

## EBA FINAL draft Regulatory Technical Standards

on the conditions for assessing the materiality of extensions and changes of internal approaches when calculating own funds requirements for credit and operational risk in accordance with Articles 143(5) and 312(4)(b) and (c) of Regulation (EU) No 575/2013 (Capital Requirements Regulation – CRR)



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## Table of contents

1.	Executive Summary	3
2.	Background and rationale	5
3.	EBA FINAL draft Regulatory Technical Standards on the conditions for assessing the materiality of extensions and changes of internal approaches when calculating own funds requirements for credit and operational risk in accordance with Articles 143(5) and 312(4)(b) and (c) of Regulation (EU) No 575/2013 (Capital Requirements Regulation – CRR)	7
4.	Accompanying documents	29
4.1	Cost- Benefit Analysis / Impact Assessment	29
4.2	Views of the Banking Stakeholder Group (BSG)	38
4.3	Feedback on the public consultation and on the opinion of the BSG	40

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## 1. Executive Summary

The Capital Requirements Regulation (henceforth 'CRR') and the Capital Requirements Directive (henceforth 'CRD')<sup>1</sup> set out prudential requirements for banks and other financial institutions which will apply from 1 January 2014. Among others, the CRR contains specific mandates for the EBA to develop draft Regulatory Technical Standards (henceforth 'RTS') to specify the conditions for assessing the materiality of extensions<sup>2</sup> and changes of internal approaches when calculating own funds requirements for credit and operational risk.

### Main features of the RTS

According to the CRR/CRDIV, all institutions are required to apply for permission whenever they intend to implement any material extension and change to their internal approaches for credit and operational risk, to ensure that the approved internal approaches comply with the regulatory requirements.

The CRR differentiates between material extensions or changes that are subject to approval, and all other changes that are subject to notification. In relation to the latter (extensions and changes subject to notification), the timing of notification is not specified, i.e. whether the extension or change should be notified before or after its implementation. The EBA therefore considers that extensions and changes of minor importance need not be known to competent authorities in advance of their implementation; instead it considers that it would be more efficient and less burdensome for institutions to collect information on such changes of minor importance and notify them to the competent authorities at regular intervals. Such an approach, which is already supervisory practice in several Member States, would reduce the supervisory burden for both the competent authorities and the institutions.

With the above considerations in mind, the core of the proposed draft RTS provides firstly (in the annexes) lists of qualitative conditions for classification of extensions and changes to the internal approaches (for each of the credit and operational risk areas) into one of the following categories: material extensions and changes, which require a permission from the competent authorities; extensions and changes of a lesser materiality, but still of a degree of materiality that requires notification to the competent authorities before their implementation; and extensions and changes of an even lesser degree of materiality, which therefore need only be notified to the competent authorities in regular intervals, after their implementation.

Those extensions and changes which fall under one of the categories of lesser materiality may still alter the own funds requirements or, where applicable, the risk-weighted exposure amounts. Hence the draft RTS also propose quantitative thresholds to be applied as a 'back-stop' measure in addition

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<sup>1</sup> 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 and Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC.

<sup>2</sup> Relevant only for internal approaches for operational risk.

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to the lists of qualitative conditions when determining the materiality of an extension and change. These thresholds are based on the percentage change of own funds requirements or, where applicable, of risk-weighted exposure amounts before and after the planned extension or change.

Finally, the draft RTS also set out the documentation to be submitted by institutions to competent authorities so that these authorities can assess compliance of institutions with the above rules.

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## 2. Background and rationale

The Capital Requirements Regulation (henceforth 'CRR') and the Capital Requirements Directive (henceforth 'CRD')<sup>3</sup> set out prudential requirements for banks and other financial institutions which will apply from 1 January 2014. Among others, the CRR contains specific mandates for the EBA to develop draft Regulatory Technical Standards (henceforth 'RTS') to specify the conditions for assessing the materiality of extensions<sup>4</sup> and changes of internal approaches when calculating own funds requirements for credit and operational risk.

### Background on the draft RTS

Article 143(1) of the CRR requires approval by competent authorities for institutions to be able to calculate their risk-weighted exposure amounts for credit risk by using the Internal Ratings Based Approach (IRB Approach); Article 312(2) CRR requires the same approval for institutions to use Advanced Measurement Approaches (AMA) to calculate own funds requirements for operational risk. Institutions must also apply for permission from their competent authorities where they want to implement material extensions and changes to their internal approaches, and such permission will be granted only where institutions prove that they continue to meet all the relevant qualitative and quantitative requirements.

