No 575/2013 as provided by Article 108(2) of that Regulation. These guidelines also derive from the EBA final draft regulatory technical standards on the IRB assessment methodology, EBA/RTS/2016/03 (RTS on IRB assessment methodology), of 21 July 2016.[18]

2.2 Scope of application

6. These guidelines apply in relation to the IRB approach in accordance with Part Three, Title II, Chapter 3 of Regulation (EU) No 575/2013 and, in particular, to institutions that have been permitted to use own LGD estimates in accordance with Article 143 of that Regulation.

7. In particular, these guidelines specify the recognition of unfunded credit protection (defined in Article 4(1)(59) of Regulation (EU) No 575/2013) in accordance with Article 160(5), Article 161(3), Article 163(4), Article 164(2) and Article 183 of that Regulation as well as the recognition of funded credit protection (defined in Article 4(1)(58) of that Regulation) in accordance with Articles 166 and 181 of that Regulation.

2.3 Addressees

8. These guidelines are addressed to competent authorities as defined in point i of Article 4(2) of Regulation (EU) No 1093/2010 and to financial institutions as defined in Article 4(1) of Regulation No 1093/2010.

2.4 Definitions

9. Unless otherwise specified, terms used and defined in Regulation (EU) No 575/2013, Directive 2013/36/EU and the EBA Guidelines on PD estimation, LGD estimation and the treatment of defaulted exposures, EBA/GL/2017/16 (EBA GL on PD and LGD estimation), have the same meaning in these guidelines.

[18] References to articles of the RTS on IRB assessment methodology will be replaced with references to the delegated regulation adopting the EBA final draft RTS on IRB assessment methodology, once that is published in the Official Journal of the EU.

3. Implementation

3.1 Date of application

10. These guidelines apply from 1 January 2022. Institutions should incorporate the requirements of these guidelines in their rating systems by that time, but competent authorities may accelerate the timeline of this transition at their discretion.

4. General provisions

11. In accordance with Article 108(2) of Regulation (EU) No 575/2013, institutions that apply the IRB approach by using their own estimates of LGD in accordance with Article 143(2) of that Regulation may recognise credit risk mitigation in accordance with Part Three, Title II, Chapter 3 of that Regulation. Institutions may recognise credit risk mitigation in accordance with Part Three, Title II, Chapter 4 of Regulation (EU) No 575/2013 where those requirements are referred to in Part Three, Title II, Chapter 3 of that Regulation and in accordance with these guidelines.

12. For the purposes of Article 181(1) of Regulation (EU) No 575/2013, any reference to the term 'collateral' should be understood as a reference to funded credit protection other than the funded credit protection referred to in Article 166(2) and (3) of that Regulation. This includes, in particular, funded credit protection other than master netting agreements and on-balance sheet netting. Credit risk mitigation effects of master netting agreements and on-balance sheet netting are reflected in the exposure value. Therefore, for the types of exposures where institutions have received permission to use own LGD estimates, institutions may recognise funded credit protection in accordance with Article 181(1) of Regulation (EU) No 575/2013 only where that protection has not already been recognised in the exposure value for the cases specified in Article 166 of that Regulation and in line with paragraph 13.

13. The credit risk mitigation effects of on-balance sheet netting should be recognised in the exposure value in accordance with Article 166(3) of Regulation (EU) No 575/2013 and the credit risk mitigation effects of master netting agreements should be recognised in the exposure value in accordance with Article 166(2) of that Regulation. In recognising the effects of on-balance sheet netting and master netting agreements, institutions should take into account all requirements related to these techniques specified in Part Three, Title II, Chapter 4 of Regulation (EU) No 575/2013, including the eligibility criteria and the methods for recognising the risk mitigation effects of such instruments.

14. For the types of exposures for which they have received permission to use own LGD estimates, institutions should recognise the effects of the unfunded credit protection in accordance with Article 160(5), Article 161(3), Article 164(2)–(3) and Article 183 of Regulation (EU) No 575/2013.

15. Institutions may recognise credit insurance in accordance with paragraph 14 if the associated techniques of credit risk mitigation can be classified as unfunded credit protection according to the definition in point (59) of Article 4(1) of Regulation (EU) No 575/2013. In particular, institutions may recognise the credit insurance according to Article 183(1) of Regulation (EU) No 575/2013 and Article 183(2) or 183(3) of Regulation (EU) No 575/2013 depending on whether credit insurance effectively functions like a guarantee or like a credit derivative respectively.

16. The treatment of ratings of third parties presented in paragraphs 62 to 64 of the EBA GL on PD and LGD estimation, taking into account the definition of credit risk mitigation in accordance with point (57) of Article 4(1) of Regulation (EU) No 575/2013, should not be considered a method for recognising credit risk mitigation effects, and it is not covered by the scope of these guidelines. In particular, the appropriate guarantee referred to in paragraph 62(a) of those guidelines relates to a type of contractual support provided by a third party to the obligor and hence it does not constitute a credit risk mitigation technique used by an institution in the sense of points (57) and (59) of Article 4(1) of Regulation (EU) No 575/2013.

5. Eligibility requirements

5.1 Eligibility requirements for funded credit protection

17. In accordance with Article 181(1)(f) of Regulation (EU) No 575/2013, for the purposes of establishing internal requirements for legal certainty that are generally consistent with those set out in Chapter 4, Section 3 of Title II in Part Three of that Regulation, to the extent that LGD estimates take into account the existence of collateral, institutions should ensure that the collateral arrangement under which the collateral is provided is legally effective and enforceable in all relevant jurisdictions, giving the institution the right to liquidate or repossess the collateral in a reasonable timeframe, including in the event of the default, bankruptcy or insolvency of the obligor and, where applicable, of the custodian holding the collateral.

18. In accordance with Article 181(1)(f) of Regulation (EU) No 575/2013, for the purposes of establishing internal requirements for collateral valuation that are generally consistent with those set out in Chapter 4, Section 3 of Title II in Part Three of that Regulation, to the extent that LGD estimates take into account the existence of collateral, institutions should ensure that all the following conditions are met:

(a) the rules governing the revaluation of the collateral, including methods and frequency of monitoring the value of the collateral, are consistent for each type of collateral and are specified in the internal policies of the institution;

(b) where the market is subject to significant changes in conditions, institutions carry out more frequent monitoring.

19. For the purposes of Article 55 of the RTS on IRB assessment methodology and to ensure compliance with the general principles on legal certainty and collateral valuation in paragraphs 17 and 18, the internal requirements for legal certainty and collateral valuation established by institutions in accordance with Article 181(1)(f) of Regulation (EU) No 575/2013 should be fully consistent with the following requirements of Chapter 4, Section 3 of Title II in Part Three of that Regulation:

(a) For financial collateral, they should be consistent with Article 207(3) and 207(4) letter (d) of that Regulation.

(b) For immovable property collateral, and for lease exposures treated as collateralised where the asset leased is an immovable property, they should be consistent with Article 208(2) and (3) of that Regulation.

For the purposes of valuing an immovable property collateral and reviewing its value under the conditions specified in Article 208(3)(b) of that Regulation, institutions should ensure the following:

(i) The immovable property collateral is valued by an independent valuer at or at less than the market value. In those Member States that have laid down rigorous criteria for the assessment of the mortgage lending value in statutory or regulatory provisions, the property may instead be valued by an independent valuer at or at less than the mortgage lending value. Institutions should require the independent valuer not to take into account speculative elements in the assessment of the mortgage lending value.

(ii) The independent valuer documents the market value or mortgage lending value in a transparent and clear manner.

(iii) The value of the collateral is the market value or the mortgage lending value reduced as appropriate to reflect the result of the monitoring and to take into account any prior claims on the property.

(iv) The independent valuer should possess the necessary qualifications, ability and experience to execute a valuation and should be independent from the credit decision process. As long as an employee of the institution meets all the aforementioned conditions, that employee can be considered an independent valuer.

(c) For receivables, they should be consistent with Article 209(2) of that Regulation. The value of the receivable should be the amount receivable.

(d) For other physical collateral, and for lease exposures treated as collateralised where the asset leased is other than immovable property, they should be consistent with Article 210(a) and (g) of that Regulation. For the purposes of conducting valuation and revaluation of the collateral in accordance with Article 210(g) of that Regulation, institutions should value physical collateral at its market value, which should be the estimated amount for which the collateral would exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction.

(e) For other funded credit protection, they should be consistent with Article 212(1)(a) and Article 212(2)(f) of that Regulation.

20. Institutions should obtain a legal opinion confirming the legal effectiveness and enforceability of the collateral arrangement in all relevant jurisdictions for the purposes of paragraph 17. This legal opinion should be:

(a) carried out at least for each type of collateral arrangement; and

(b) provided in a written form by a legal counsel. Where the legal counsel is an employee of the institution, the legal counsel should be independent from the credit decision process responsible for originating or renewing the exposures under consideration.

21. For the purposes of paragraph 20, institutions may rely on a single legal opinion in relation to multiple collateral arrangements where it relates to the same applicable law. Institutions should obtain additional legal opinion relating to any substantive variation to the terms of the collateral arrangement that could affect the legal effectiveness and enforceability of the specific collateral arrangement. At a minimum, changes in the legal framework applicable to the collateral arrangements and application of the collateral arrangement to other types of exposures or to obligors classified to other exposure classes or to other types of obligors, meaning individual persons or legal entities, should always be considered cases of substantive variation to the terms of the collateral arrangement.

22. For the purposes of paragraph 20, institutions may rely on a single legal opinion covering several jurisdictions. In particular, where international regulations exist in the form of international law or another form of international agreement, the legal opinion may span some or all jurisdictions where these regulations are adopted. In this case, the legal opinion should at least:

(a) consider whether the regulations ensure legal effectiveness and enforceability of the collateral in all jurisdictions in which the regulations are applicable;

(b) clearly identify all jurisdictions in which the regulations are applicable;

(c) clearly identify all forms of collateral that are subject to the regulations.

23. Institutions should ensure that they obtain the legal opinion or opinions in accordance with paragraph 20, confirming that the collateral arrangement under which the other physical collateral is provided is legally effective and enforceable at least in the following jurisdictions:

    (a) the jurisdiction whose law governs the collateral arrangement;

    (b) if a public register for the type of collateral exists, the jurisdiction where the collateral is registered; otherwise, the jurisdiction in which the owner of the collateral is incorporated or the place of residence if the owner of the collateral is a natural person;

    (c) if considered relevant for a given collateral, the jurisdictions in which the institution and the obligor are incorporated; in any case, if the obligor is a natural person, the jurisdiction of his or her place of residence;

    (d) the jurisdiction where it is most likely that the realisation of the collateral would be carried out should this be necessary;

    (e) any other jurisdiction, if considered relevant for a given collateral.

5.2 Eligibility requirements for unfunded credit protection

24. For the purposes of Article 183(1)(c) of Regulation (EU) No 575/2013, institutions should obtain a legal opinion confirming that the unfunded credit protection arrangement is legally effective and enforceable in all relevant jurisdictions. This legal opinion should be:

    (a) carried out at least for each type of unfunded credit protection; and

    (b) provided in a written form by a legal counsel. Where the legal counsel is an employee of the institution, the legal counsel should be independent from the credit decision process responsible for originating or renewing the exposures under consideration.

25. For the purposes of paragraph 24, institutions may rely on a single legal opinion to support multiple unfunded credit protection arrangements where it relates to the same applicable law. Institutions should obtain additional legal opinion relating to any substantive variation to the terms of the contract that could affect the legal effectiveness and enforceability of the arrangement of the specific unfunded credit protection. At a minimum, changes in the legal framework applicable to the unfunded credit protection arrangement and the application of such unfunded credit protection arrangement to other types of exposures, or the use of guarantors classified to other exposure classes or to other types of guarantors, meaning individual persons or legal entities, should always be considered cases of substantive variation to the terms of the contract.

6. The effects of credit risk mitigation

6.1 The effects of funded credit protection

26. Institutions may recognise credit risk mitigation effects of funded credit protection other than master netting agreements and on-balance sheet netting as specified in paragraph 12 for the purposes of Article 181(1)(c)–(g) of Regulation (EU) No 575/2013.

27. For the purposes of recognising the credit risk mitigation effects of master netting agreements in accordance with Article 166(2) of Regulation (EU) No 575/2013, institutions should use the fully adjusted exposure value (E*) calculated in accordance with Article 220(3) or Article 221(6) of that Regulation as the exposure value when calculating the risk-weighted exposure amounts and expected loss amounts.

28. For the purposes of recognising the credit risk mitigation effects of on-balance sheet netting in accordance with Article 166(3) of Regulation (EU) No 575/2013, institutions should use E* calculated in accordance with Article 223(5) of that Regulation as the exposure value when calculating the risk-weighted exposure amounts and expected loss amounts.

29. For the purposes of LGD estimation as referred to in Article 181(1)(a) of Regulation (EU) No 575/2013 and in accordance with paragraph 131 of the EBA GL on PD and LGD estimation, institutions should calculate the realised LGD for each exposure that is covered by a master netting agreement or on-balance sheet netting as the ratio of the economic loss to the outstanding amount of the credit obligation at the moment of default calculated as E* in accordance with paragraph 27 or 28. Institutions should calculate the economic loss on the basis of this outstanding amount, and no cash flows from netting should be included as recoveries after default in the economic loss. Nevertheless, in line with paragraph 131 of the EBA GL on PD and LGD estimation, it is important to recall that the outstanding amount of the credit obligation at the moment of default calculated as E* needs to include any amount of principal, interest or fee realised so far.

30. For the purposes of recognising the credit risk mitigation effects of collateral in accordance with Article 181(1) of Regulation (EU) No 575/2013, the criteria specified by institutions for adjusting LGD estimates should:

    (a) not lead to a decrease in the value of the LGD estimates when the collateral is a liability of the obligor that ranks either lower than or *pari passu* with the obligation the obligor has to the institution;

    (b) for other than first rank claims, appropriately consider the effects on LGD estimates of the subordinated position of the institution in relation to the collateral;

(c) for other physical collateral, appropriately consider the likely location of the collateral during the lifetime of the loan and the influence it may have on the potential inability of institutions to expeditiously gain control of their collateral and liquidate it in accordance with Article 181(1)(e) of Regulation (EU) No 575/2013;

6.2 The effects of unfunded credit protection

31. Institutions may recognise the credit risk mitigation effects of unfunded credit protection using one of the following methods:

(a) adjustment of PD or LGD estimates in accordance with Article 160(5), 161(3) and 164(2) of Regulation (EU) No 575/2013, on the basis of the criteria specified by institutions in accordance with Article 183(2) and (3) of Regulation (EU) No 575/2013 by using, in particular, one of the following approaches:

(i) regardless of the approach applied to comparable direct exposures to the guarantor, adjustment of grades, pools or LGD estimates, including LGD in default and EL_{BE}, by considering the unfunded credit protection in the estimation of risk parameters as further specified in these guidelines (i.e. the modelling approach);

(ii) when comparable direct exposures to the guarantor are, or would be, treated under the IRB approach with or without own estimates of LGD and conversion factors, substitution of both the PD and LGD risk parameters of the underlying exposure with the corresponding PD and LGD of a comparable direct exposure to the guarantor as further specified in these guidelines (i.e. the substitution of risk parameters approach);

(iii) regardless of the approach applied to comparable direct exposures to the guarantor, adjustment of grades, pools or LGD estimates, including LGD in default and EL_{BE}, in the application of risk parameters by overriding the grade assignment process in accordance with Article 172(3) of Regulation (EU) No 575/2013 and Section 8.2 of the EBA GL on PD and LGD estimation (i.e. the override);

(b) if the institution applies the Standardised approach for comparable direct exposures to the guarantor, and does not recognise the credit risk mitigation effects of the UFCP in the PD and LGD estimates in accordance with point (a), use of the risk weight applicable under the Standardised approach in accordance with Article 183(4) of Regulation (EU) No 575/2013 (i.e. the substitution of risk weight approach);

(c) calculation of the risk-weighted exposure amount in accordance with Article 153(3), Article 154(2), Article 161(4) and Article 164(3), of Regulation (EU) No 575/2013 (i.e. the double default treatment).

