

**Guidelines on credit risk mitigation techniques for institutions applying the IRB
approach with own estimates of LGDs.**

(EBA/GL/2020/05)

These guidelines are addressed to competent authorities, as defined in point (i) of Article 4(2) of Regulation (EU) No 1093/2010, and to institutions as defined in point 3 of Article 4(1) of Regulation (EU) No 1093/2010.

These Guidelines address the requirement for the EBA to issue Guidelines, under Article 16 of Regulation (EU) No 1093/2010 and have been developed on the EBA's own initiative in the context of the IRB Roadmap.

The Guidelines provide additional clarity on the application of the Credit Risk Mitigation (hereinafter 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.

These Guidelines have been developed by the EBA in accordance with article 16 of Regulation (EU) No 1093/2010. The EBA published the English version of these Guidelines on 6th May 2020 (the Spanish version was released on 31st August 2020). The Guidelines apply from 1st January 2020.

The Executive Commission of the Banco de España, in its role of competent authority for the direct supervision of the less significant credit institutions, adopted these Guidelines as their own on 23rd October 2020.

These Guidelines will not apply to specialised lending institutions.

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 1093/2010.¹ 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.

¹ 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 2016.²

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.

² 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.