

EBA/CP/2020/12

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## Consultation Paper

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Draft Regulatory Technical Standards on requirements that an internal methodology or external sources used under the internal default risk model are to fulfil for estimating default probabilities and losses given default under Article 325bp(12) of Regulation (EU) No 575/2013 (Capital Requirements Regulation 2 - CRR2)

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# 1. Responding to this consultation

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The EBA invites comments on all proposals put forward in this paper and in particular on the specific questions summarised in 5.2.

Comments are most helpful if they:

- respond to the question stated;
- indicate the specific point to which a comment relates;
- contain a clear rationale;
- provide evidence to support the views expressed/ rationale proposed; and
- describe any alternative regulatory choices the EBA should consider.

## Submission of responses

To submit your comments, click on the 'send your comments' button on the consultation page by 22.10.2020. Please note that comments submitted after this deadline, or submitted via other means may not be processed.

## Publication of responses

Please clearly indicate in the consultation form if you wish your comments to be disclosed or to be treated as confidential. A confidential response may be requested from us in accordance with the EBA's rules on public access to documents. We may consult you if we receive such a request. Any decision we make not to disclose the response is reviewable by the EBA's Board of Appeal and the European Ombudsman.

## Data protection

The protection of individuals with regard to the processing of personal data by the EBA is based on Regulation (EC) N° 45/2001 of the European Parliament and of the Council of 18 December 2000 as implemented by the EBA in its implementing rules adopted by its Management Board. Further information on data protection can be found under the Legal notice section of the EBA website.

## 2. Executive Summary

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The amendments to Regulation (EU) No 575/2013<sup>1</sup> (the Capital Requirements Regulation 2 – CRR2) implement in EU legislation, inter alia, the revised requirements to compute own funds requirements for market risk.

Institutions using an alternative internal model to compute own funds requirements for market risk and holding positions in traded debt and equity instruments in trading desks covered by the IMA permission, are required to additionally compute an own funds requirement using an internal default risk model (DRC).

One of the requirements to be met under the internal default risk model consists for institutions to be capable of modelling the default of individual issuers, as well as the simultaneous default of multiple issuers, and computing the impact of those defaults on the market values of the positions that are included in the scope of that model.

In order to simulate the default of issuers under the internal default risk model, institutions need to estimate the default probabilities (PDs) of those issuers in accordance with the requirements set out in paragraph 5 of Article 325bp of the CRR2. In particular, institutions that have been granted permission to estimate default probabilities in accordance with Section 1 of Chapter 3 of Title II (Permission to use the IRB approach) are required to use the methodology set out therein to calculate default probabilities, while institutions that have not been granted that permission are required to develop an internal methodology or use external sources to estimate default probabilities.

Similarly, in order to simulate the default of issuers under the internal default risk model, institutions need to estimate the relevant loss given default (LGD) in accordance with the requirements set in paragraph 6 of Article 325bp of the CRR2. In particular, institutions that have been granted permission to estimate LGD in accordance with Section 1 of Chapter 3 of Title II (Permission to use the IRB approach) are required to use the methodology set out therein to calculate LGD estimates, while institutions that have not been granted that permission are required to develop an internal methodology or use external sources to estimate LGD.

These draft regulatory standards specify the requirements that an institution's internal methodology or external sources are to fulfil for estimating default probabilities and losses given default in accordance with point (e) of Article 325bp(5) and point (d) of Article 325bp(6).

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<sup>1</sup> REGULATION (EU) 2019/876 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012

### 3. Background and rationale

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In January 2019, the Basel Committee on Banking Supervision (BCBS) finalised and published standards on Minimum capital requirement for market risk<sup>2</sup>. The text replaces the previous minimum capital requirements for market risk in the global regulatory framework, which are implemented in the EU via Regulation (EU) No 575/2013 (CRR).

The amendments to Regulation (EU) No 575/2013<sup>3</sup> (the Capital Requirements Regulation 2 – CRR2) implement the new market risk framework provided by the BCBS standards into EU legislation as a reporting requirement in a first step.

A key requirement for institutions using an alternative internal model to compute own funds requirements for market risk consists in additionally compute an own funds requirement using an internal default risk model for their positions in traded debt and equity instruments included in trading desks covered by the IMA permission as set out in Article 325bl of the CRR.