32. Institutions should have clear policies for assessing the effects of unfunded credit protection on risk parameters. The policies should be consistent with their internal risk management practices and should reflect the requirements of Article 183(2) and 183(3) of Regulation (EU) No 575/2013, and the requirements specified in these guidelines. Institutions should include in these policies a clear specification which of the specific methods described in paragraph 31 is used for each rating system, and they should apply these policies consistently over time.

33. Unfunded credit protection that does not meet the eligibility requirements for guarantors and guarantees specified in Article 183(1) and (3) of Regulation (EU) No 575/2013 and in Section 5.2 of these guidelines should not be recognised using any of the methods specified in paragraph 31. For LGD estimation purposes, the cash flows received from exercising the ineligible unfunded credit protection should be treated as if they had been received without the use of unfunded credit protection. Regardless of this treatment, institutions should collect the information about the source of the cash flows related to ineligible unfunded credit protections and allocate them appropriately. Institutions should regularly monitor the levels of such cash flows as well as the extent to which the relevant types of unfunded credit protection are used. Where necessary, institutions should perform appropriate adjustments in order to avoid any bias in the PD and LGD estimates.

34. Where institutions adopt the modelling approach specified in paragraph 31(a)(i), they should consider and, if relevant, take into account in the LGD estimates in a conservative manner the following elements:

    (a) any currency mismatch between the underlying obligation and the unfunded credit protection;

    (b) the degree to which the guarantor’s ability to fulfil the contractual obligation under the unfunded credit protection agreement is correlated with the obligor’s ability to repay;

    (c) the defaulted status of the guarantor and its resulting reduced ability to fulfil the contractual obligation under the unfunded credit protection.

35. Where institutions adopt the modelling approach specified in paragraph 31(a)(i), the unfunded credit protection may be considered as a risk driver in the rating system. In particular, it may consist in:

    (a) adjusting only the LGD estimates according to historical experience related to the observed credit risk mitigation effects of the unfunded credit protection on realised LGDs, including realised recoveries and material costs associated with exercising the unfunded credit protection;

    (b) adjusting both the PD and the LGD estimates, where institutions can provide empirical evidence that the existence of the unfunded credit protection has an impact on the PD of the obligor and demonstrate that the simultaneous adjustment of both the PD and

LGD estimates does not lead to double counting effects of the unfunded credit protection or to underestimation of expected loss.

The sole adjustment of the PD estimates should be deemed inappropriate in any circumstance.

36. Institutions may adopt the substitution of risk parameters approach specified in paragraph 31(a)(ii) only where the following conditions are met:

    (a) the unfunded credit protection is eligible according to the relevant criteria for unfunded credit protection set out in Part Three, Title II, Chapter 4 of Regulation (EU) No 575/2013;

    (b) the institution may reasonably expect that the direct costs of exercising the unfunded credit protection are negligible with respect to the amount covered by the unfunded credit protection;

    (c) the guarantor is in a non-defaulted status.

37. Where institutions adopt the substitution of risk parameters approach or the substitution of risk weight approach specified in paragraph 31(a)(ii) and 31(b) respectively, they should:

    (a) collect and store information on the characteristics and performance of the obligor and the exposure and use this information in the estimation of PD of the obligor in accordance with the EBA GL on PD and LGD estimation;

    (b) for internal risk management purposes, consider separately direct exposures to guarantors and exposures secured by unfunded credit protection provided by such entities;

    (c) define a separate scope of application of the LGD models and calculate separately the risk weight for the type of guaranteed exposures or parts of exposures whose PD and LGD risk parameters are substituted or that are assigned the risk weight of the guarantor. For the guaranteed exposures or parts of exposures included in the scope of application of the substitution of risk parameters approach or the substitution of risk weight approach, institutions are not required to estimate the LGDs other than the LGDs of the comparable direct exposures to the guarantors if they adopt the substitution of risk parameters approach.

38. For the purposes of paragraph 37, if a given unfunded credit protection does not fully cover the original exposure, institutions should be able to assign to the part of the exposure that is not covered by the given unfunded credit protection the PD and LGD estimates applicable to the original exposure without recognising the effect of the given unfunded credit protection. Moreover, for the purposes of calculating the realised LGD applicable to the part of the exposure not covered by the unfunded credit protection, institutions should allocate cash flows and costs in the following way:

(a) Cash flows received from the guarantor should be allocated to the guaranteed part of the exposure, while cash flows that come from any other source should be allocated to the part of the exposure not covered by the unfunded credit protection. In the case of exposures that also benefit from funded credit protection, the cash flows associated with the funded credit protection should be allocated to the part of the exposure that is covered by this funded credit protection, in accordance with the guidance provided in paragraph 46.

(b) Indirect costs should be allocated to the different parts of the exposure in accordance with the guidance provided in paragraph 113 of the EBA GL on PD and LGD estimation.

(c) Direct costs that are directly linked to the exercising of the unfunded credit protection should be allocated to the guaranteed part of the exposures, while any other direct cost should be allocated to the part of the exposure not covered by the unfunded credit protection. In the case of exposures that also benefit from funded credit protection, the direct costs associated with realisation of the funded credit protection should be allocated to the guaranteed part of the exposure in accordance with the guidance provided in paragraph 46.

39. Where institutions adopt the substitution of risk parameters approach and the obligor has defaulted, the following applies:

(a) The risk weight of the guaranteed part of the exposure should be that of the comparable direct exposure to the non-defaulted guarantor.

(b) The expected loss of the guaranteed part of the exposure should be that of the comparable direct exposure to the non-defaulted guarantor.

(c) Where the guarantor remains in a non-defaulted status, the guaranteed part of the exposure should be considered defaulted for the purposes of the calculation of the IRB shortfall or excess in accordance with Article 159 of Regulation (EU) No 575/2013 and Section 8.4 of the EBA GL on PD and LGD estimation.

40. Where institutions apply the substitution of risk parameters approach, the other quantitative validation tools required by Article 185(c) of Regulation (EU) No 575/2013 should include a comparison of the expected loss of comparable direct exposures to the guarantor with the observed loss rates of the underlying exposures or parts of exposures to defaulted obligors that were considered guaranteed before the moment of default.

41. Where institutions adjust the risk parameters in individual cases by considering the unfunded credit protection using overrides in accordance with paragraph 31(a)(iii), institutions should be able to justify that the nature and characteristics of the unfunded credit protection do not allow the use of methods described in paragraph 31(a)(i), 31(a)(ii) or 31(b) to reflect the credit risk mitigation effects of the unfunded credit protection.

42. Where institutions adopt one of the approaches described in paragraph 31(a) and the resulting estimates produce a lower risk weight than the risk weight that would apply to an otherwise identical exposure in respect of which the institution has no unfunded credit protection, the final risk weight cannot be lower than the risk weight of a comparable direct exposure to the guarantor in accordance with Article 161(3) and 164(2) of Regulation (EU) No 575/2013, i.e. the risk weight floor applies.

43. For the purposes of applying the substitution of risk parameters approach and calculating the risk weight floor, where institutions have not received the permission of the competent authority to use own LGD estimates in accordance with Article 143(2) of Regulation (EU) No 575/2013 for comparable direct exposures to the guarantor, institutions should use LGD values specified according to Article 161(1) of that Regulation to derive the LGD of a comparable direct exposure to the guarantor.

44. For the purposes of applying the substitution of risk parameters approach and calculating the risk weight floor, the value of unfunded credit protection should be the following:

    (a) The value of the unfunded credit protection should be specified in accordance with Article 233 and Article 239(3) of Regulation (EU) No 575/2013. Any potential maturity mismatch should be considered in the adjusted value of the unfunded credit protection in accordance with Article 239(3) of that Regulation, whereas the maturity of comparable direct exposures to the guarantor should be the same as the maturity of the exposure to the obligor.

    (b) If the unfunded credit protection covers the value of the exposure remaining after pursuing the obligor, and, if relevant, any other forms of credit risk mitigation, institutions should estimate the value of the protection based on past experience in a conservative manner.

    (c) The value of the unfunded credit protection meeting the requirements of the second subparagraph of Article 215(1)(a) or Article 215(2) of Regulation (EU) No 575/2013 may be the maximum amount that the protection provider has undertaken to pay in the event of default or non-payment of the borrower or on the occurrence of other specified credit events.

45. Institutions should calculate the risk weight floor in the following manner:

    (a) Where the exposure benefits from multiple unfunded credit protection, each providing protection to different parts of the exposure, institutions should calculate the risk weight floor as the exposure-weighted average of the risk weights of comparable direct exposures to each of the guarantors.

    (b) Where the exposure benefits from multiple unfunded credit protection, and where two or more of these are providing protection to the same part of the exposure, institutions should calculate the risk weight floor for this part of the exposure as the lowest of the risk weights of each comparable direct exposure to the guarantor. In the calculation of each risk weight, the LGD of a comparable direct exposure to each of the guarantors may consider the effect of the other existing unfunded credit protection.

(c) Where any part of the exposure is not covered by any unfunded credit protection, institutions should assign to this part of the exposure the risk weight applicable to such exposure to the obligor without any unfunded credit protection; in this case they should calculate the risk weight floor as the exposure-weighted average of the risk weight applicable to the part of the exposure covered by the unfunded credit protection and the risk weight applicable to the remaining part of the exposure.

(d) For the purposes of calculating the exposure-weighted average risk weight in accordance with points ((a) and ((c), each risk weight should be calculated separately and weighted by the relevant share of the exposure value.

46. For the purposes of paragraph 45 and in order to recognise the effects of multiple credit risk mitigation techniques in accordance with the approaches specified in paragraph 31, all of the following conditions should be met:

(a) Institutions should have clear policies for the allocation, sequence and recognition of funded and unfunded credit protection that are consistent with the internal recovery and collection process.

(b) Institutions should not recognise the effects of the same credit risk mitigation twice; for example, in allocating the funded credit protection between the part of the exposure covered by the unfunded credit protection and the part of the exposure that is not covered by the unfunded credit protection, double recognition of the funded credit protection should not be allowed.

(c) Institutions should apply the approaches consistently; therefore:

(i) Splitting the part of the exposure covered by a given unfunded credit protection into two parts and applying to one part the substitution of risk parameters approach or substitution of risk weight approach and to the other part the modelling approach should not be allowed.

(ii) In cases of multiple unfunded credit protections that are, at least partially, covering the same part of the exposure, institutions should establish appropriate criteria to choose which unfunded credit protection to use for the purposes of substituting the risk parameters. Such criteria should be described in the internal policies specified by institutions for adjusting PD and LGD estimates in accordance with paragraph 38. Without prejudice to sub-point (i), institutions are allowed to split the part of the exposure covered by a given unfunded credit protection into two parts and apply to one part the substitution of risk parameters approach while recognising the effects of the remaining part of the given unfunded credit protection in the application of the substitution of risk parameters approach to the other existing unfunded credit protections; in particular, the risk mitigation effect of the remaining part of the given unfunded credit protection may be considered in the LGD of comparable direct exposures to the other existing guarantors in accordance with paragraph 47.

47. For the purposes of recognising the credit risk mitigation effects of multiple credit protections that, as a result of the allocation performed by the institution in accordance with paragraph 46, cover the same part of an exposure, institutions may use one of the approaches specified in paragraph 31(a). In particular, for the purposes of applying the substitution of risk parameters approach and calculating the risk weight floor, institutions should use the following methods to derive the LGD of a comparable direct exposure to the guarantor including the credit risk mitigation effects of the additional credit protection:

    (a) Where comparable direct exposures to the guarantor are in the scope of a rating system for which the institution has not received prior permission to use own estimates of LGD in accordance with Article 143(2) of Regulation (EU) No 575/2013, the institution should use the LGD values provided in Article 161(1) of that Regulation, reflecting, if relevant, the funded credit protection by applying the relevant requirements in Part Three, Title II, Chapter 4 of that Regulation.

    (b) Where comparable direct exposures to the guarantor are in the scope of a rating system for which the institution has received prior permission to use own estimates of LGD in accordance with Article 143(2) of Regulation (EU) No 575/2013, the institution should use the LGD of a comparable direct exposures to the guarantor that includes the effect of additional unfunded or funded credit protection. If institutions are not able to recognise this additional credit protection in the estimation of the LGD of comparable direct exposures to the guarantor, then:

        (i) if the LGD of unsecured exposures to the guarantor is lower than or equal to the LGD of unsecured exposures to the obligor, they should use the LGD estimates of the exposure to the obligor reflecting the effect of the additional credit protection; or

        (ii) if the LGD of unsecured exposures to the guarantor is greater than the LGD of unsecured exposures to the obligor, or if institutions are not able to perform such a comparison, they should:

            - for non-retail guarantors, use either the relevant LGD values prescribed by Article 161(1) of Regulation (EU) No 575/2013, reflecting, if relevant, the funded credit protection by applying the relevant requirements in Part Three, Title II, Chapter 4 of that Regulation, or the LGD estimate applicable to unsecured exposures to the guarantor. The choice between these two options should be consistent for the type of exposure of the guarantor;

- for retail guarantors, use the LGD estimate applicable to unsecured exposures to the guarantor.

Accompanying documents

Impact assessment

Article 16(2) of Regulation (EU) No 1093/2010 (the EBA Regulation) provides that the EBA should carry out an impact assessment (IA) that analyses 'the potential related costs and benefits' of any guidelines it develops. This analysis should provide an overview of the findings regarding the problem to be dealt with, the solutions proposed and the potential impact of these options.

This analysis presents the impact assessment (IA) of the main policy options included in these Guidelines on credit risk mitigation for institutions that apply the IRB approach by using their own estimates of LGD in accordance with Article 143(2) of Regulation (EU) No 575/2013. The majority of the IA is high level and qualitative in nature, given the availability of data. The IA also draws on some data collected as part of the 2018 benchmarking exercise.

In line with the above Guidelines, in what follows, FCP refers to collateral as well as OBSN and master netting agreements, while UFCP refers to guarantees and credit derivatives.

A. Problem identification

The EBA, in its Roadmap on the regulatory review of internal models published in February 2016, set out aspects related to CRM to be covered in a fourth and final phase.[19] So far, the clarifications to be provided on CRM in the context of the F-IRB approach and the SA have been agreed in the CRM report. Some aspects of the CRM framework in the context of the A-IRB approach have also been addressed as part of the GL on PD and LGD estimation.

Nevertheless, clarification on certain aspects of CRM under the A-IRB approach remains lacking, resulting in divergent practices and interpretations observed across countries. These divergent practices range from eligibility criteria applied for collateral to the methods applied for recognising UFCP, which ultimately could lead to unwarranted variability of own funds requirements for the same exposure across different institutions or jurisdictions, in turn distorting the level playing field across the EU, not only for banks, but ultimately also for borrowers through the effect this may have on banks' pricing and allocation of lending.