These draft RTS contain rules on how to assess the materiality of extensions and changes to an approved IRB Approach, or to an AMA, in order to harmonise the supervisory processes for model extensions and changes and ensure that the approved internal approach continues to comply with regulatory requirements.

The permission to use either the IRB Approach or the AMA is valid only for the approved approach. Regular adjustments are needed to maintain the relevance of all these approaches for the calculation of own funds requirements and for risk management purposes. The need for adjustments may stem from changes in internal or external factors, for example, changes in the business activity or organisational structure of the institution. Institutions are encouraged to further develop their internal approaches.

The CRR differentiates between material extensions or changes that are subject to approval, and all other changes that are subject to notification. In relation to the latter (extensions and changes subject to notification) the timing of notification is not specified, i.e. whether the extension or change should be notified before or after its implementation. The EBA therefore considers that extensions and changes of minor importance need not be known by competent authorities in advance of their implementation; instead it considers that it would be more efficient and less burdensome for institutions to collect information on such changes of minor importance and notify them to the competent authorities at

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<sup>3</sup> 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 and Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC.

<sup>4</sup> Relevant only for internal approaches for operational risk.

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regular intervals. Such an approach, which is already supervisory practice in several Member States, would reduce the supervisory burden on both the competent authorities and the institutions.

With the above considerations in mind, the core of the proposed draft RTS provides firstly (in the annexes) lists of qualitative conditions for classification of extensions and changes to the internal approaches (for each of the credit and operational risk areas) into one of the following categories: material extensions and changes, which require a permission from the competent authorities; extensions and changes of a lesser materiality, but still of a degree of materiality that require notification to the competent authorities before their implementation; and extensions and changes of an even lesser degree of materiality, which therefore could only be notified to the competent authorities in regular intervals, after their implementation.

Those extensions and changes which fall under one of the categories of lesser materiality, may still alter the own funds requirements or, where applicable, the risk-weighted exposure amounts. Hence the draft RTS also proposes quantitative thresholds to be applied as a 'back-stop' measure in addition to the lists of qualitative conditions when determining the materiality of an extension and change. These thresholds are based on the percentage change of own funds requirements or, where applicable, of risk-weighted exposure amounts before and after the planned extension or change.

Finally, the draft RTS also set out documentation to be submitted by institutions to competent authorities so that these authorities can assess compliance of institutions with the above rules.

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EUROPEAN COMMISSION

Brussels, **XXX**  
[...] (2012) **XXX** draft

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

**of **XXX****

**[...]**

**supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms, with regard to regulatory technical standards for the conditions for assessing the materiality of extensions and changes of internal approaches when calculating own funds requirements for credit and operational risk in accordance with Articles 143(5) and 312(4)(b) and (c)**

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

**supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms, with regard to regulatory technical standards for assessing the materiality of extensions and changes of internal approaches when calculating own funds requirements for credit and operational risk in accordance with Articles 143(5) and 312(4)(b) and (c)**

**of XX Month 2013**

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 and in particular third subparagraph of Article 143(5) and third subparagraph of Article 312(4) in relation to points (b) and (c) thereof,

Whereas:

- (1) The provisions in this Regulation are closely linked, since they refer to extensions and/or changes to internal approaches for own funds requirements for credit and operational risk, and since relevant supervisory issues and procedures are similar for all types of internal approaches. To ensure coherence between those provisions, and to facilitate a comprehensive view and access in a coordinated fashion to them by persons subject to those obligations, it is desirable that they enter into force at the same time and to include all of the regulatory technical standards required by Regulation (EU) No 575/2013 on extensions and changes to internal models for credit and operational risk, in a single Regulation.
- (2) In accordance with Article 143(3) of Regulation (EU) No 575/2013 the range of application of a rating system refers to the type of exposures as defined in Article 142(1) point (2) of Regulation (EU) No 575/2013, that may be rated with a specific rating system as defined in Article 142(1) point (1) of Regulation (EU) No 575/2013.
- (3) Regulation (EU) No 575/2013 differentiates between material extensions or changes that shall be subject to approval, and all other changes that shall be subject to notification. As to the latter there is no indication in Regulation (EU) No 575/2013 on the timing of notification of the extension or change, i.e. whether the change should be notified before or after its implementation. Against this background, extensions or changes of minor importance need not be known to competent authorities in advance. Further, it would also be more efficient and less burdensome for institutions to collect such changes of minor importance and notify them to the competent authorities in regular intervals. Indeed, this has been supervisory practice in several Member States. With that in mind extensions and changes requiring