In order to simulate the default of issuers under the internal default risk model, institutions need to estimate the relevant default probabilities (PDs) and losses given default (LGD) in accordance with the requirements set in paragraphs 5 and 6 of Article 325bp, respectively. In particular, institutions that have been granted permission to use the IRB approach in accordance with Section 1 of Chapter 3 of Title II are required to use the methodology set out therein to calculate default probabilities and LGD estimates, while institutions that have not been granted that permission are required to develop an internal methodology or use external sources to calculate those estimates.

Article 325bp(12) mandates the EBA to *'develop draft regulatory technical standards to specify the requirements that an institution's internal methodology or external sources are to fulfil for estimating default probabilities and losses given default in accordance with point (e) of paragraph 5 and point (d) of paragraph 6.'*

With respect to PDs, paragraph 5 of Article 325bp specifies that:

*"5. To simulate the default of issuers in the internal default risk model, the institution's estimates of default probabilities shall meet the following requirements:*

*(a) the default probabilities shall be floored at 0,03 %;*

*(b) the default probabilities shall be based on a one-year time horizon, unless stated otherwise in this Section;*

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<sup>2</sup> Minimum capital requirements for market risk, January 2019 (rev. February 2019)

<sup>3</sup> REGULATION (EU) 2019/876 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012

*(c) the default probabilities shall be measured using, solely or in combination with current market prices, data observed during a historical period of at least five years of actual past defaults and extreme declines in market prices equivalent to default events; default probabilities shall not be inferred solely from current market prices;*

*(d) an institution that has been granted permission to estimate default probabilities in accordance with Section 1 of Chapter 3 of Title II shall use the methodology set out therein to calculate default probabilities;*

*(e) an institution that has not been granted permission to estimate default probabilities in accordance with Section 1 of Chapter 3 of Title II shall develop an internal methodology or use external sources to estimate default probabilities; in both situations, the estimates of default probabilities shall be consistent with the requirements set out in this Article.”*

With respect to LGDs, paragraph 6 of Article 325bp specifies that:

*“6. To simulate the default of issuers in the internal default risk model, the institution's estimates of loss given default shall meet the following requirements:*

*(a) the loss given default estimates are floored at 0 %;*

*(b) the loss given default estimates shall reflect the seniority of each position;*

*(c) an institution that has been granted permission to estimate loss given default in accordance with Section 1 of Chapter 3 of Title II shall use the methodology set out therein to calculate loss given default estimates;*

*(d) an institution that has not been granted permission to estimate loss given default in accordance with Section 1 of Chapter 3 of Title II shall develop an internal methodology or use external sources to estimate loss given default; in both situations, the estimates of loss given default shall be consistent with the requirements set out in this Article.”*

### 3.1 Feedback received on the Discussion Paper

Although the Discussion Paper did not specifically discuss implementation issues in relation with the DRC, some respondents raised concerns with respect to the scope of application of the EBA mandate set out in Article 325bp(12). In particular, those respondents highlighted that the RTS should also be applicable to IRB institutions for those issuers within the scope of the DRC that are not covered by the IRB permission. In addition, they suggested that the DRC RTS mandate could be tackled in the revised RTS on assessment methodology.

## 3.2 EBA Advice on RTS mandate on PDs and LGDs (CfA<sup>4</sup>)

Article 325bp paragraphs 5(d) and 6(c) could be read as implying that institutions that have received permission to use the IRB approach should use this approach for all their issuers and issues (or financial instruments) in the scope of the default risk charge. However, this would contradict the fact that, in practice, the IRB approach only covers a certain scope of obligors, for which PD estimates are available in the IRB approach, and a certain number of facilities, for which LGD estimates are available in the IRB approach.

A specific recommendation was included in the EBA's response to the European Commission's Call for Advice published on the 4 December 2019 with the view to addressing the issue in the next legislative package.

The EBA suggested clarifying in Article 325bp paragraphs 5(d), 5(e), 6(c) and 6(d) that institutions that have been granted permission under the IRB approach, for given obligors, to estimate default probabilities and, for given facilities, to estimate loss given default must use the methodology set out therein only for their trading book issuers and issues, for which default probability estimates are available for corresponding obligors under their IRB approach and loss given default estimates are available for corresponding facilities under their IRB approach. For their other trading book issuers and issues, those institutions must, similar to institutions that have not been granted IRB permission, develop an internal methodology or use external sources to estimate default probabilities and loss given default for the purpose of the internal default risk charge.

### Recommendation MR 9: RTS mandate on PDs and LGDs

The EBA suggests clarifying in Article 325bp paragraphs 5(d) and 6(c) that institutions that have been granted permission under the IRB approach, for given obligors, to estimate default probabilities and, for given facilities, to estimate loss given default should use the methodology set out therein only for their trading book issuers and issues, for which default probability estimates are available for the corresponding obligors under their IRB approach and loss given default estimates are available for the corresponding facilities under their IRB approach.