B. Policy objectives

These guidelines aim to address at least some of the remaining areas of lack of clarity with regard to certain issues on CRM in the context of the A-IRB approach. Providing clarifications and guidance

[19] EBA Roadmap for the implementation of the regulatory review of internal models. For details on the progress achieved on the regulatory review of the IRB framework, see also the EBA Progress report on the IRB Roadmap.

on specific aspects, the guidelines aim to improve the level playing field in Europe in applying the A-IRB approach, but also to ensure the right incentives for institutions to use this approach.

C. Options considered

This section presents the main policy options discussed and the decisions made during the development of the guidelines. Advantages and disadvantages, as well as potential costs and benefits of the policy options and the preferred options resulting from this analysis, are also reported.

Eligibility for FCP – mapping to Chapter 4 and introduction of general principles

Option 1a: Provide a one-to-one direct mapping of Article 181(1)(f) of the CRR to requirements in Chapter 4, Section 3, for legal certainty and collateral valuation. In addition, general principles on legal certainty and collateral valuation should be defined for all collateral types, including for those collateral types not included in Chapter 4.

Option 1b: Provide a one-to-one direct mapping of Article 181(1)(f) of the CRR to requirements in Chapter 4, Section 3, for legal certainty and collateral valuation. No general principles on legal certainty and collateral valuation should be defined on top of this.

Narrow definition of the term 'collateral' in Article 181(1) of the CRR

Option 2a: Read 'collateral' in Article 181 of the CRR as FCP only but excluding OBSN and MNA.

Option 2b: Read 'collateral' in Article 181 of the CRR in a wider sense, including UFCP, but also excluding OBSN and MNA.

Recognition of OBSN and MNA

Option 3a: Both OBSN and MNA to be recognised in the exposure value by using E*, calculated in accordance with Article 223(5) and Article 220(3) of the CRR respectively, as an exposure value.

Option 3b: OBSN to be recognised by using the LGD* calculated in accordance with Article 228(2) of the CRR.

Other physical collateral – jurisdictions for which legal effectiveness and enforceability of the collateral need to be assessed

Option 4a: Legal effectiveness and enforceability of physical collateral to be assessed also in all jurisdictions to which the collateral could move during the lifetime of the loan.

Option 4b: Legal effectiveness and enforceability of physical collateral to be assessed also in all jurisdictions where the collateral is usually located depending on the purpose of its use.

Option 4c: Legal effectiveness and enforceability of physical collateral to be assessed also for the jurisdiction where it is most likely that the realisation of the collateral will be carried out.

Treatment of UFCP – modelling approach: adjustment of PD and LGD of the obligor

Option 5a: Adjusting only the LGD.

Option 5b: Adjusting the LGD and under certain conditions also adjusting the PD.

Option 5c: In addition to the options under 5b, also allowing adjusting only the PD.

Issues related to applying the substitution of risk parameters approach

A – Eligibility for using the substitution of risk parameters under the A-IRB approach

Option 6a: Eligibility requirements in Chapter 4 apply (i.e. the same as for the F-IRB approach).

Option 6b: Eligibility requirements in Chapter 4 apply; at the same time, costs of exercising the guarantee need to be negligible.

Option 6c: Eligibility requirements in Chapter 4 apply; at the same time, costs of exercising the guarantee need to be negligible and the guarantor needs to be in non-defaulted status.

Option 6d: Not applicable, because substitution approach under A-IRB approach not allowed.

B – Treatment of UFCP: substitution of risk parameters approach

Option 7a: No substitution of PD or LGD of the guarantor allowed under the A-IRB approach.

Option 7b: Substitution allowed – both PD and LGD of the guarantor should be substituted.

Option 7c: Substitution of either the PD or the LGD of the guarantor, or both, allowed.

C – Treatment of exposures to defaulted obligors under the substitution of risk parameters approach

Option 8a: Substitute the risk weight and EL of the (non-defaulted) guarantor.

Option 8b: Calculate EL_{BE} and LGD in default based on the risk parameters and risk weight of the (non-defaulted) guarantor.

Option 8c: Return to modelling approach.

Application of the substitution approach with partial guarantees and the treatment of cash flows and costs

Option 9a: Allow splitting of an exposure into a covered part and a part not covered by the guarantee and allocate all cash flows and costs (other than the ones coming from the guarantor) to the part not covered by the guarantee.

Option 9b: Allow splitting of an exposure into a covered part and a part not covered by the guarantee and perform a pro rata allocation of cash flows (other than the ones coming from the guarantor) and allocate all costs to the part not covered by the guarantee.

Option 9c: Do not allow splitting of exposures.

Challenges related to the calculation of the LGD of comparable direct exposure to the guarantor in cases of multiple credit protection providers

A – Should it be allowed to factor in the existence of multiple protection providers under the substitution approach?

Option 10a: Substitution approach not allowed to factor in any additional protection.

Option 10b: Substitution approach allowed to factor in additional protection.

B – How to factor in all credit protection in the LGD of comparable direct exposures to the guarantor

Option 11a: Allow substitution approach to factor in any additional protection, but do not allow proxies.

Option 11b: Allow substitution approach to factor in any additional protection, allowing the use of proxies under certain conditions and, where relevant, reverting back to Chapter 4.

D. Assessment of the options and preferred options

Eligibility for FCP – mapping to Chapter 4 and introduction of general principles

Article 181(1)(f) of the CRR requires banks to establish internal eligibility requirements for collateral valuation, legal certainty and risk management that are consistent with Section 3 of Chapter 4. Article 55 of the RTS on the assessment methodology requires competent authorities to verify that at least policies and procedures of the institutions relating to the internal requirements for collateral valuation and legal certainty are fully consistent with the requirements of Section 3 of Chapter 4.

In order to clarify what is meant by 'full consistency' in the RTS, **Option 1a has been chosen as the preferred option**. A direct mapping has been provided from Section 3 of Chapter 4 to Article 181(1)(f) of the CRR of all provisions relevant for legal certainty and collateral valuation. In addition, the guidelines cover other potential types of collateral that are not listed in Chapter 4 but may be reflected in an LGD model, by including general principles on collateral valuation and legal certainty for such collateral.

These general principles are established based on specific requirements of Chapter 4, Section 3. While covering those types of collateral that are not included in Chapter 4 goes beyond a simple mapping, it provides institutions with increased clarity and guidance on the criteria to be considered in the context of legal certainty of collateral and collateral valuation. It is expected that as a result Article 181(1)(f) of the CRR will be adhered to more effectively and consistently across the EU.

Definition of the term 'collateral' in Article 181(1) of the CRR

Article 183 of the CRR covers both LGD and PD estimation and its title explicitly determines the content as relating to UFCP. Article 181 of the CRR covers only the LGD estimation, implying that collateral can only be reflected in LGD estimates and that FCP does not affect the PD.

Verifying that Article 183 of the CRR does not cover too narrow a spectrum of aspects to be considered for LGD adjustment under UFCP,[20] **Option 2a has been chosen**. Requirements related to collateral specified in Article 181 of the CRR should be read as covering FCP only, excluding master netting agreements and on-balance sheet netting (as these are reflected in exposure value in accordance with Article 166 of the CRR).

This reading of the term 'collateral' in Article 181 of the CRR as only FCP (other than netting) allows clarity in the CRR in that Article 181 covers FCP only, and equivalent requirements for UFCP are specified in Article 183.

Recognition of OBSN and MNA

For OBSN and MNA, the effects of netting could technically be recognised through adjusting the exposure value or through an adjustment of the LGD.

However, Article 166 of the CRR requires that netting should be reflected in the exposure value, which cannot be changed by the guidelines. This reflects the fact that netting agreements may be executed before the default and that the use of netting is not expected to lead to any significant costs for the institution. **Option 3a, recognising OBSN and MNA directly in the exposure value**, **has been chosen**, as it is better aligned with the requirements of Article 166(2) and (3) of the CRR. While **Option 3b** would lead to the same results in terms of RWEA, it **was disregarded**, as it would lead to inconsistencies between the OBSN and MNA, as well as inconsistencies in the recognition of netting between the SA and the IRB approach.

Other physical collateral – jurisdictions for which legal effectiveness and enforceability of the collateral need to be assessed

Legal certainty of collateral always needs to be assessed (through legal opinion) with respect to its enforceability and effectiveness in all relevant jurisdictions. The choice of relevant jurisdictions is particularly challenging in the case of physical collateral other than immovable property, as often such collateral can be moved between jurisdictions during the lifetime of a loan. In this case, the enforceability and effectiveness of collateral may also depend not only on the jurisdiction whose

[20] Issues that are not covered under Article 183 will be covered through further clarifications in the guidelines (e.g. currency mismatches); however, in general Article 183 was assessed to cover all important and relevant aspects, in particular given that one would expect eligibility criteria for UFCP to be less strict than for FCP.

law governs the collateral agreement and the jurisdiction where the collateral or protection provider is registered, but also on the location of the asset.

One way to address this would be to obtain a legal opinion on the legal enforceability and effectiveness of collateral in all jurisdictions the physical collateral is likely to move to during the lifetime of the loan. While this would imply a very thorough and complete assessment of the collateral, at the same time it would imply that the collateral contract would need to specify the entire set of jurisdictions the collateral could move to during the lifetime of the loan and that institutions would have to obtain legal opinions for each of them. Comparing the substantial burden this would entail for institutions with the value added this would provide for the collateral assessment, **Option 4a has been ruled out**. **Similar considerations apply to Option 4b**, due to potential difficulties in establishing the usual location of collateral depending on the purpose of its use. **Option 4c has been chosen as the preferred option**, according to which an assessment needs to be made for the jurisdiction where it is most likely that the process of realising the collateral would be carried out, should this be necessary.

However, it is required that the legal certainty is ensured for all relevant jurisdictions. Therefore the guidelines clarify that institutions are also required to assess any additional jurisdictions that are considered relevant to a given collateral.

Treatment of UFCP – modelling approach: adjustment of PD and LGD of the obligor[21]

In Article 160(5), Article 161(3) and Article 164(2), the CRR leaves room for both the PD and LGD to be adjusted under the A-IRB approach for recognising the effects of UFCP. Furthermore, Article 236 of the CRR allows adjustments of both the PD and the LGD at the same time under the F-IRB approach. However, further clarification is needed on how UFCP should be reflected under the A-IRB approach, and under what conditions both the PD and LGD may be adjusted and how. It needs to be ensured that there is no double counting of the CRM effect, where the effect of the same UFCP is recognised both in PD and in LGD estimates.

Option 5b has been chosen as the preferred option. Banks modelling their own LGD, and UFCP being reflected in an adjusted LGD, is assessed as the most sensible option, since it allows maximum risk sensitivity. In exceptional cases, however, adjusting both the PD and the LGD of the obligor may also be appropriate. These would be cases where UFCP not only brings recoveries in the event of default of the obligor, but also influences the behaviour of the obligor, making the obligor more likely to pay its obligations in full. This approach is also reflected in EBA Q&A 2013_145.[22]

Option 5c, in which adjusting only the PD is allowed, has been ruled out. The rationale for this is that adjusting the PD in order to reflect effects of a UFCP, but not then also changing the LGD, would not reflect the full effect of a UFCP. While the existence of UFCP may affect the PD of the obligor, it will never reduce it to zero and, as soon as the lending institution calls on a guarantee,

[21] The treatment of ineligible UFCP has been aligned to the treatment of ineligible collateral in the GL on PD and LGD, para. 127. Cash flows from ineligible UFCP cannot be used as risk drivers and should not affect the calculation of RWE. They should, however, be monitored and treated as if they were not covered by a guarantee.

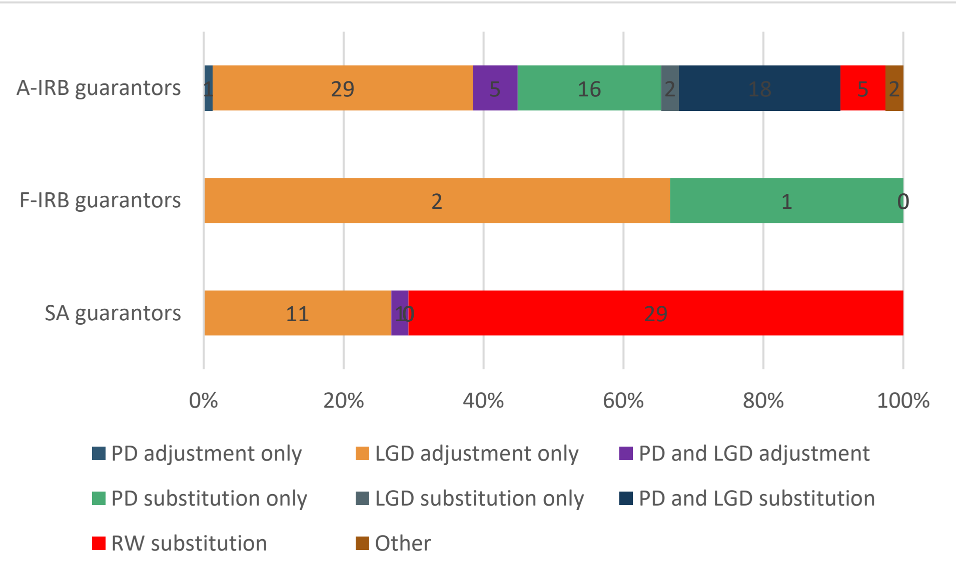
[22] EBA Q&A 2013_415.

this means default of the obligor. Hence, when adjusting the PD to reflect the guarantee, the LGD is expected to be adjusted too.

Ideally, one would have an understanding of the quantitative implications of the various approaches and from this get an understanding of the impact of different approaches on banks. Measuring this is, however, difficult, as it would require hypothetical data from banks on the risk weights under the various approaches, with hypothetical estimates on PDs and LGDs, taking data about past comparable default scenarios into account.

As an alternative, the 2018 EBA benchmarking exercise provides some insights into the current practices of banks.[23] The majority of A-IRB banks that apply the modelling approach in fact model their own LGD (29 out of 35 banks for guarantors or derivatives treated under the A-IRB approach and both of the banks that use the modelling approach for guarantors treated under the F-IRB approach). Five banks adjust both the LGD and PD in the case of A-IRB guarantors, while only one bank adjusts the PD only.

Figure 11: Methodologies used for the treatment of guarantees and derivatives by A-IRB banks in risk-weighted asset calculation by type of guarantor (corporate non-SME and mortgages for A-IRB banks)



Source: 2018 EBA credit risk benchmarking exercise

The responses from the 2018 benchmarking exercise suggest that the choice of Option 5b would not require substantial changes to the current practices of banks.

Issues related to applying the substitution of risk parameters approach

A – Eligibility for using the substitution of risk parameters under the A-IRB approach

Using the substitution approach to reflect UFCP essentially implies that one replaces the obligor's parameters with the parameters of the guarantor. For this to be appropriate, certain conditions

[23] Institutions were asked to provide some information on their treatment of guarantees and derivatives. Submission of this part of the report was voluntary and in total 94 institutions supplied information.

need to be met to ensure that the exposure can be treated as if it were a direct exposure to the guarantor. Since the substitution approach is the only possible method under the SA and the F-IRB approach, the CRR establishes detailed eligibility requirements for using UFCP under these approaches. It is considered appropriate to require that the same requirements should be met in order to use the substitution of risk parameters under the A-IRB approach. In addition to this, it has been assessed that the cost of exercising the guarantee also needs to be negligible, as otherwise any material costs related to exercising the guarantee would need to be reflected in the LGD estimate. In this case, the LGD applicable to direct exposure to the guarantor would not be appropriate and this difference should be reflected through modelling.

Furthermore, an additional restriction has been implemented in that, in order to use the substitution approach under the A-IRB approach, the guarantor cannot be defaulted. This additional condition is needed because the risk weight of a defaulted guarantor is not considered appropriate for an exposure to a non-defaulted obligor. It cannot be argued that the exposure can be treated as a direct exposure to the defaulted guarantor. Rather, after the default of the guarantor the exposure towards the obligor should be treated as no longer secured by that guarantee. Therefore, **Option 6c has been chosen as the preferred option**, and all three conditions need to be met in order for the substitution approach to be used under the A-IRB approach.

B – Treatment of UFCP: substitution of risk parameters approach

Articles 160 and 161 of the CRR do not establish a direct link to the substitution of risk parameters approach in the context of the A-IRB approach, as they use the wording of adjustment of PD and LGD only. This gives rise to the discussion of whether PD and LGD adjustment can also entail substituting the risk parameters and, if so, if it should apply only to the PD, only to the LGD or to both.

In order not to give preferential treatment to the F-IRB approach where substitution is allowed, substitution should be allowed for UFCP under the A-IRB approach, and it can be viewed as an extreme form of adjustment of risk parameters. **Option 7a has been eliminated as a result.**

At the same time**, Option 7c has been eliminated**, as it would not adequately reflect the risk profile of exposures covered by UFCP. Since the application of the substitution approach is like modelling a comparable direct exposure to the guarantor, substituting both LGD and PD of the guarantor is the only way that would be an appropriate reflection of a comparable direct exposure. If only substitution of the guarantor's PD were allowed, the LGD (of the obligor) would not correctly reflect the loss that would occur if the guarantor failed. Likewise, allowing substitution of the guarantor's LGD only, one would be treating the exposure as a direct exposure to the guarantor, but with an inappropriate PD (as the guarantor's PD is likely to be different from the obligor's PD).

Substituting both the guarantor's PD and its LGD, **Option 7b, is therefore the option chosen**.

The preferred option also reflects the most common practices applied currently when substitution of risk parameters is used. Figure 11 shows that approaches vary depending on the guarantor type. For A-IRB guarantors, the most commonly used approach among A-IRB banks using the substitution approach (41), was substitution of both the PD and LGD of the guarantor (18). This was followed by substitution of the guarantor's PD only (16), of the guarantor's LGD only (2) and of the risk weight (5). For guarantors treated under the F-IRB approach, the only bank applying the substitution approach applied the guarantor's PD substitution only. However, under the F-IRB approach the LGD values are uniform for all exposures; hence, the substitution results in a different LGD parameter only in cases of a difference in seniority between the underlying exposure and the UFCP.

C – Treatment of defaulted exposures under the substitution approach

The substitution of risk parameters approach can be used under the assumption that the exposures covered by UFCP are treated as direct exposures to the guarantor. As this should not change in the case of default of an obligor – just the opposite; it is likely that the exposure will actually become a direct exposure to the guarantor – **Option 8c was disregarded**.

Based on the assumption described above, it is considered that the appropriate risk weight for such exposure is the risk weight applicable to a direct exposure to the guarantor. Option 8b was considered in the context of the different risk weight functions applicable to defaulted exposures, which is based on the EL_{BE} and LGD in default. Based on the risk weight and EL of the direct exposure to the guarantor, it could be possible to transform the risk weight function in such a way as to achieve the LGD in default. However, this was considered inappropriate and unnecessary and hence **Option 8b was disregarded**. **Option 8a was chosen as the preferred option**, as it is simple to apply and leads to appropriate levels of own funds requirements. Challenges related to the calculation of the LGD of comparable direct exposure to the guarantor in cases of multiple credit protection providers.

The application of the substitution approach with partial guarantees and treatment of cash flows and costs

In cases where partial guarantees are treated under the substitution approach, splitting the exposures is necessary for the correct determination of the LGD and for the calculation of risk weights; therefore, **Option 9c has been eliminated.**

In order to ensure consistency in the calculation of LGDs for the part not covered by the guarantee, however, it is important to establish and clarify the allocation of costs and cash flows from sources other than the guarantor (e.g. the obligor).[24] Whether these will be allocated in full to the part not covered by the guarantee, or allocated on a pro rata basis between the part of the exposure that is covered and the part that is not covered by the guarantee, will affect the LGD estimate for the part not covered by the guarantee and will therefore have implications for the own funds requirements, as well as for the incentives for substitution.

Option 9a, **allocation of costs and cash flows in full to the part of the exposure not covered by the guarantee, has been chosen as the preferred option** for reasons of simplicity.

[24] Cash flows from the guarantor will be allocated in full to the part of the exposure covered by the guarantee.

It is noted that pro rata allocation will disincentivise the substitution approach in the event of only partial or late payment of the guarantor, as it will lead to higher LGD on the part of the exposure not covered by the guarantee. However, guarantees that pay in full and on time are the most likely outcome as a result of the stricter eligibility requirements of Chapter 4. When guarantees pay in full, the two methods for allocation of cash flows will produce the same realised LGD for the exposure.

Challenges related to the calculation of the LGD of comparable direct exposure to the guarantor in the case of multiple credit protection providers

A – Should it be allowed to factor in the existence of multiple protection providers under the substitution approach?

A key aspect to consider when reflecting FCP and UFCP in a bank's exposure and credit risk is the question of how far this can be done in a realistic and representative way. The answer to this in the context of substitution depends on how well an institution is able to model a comparable direct exposure to the guarantor, in order to arrive at the substituted guarantor's PD and LGD values.

In cases where an exposure is covered by several credit protections, either in the form of both collateral and guarantees (i.e. FCP and UFCP) or by multiple guarantees (i.e. multiple UFCPs), establishing an LGD estimate for a comparable direct exposure to a guarantor becomes quite difficult, given that such hypothetical exposure may not actually exist on the balance sheet of the institution. In the case of FCP and UFCP, for example, calculating the LGD for the comparable direct exposure to the guarantor would require finding an exposure to the guarantor that is collateralised by the same collateral as the original exposure.

Therefore, the question arises whether it should be allowed to recognise other existing risk mitigation techniques under the substitution of risk parameters approach, or whether banks should in this case be required to ignore any additional protection (i.e. not take into account the collateral or any additional UFCP when modelling the LGD of a comparable direct exposure to the guarantor).

Option 10b has been chosen as the preferred option due to its higher risk sensitivity. In principle, institutions should be allowed to factor in all credit protection when applying the substitution approach. Not allowing the recognition of all eligible credit protection may disincentivise institutions to take on additional collateral or guarantees.

B – How to factor in all credit protection in the LGD of comparable direct exposures to the guarantor

Acknowledging the difficulties involved in reflecting all credit protection in the LG of a comparable direct exposure to the guarantor, the crucial question is then about providing potential simpler alternatives for cases where this is not feasible.

Disallowing the use of proxies under Option 11a would imply that, unless banks are able to model the LGD for a comparable direct exposure to a guarantor and taking into account additional credit protection, they would have to disregard any additional form of protection covering the exposure.

Given the calculation difficulties discussed above and the potential disincentives created by this outcome, **Option 11a has been eliminated**.

Instead, **Option 11b has been chosen as the preferred option**. For A-IRB guarantors, banks should be allowed to use proxies in case they are unable to compute the LGD of a comparable direct exposure to the guarantor taking into account the other credit protections. For these cases, several potential proxies are suggested, allowing the recognition of additional credit protection in a simplified manner, under conditions ensuring that the proxies are sufficiently conservative.

Allowing the application of these proxies limits the disincentives for institutions to take on additional collateral or guarantees.

E. Conclusion

The application of the above policy options by banks will have implications for how they determine their risk-weighted assets (RWAs) for exposures covered by FCP or UFCP and may influence their decisions to use either the modelling or the substitution approach. The proposed policy choices will have some impact on the RWAs and hence the amount of capital banks will need to hold.

It is not possible to determine the aggregate effect on RWAs and capital, as there are insufficient data available on banks' current practices in order to get an indication on the necessary changes and their impact.

Nevertheless, despite these impacts and the uncertainty related to their size, three key improvements and advantages that come with these guidelines and the proposed policy options should be highlighted in particular:

1. **Enhanced transparency and clarity:** the clarifications provided through these guidelines will ensure clarity for banks and improved transparency on banks' practices for both supervisors and market participants.

2. **Improved risk management:** these guidelines and policy decisions taken promote a risk-sensitive approach by banks. This contributes to more focused credit risk management and more effective capital management, through better differentiation between safer and riskier exposures.

3. **Level playing field:** common sets of guidelines on the specificities of CRM in the context of A-IRB models ensure that banks' practices are better aligned, their identified risks and RWAs are more comparable and as a consequence their capital positions provide a better, more reliable and more comparable reflection of EU banks' risk profiles.

Overview of questions for consultation

Question 1: Do you agree with the proposed clarifications on eligibility requirements in accordance with Article 181(1)(f) of the CRR?

Question 2: Do you agree with the proposed clarifications on the assessment of legal certainty of movable physical collateral? How do you currently perform the assessment of legal effectiveness and enforceability for movable physical collateral?

Question 3: Do you agree with the proposed clarification regarding the calculation of realised LGD on exposures covered by eligible on-balance sheet netting or master netting agreements?

Question 4: Do you have specific concerns related to the recognition of collateral in the modelling of LGD? How do you currently recognise collateral in your LGD estimates?

Question 5: What approaches for the recognition of the unfunded credit protection do you currently use? What challenges would there be in applying approaches listed above for the recognition of unfunded credit protection?

Question 6: Do you have any specific concerns related to the issues excluded from the scope of the Guidelines?

Question 7: Do you agree with the proposed clarification regarding the parallel treatment of ineligible UFCP and ineligible FCP? How do you currently monitor the cash flows related to ineligible unfunded credit protection and how do you treat such cash flows with regard to the PD and LGD estimates?

Question 8: Do you agree with the proposed rules for the application of the substitution approach? Do you see any operational limitations in excluding the guaranteed part of exposure to which substitution approach is applied from the scope of application of the LGD model for unguaranteed exposures?

Question 9: Do you agree with the proposed rules for the application of the modelling approach?

Question 10: What challenges would you envisage for back-testing the substitution approach? Do you agree that the back-testing should be performed rather at Expected loss level? Do you have any approach currently in place for the back-testing of substitution approach?

Question 11: Do you agree with the proposed guidance for the estimation of the LGD of comparable direct exposure towards the guarantor? What concerns would you have about the calculation of the risk weight floor?

Question 12: Do you consider portfolio guarantees as a form of eligible UFCP? Do they include cases where the guarantee contract sets a materiality threshold on portfolio losses below or above which no payment shall be made by the guarantor? Do they include cases where two or more thresholds (caps) either expressed in percentages or in currency units are set to limit the maximum obligation under the guarantee? How do you recognise the portfolio guarantees' credit risk mitigation effects in adjusting risk parameters?

Feedback on the public consultation

The EBA publicly consulted on the draft proposal contained in this paper.

The consultation period lasted for 3 months and ended on 25 May 2019. The EBA received 35 responses, of which 25 were published on the EBA website.

This paper presents a summary of the key points and other comments arising from the consultation, the analysis and discussion triggered by these comments and the actions taken to address them if deemed necessary.

In many cases, several industry bodies made similar comments or the same comments were repeated in the responses to different questions. In such cases, the comments and EBA analysis are included in the section of this paper where the EBA considers them most appropriate.

Changes to the draft guidelines have been incorporated as a result of the responses received during the public consultation.

Summary of key issues and the EBA's response

As the consultation paper included 12 specific questions, the industry provided detailed feedback on the draft GL. There was general support for the GL and in particular for the EBA's efforts to provide clarity on the CRM framework for A-IRB exposures.

While the overall number of responses is high, it has to be noted that most of the submitters did not respond to all of the questions and were focused on specific topics such as legal certainty of other physical collateral and the treatment of credit insurance. Only six respondents provided comprehensive feedback on all or most of the questions.

Most of the respondents focused on the eligibility requirements of FCP and the assessment of legal certainty (questions 1 and 2). In particular, negative feedback was received on the strict approach proposed for the selection of relevant jurisdictions for other physical collateral (i.e. the set of jurisdictions where the collateral could move during the lifetime of the loan according to the collateral agreement). The alternative approach considered in an explanatory box (where the relevant set of jurisdictions could be limited to those where the collateral is usually located depending on the purpose of its use) was evaluated as unpractical, since many physical types of collateral such as ships or aircrafts do not have a precise set of usual jurisdictions where they operate. Some of the respondents also pointed out the potential cost of having a legal opinion for each jurisdiction. Furthermore, it was also argued that it is not market practice to require assets to be operated or located within a limited number of jurisdictions. Moreover, the respondents brought to the EBA attention a number of international agreements, such as the Cape Town Convention on International Interests in Mobile Equipment, the Protocol thereto on Matters Specific to Aircraft Equipment and the Luxembourg Rail Protocol (expected to be in force by the time the GL come into force), which are supposed to provide a robust international framework for the enforcement of creditors' rights over their collateral. The EBA has carefully considered the feedback received and adjusted the proposal such that legal certainty could be achieved in a simpler and less costly manner.

Several respondents (nine) focused on the treatment of credit insurance, in particular with respect to the final Basel III framework, in which these exposures will be treated under the F-IRB approach. While the comments are mostly in response to questions 6, 8 and 11, they generally appear to go beyond the scope of these GL, contesting the requirements of the CRR and the reforms envisaged with the implementation of the final Basel III framework. A comprehensive response to these concerns was expressed in the EBA's Opinion on the treatment of credit insurance in the prudential framework, published and submitted to the Commission in March 2020[25].

While there was broad agreement with the requirements specified for the back-testing of substitution of risk parameters, some respondents expressed concerns about its legal feasibility.

More detailed feedback with regard to these and other comments is provided in the table below.

25 https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Opinions/2020/880839/EBA%20Opinion%20on%20credit%20insurance%20EBAOp-2020-05.pdf

Summary of responses to the consultation and the EBA's analysis

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
General comments			
General principles for legal certainty of FCP	One respondent suggested that enforceability in case of insolvency or bankruptcy, required in paragraph 16 of the consultation paper of the GL (CP hereinafter), is not a systematic and general requirement laid down by the CRR. In the opinion of the respondent, it should not be considered an eligibility criterion applicable to all CRM techniques or in every case, but should only apply where explicitly required by the CRR, i.e. for certain CRM techniques such as (i) on-balance-sheet netting agreements (Article 205 of the CRR) or (ii) master netting agreements for repurchase, securities, or commodities lending or borrowing transactions or other capital-markets-driven transactions as defined in Article 192(3) of the CRR (Article 206 of the CRR).	Paragraph 17 has been drafted along the lines of Article 194(4) of the CRR, which covers generally all forms of FCP. Therefore, it has been decided to keep the requirement in the GL.	N/A.
Treatment of credit insurance as UFCP	A large number of respondents expressed concerns on the treatment of insurance as UFCP, in particular with respect to the final Basel III framework, in which these exposures will be treated under the F-IRB approach. The main concern was that, after the implementation of the revised Basel III framework, financial institutions will be treated under the F-IRB	The issues raised regarding the treatment of credit insurance are beyond the scope of these GL, since they refer to reforms proposed in the final Basel III framework. As the issue of the treatment of credit insurance was not explicitly addressed in the EBA's response to the Commission's call for advice on the impact and implementation of the final Basel III framework in the EU (CfA report)[26], the EBA issued a dedicated opinion to provide a clear stance on these	Addressed in the EBA Opinion on the treatment of credit insurance in the prudential framework.