The EBA suggests clarifying in Article 325bp paragraphs 5(e) and 6(d) that, in addition to institutions that have not been granted IRB permission, institutions that have been granted permission under the IRB approach should develop an internal methodology or use external sources to estimate the default probabilities and loss given default for their trading book issuers or issues, for which no default probability or loss given default estimates are available under their IRB approach.

<sup>4</sup> POLICY ADVICE ON THE BASEL III REFORMS ON CREDIT VALUATION ADJUSTMENT (CVA) AND MARKET RISK [https://eba.europa.eu/sites/default/documents/files/document\\_library/EBA-2019-Op-15%20-%20Policy%20Advice%20on%20the%20Basel%20III%20reforms%20on%20credit%20valuation%20adjustment%20%28CVA%29%20and%20market%20risk.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/EBA-2019-Op-15%20-%20Policy%20Advice%20on%20the%20Basel%20III%20reforms%20on%20credit%20valuation%20adjustment%20%28CVA%29%20and%20market%20risk.pdf)

### 3.3 Consequences for the present RTS of changes to the permission to use the IRB Approach under Article 143(2)

Section 3 of Chapter 1b of the CRR specifies the requirements to be met by institutions calculating own funds requirements using an internal default risk model. Those requirements apply to all PD and LGD estimates used under the DRC regardless of the source of such estimates, and in particular, prevail over any contrary provisions that may be applicable under the IRB approach. For example, floors applicable to own estimates under the IRB approach do not apply under the DRC, which has its own provisions in this respect.

For IRB institutions, any change to the scope of the permission to use the IRB Approach granted under Article 143(2), whether it is the result of a change in regulation or in the permission granted by competent authorities, will mechanically affect the PD and LGD estimates used under the DRC. In this respect, the RTS apply as soon as own estimates are not available (i.e. either because they are not currently calculated or because they cannot be calculated under the existing IRB approval) - or not available anymore - under the IRB approach regardless of the cause of such unavailability. As a result, the limits imposed by international standards to the own estimation of PDs and LGDs under the IRB approach are expected to, where implemented in the EU, lead to an increase in the PDs and LGDs estimated under the present RTS.

### 3.4 Proposed approach

#### 3.4.1 Institutions permitted to use the IRB approach

Paragraphs 5(d), 5(e), 6(c) and 6(d) of Article 325bp specify different treatments based on whether an institution has been granted - or not - permission to estimate default probabilities or loss given default in accordance with Section 1 of Chapter 3 of Title II.

Since IRB permissions are granted for certain exposure classes and rating systems, these RTS clarify in Recital 1 that the above provision should be understood as applying for the particular exposure classes and rating systems, for which the IRB permission has been granted. In particular, where positions within the scope of the DRC in accordance with Article 325bl(1) refer to issuers identified in accordance with Article 325bl(2) that would not be covered by the exposure classes and ratings systems included in the IRB permission if they were banking book obligors, then institutions should apply the provisions of these RTS.

Where issuers identified in accordance with Article 325bl(2) would be covered by the exposure classes and ratings systems included in the IRB permission if they were banking book obligors, then paragraphs 5(d) and 6(c) of Article 325bp require institutions to use the methodology set out in the IRB to calculate default probabilities and loss given default estimates.



Trading book positions are held with trading intent or to hedge positions held with trading intent and hence are expected to change on a daily basis, including due to trading in new financial instruments or issuers at short notice. In addition, own funds requirements for default risk are required to be calculated on at least a weekly basis. Therefore, it is expected that assigning probabilities of default or losses given defaults to trading book issuers and financial instruments based on the existing IRB permission will generally not be possible within days, due to the need to meet all relevant IRB requirements. As a matter of fact, estimates of default probabilities and losses given default stemming from external sources will, in many cases, be the only estimates available at short notice to institutions.

In light of this, Recital 2 of these RTS clarify that institutions, even those with an IRB approval covering the relevant exposure classes and rating systems, should be understood to be allowed to temporarily use external sources, as delaying or suspending their trading book operations until probabilities of default or losses given default are derived from the IRB methodology would be disproportionate.

### **3.4.2 Use of an internal methodology under the DRC**

Title IV Chapter 1b Section 3 of the CRR introduces a precise hierarchy for sources of PD and LGD estimates to be used under the DRC. In particular, Article 325bp of the CRR requires institutions to use, over all other sources, PDs or LGDs estimated under the IRB approach, where those estimates are available.