[26] https://eba.europa.eu/eba-advises-the-european-commission-on-the-implementation-of-the-final-basel-iii-framework

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	approach and therefore the 45% single LGD value (prescribed) for financial institutions will disincentivise the use of CRM techniques provided by insurance companies. This regulatory LGD value is considered inadequate since (i) it is not reflective of the reality of this specific CRM tool (as noted in the Fitch Insurer Rating Criteria, recovery rates for policyholders are expected to be well above the ones implied by this value), (ii) it will result in substitution of much higher risk weights and (iii) it will potentially lead to a reduction in lending volumes and trade facilitated by this CRM tool. It was also noted that insurance policies used as CRM tools warrant an enhanced LGD compared with that prescribed in the FIRB approach or indeed observed in direct exposure instances. In this particular case, indirect exposures are in fact more beneficial than direct for all the reasons that set insurers apart from banks (i.e. insurers are not involved in maturity transformation (unlike banks) and are not exposed to sudden losses of confidence or 'runs' and most multi-line insurers are uncorrelated to the credit cycle). In this regard, the respondents welcome further discussion on the introduction of more risk-sensitive LGD values for insurance companies to promote a virtuous circle and incentivise banks to insure their deals with credit protection providers. Furthermore, the revised Basel III framework does not differentiate between the following two cases: (i) exposures to an insurance company as a lender and (ii) beneficiary of an insurance policy provided by the insurer	aspects. This opinion intends to complement the previously provided policy advice with additional considerations related to the treatment of credit insurance as a CRM technique for the purpose of the calculation of own funds requirements. With regard to the double default treatment specified in Article 153(3) of the CRR, institutions can currently use this method for recognising the effects of UFCP, as clarified in section 6.2 of the GL.	

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	covering a loan. Therefore, the application of the LGD value of 45% is greatly overestimating the LGD given the preferential treatment provided by Solvency II. Two respondents suggested explicitly both (i) better recognising the specificity of insurance exposures in the LGD values prescribed by the regulation or maintaining the A-IRB approach for exposures to credit insurers and (ii) confirming that collateral effects can be assessed independently of the identity of the obligor and reflected as such at the comparable exposure level. One respondent suggested keeping the double default treatment presented in Article 153(3) of the CRR to give preferential treatment to credit insurances.		
Date of application of the guidelines	One respondent pointed out that the clarification of the CRM approaches at which these GL are aimed should be considered jointly with the changes related to the finalisation of Basel III to avoid excessive model volatility within a very short timeframe. One of the main challenges is to achieve the required IRB changes (such as the implementation of these GL) by the 2021 deadline (many of them will become redundant after the implementation of the revised Basel III framework). It was also noted that, in the event of an adjustment to the implementation deadline of	The aspect of the timing of the application of these GL does not relate exclusively to the EBA GL on CRM under the A-IRB approach; hence, it does not imply any change in the proposed GL. This point has been assessed by the EBA in the Progress report on the IRB roadmap [27] (IRB roadmap report), and the implementation timeline was extended. More precisely, it is specified in paragraph 18 of the report that 'to accommodate the concerns as regards resources on both sides, supervisors and industry, the EBA considers that the final deadline for implementation of the changes to the rating systems	Addressed in the EBA's Progress report on the IRB roadmap (postponement of the implementation deadline).

[27] https://eba.europa.eu/eba-publishes-report-on-progress-made-on-its-roadmap-to-repair-irb-models

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	2021 to align with the Basel III implementation, the additional time need to be available to both banks and regulators. An adjustment for regulators alone will not give banks the time needed to combine the Basel III reform and the IRB repair changes to their models. In this vein, several respondents suggested postponing the date of application of the IRB repair measures to the date of application of the revised Basel III framework. In addition, one respondent requested the EBA to prevent competent authorities from bringing forward the date of application of the GL.	should be postponed by one year until the end of 2021 (application date from 1 January 2022). It should be noted that, while the final deadline is postponed, both institutions and competent authorities should follow the original implementation plan where feasible'. Considering the interactions with the final Basel III framework, in the IRB roadmap report report the EBA also acknowledges in paragraph 19 that 'the plans for the implementation of the changes in the rating systems should take into account the upcoming reforms, in line with the revised Basel III framework. In particular, institutions may apply a lower priority to those models that cover portfolios that will no longer be eligible for the AIRB approach under the final Basel III framework. In this specific case, where institutions have stand-alone rating systems for exposures to institutions, financial institutions treated as corporates or large corporates as defined under the final Basel III framework, the deadline for the implementation of the changes in LGD and conversion factors models is postponed until the end of 2023. Within that period, institutions may also choose to apply for permission to return to a less sophisticated IRB approach or for the permanent partial use of the standardised approach for those portfolios, according to Articles 149 and 150 of the CRR.'	
Rating transfer	Two respondents asked for clarification of the difference between the rating transfer as specified	The EBA took note of the concerns raised by the respondents and clarified in section 4 of the GL that	Changes to section 4.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	in paragraph 62(a) of the EBA GL on PD and LGD estimation and the 'substitution approach' as specified in paragraph 29(a) of the CP ('substitution of risk parameters approach' as per final GL). In particular, it was deemed necessary to clarify whether the eligibility requirements for the CRM purposes specified in these GL are considered equivalent to the appropriateness requirements for the rating transfer purposes specified in the EBA GL on PD and LGD estimation.	the treatment of ratings of third parties presented in paragraphs 62 to 64 of the EBA GL on PD and LGD estimation is not considered a method for recognising CRM effects. In particular, the use of the rating transfer specified in paragraph 62(a) is not a substitution of risk parameters due to the existence of CRM and therefore it is not covered by the scope of these GL. Rating transfer and the 'substitution of risk parameters approach' (specified in paragraph 31(a)(ii) of the GL) are different concepts: (i) the first one is a possible manner in which the rating of a third party (with whom the obligor has a contractual or organisational relation) may be taken into account by institutions in the assessment of risk of an obligor whereas (ii) the second one is one of the possible approaches that institutions may use to reduce the credit risk associated with an exposure. Under (i) the obligor may use the support from a third party without any specific action from the institution and this support may prevent the default of the obligor. On the contrary, under (ii) the CRM is realised at the explicit request of the institution and this action triggers the default of the obligor. Under this understanding, there is no direct relation between the eligibility requirements for CRM techniques and the appropriateness of the type of support provided by a third party to an obligor in order to consider a rating transfer.	
Recognition of collateral and LGD floors	Two respondents expressed concern on the future impact of the recognition of collateral in the modelling of LGD. They argued that the application	The points raised regarding the future recognition of collateral and LGD floors are beyond the scope of these GL, since they refer to reforms proposed in the	Addressed in the CfA report.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	of input floors and haircuts on A-IRB models proposed by the final Basel III framework is overly punitive, as the formula used to determine the floor considers the haircut according to the FCCM (under the F-IRB approach), hence leading to increasing capital absorption despite better quality collateral. In this context, several respondents asked for a review of the granularity and scope of 'other physical collateral' in order to accommodate specific characteristics of collaterals such as aircraft and ships. They suggested the introduction of a separate collateral type for 'aircraft and ships', with lower regulatory LGD under the F-IRB approach and lower LGD floor under the A-IRB approach, to differentiate them from less liquid collateral such as plants, machinery and equipment. Furthermore, some respondents deemed the eligibility criteria for specialised lending exposures to be overly punitive, as designed for corporate loans. They argued that the eligibility criteria should therefore be adapted to the economic reality of the recovery practices observed in the market.	final Basel III framework; hence, it does not imply any change in the proposed text. Nevertheless, it should be noted that 'Recommendation CR-IR 13: LGD input floors' presented in the CfA report clarifies that 'the haircuts used for calculation of the individual LGD input floors for secured and partially secured exposures should be based on the eligibility criteria of the A-IRB Approach'. However, the final Basel III framework does not introduce any ad hoc haircut values for the LGD input floors for collaterals such as aircraft and ships.	
Large exposure framework	One respondent noted that any change to the CRM techniques (especially UFCP eligibility and/or efficiency) should take into consideration the large exposures framework in order to avoid any unintended consequences.	According to section 2, 'these guidelines provide additional clarity on the application of the CRM approach for A-IRB institutions, focusing on clarifying the application of the current CRR provisions for the eligibility and methods of different CRM techniques, namely funded and unfunded credit protection,	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
		available to institutions under the A-IRB Approach.' The aim of the GL is therefore to provide clarifications of the existing requirements and not to change the framework.	
General provisions – netting	One respondent questioned the reason for not including a reference to Article 166(2) of the CRR and recognition of netting agreements (as opposed to 'master netting agreement') in the last bullet point of paragraph 10 of the background and rationale of the CP. The respondent suggested that a change should be introduced in the CRR, and that Article 166(2) of the CRR should refer to the recognition of netting agreements in accordance with Chapter 6.	The CRR cannot be changed by EBA guidelines, so the suggestion was not taken on board. Following the requirements of the CRR, the GL refer to 'master netting agreements'.	N/A.
Mapping of the CRM regulation applicable to SA, F-IRB approach and A-IRB approach	A respondent requested a mapping regarding the articles relating to the key areas of CRM (e.g. currency mismatch, maturity mismatch, collateral haircuts, etc.) applicable to SA, F-IRB approach and A-IRB approach.	As stated in section 2.2 of the GL, 'These guidelines apply in relation to the IRB approach in accordance with Part Three, Title II, Chapter 3 of Regulation (EU) No 575/2013 and, in particular, to institutions which have been permitted to use own LGD estimates'; therefore, no information regarding the CRM techniques applicable to exposures under the SA and F-IRB approach is provided in these GL. Such information is available in the CRM report [28] published in March 2018.	N/A.
Eligibility requirement for UFCP	One responded asked whether there are other conditions in addition to being compliant with the	The EBA confirms that the intention of the GL is not to create eligibility requirements for the A-IRB	N/A.

[28] https://eba.europa.eu/sites/default/documents/files/documents/10180/2087449/2644c0e5-6007-4652-8839-993b40bed22e/EBA%20Report%20on%20CRM%20framework.pdf