In drafting these RTS, the EBA acknowledged the priority assigned by the CRR to the IRB methodology over any other methodology that could be developed to derive own PD and LGD estimates. As a result, it follows that any internal methodology used under the DRC would have to be equivalent to the requirements prescribed in the IRB approach. Therefore, the draft RTS specify that the use of an internal methodology under the DRC should be possible only where such internal methodology fulfil all the requirements set out in Section 1 of Chapter 3 of Title 2.

This provision will also allow maintaining a level playing field between institutions that have developed an IRB approach and institutions that have not.

### **3.4.3 Use of external sources under the DRC**

The CRR envisages the use of external sources to estimate the PDs and LGD to be used under the DRC. In a number of cases, PD and LGD estimates stemming from external sources are the only ones readily available at short notice to institutions. These RTS specify the requirements that external sources are to fulfil for their use under the DRC, reflecting similar qualitative requirements as those applicable to an internal methodology.

External sources should provide estimates of PDs and LGDs that are appropriate with respect to the institution's portfolio. In addition, those estimates should be validated on a periodic basis for their use under the DRC.



In case multiple external sources are used by an institution for the purpose of the DRC, the institution should provide a hierarchy of such sources, in order to ensure the overall consistency of PD and LGD estimates used in the DRC.

Finally, requirements were added to specify more in detail how the general documentation requirement should be applied in the particular case of the external sources used by institutions for estimating default probabilities and losses given default. Given the fact that IRB requirements already include specific documentation requirements, the specification of such requirement was not considered necessary in the context of the use of an internal methodology under these RTS.

## 4. Draft regulatory technical standards on requirements that an internal methodology or external sources used under the internal default risk model are to fulfil for estimating default probabilities and losses given default under Article 325bp(12) of Regulation (EU) No 575/2013 (Capital Requirements Regulation 2 - CRR2)

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In between the text of the draft RTS that follows, further explanations on specific aspects of the proposed text are occasionally provided, which either offer examples or provide the rationale behind a provision, or set out specific questions for the consultation process. Where this is the case, this explanatory text appears in a framed text box.

**COMMISSION DELEGATED REGULATION (EU) No .../..**

**of **XXX****

**supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards on requirements that an internal methodology or external sources used under the internal default risk model are to fulfil for estimating default probabilities and losses given default under Article 325bp(12) of Regulation (EU) No 575/2013**

(Text with EEA relevance)

## THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 575/2013 of 26 June 2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012<sup>5</sup>, and in particular the third subparagraph of Article 325bp(12) thereof,

Whereas:

- (1) Since issuers and financial instruments found in the trading book will in many cases be different from, respectively, obligors and facilities found in the non-trading book, in order for institutions to be able, in accordance with Article 325bp(5)(d) and (6)(c) of Regulation (EU) No 575/2013, to use the IRB Approach, where such a permission has been granted under Article 143(2) of that Regulation, for the purpose of deriving probabilities of default and losses given default for the computation of their own funds requirements for default risk, it should be understood as a requirement that such an IRB permission relates to the exposure classes and rating systems which are relevant for trading book purposes. Where, instead the IRB permission received does not cover such exposure classes and rating systems, the requirements of this Regulation would be applicable.
- (2) Where institutions avail of an IRB permission for the exposure classes and rating systems relevant for the trading book issuers at hand, in accordance with Article 325bp(5)(d) and (6)(c), they are required to use that IRB methodology to calculate default probabilities and estimates of loss given default. Nevertheless, trading book positions are held with trading intent or to hedge positions held with trading intent and hence they are expected to change on a daily basis, including due to trading in new financial instruments or issuers at short notice. Given the requirement, referred to in Article 325bn(2) of Regulation (EU) No 575/2013, that the own funds requirements for default risk are calculated on at least a weekly basis, it is expected that estimates of default probabilities and losses given default stemming from external sources will, in many cases, be the only estimates available at such a short notice to institutions, as assigning probabilities of default or losses given defaults to trading book issuers and financial instruments based on the existing IRB permission will generally not be possible within days, due to the need to meet all relevant IRB requirements. In light of this, institutions, even those with an IRB permission covering relevant exposure classes and rating systems, should be understood to be allowed to temporarily use external sources, as delaying or suspending their trading book operations until probabilities of default or losses given default were derived from the IRB methodology would be disproportionate. As a result, rules specifying the requirements for external sources should reflect similar qualitative requirements as those applicable under the rules relating to internal methodologies, with the view to covering the resort to the use of external sources in all cases.

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<sup>5</sup> OJ L 176, 27.6.2013, p. 1.

### Explanatory text for consultation purposes

Trading book positions are held with trading intent or to hedge positions held with trading intent. Hence, they are expected to change on a daily basis, including due to trading in new financial instruments or issuers at short notice. In addition, own funds requirements for default risk are required to be calculated on at least a weekly basis.

It is expected that assigning probabilities of default or losses given defaults to trading book issuers and financial instruments based on the existing IRB permission will generally not be possible within days, due to the need to meet all relevant IRB requirements.

Recital 2 clarify that institutions, even those with an IRB approval covering the relevant exposure classes and rating systems, should be understood to be allowed to temporarily use external sources, as delaying or suspending their trading book operations until probabilities of default or losses given default are derived from the IRB methodology would be disproportionate.

### Questions for consultation

**Q1.** What would you consider to be the main challenges and most time consuming steps involved in using the IRB approach to be able to assign a PD and a LGD to a trading book issuer and the corresponding financial instrument, where such issuer is covered by the existing IRB permission, but no PD or LGD is immediately available under the IRB approach (i.e. they need to be assigned based on the existing IRB approach)? Based on this assessment, please indicate how much time you expect is needed for an IRB approach to assign a PD and a LGD to a specific trading book issuer.

**Q2.** What possible approach – other than the use of external sources as proposed in these RTS – could be considered until a PD and a LGD are calculated under the IRB approach for such issuer and financial instrument?

- (3) The requirement to use the IRB methodology, where available, to derive default probabilities and losses given default, provided by Article 325bp(5)(d) and (6)(c) of Regulation (EU) No 575/2013, respectively, is indicative of the key role and great importance of the internal approach requirements set out in Section 1 of Chapter 3 of Title 2 of that Regulation, for the derivation of own estimates of default probabilities or losses given default. Such considerations, combined with the need to create a level playing field across institutions in the Union, suggest that the use of an internal methodology for a given issuer or financial instrument under this Regulation should be allowed only where all the requirements set out in Section 1 of Chapter 3 of Title 2 are met, as other solutions would not be prudent.
- (4) While there is a requirement to use the IRB methodology, where available, to derive default probabilities and losses given default, pursuant to Article 325bp(5)(d) and (6)(c) of Regulation (EU) No 575/2013, respectively, where no such IRB approval is available, institutions avail of a choice: they can rely on the use of external sources of data, internal sources of data, or a combination of those sources. As a result, all relevant provisions of this Regulation apply, as appropriate so that, regardless of the source of data used, institutions develop a methodology for the estimation of default probabilities and losses given default, which is overall consistent and

fit for the purpose of the computation of own funds requirements for default risk using an internal default risk model.

- (5) Article 325bp(11) of Regulation (EU) No 575/2013 provides for documentation by institutions of their correlation assumptions and other modelling assumptions used in their internal default risk models. In order to assist competent authorities to ensure compliance with this Regulation, it is necessary to set out further details of how that general documentation requirement should be applied in the particular case of the external sources used by institutions for estimating default probabilities and losses given default in accordance with Article 325bp(5)(e) and 325bp(6)(d) of that Regulation, such a specification not being necessary with regard to the internal methodologies, given the requirement to apply all relevant IRB rules, which include documentation requirements.
- (6) This Regulation is based on the draft regulatory technical standards submitted by the European Banking Authority to the Commission.
- (7) EBA has conducted open public consultations on the draft regulatory technical standards on which this Regulation is based, analysed the potential related costs and benefits, and requested the opinion of the Banking Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1093/2010<sup>6</sup>,

HAS ADOPTED THIS REGULATION:

#### *Article 1*

#### *Requirements that an institution's internal methodology or external sources are to fulfil for estimating default probabilities*

1. The requirements that an institution's internal methodology is to fulfil for estimating default probabilities in accordance with point (e) of Article 325bp(5) of Regulation (EU) No 575/2013, where the institution has not received any permission under Article 143(2) of that Regulation to use the IRB Approach for the relevant exposure class and rating system corresponding to a certain issuer, shall be all the requirements needed to be fulfilled for an institution to be granted the permission to estimate default probabilities in accordance with Section 1 of Chapter 3 of Title II of that Regulation.