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	eligibility requirements of Chapter 4 to ensure compliance with the eligibility criteria for UFCP under the A-IRB approach. In particular, given that institutions applying the A-IRB approach may sometimes wish to structure their UFCP in line with the eligibility requirements of Chapter 4, it would be helpful if the EBA could confirm that compliance with the UFCP eligibility criteria under Chapter 4 is sufficient to treat the UFCP as eligible under the A-IRB approach. In addition, one respondent asked whether the fulfilment of the Chapter 4 eligibility requirements would automatically mean that the UFCP is unconditional.	approach that are stricter than for the F-IRB approach or the SA. In this respect, being in line with the eligibility requirements for UFCP of Chapter 4 would ensure compliance with eligibility requirements for UFCP of Chapter 3 as well as with the principles presented in paragraphs 24 and 25 of the GL. Furthermore, as conditional UFCP is not permitted under the F-IRB approach and the SA, if an institution fulfils the requirements for UFCP for these approaches, this means that the UFCP is unconditional.	
Question 1. Do you agree with the proposed clarifications on eligibility requirements in accordance with Article 181(1)(f) of the CRR?			
General consistency with the requirements of Chapter 4	A couple of respondents expressed their agreement with the GL. They welcomed the general alignment of the SA and the IRB approach in terms of eligibility requirements (in particular regarding the collateral valuation), as well as exempting the requirements around property insurance for collateral. Other respondents generally criticised the notion of eligibility, not only because too strict eligibility criteria for some collaterals would be difficult to meet in practice, but also because the LGD models and their outcomes can capture the lower quality of this credit protection (via the lower observed cash flows). The respondents pointed out in	In order to recognise the effects of CRM techniques in own funds requirements, institutions have to meet minimum eligibility criteria. However, as specified in Article 181(1)(f) of the CRR, under the A-IRB approach these eligibility criteria are less strict than those applicable under the SA and the F-IRB approach. This already takes into account the increased risk sensitivity of LGD models compared with less sophisticated approaches.	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	particular the general consistency for legal certainty and collateral valuation, which seems too strict in terms of costs and frequency and considering that A-IRB institutions are allowed to reflect lower quality CRM techniques in their estimates. One respondent specifically criticised the requirement to revalue properties every 3 years as too strict.		
Reasonable timeframe	Two respondents argued that the notion of 'reasonable timeframe' for repossession or liquidation of the collateral (paragraph 16 of the CP) cannot be covered by the standard legal opinions, since this assessment is outside the scope of market standard legal opinions currently available by law firms active in cross-border financings of aircraft and other movable assets Moreover, one respondent noted the addition of the word 'also' in paragraph 16 of the CP, which does not appear in Article 194(4) of the CRR. In the respondent's view, it should be clarified that there is no need for an institution to be able to retain assets in the sole event of a custodian insolvency or default (i.e. if the obligor is still performing) but rather the requirement is that the assets are bankruptcy remote to the custodian.	The EBA notes that the terminology 'reasonable timeframe' is the one used in Articles 208 and 210 of the CRR, and is necessary to establish whether a credit protection arrangement is legally effective and enforceable. Conversely, the EBA agrees with the respondent regarding the interpretation of the word 'also', i.e. it does not refer to the cases of a custodian insolvency only. In particular, in accordance with Article 194(4) of the CRR, it is clarified in the background and rationale that the collateral should always be effective when necessary, even in the case of custodian insolvency.	Amendments to the background and rationale section.
Frequency of monitoring of the value of collateral	One respondent asked whether the requirement in paragraph 17(b) of the CP regarding the obligation to carry out more frequent monitoring in case the market is subject to significant changes in	The EBA notes that Article 207 of the CRR only applies to financial collateral, while paragraph 18 of the GL has a larger scope of application and applies to all types of collateral. Therefore, the EBA confirms that	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	conditions is stricter than the requirement in Article 207(4)(d) of the CRR (‘at least every six months and whenever they have reason to believe that a significant decrease in the market value of the collateral has occurred’).	paragraph 18 of the GL does not extend the monitoring requirements for financial collateral.	
Full consistency versus compliance	A couple of respondents asked whether there is a difference in meaning between the requirement for an A-IRB institution to be ‘fully consistent’ with the CRR requirements listed in paragraph 18 of the CP and the requirement for an F-IRB institution to ‘comply’ with the same paragraphs in order to recognise collateral.	The EBA sees no difference in the terminology used and this wording is consistent with the RTS on assessment methodology.	N/A.
Leasing exposures	One respondent proposed deleting the reference to Article 210 of the CRR for leasing exposures as the ownership of the collateral ensures an effective and strong form of credit risk mitigation.	Article 211(1)(a) of the CRR requires that leasing exposures could be treated as collateralised only when the conditions set out in Article 208 or Article 210 are met. Therefore, eligibility requirements for collateralised leasing exposures should be fully consistent with those provided in Article 210(a) and (g) of the CRR. In addition, paragraph 19(d) of the GL clarifies how institutions should valuate and revalue physical collateral.	Changes to section 5.1.
Clarification of the wording ‘openly pledged’	One respondent asked the meaning of ‘openly pledged’ in Article 212(1)(a) of the CRR.	The GL specify the requirements for using CRM techniques under the A-IRB approach. Therefore, it goes beyond the scope of this GL to define notions provided in the CRR that apply also to the SA and the F-IRB approach.	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
Independence	In paragraph 19, last sub-paragraph, of the CP, one respondent suggested changing the term 'independent' to 'not directly benefiting' as in paragraph 16 of the background and rationale.	The EBA notes that the wording 'independent' comes from the Article 194(1) of the CRR. Hence, the background and rationale section has been amended to align with this terminology.	Amendments to the background and rationale section.
Valuation method	One respondent asked for clarification regarding the interpretation of the first sentence of Article 181(1)(e) of the CRR. In particular, it sought to understand whether the 'control' of the collateral mentioned in the second sentence of the same article prescribes that other valuation methods than 'market value assessment' must also be applied.	Article 181(1)(e) of the CRR requires institutions to take into account in LGD estimation the effect of the potential inability to expeditiously gain control and liquidate the collateral but does not prescribe any specific method to achieve this. This aspect should be reflected appropriately in the design of the model.	N/A.
Legal opinion	One respondent argued that institutions should be allowed to assess legal certainty via a simple questionnaire or a memorandum of advice, rather than a legal opinion with specific qualifications and assumptions.	The EBA notes that the terminology 'legal opinion' is the one used in Article 194 of the CRR, and it is necessary to establish whether a credit protection arrangement is legally effective and enforceable.	N/A.
First ranking requirements	One respondent asked for reasons for not applying the first ranking requirements to assess legal certainty of receivables and other physical collateral consistently across collateral types and approaches. In particular, the respondent asked whether it could be considered as consistent with the principles presented in paragraphs 17 and 18 of the CP if institutions set their own rules for exceptions to the first ranking requirement as long as the valuation carried out is sufficiently risk	Paragraph 19(c) of the GL requires that eligibility requirements for receivable collaterals should be consistent with those provided in Article 209(2) of the CRR, including that lending institutions should have a first priority claim over the collateral, although such claims may still be subject to the claims of preferential creditors provided for in legislative provisions. This requirement is deemed relevant to receivables, considering that recoveries of this type of collateral could be highly influenced by execution of other claims.	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	sensitive to the fact that the institution does not hold a first rank position in relation to the collateral.	Nevertheless, the EBA does not consider it necessary to introduce this eligibility requirement also for other physical collateral, since A-IRB institutions should reflect this aspect in their LGD estimates. In particular, they should take into account the effect of their potential inability to expeditiously gain control of their collateral and liquidate it (in this case due to other claims over the same collateral).	
Maturity mismatch	One respondent asked whether maturity mismatch between the original exposure and the UFCP is allowed in the light of the provisions laid out in Article 183(1) of the CRR.	UFCP with maturity mismatch is eligible under the SA and the F-IRB approach in accordance with Article 237 of the CRR. Since eligibility requirements under the A-IRB approach are less strict than the ones for less sophisticated approaches, UFCP with maturity mismatch is eligible also for A-IRB institutions. The GL now clarify how to deal with maturity mismatch in calculating the risk weight floor (required in Article 161(3) of the CRR) and for institutions using the ‘substitution of risk parameters approach’ (in accordance with paragraph 31(a)(ii) of the GL). In addition, the EBA deems it appropriate that institutions using the ‘modelling approach’ (in accordance with paragraph 31(a)(i) of the GL) should consider any maturity mismatch and if relevant reflect it appropriately in the estimation of risk parameters.	Changes in paragraph 44(a).
Eligibility requirements and Bank Recovery and Resolution Directive (BRRD)	One respondent asked for clarification about the eligibility requirements for FCP and UFCP provided by banks under resolution. In particular, it was questioned whether the powers of resolution	While the BRRD is not considered to generally prevent the recognition of CRM, the legal effectiveness and enforceability should be	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	authorities under the BRRD are not regarded as prejudicing the satisfaction of the requirement for legal effectiveness and enforceability of the credit protection.	considered on a case-by-case basis. The EBA considers that further clarifications regarding this comment are out of the scope of the GL, as it potentially refers also to institutions under the SA and the F-IRB approach.	
Question 2. Do you agree with the proposed clarifications on the assessment of legal certainty of movable physical collateral? How do you currently perform the assessment of legal effectiveness and enforceability for movable physical collateral?			
Legal opinion – substantive variation of terms	Several respondents commented that the provisions given in paragraph 19 of the CP were seen as quite burdensome. Some of them complained about the requirement of having an additional legal opinion when there is substantial variation to the terms of the collateral arrangement, such as the application of the collateral arrangement to other types of exposures or other obligors. They claimed that this could go against the general principle that a single legal opinion is sufficient for multiple collateral arrangements for the same type of collateral. In particular, the meaning of 'other types of exposures' and 'other obligors' should be clarified, since according to the CP a new legal opinion seems to be required for any new borrower. Another respondent pointed out that transaction-specific opinions should be considered the exception rather than the rule. While the clarifications provided in the GL recognise the possibility of a generic opinion (single opinions for multiple collateral arrangements), they may give	Institutions are required to obtain an additional legal opinion any time a substantive variation of the terms of the collateral arrangement has an impact on the effectiveness and enforceability of the collateral. Changes in the type of obligor covered by the UFCP are always considered cases of substantive variation. It was not intended to require a separate legal opinion for every borrower and the GL are modified accordingly. Moreover, the EBA does not limit the use of legal opinions covering multiple collateral arrangements, as long as they meet the requirements specified in the GL. As an additional remark, the GL do not require a separate legal opinion for each jurisdiction but they allow institutions to rely on a single legal opinion covering several jurisdictions. For this purpose, institutions may use international regulations, which have been adopted to ensure the effectiveness and enforceability of specific types of collaterals.	Changes to paragraphs 20, 21 and 22.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	the impression that transaction- and obligor-specific opinions are the more regular or even preferred approach. Therefore, they asked for clarification of whether this is not the case and for the GL to clarify that institutions will normally rely on generic opinions for sample or template agreements.		
Legal certainty of other physical collateral – relevant jurisdictions	The reference in paragraph 20(a) of the CP to the jurisdiction where the obligor is incorporated was deemed irrelevant by several respondents because enforceability of the collateral could be sufficiently ensured by a legal opinion on the law of the state in which the institution is located and, if relevant, by the assessment of the third country law. Other respondents considered that the reference in paragraph 20(a) of the CP to the jurisdiction where the lender is incorporated was irrelevant because enforceability is independent from the law of the lending institution but, if different, is related to the jurisdiction of the obligor and the registration country of the collateral. Furthermore, one respondent proposed clarifying the notion of 'obligor', which should be interpreted as the owner of the asset (namely the collateral), since the owner of the asset would grant the interest under the collateral agreement in favour of the institution (as creditor). Concerning paragraph 20(c) of the CP, two respondents	The EBA recognises that assessing legal certainty for some types of collateral could be challenging. The principles with regard to obtaining a legal opinion were revised to reduce burden and unjustified costs for institutions but ensure a sufficient level of legal certainty. Regarding the jurisdictions considered relevant for other physical collateral, the strict approach originally proposed in paragraphs 20 and 21 of the CP is replaced by a more practical approach. The list is now more flexible, specifying a minimum set of jurisdictions that institutions should take into account when assessing legal certainty. In particular, the jurisdiction of the obligor and the one where the lending institution is incorporated may not always be considered relevant but institutions should evaluate their relevance. Paragraph 20(c) of the CP (paragraph 23(b) in the GL) was drafted in a more general way to recognise the possibility that a public register for the collateral does not exist. In addition, paragraph 20(d) of the CP has been removed and instead paragraph 23(d) of the GL requires institutions to provide a legal opinion for the	Changes to paragraph 22 and 23.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	underlined that most countries do not have yet a national rail registry. The requirements in paragraph 21(b) and/or 20(d) of the CP were deemed too burdensome by the majority of the respondents. It has been highlighted that considering legal certainty in numerous jurisdictions would create huge constraints and costs for both borrowers and lenders. Moreover, they stated that these provisions are against market practices, which do not prescribe a limited set of jurisdictions, but it is more common to specify in the contracts in which jurisdictions the asset may not be operated. Finally, respondents argued that obtaining legal opinions for all the jurisdictions listed in the CP would not increase legal certainty. Indeed, institutions have systems that allow them to track the position of movable collaterals and they enforce the collateral only when it is located in a favourable jurisdiction.	jurisdiction where it is most likely that the realisation of the collateral would be carried out should this be necessary. This assessment could be based, for example, on contractual clauses or institutions' experience with regard to liquidation of similar types of collateral. Finally, paragraph 23(e) of the GL introduces a residual category of any other relevant jurisdiction considered important to ensure legal certainty of the specific collateral. In accordance with Article 181(e) of the CRR, the GL clarify that, for other physical collateral, institutions should consider and appropriately reflect in their LGD estimates any potential inability to enforce the collateral because of their movable nature.	
Question 3. Do you agree with the proposed clarification regarding the calculation of realised LGD on exposures covered by eligible on-balance-sheet netting or master netting agreements?			
OBSN and MNA	Most of the respondents agreed with the proposed clarification. However, some respondents suggested that the EBA amend the wording of the GL to clarify that: - the effects of OBSN cannot be recognised in the LGD estimates but should be recognised via LGD	The requirements in the GL have been reconsidered and redrafted in a clearer way in accordance with Article 166(2) and (3) of the CRR. The effects of OSBN should be recognised in the exposure value taking into account all requirements of Chapter 4 (including eligibility requirements and methods). Therefore, institutions should use E* calculated in accordance with Article 223(5) of the CRR as the exposure value	Changes to paragraph 28.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	using the FCCM in accordance with Article 228(2) of the CRR in order to ensure consistency with COREP; - the 'exposure value' used in the calculation of the RWEA should not be reduced by the OBSN to avoid double-counting the netting benefit.	when calculating the risk-weighted exposure amounts and expected loss amounts. An example was introduced in the background and rationale to facilitate the interpretation of the proposed provisions.	
Question 4. Do you have specific concerns related to the recognition of collateral in the modelling of LGD? How do you currently recognise collateral in your LGD estimates?			
Clarifications	Six responses were received to this question, two of which expressed no concern. None of the four other respondents disagreed with the proposed policy of the GL, although they asked for further clarifications.	The text of the GL was reviewed in a comprehensive manner and the wording was adjusted to provide more clarity. In addition, the background and rationale section was extended, providing additional clarifications as requested.	Changes to section 6.1 and amendments to the background and rationale section.
Collateral ranking lower or pari passu	One respondent requested that the EBA clarify the meaning of the requirement on ranking either lower than or pari passu with the obligation.	The background and rationale section has been enriched by including an example where adjusting the LGD estimates should not lead to a decrease in their values, since the collateral ranks either lower than or pari passu with the obligation (i.e. bond collateralised with the obligor's own equity).	Amendments to the background and rationale section.
Asset volatility haircuts	One respondent asked clarification regarding the applicable haircuts for bonds, i.e. whether they should be specified in accordance with Chapter 3 or Chapter 4.	It is important to recall that, in accordance with Article 108(2) of the CRR, institutions under the A-IRB approach may recognise CRM in accordance with Chapter 3, and the requirements in Chapter 4 can only be considered where there is a specific reference from Chapter 3 or from the GL. In particular, Article 181(1) of the CRR (in Chapter 3) provides the requirements to be met when deriving own LGD estimates taking into account the existence	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
		of collateral. These requirements do not include any pre-defined haircuts and there is no reference to the FCCM supervisory haircuts present in Chapter 4. Therefore, the EBA does not believe this specific clarification is appropriate, as any methodology to derive own LGD estimates is possible as long as all related requirements are fulfilled, including back-testing.	
Dependence between the risk of the obligor and that of the collateral or collateral provider	One respondent asked what was the exact meaning of a 'significant degree of dependence' 'between the risk of the obligor with that of the collateral or collateral provider'.	As clarified in the background and rationale, collaterals other than MNA and OBSN may be recognised in the institutions' LGD estimates in accordance with letters (c) to (g) of Article 181(1) of the CRR and the guidance provided in the EBA GL on PD and LGD estimation. These requirements are further elaborated in section 6.1 of the GL, but with no specific condition for assessing the level of dependence between the risk of the obligor and that of the collateral or collateral provider. This aspect is expected to be assessed by institutions on a case-by-case basis in a conservative manner, as specified in the background and rationale.	Amendments to the background and rationale section.
Collateral accounted in the exposure value	One respondent asked whether collateral could be accounted in the exposure value rather than in LGD estimates.	Sections 4 and 6.1 of the GL explicitly clarify that only the effects of MNA and OBSN can be reflected in the exposure value. Other collateral should be considered in the LGD estimation. The background and rationale was amended accordingly.	Changes to paragraphs 27 and 28, and amendments to the background and rationale section.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
Inclusion of collaterals in the LGD estimation	Many respondents expressed concern regarding the way the explanatory box was drafted. In particular, they pointed out that some models do not directly reflect the effect of collaterals in the LGD estimates. These respondents were concerned about the strict interpretation of this explanation, which seems not to reflect the widely used commercial recovery process where a customer-level approach is followed. They commented that: a) where a customer-level approach is used it is unnecessarily complex to separate recoveries for each individual type of collateral, whether eligible or ineligible, as it would not reflect the commercial reality; b) the effect of collateral cannot, in many situations, be isolated from the other recovery flows in the event of default of the customer. Therefore, requiring the possibility to model directly the effect of collaterals on LGD (such as via a decomposition of the secured and unsecured LGD) would impose the application of the F-IRB approach on the large number of secured exposures. Therefore, both a national and an EU banking association advocated that the revised CRR should confirm full latitude to institutions to model the effects of collaterals under the A-IRB approach, by removing any limitation to the modelling of	For A-IRB institutions, the only way to recognise the existence of collateral (other than MNA or OBSN) is through modelling the LGD estimates. In this respect, guidance on how this type of FCP should be recognised in the institutions' LGD estimates was already provided in section 6 of the EBA GL on PD and LGD estimation. In particular, regardless of the recovery process followed by institutions, paragraph 114 of those guidelines requires that '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. 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.' Furthermore, section 6.2.3 of the EBA GL on PD and LGD estimation presents the main principles that institutions need to fulfil in order to appropriately reflect the effect of collaterals in the LGD estimates (without prescribing any specific methodology) and, in particular, it is not required that institutions need to decompose the LGD estimates into the secured and unsecured components. Paragraph 105 of those GL reads as follows: '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 … The methods used in the LGD	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	collateral effects, i.e. there should be no requirement to: a) have enough data to model the effect of the collateral on recoveries; b) assess the effects of a given type of collateral separately for each scope of application of LGD models/obligor type. It is argued that there is no strong evidence that the liquidation value of a given collateral or repossession costs are strongly related to the identity of the obligor or even to the obligor type or the exposure class.	estimation should … be consistent with the collection and recovery policies adopted by the institution and should take into account possible recovery scenarios'. Regarding the suggestion provided for a revision of the CRR in the context of the final Basel III framework, the EBA's advice on the implementation of Basel III has been provided in the CfA report.	
Question 5. What approaches for the recognition of the unfunded credit protection do you currently use? What challenges would there be in applying approaches listed above for the recognition of unfunded credit protection?			
Methods to recognise UFCP	For many respondents the drafting of paragraph 29 of the CP was unclear and they were concerned by its potential implications. Some respondents were particularly concerned about the application of the 'substitution of risk parameters approach' (specified in paragraph 29(a)(ii) of the CP) and the consequences of applying the eligibility requirements from Chapter 4.	The EBA took note of the concerns raised by the respondents and reviewed the drafting of this paragraph in order to clarify it.	Changes to paragraph 31.
Maturity for the calculation of the risk weight floor	One respondent indicated that, where comparable direct exposures to the guarantor are treated under the F-IRB approach, it is unclear which maturity to use for the calculation of the risk weight floor (in accordance with Article 161(3) of the CRR),	EBA Q&A 2013_415 states that neither Article 161(3) nor Article 236(1) of the CRR requires the use of a different risk weight function or asset value correlation where comparable direct exposures to the guarantor are treated under the F-IRB approach.	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	i.e. the maturity of the comparable direct exposure to the guarantor should be (i) 2.5 years (in accordance with Article 162(1) of the CRR) or (ii) the obligor's effective maturity in accordance with Article 162(2) of the CRR.	Therefore, the maturity to be used for the purpose of the risk weight floor calculation should be in line with the Q&A, which states that a change of the risk weight function to that of the protection provider is not required. The EBA thinks that this topic would benefit from an overall review in the context of the implementation in the EU legislation of the final Basel III framework (see recommendation CR-IR-25 in the CfA report).	
Methods available to recognise UFCP	Some respondents believed the EBA should reconsider the value of preserving the three approaches for recognising UFCP (specified in paragraph 29 of the CP), given that it decreases the comparability between institutions. In particular, the respondents argued that, given the various options and the complexity related to the 'substitution of risk parameters approach' (on computing realised LGD etc.), it may not present much value added. One respondent asked for clarification on the status of the 'double default' treatment (in accordance with Article 153(3) of the CRR) and how various approaches for UFCP could possibly be combined.	The EBA guidelines cannot be used to limit the available methods specified in the CRR. The GL are therefore focused on clarifying their application to ensure that unwarranted variability of own funds requirements is avoided. The 'double default' treatment cannot be combined with other UFCP approaches for the same type of exposures. Furthermore, it should be noted that in the final Basel III framework the possibility of using the 'double default' treatment was removed. The EBA provided its advice to implement this rule in the EU in the CfA report.	N/A.
Treatment of UFCP	One respondent commented that the treatment of UFCP under the final Basel III framework could penalise above all UFCPs provided by guarantors with better quality. An alternative methodology is proposed via the computation of an 'LGD secured'	This concern is not directly linked to these GL. The EBA provided its advice with regard to implementation of the final Basel III framework in the EU in the CfA report. With regard to the proposal presented by the respondent, the EBA notes that this	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	on the tranche of the A-IRB exposures covered by large corporate or bank guarantors equal to the expected loss resulting from the adoption of internal PD and regulatory LGD under the F-IRB approach (40%-45%).	treatment would result in recognition of double default effect, which is deemed inappropriate in the final Basel III framework.	
Exposure partially covered by a guarantee	One respondent asked for clarification for the situation of a facility only partially covered by a guarantee and the recognition under the 'substitution of risk parameters approach' (specified in paragraph 29(a)(ii) of the CP).	The GL clarify the treatment of this specific situation. Institutions should refer to the part of the GL dedicated to the 'substitution of risk parameters approach' and to the background and rationale section for more detailed explanations.	N/A.
Question 6. Do you have any specific concerns related to the issues excluded from the scope of the Guidelines?			
SA and F-IRB exposures with A-IRB guarantor	One of the concerns expressed by the industry entails the treatment of exposures risk weighted under the SA or the F-IRB approach and covered by a guarantee where the direct exposures to the guarantor are treated under the A-IRB approach. In particular, the industry questioned whether the 'substitution of risk parameters approach' (specified in paragraph 29(a)(ii) of the CP) was applicable and whether institutions should follow the requirements for the recognition of the credit protection relevant for the A-IRB approach (i.e. Chapter 3) or the ones from Chapter 4.	In accordance with Article 108 of the CRR, the treatment of CRM techniques and, in particular, UFCP for exposures risk weighted under the SA or the F-IRB approach should follow Chapter 4 independently from the approach used for direct exposures to the guarantor. In particular, where the original exposure is treated under the SA, the substitution can be used in accordance with Article 235 of the CRR (and paragraph 1 of this article is clear that the risk weight of the protection provider is the one specified under Chapter 2). Consequently, the requirements for the recognition of the credit protection can only be the ones used for the SA. Where the original exposure is treated under the F-IRB approach, the effects of UFCP can be recognised in accordance with Article 236 of the CRR.	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
Supervisory slotting approach	Some respondents asked how to take into account UFCP for the supervisory slotting approach. They pointed out that the CRR is silent on whether UFCP (other than those already specified in the slotting approach, such as completion guarantees or guarantees provided by public entities in public–private partnership projects) can be recognised for specialised lending exposures treated under the slotting approach. Regarding ECA guarantees that effectively convert the guaranteed exposure to ECA or sovereign risk, clarification was requested on how their impact can be reflected in the slotting approach. The respondents commented that, while the framework allows this to be done only through PD and LGD adjustments, under the slotting approach there is no PD/LGD to adjust. They suggested that this could potentially be addressed by tranching the exposure in the context of ECA guarantees and risk-weighting the guaranteed portion using the PD and LGD of the eligible guarantor (and using the slotting approach only for the unguaranteed portion of the exposure). In addition, they suggested enhancing the granularity of the slotting approach by allowing other risk mitigation techniques to be better reflected in the risk weights. The respondents also noted that in footnote 3 of the high-level summary of the Basel III reforms, the Basel Committee on Banking Supervision	The supervisory slotting approach is not covered by the scope of these GL; therefore, this concern cannot be addressed in these GL. Furthermore, the proposed solutions would entail the need to modify the CRR, and hence this cannot be incorporated through the EBA guidelines.	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	confirmed their intention to review the slotting approach for specialised lending in due course. They welcomed early clarity on when this will take place and urged the EBA to engage on any such review and consult the industry in the process.		
Risk weight function under the 'substitution of risk parameters approach'	One respondent commented that for calculating the RWEA under the 'substitution approach' (specified in paragraph 29(a)(ii) of the CP), the risk weight function of the guarantor should be adopted in order to have consistency with the reporting framework.	Under the current CRR this aspect is clarified in Q&A 2013/415 (which states that a change of the risk weight function to that of the protection provider is not required). Please note that, with regard to the implementation of the final Basel III framework, the EBA also made a recommendation on this issue in the CfA report, namely, where institutions adopt the 'substitution of risk parameters approach' (specified in paragraph 31(a)(ii) of the GL), the risk weight function to use should be that of the protection provider (please refer to recommendation CR-IR 25 of the CfA report).	Addressed in the CfA report.
Consistency of eligibility requirements between the SA and the IRB approach	Some respondents advocated the alignment of the eligibility requirements between the SA and the IRB approach in order to have a consistent application of the output floor. In particular, one respondent mentioned that the European authorities should further consider the impacts of the changes introduced in the scope of application of the existing rules under the final Basel III framework. In the revised framework, there are still differences between the SA and the IRB approach in the collateral that can be used as credit risk mitigation technique. For instance,	In principle, the IRB approach is more risk sensitive than the SA and therefore gives the possibility for institutions to recognise a larger scope of CRM techniques. Regarding the implementation of the final Basel III framework in the EU, the EBA provided its advice in the CfA report.	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	physical collateral is not considered an eligible CRM technique under the SA, while it is eligible under the IRB approach.		
Assessment of collateral under the final Basel III framework	One European association commented that the final Basel III framework introduces limitations in the assessment of collateral under the A-IRB approach. Essentially, banks are encouraged to apply the standardised and F-IRB parameters to the collateral evaluation even under the A-IRB approach. Indeed, the only eligible collateral is that for which the effects on the LGD parameter are possible to model. The fixed F-IRB haircuts to be applied to LGD floors contravene the permission provided for in the final Basel III framework for banks to continue using internal models, as the purpose of these models is precisely to assess internal haircuts. The reference to the F-IRB eligibility criteria in the A-IRB approach is also counter to other parts of regulation regarding requests for own estimation of LGD (notably regarding liquidity and the degree to which it should be taken into account in the A-IRB approach). The eligibility criteria were designed for corporate loans and not for specialised lending and should therefore be adapted in order to be consistent with the A-IRB approach.	This point does not relate to the GL, but rather to the final Basel III framework; hence, it does not imply any change in the proposed GL. The EBA provided its advice on the implementation of the final Basel III framework in the EU in the CfA report. However, please note that the EBA made a recommendation in the CfA report (Recommendation CR IR 13: LGD input floors) specifying that the haircuts used for the calculation of the individual LGD input floors should be based on the eligibility criteria of the A-IRB approach.	Addressed in the CfA report.
Question 7. Do you agree with the proposed clarification regarding the parallel treatment of ineligible UFCP and ineligible FCP? How do you currently monitor the cash flows related to ineligible unfunded credit protection and how do you treat such cash flows with regard to the PD and LGD estimates?			