#### **Explanatory text for consultation purposes**

Article 325bp of the CRR requires institutions to use, over all other sources, PDs or LGDs estimated under the IRB approach, where those estimates are available, thus recognising the primacy of the IRB methodology over any other methodology that could be developed to derive own PD and LGD estimates.

<sup>6</sup> 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).

As a result, these draft RTS specify that the use of an internal methodology under the DRC should be possible only where such internal methodology fulfil all the requirements set out in Section 1 of Chapter 3 of Title 2. It should be noted that institutions' compliance with those requirements is expected to be assessed by competent authorities as part of the assessment of institutions' request for IMA permission.

This provision is expected to maintain a level playing field between institutions that have been granted the permission to use the IRB approach and institutions that have not.

#### **Questions for consultation**

**Q3.** Could you please describe how PDs are determined for the purpose of the current IRC charge (Article 372 and following of the CRR)? Please specify, whether PDs are derived from internal sources and/or derived from external sources and what the predominant source (internal or external) currently is?

**Q4.** What are your views with respect to alternative internal methodologies (i.e. IRB equivalent, but different from the approach proposed here) that could be developed to derive PDs under these RTS? Are there any particular aspects and issues regarding trading book dynamics that you would like to highlight?

2. The requirements that external sources are to fulfil for estimating default probabilities in accordance with point (e) of Article 325bp(5) of Regulation (EU) No 575/2013, where the institution has not received any permission under Article 143(2) of that Regulation to use the IRB Approach for the relevant exposure class and rating system corresponding to a certain issuer, shall be all of the following:

- (a) the external sources provide estimates of default probabilities that are appropriate having regard to the institution's portfolio;
- (b) the external sources provide estimates of default probabilities that are validated on a periodic basis for their use in the internal default risk model in accordance with Article 325bp(7) and 325bj(2) of Regulation (EU) No 575/2013;
- (c) where more than one external source is used, a hierarchy of sources is established in order to ensure the overall consistency of default probability estimates used in the internal default risk model;
- (d) the external sources meet the documentation requirements set out in Article 3.



## *Article 2*

### *Requirements that an institution's internal methodology or external sources are to fulfil for estimating losses given default*

1. The requirements that an institution's internal methodology is to fulfil for estimating losses given default in accordance with point (d) of Article 325bp(6) of Regulation (EU) No 575/2013, where the institution has not received any permission under Article 143(2) of that Regulation to use their own estimates of losses given default for the relevant exposure class and rating system corresponding to that position, shall be all the requirements needed to be fulfilled for an institution to be granted the permission to estimate losses given default in accordance with Section 1 of Chapter 3 of Title II of that Regulation.

#### **Explanatory text for consultation purposes**

Same questions as above for LGDs.

#### **Questions for consultation**

**Q5.** Could you please describe how LGDs are determined for the purpose of the current IRC charge (Article 372 and following of the CRR)? Please specify, whether LGDs are derived from internal sources and/or derived from external sources and what the predominant source (internal or external) currently is?

**Q6.** What are your views with respect to alternative internal methodologies (i.e. IRB equivalent, but different from the approach proposed here) that could be developed to derive LGDs under these RTS? Are there any particular aspects and issues regarding trading book dynamics that you would like to highlight?

2. The requirements that external sources are to fulfil for estimating losses given default in accordance with point (d) of Article 325bp(6) of Regulation (EU) No 575/2013, where the institution has not received any permission under Article 143(2) of that Regulation to use their own estimates of losses given default for the relevant exposure class and rating system corresponding to that position, shall be all of the following:

- (a) the external sources provide estimates of losses given default that are appropriate having regard to the institution's portfolio;
- (b) the external sources provide estimates of losses given default that are validated on a periodic basis for their use in the internal default risk model in accordance with Article 325bp(7) and 325bj(2) of Regulation (EU) No 575/2013;

- (c) where more than one external source is used, a hierarchy of sources is established in order to ensure the overall consistency of loss given default estimates used in the internal default risk model;
- (d) the external sources meet the documentation requirements set out in Article 3.

### *Article 3*

#### *Documentation requirements for external sources*

Institutions shall keep up to date an inventory of the external data sources used for the purposes of Articles 1 and 2, which shall include all of the following:

- (a) a description of the methodologies used to obtain default probabilities and losses given default from external sources in accordance with paragraphs (a) and (b) of Article 1(2) and paragraphs (a) and (b) of Article 2(2);
- (b) the results of the validation performed in accordance with paragraph (b) of Article 1(2) and paragraph (b) of Article 2(2);
- (c) the hierarchy of the sources used in accordance with paragraph (c) of Article 1(2) and paragraph (c) of Article 2(2).

#### **Explanatory text for consultation purposes**

This Regulation aims at ensuring that institutions comply with minimum qualitative standards when estimating PDs and LGDs for the purpose of DRC. Therefore, requirements have been specified in order to ensure that both internal methodologies and external sources could produce PD and LGD estimates as reliable as the IRB ones.

#### **Question for consultation**

**Q7.** Do you have any additional comments on the general approach?

### *Article 4*

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.



Done at Brussels,

*For the Commission  
The President*

*[For the Commission  
On behalf of the President*

## 5. Accompanying documents

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### 5.1 Draft cost-benefit analysis / impact assessment

Article 325bp of Regulation (EU) No. 575/2013 (CRR) requires the EBA to develop draft regulatory technical standards (RTS) specifying the requirements that an institution's internal methodology or external sources are to fulfil for estimating default probabilities and losses given default.

Article 10(1) of Regulation (EU) No 1093/2010 (EBA Regulation) provides that any RTS developed by the EBA should be accompanied by an analysis of 'the potential related costs and benefits'. 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 section presents the cost-benefit analysis of the main policy options included in the draft RTS described in this CP. Given the nature and the scope of the draft RTS, the analysis is high-level and qualitative in nature.

#### A. Problem identification and Baseline scenario

The CRR2 introduces the revised internal model approach (IMA) for market risk as part of the transposition into EU legislation of the standards on 'Minimum capital requirement for market' finalised by the Basel Committee on Banking Supervision (BCBS). The capital requirements under the IMA comprise of three components: a) the capital requirements for modellable risk factors (expected shortfall measure); b) the capital requirements for non-modellable risk factors (stress scenario risk measure); and c) the default risk capital requirement.

The default risk capital requirement aims to capture the default risk for positions in traded debt and equity instruments included in IMA trading desks. Institutions are required to compute this capital requirement using an internal default risk model. To simulate the default of issuers in the internal default risk model, estimates of the default probabilities (PDs) and losses given default (LGD) of the issuers and issuances of these trading positions are needed.

These estimates shall comply with the requirements set out in paragraphs 5 and 6 of Article 325bp of the CRR2. On the one hand, institutions that have been granted permission to use the IRB approach are required to use the methodology set out therein to calculate PD and LGD estimates. On the other hand, institutions with no IRB permission are required to develop an internal methodology or use external sources to estimate default probabilities.

The EBA is mandated to develop draft RTS specifying the requirements that an institution's internal methodology or external sources are to fulfil for estimating PD and LGD.



The lack of common requirements could result in an inconsistent application of the internal default risk model across institutions, undermining the calibration of the default risk capital requirements. Given that institutions may use different types of methodologies and/or external sources, it is important to set minimum requirements to ensure that the PD and LGD estimates used in the internal default risk model are appropriate for the intended use.

## B. Policy objectives

The specific objective of the draft RTS is to establish common requirements for the internal methodology or external sources that institutions need to fulfil for estimating default probabilities and losses given default for the internal risk model. These requirements aim to ensure that the PD and LGD estimates are appropriate and consistent across institutions.

Generally, the draft RTS aim to create a level playing field, promote convergence of institutions practices and enhance comparability of own funds requirements across EU.

## C. Options considered, Cost-Benefit Analysis and Preferred Options

This section presents the main policy options discussed during the development of the CP, the costs and benefits of these options, as well as the preferred options retained in the CP.

### Scope of the draft RTS

Article 325bp paragraphs 5(d) and 6(c) of the CRR2 provides that an institution that has been granted permission to estimate PDs and LGD in accordance with Section 1 of Chapter 3 of Title II shall use the methodology set out therein to calculate those estimates. Institutions that have not been granted this permission shall develop an internal methodology or use external sources to estimate PDs and LGD as provided in Article 325bp paragraphs 5(e) and 6(d) of the CRR2, respectively.

The EBA has identified a potential issue with these provisions as highlighted in its response to the European Commission's Call for Advice on Basel III reforms published in December 2019. In particular, Article 325bp paragraphs 5(d) and 6(c) seem to imply that institutions that have received permission to use the IRB approach should use this approach for all their issuers and issues in the scope of the default risk charge. However, in practice, the IRB approach only covers a certain scope of obligors — for which PD estimates are available in the IRB approach — and a certain number of facilities — for which LGD estimates are available in the IRB approach.