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
Ineligible FCP and UFCP	Most of the respondents expressed general agreement with the proposed policy. However, for the same reasons as expressed at question 1, some respondents generally criticised the notion of eligibility for UFCP and argued that all UFCP should be considered in the LGD estimates, without any limitations. One respondent suggested considering the eligibility criteria only in the application (and not in the estimation) of risk parameters. Moreover, it has been pointed out that when eligibility criteria are not met, in some cases, the collaterals that are not eligible might however have a material positive impact on the level of the realised LGD. Additional clarification is requested on the appropriate approach to properly take into account such cash flows while correcting the associated biases in accordance with paragraph 127 of the EBA GL on PD and LGD estimation (to avoid systematic overestimation of the LGD estimated for the unguaranteed part of the exposure).	The eligibility requirements are specified directly in the CRR and cannot be overridden in the GL. However, the EBA acknowledges that the issue needs clarification and the CRM framework would benefit from an overall review in the context of the implementation of the final Basel III framework in the EU (see Recommendation CR-IR 27 of the CfA report).	Addressed in the CfA report.
Monitoring cash flows	One respondent argued it was not clear what regular monitoring of cash flows from ineligible UFCP means (without proposing any clarification).	The EBA believes that the notion of 'regular monitoring of cash flows from ineligible UFCP means' is sufficiently clear and hence does not require further description. A similar notion is used in the EBA GL on PD and LGD estimation in the context of the treatment of ineligible FCP.	N/A.
Ineligible UFCP	One respondent stated that the treatment of ineligible guarantees does not reflect the	Eligibility requirements are specified in the context of prudential requirements. While institutions may use	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	commercial recovery process, and specifically questioned the following text in paragraph 31 of the CP: 'Unfunded credit protection which does not meet the eligibility requirements … should not affect the calculation of risk-weighted exposure amounts'. The respondent asked whether it is to be understood from this wording that, despite these guarantees being ineligible, CRM can still be applied as long as the calculation of the risk weight is not affected. The respondent also asked if the cash flows from ineligible UFCP should be allowed to be included with unsecured recovery cash flows (having in mind, in particular, cash flows received from general securities, which do not meet the eligibility criteria but might have a material positive impact on the level of realised LGD).	any forms of credit risk mitigation they consider appropriate for the purpose of internal risk management, only the eligible ones can be recognised in the calculation of own funds requirements. The treatment of ineligible UFCP specified in these GL is consistent with the treatment of ineligible FCP specified in the EBA GL on PD and LGD estimation. Where cash flows from ineligible guarantees are included in the reference data set used for LGD estimation, the amounts and frequency of such cash flows have to be monitored and, where necessary, the estimates have to be adjusted to avoid potential bias. However, EBA acknowledges that the issue needs clarification and the CRM framework would benefit from an overall review in the context of the implementation of the final Basel III in the EU (see recommendation CR-IR 27 of the CfA report).	
Question 8. Do you agree with the proposed rules for the application of the substitution approach? Do you see any operational limitations in excluding the guaranteed part of the exposure to which the substitution approach is applied from the scope of application of the LGD model for unguaranteed exposures?			
Allocation of cash flows in cases of partial guarantees	There was no consensus on the proposed rules for the application of the 'substitution approach' (specified in paragraph 29(a)(ii) of the CP) and on the options presented in the CP on the allocation of cash flows not directly related to guarantor into the guaranteed and the unguaranteed parts of the exposure: some respondents preferred option 1, others option 2, some found both options adequate	As there was no clear consensus in the responses, the EBA kept the proposed conditions for the application of the 'substitution of risk parameters approach' (specified in paragraph 31(a)(ii) of the GL). The EBA believes the adequate risk management practices, especially for institutions using internal ratings-based models, should include appropriate	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	and others advocated keeping some flexibility in the treatment. One respondent noted that the requirement to separate guaranteed cash flows and other cash flows, and the exact allocation of the guarantee cash flows to the same guarantee, will be operationally challenging, as the guaranteed and unguaranteed cash flows cannot be always separated in a reliable manner.	identification of the source of recovery cash flows. This aspect is also addressed by the EBA GL on PD and LGD estimation.	
Eligibility requirements for using the 'substitution of risk parameters approach'	Some respondents argued that the alignment of the eligibility requirements to recognise the UFCP in the 'substitution approach' (specified in paragraph 29(a)(ii) of the CP) with those in Chapter 4 (applicable to the F-IRB approach) is too strict and could strongly limit the range of possible UFCP, which could be recognised, with the consequence of creating strong penalisation for the A-IRB institutions. Furthermore, several respondents argued that the requirement of negligible costs should be dropped, as this would even go beyond the strict Chapter 4 requirements, creating a distortion between A-IRB institutions and F-IRB institutions, which are not subject to this additional eligibility condition. In this context, some respondents asked whether the 'substitution approach' can be applied only if the execution costs are expected to be negligible and whether it is necessary to shift to the 'modelling	The EBA believes that the requirements introduced for allowing institutions to use the 'substitution of risk parameters approach' (specified in paragraph 31(a)(ii) of the GL) are necessary in order to ensure consistency with the substitution approach used under the F-IRB approach. Furthermore, the requirement that costs are negligible ensures that there is no significant underestimation of losses in the case of guarantees implying high costs of collection. Since costs cannot be taken into account under the 'substitution of risk parameters approach', they should be reflected in the 'modelling approach' (specified in paragraph 31(a)(i) of the GL).	N/A.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	approach' (specified in paragraph 29(a)(i) of the CP) when these costs are significant.		
The 'substitution of risk parameters approach' and the assignment of exposures to the exposure class	One respondent asked about the reasons for keeping the exposure in the same exposure class where institutions adopt the 'substitution approach' (specified in paragraph 29(a)(ii) of the CP). Another respondent pointed out that paragraph 30 of the CP seems to be in contradiction with the ITS on supervisory reporting, which require banks to reassign such exposures to the exposure class of the guarantor.	Instead of a reference to the assignment of exposures to the exposure class, a more extensive clarification was included in the GL on the use of information about the obligor where institutions adopt the 'substitution of risk parameters approach' (specified in paragraph 31(a)(ii) of the GL).	Clarifications included in paragraph 37.
Default classification of the exposure	One respondent asked the EBA to clarify that, even in the presence of the migration of the exposure class for regulatory reporting, in case of mismatch of the default classification between the guaranteed obligor and the guarantor (the former in default and the latter in performing status), the default classification should remain the guaranteed obligor's one.	This clarification, relevant where institutions adopt the 'substitution of risk parameters approach' (specified in paragraph 31(a)(ii) of the GL), was added to paragraph 39 of the GL and further clarified in the background and rationale section. The classification of exposures as defaulted should be performed in accordance with the status of the obligor and regardless of the approach used to recognise the UFCP. As long the definition of default is applied at obligor level and the obligor is non-defaulted, the exposure should also be considered non-defaulted. Conversely, in all cases where the obligor defaulted, including where the 'substitution of risk parameters approach' is used, the exposure should be allocated to the portfolio of defaulted exposures. This clarification is provided in the GL in the context of the calculation of the IRB shortfall or	Changes to paragraph 39(c) and amendments to the background and rationale section.