The EBA has suggested in its policy recommendation MR 9 to clarify in Article 325bp paragraphs 5(d) and 6(c) that institutions that have been granted permission under the IRB approach, for given obligors, to estimate PDs and, for given facilities, to estimate LGD should use the methodology set out therein only for their trading book issuers and issues, for which PD estimates are available for the corresponding obligors under their IRB approach and LGD estimates are available for the corresponding facilities under their IRB approach. Furthermore, the EBA suggested clarifying in



Article 325bp paragraphs 5(e) and 6(d) that, in addition to institutions that have not been granted IRB permission, also institutions that have been granted permission under the IRB approach should develop an internal methodology or use external sources to estimate the default probabilities and loss given default for their trading book issuers or issues, for which no PD or LGD estimates are available under their IRB approach.

The EBA has chosen to clarify the scope of the RTS in line with the EBA's policy recommendation. In particular, the RTS should be relevant for institutions that have received a permission to use an IRB model but not for the relevant exposure classes/rating systems, allowing institutions to only use the own PD and LGD estimates from the IRB model where those are available i.e. either because they are already estimated or because they can be derived under the existing IRB approval. This clarification is expected to reduce significantly the burden for institutions, as institutions could rely on the internal methodology or external sources to obtain the PD and LGD estimates for the internal default risk model. The lack of such clarification might imply that institutions should use the IRB approach for the PD and LGD estimates of their trading book issuers and issues, for which PD and LGD estimates cannot be derived under that approach (e.g. because the institution does not have a credit exposures to these issuers or issues). However, it could be impractical – or even impossible (e.g. due to the lack of relevant data, the need to comply with all IRB requirements including being granted an IRB approval for new exposure classes/rating systems) – to obtain internally those estimates in a timely manner.

### Requirements for an institution's internal methodology

Article 325bp paragraphs 5(e) and 6(d) of the CRR2 envisages the possibility for an institution that has not been granted permission to estimate PDs and LGD in accordance with Section 1 of Chapter 3 of Title II to develop an internal methodology to estimate PDs and LGDs, respectively. In paragraph 12 of Article 325bp the EBA is mandated to develop draft RTS to specify the requirements that such internal methodology is to fulfill. Two different approaches are considered for the specification of those requirements.

**Option 1a:** particular requirements can be specified for an institution's internal methodology developed for estimating PDs and LGD for the purpose of computing the default risk charge.

**Option 1b:** requirements in line with the IRB ones can be specified for an institution's internal methodology developed for estimating PDs and LGD for the purpose of computing the default risk charge.

The EBA acknowledges the key role and great importance attributed in the CRR to the IRB approach for the derivation of own estimates of PDs or LGD. In addition, Basel standards require institutions to compute PDs and LGD using a methodology consistent with the IRB methodology, where IRB estimates are not available. Therefore, in the light of such considerations, and also with the view to creating a level playing field across institutions in the Union, Option 1b is retained.



## 5.2 Overview of questions for consultation

**Q1.** What would you consider to be the main challenges and most time consuming steps involved in using the IRB approach to be able to assign a PD and a LGD to a trading book issuer and the corresponding financial instrument, where such issuer is covered by the existing IRB permission, but no PD or LGD is immediately available under the IRB approach (i.e. they need to be assigned based on the existing IRB approach)? Based on this assessment, please indicate how much time you expect is needed for an IRB approach to assign a PD and a LGD to a specific trading book issuer.

**Q2.** What possible approach – other than the use of external sources as proposed in these RTS – could be considered until a PD and a LGD are calculated under the IRB approach for such issuer and financial instrument?

**Q3.** Could you please describe how PDs are determined for the purpose of the current IRC charge (Article 372 and following of the CRR)? Please specify, whether PDs are derived from internal sources and/or derived from external sources and what the predominant source (internal or external) currently is?

**Q4.** What are your views with respect to alternative internal methodologies (i.e. IRB equivalent, but different from the approach proposed here) that could be developed to derive PDs under these RTS? Are there any particular aspects and issues regarding trading book dynamics that you would like to highlight?

**Q5.** Could you please describe how LGDs are determined for the purpose of the current IRC charge (Article 372 and following of the CRR)? Please specify, whether LGDs are derived from internal sources and/or derived from external sources and what the predominant source (internal or external) currently is?

**Q6.** What are your views with respect to alternative internal methodologies (i.e. IRB equivalent, but different from the approach proposed here) that could be developed to derive LGDs under these RTS? Are there any particular aspects and issues regarding trading book dynamics that you would like to highlight?

**Q7.** Do you have any additional comments on the general approach?