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		excess (in accordance with Article 159 of the CRR). It ensures consistency of the comparison between the expected loss and credit risk adjustments, given that, under the accounting framework, exposures from defaulted obligors will normally be recognised as impaired, regardless of the existence of any credit risk mitigation technique. Nevertheless, under the 'substitution of risk parameters approach', if the obligor has defaulted but the guarantor is still performing, the risk weight and expected loss of the guaranteed part of the exposure should be those of the direct, comparable exposure to the non-defaulted guarantor. Therefore, when comparing with the amount of credit risk adjustments, institutions should use the substituted EL amount of the comparable direct exposure to the guarantor, and no further specific estimation of the expected loss best estimate is necessary.	
Treatment of partial guarantees	Several respondents commented on the treatment of exposures that are only partially guaranteed, where the guarantees are recognised under the 'substitution approach' (specified in paragraph 29(a)(ii) of the CP). One respondent asked for clarification of whether paragraph 33 of the CP applies only in cases of fully guaranteed exposures under the 'substitution approach' (paragraph 33 reads 'For the guaranteed exposures included in such scope of application, institutions are not required to estimate the LGDs').	More detailed explanations of the treatment of partial guarantees and the recognition under the 'substitution of risk parameters approach' (specified in paragraph 31(a)(ii) of the GL) are included in the GL and in the background and rationale. In particular, it is clarified that, in the case of partial guarantees where institutions adopt the 'substitution of risk parameters approach' or the 'substitution of risk weight approach' (specified in paragraph 31(b) of the GL), they should treat the part of the exposure covered by the guarantee and the remaining part of the exposure as if they were two separate exposures.	Section 6.2 redrafted to improve clarity and amendments to the background and rationale section.

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	One respondent asked for clarification of whether the splitting of the exposure should only be presented and tracked in the mathematical derivations (e.g. in model documentation) or also by corresponding data sets in data-processing systems.	Paragraph 37 of the GL applies to any UFCP regardless of whether it is partially or fully covering the exposure; i.e. in case of partially guaranteeing the exposure, the clarification applies to the guaranteed part of the exposure. The EBA notes that all data relevant to LGD estimation have to be collected and stored. In the case of partial guarantees under the 'substitution of risk parameters approach', the data set should include information necessary for the estimation of parameters for the remaining part of the exposure, as if it was a separate exposure. It has to be stressed that the splitting of exposures can only be applied on actually existing UFCP recognised under the 'substitution of risk parameters approach', and not on theoretical assumptions.	
Question 9. Do you agree with the proposed rules for the application of the modelling approach?			
General support	There was full agreement with the proposed rules for the application of the 'modelling approach' (specified in paragraph 29(a)(i) of the CP).		N/A.
Question 10. What challenges would you envisage for back-testing the substitution approach? Do you agree that the back-testing should be performed rather at Expected loss level? Do you have any approach currently in place for the back-testing of substitution approach?			
Back-testing of the 'substitution of risk parameters approach'	Some respondents supported the proposed additional back-testing tool where institutions adopt the 'substitution approach' (specified in paragraph 29(a)(ii) of the CP), stating that it leads to equal footing of the 'substitution approach' and the	The EBA introduced the requirement for institutions that use the 'substitution of risk parameters approach' (specified in paragraph 31(b) of the GL) to include in their validation methodology a comparison of the expected loss of comparable direct exposures	Introduction of new paragraph 40 for back-testing the 'substitution of risk

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	‘modelling approach’ (specified in paragraph 29(a)(i) of the CP) and that it could complement the back-testing of PD and of LGD of comparable exposures to the guarantor. Other respondents opposed back-testing the ‘substitution approach’, pointing out that it does not appear to have a legal basis in the philosophy of rating systems embedded in the CRR. They consider that the current approach in place within banks for the back-testing of credit risk parameters (applicable to guarantors and obligors) would ensure that the estimates stay robust to additional historical data. Furthermore, back-testing the ‘substitution approach’ would be difficult because UFCP is very often provided by financial institutions or sovereign counterparties, which are exposure types with a low number of default observations.	to the guarantor against the observed loss rates of the underlying exposures or parts of exposures to defaulted obligors, which were considered guaranteed before the moment of default. The EBA considers this an appropriate and necessary additional quantitative validation tool, in accordance with Article 185(c) of the CRR. This tool should be used in addition to normal PD and LGD back-testing applied in accordance with Article 185(b) of the CRR. The EBA sees no basis for generally excluding certain guarantor types from these requirements.	parameters approach’.
Question 11. Do you agree with the proposed guidance for the estimation of the LGD of comparable direct exposure towards the guarantor? What concerns would you have about the calculation of the risk weight floor?			
Fall-back solutions for LGD of comparable direct exposure to the guarantor	Two respondents specifically criticised paragraph 39(b) of the CP, which clarifies how to calculate the LGD of comparable direct exposures to the guarantor for exposures covered by both FCP and UFCP when institutions use (or would use) own LGD estimates for direct exposures to the guarantor. In particular, paragraph 39(b) of the CP suggests that, if institutions are not able to recognise the funded credit protection in the estimation of the LGD of comparable direct	In this case, In calculating the risk weight floor as well as in applying the ‘substitution of risk parameters approach’ (specified in paragraph 31(b) of the GL), both PD and LGD parameters should be used as appropriate for comparable direct exposure to the guarantor. The EBA considers that it is not sufficiently prudent to allow the use of the LGD of the obligor, without the additional condition as specified in the GL.	Changes to paragraph 47(b) and amendments to the background and rationale section.

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	exposures to the guarantor, then they should use the obligor LGD or the F-IRB LGD, depending on comparison between the obligor LGD and the guarantor LGD without FCP. The respondents suggested that the comparison between the obligor LGD and the guarantor LGD without FCP should be dropped and that banks should always be allowed to use the obligor LGD to recognise FCP. They argued that the treatment is unduly punitive in the case of financial institutions, which will in the future be F-IRB guarantors and will be a strong issue when applying the final Basel III framework (due to the migration to the F-IRB approach). It was therefore argued that the condition will never be fulfilled, and banks will not be able to use the LGD estimates of the original exposure to the obligor including the effect of the FCP. The EBA was urged to allow a more accurate treatment, i.e. to use the LGD applicable to the obligor taking into account the FCP, without condition.	Furthermore, the EBA notes that for any F-IRB guarantor paragraph 47(a) of the GL would apply instead of paragraph 47(b). Since own estimates of LGD are not available for an F-IRB guarantor, it is necessary to use the regulatory LGDs.	
Conservative adjustment in case of correlation between the guarantor and the obligor's ability to repay	Two respondents suggested that paragraph 35(c) of the CP (dealing with the conservative adjustment of estimates in case of correlation between obligor and guarantor's ability to pay) should not be applicable if the UFCP is provided by non-payment insurers. These insurers are highly regulated entities with diverse liability portfolios, stringent solvency requirements and ring-fenced capital to guarantee policyholder protection, allied to low correlation of risk with the default of the obligor.	The GL require that, where institutions adopt the 'modelling approach' (specified in paragraph 31(a)(i) of the GL), the degree to which the guarantor's ability to fulfil the contractual obligation under the UFCP agreement is correlated with the obligor's ability to repay is taken into account in the LGD estimates in a conservative manner. If there is no or low correlation between insurance providers and obligors, a conservative adjustment is not necessary, but a positive adjustment should be ruled out in all cases.	N/A.

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Treatment UFCP also covered by FCP	One respondent expressed doubts regarding the proposed rules for the treatment of multiple CRM techniques (i.e. multiple UFCP or FCP/UFCP), considering them too strict and penalising, since they create a limitation in the recognition of CRM techniques even if institutions have empirical evidence of the effect of them on the LGD estimates. The respondent proposed that the LGD own estimates should be based on the internal track-record of cash flows recorded by institutions. One respondent asked for clarification on paragraph 38 of the CP, which states that allocation of UFCP should be in line with internal policies. According to the respondent, actual collection processes can be erratic and it is unclear if the EBA would accept something like this. Two respondents asked for more examples on paragraphs 37-40 of the CP, and two respondents criticised the example illustrated in Figure 4 in the background and rationale. The respondents questioned the logic of the UFCP and FCP overlapping in a way that leaves part of the exposure unsecured.	Where institutions adopt the ‘modelling approach’ (specified in paragraph 31(a)(i) of the GL), they are free to consider the effect of CRM techniques in their LGD own estimates according to their internal assessment based on historical observations of the institution. However, for the ‘substitution of risk parameters approach’ (specified in paragraph 31(a)(ii) of the GL) and the calculation of the risk weight floor (in accordance with Article 161(3) of the CRR), clear rules are necessary to avoid undue RWA variability. With regard to the allocation of UFCP, the EBA expects that this should be consistent with institutions’ internal policies on collection and recovery processes, taking into account in particular the order of realising different elements of credit protection. The strategy of institutions for the allocation of UFCP should also be consistent over time. The background and rationale section was enhanced taking into account the received feedback. Moreover, additional examples were added.	Amendments to the background and rationale section.
Collateralised guarantees	One respondent requested clarification of whether the paragraphs in the CP on the recognition of both FCP and UFCP also apply to collateralised guarantees where the collateral is provided in respect of the guarantee obligation (the UFCP) rather than in respect of the underlying exposure.	The EBA does not see a legal basis in the CRR for special treatment of collateralised guarantees. Therefore, the GL do not refer specifically to collateralised guarantees, as these should be treated in the same way as any other guarantees.	N/A.

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	Such collateralised guarantees are explicitly referred to in Basel II and III when describing a reason for adjusting the LGD for guaranteed exposures under the F-IRB approach.		
Residual value guarantees	One respondent noted that residual value insurances (which are applied from an economic point of view after considering the realisation of FCP), could not be taken into account under the proposed approaches, as the methods described for recognising UFCP only work for guarantees that take effect prior to the realisation of material collateral. Given this, the partial exposure of such guarantees could be modelled appropriately. The same would apply to the calculation of the risk weight floor (in accordance with Article 161(3) of the CRR).	The EBA recognises the need to clarify the treatment of residual value guarantees and has introduced clarification on their treatment in paragraph 44(b) of the GL.	Changes to paragraph 44(b) and amendments to the background and rationale section.
Multiple CRM techniques and LGD of a comparable direct exposure to the guarantor	Some respondents requested clarifications on paragraph 39 of the CP and, in particular, on the part specifying that 'ability to recognise a funded credit protection in the estimation of the LGD of comparable exposures to the guarantor' does not 'require to find an exposure to the guarantor which is collateralised by the same collateral as the original exposure'. According to two respondents, this would imply that A-IRB institutions would not be able to recognise UFCP on most specialised lending exposures that also benefit from FCP, since the loss experience on exposures to guarantors secured by the very same type of collateral is potentially limited. Furthermore, they argued that	When deriving the LGD of a comparable direct exposure to the guarantor, institutions should consider a hypothetical exposure to the guarantor that would be identical to that to the obligor, apart from the existence of the considered guarantee. This means, for example, that if they have a mortgage exposure against an obligor they should be able to model a similar mortgage exposure against the guarantor. If this is not possible based on the LGD model applicable to exposures to the guarantor, institutions may use the alternative solutions set out in paragraph 47 of the GL.	N/A.

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	the FCP may be independent from also having a UFCP, and the modelling of the asset recoveries should not be affected by the existence of the insurance.		
Multiple UFCPs	One respondent asked for clarification about the appropriate criteria to choose which UFCP to use for the purpose of substitution in case of overlapping UFCPs. On the treatment of multiple UFCP, two respondents stated that they would prefer to use only one UFCP in the case of multiple UFCPs, noticing that this possibility is already implied under paragraph 38(c)(ii) of the CP. However, they saw a need for clarification of whether paragraph 40 of the CP contradicts this understanding.	Under the 'modelling approach' (specified in paragraph 31(a)(i) of the GL), all UFCPs that are relevant risk drivers have to be used. Under the 'substitution of risk parameters approach' (specified in paragraph 31(a)(ii) of the GL), only one UFCP can be used due to the nature of the approach, while other UFCPs or FCP may be reflected in the LGD applicable to comparable direct exposures to the guarantor whose parameters are substituted, subject to the conditions described in paragraph 47 of the GL. Institutions are free to specify the most appropriate criteria to choose which UFCP to use as the basis for the 'substitution of risk parameters approach'.	Changes to paragraphs 45, 46 and 47.
Risk weight floor (in accordance with Article 161(3) of the CRR)	Four respondents disagreed with paragraph 37(c) of the CP, which requires using the weighted average of the risk weight of the UFCP for the calculation of the risk weight floor where the exposure benefits from multiple overlapping UFCPs. One respondent considers the described methodologies to be overly complicated to implement for the weak added value that they bring. The respondent suggests that, if institutions correctly implement a risk weight floor, ensuring that the risk weight applicable after substitution is not inferior to the risk weight of a comparable direct	The EBA took note of the concerns raised by the respondents and adjusted the GL so that paragraph 45(b) clarifies that, for multiple overlapping UFCPs, the lowest risk weight of those UFCPs has to be used for the risk weight floor. The EBA agrees that clarifications on the application of the risk weight floor are necessary to reduce undue RWA variability across A-IRB institutions. Finally, regarding the comparable direct exposure to the guarantor, paragraph 45 of the GL as well as the background and rationale section have been amended to improve clarity. In particular, in the	Changes to paragraph 45 and amendments to the background and rationale section.

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	exposure to the guarantor, no harmonisation on the way of calculating the floor is necessary. Finally, one respondent highlighted also that the GL do not address the interpretation of the word 'comparable' in the definition of the risk weight floor. In particular, if the transaction benefits from multiple CRM techniques, it is not clear if a comparable transaction would be then by consequence a secured transaction.	calculation of the risk weight floor, the LGD of a comparable direct exposure to the guarantor may consider the effect of the other existing CRM techniques.	
Question 12. Do you consider portfolio guarantees as a form of eligible UFCP? Do they include cases where the guarantee contract sets a materiality threshold on portfolio losses below or above which no payment shall be made by the guarantor? Do they include cases where two or more thresholds (caps) either expressed in percentages or in currency units are set to limit the maximum obligation under the guarantee? How do you recognise the portfolio guarantees' credit risk mitigation effects in adjusting risk parameters?			
Portfolio guarantees	Three respondents considered that the effect of the UFCP schemes described in the CP should be independent of the eligibility rules applicable to the guarantor, and the UFCP schemes should be used on both SA and IRB portfolios. Two respondents pointed out that, while they do not recognise portfolio guarantees in the sense detailed in the text, there is a range of 'scheme' guarantees where the government or European authorities provide partial backing for specific loans granted under the terms of the schemes that should be regarded as eligible UFCP. Two respondents consider that portfolio guarantees work similarly to securitisation transactions (in accordance with point (61) of	The EBA discussed the concerns raised by the respondents and agreed that the treatment of portfolio guarantees should be considered in a comprehensive manner for all approaches, and not exclusively for the A-IRB approach. Therefore, in order to avoid any potential unintended inconsistencies, the issue is not included in the scope of the GL. Instead, the necessary clarification should be provided through a Q&A, consistently applied to all approaches.	N/A.

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	Article 4(1) of the CRR). In fact, when the guarantee is provided to a portfolio of loans, the occurred loss of a single loan does not imply the termination of the risk mitigation effects, because the contractual guarantee continues to be operative and effective until its legal maturity (which must not be shorter than the weighted average life of the covered portfolio). One respondent stated that it is not clear whether all types of capped portfolio guarantees that transfer a part of the risk of a loan in one or more tranches (in accordance with Article 234 of the CRR) can be recognised as eligible UFCP.		