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notification should be further distinguished into extensions and changes requiring notification before implementation and extensions and changes only requiring notification after implementation. This would further ensure that competent authorities in their daily tasks focus their attention on extensions and changes with the potential of materially altering own funds requirements or the performance of the models or rating systems. It would also ensure that institutions distinguish between extensions and changes of great significance from extensions and changes of minor importance on the basis of a risk-oriented supervisory approach. Such a distinction between extensions and changes subject to notification before implementation and extensions and changes subject to notification after implementation, would be prudent, given that the notification before implementation would allow competent authorities the possibility to review the correct application of this Regulation. This in return would also reduce the supervisory burden on the institutions' side.

- (4) Materiality of extensions or changes in the models will usually depend on the type and category of the extension or change proposed (which should be reflected in qualitative criteria), and on their potential to alter the own funds requirements or, where applicable, the risk-weighted exposure amounts (which should be reflected in the quantitative criteria). Therefore any quantitative criteria for reviewing the materiality of extensions or changes should take the form of a threshold based on the percentage change of own funds requirements or, where applicable, of risk-weighted exposure amounts before and after the change.
- (5) While for extensions and changes to AMA models, the quantitative threshold should be calculated, for the sake of simplicity, on the basis of the own funds requirements, for changes to the IRB approach the threshold should be calculated on the basis of risk-weighted exposure amounts, to rule out effects stemming from provisions. Moreover, quantitative thresholds should be designed to take into account the overall impact of the extensions or changes on the capital required based on the internal approaches as well as the standardised approaches, in order to reflect the extent to which internal approaches are used for the overall own funds requirements or risk-weighted exposure amounts. This applies to all thresholds for both approaches, except in relation to the second threshold for the IRB approach and the prior notification threshold for the IRB approach which are designed with regard to the impact of changes on the risk-weighted exposure amounts covered by the range of application of a specific model. For both the IRB approach and the AMA, the calculation of the impact of the extension/change before and after the extension/change should be made with reference to the same point in time, given that the set of exposures (in the case of the IRB approach) and the risk profile (in the case of the AMA) are relatively stable in time.
- (6) Competent authorities may at any time take appropriate supervisory measures with regard to model extensions and changes that have been notified, based on the on-going review of existing permissions to use internal approaches provided in Article 101 Directive 2013/36/EU. This is in order to ensure that the requirements laid down in Part Three, Title II, Chapter 3, Section 6, or Part Three, Title III, Chapter 4 or Part Three, Title IV, Chapter 5 of Regulation (EU) No 575/2013 remain satisfied. On the other hand, rules are necessary to establish the triggers for new approvals and notifications of extensions and changes to internal approaches. Such rules

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should not affect supervisory internal model review approaches or administrative processes foreseen by Article 20(8) of Regulation (EU) No 575/2013.

- (7) Changes to the permanent partial use of internal approaches or, where applicable, to the sequential implementation of internal approaches are covered by Articles 148 and 150 of Regulation (EU) No 575/2013 for IRB approach and Article 314 of Regulation (EU) No 575/2013 for AMA. Therefore these types of changes should not be covered by this Regulation.
- (8) The permission of competent authorities relates to the methods, processes, controls, data collection and IT systems of the approaches, therefore on-going alignment of the models to the calculation data-set used, based on the approved methods, processes, controls, data collection and IT systems, should not be covered by this Regulation.
- (9) In order for competent authorities to be able to assess that institutions have applied the rules on assessing the materiality of extensions and changes correctly, appropriate documentation should be submitted by institutions to competent authorities. In order to reduce the supervisory burden on institutions and to increase the effectiveness and efficiency of competent authorities' procedures in that respect, rules should be laid down to specify documentation requirements to accompany applications for approval or notifications of extensions and changes.
- (10) This Regulation is based on the draft regulatory technical standards submitted by the European Banking Authority to the Commission.
- (11) The European Banking Authority 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.

HAS ADOPTED THIS REGULATION:

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## TITLE I

### General rules for the assessment of the materiality of extensions and changes

#### *Article 1*

##### *Categories of extensions and changes*

1. The materiality of changes to the range of application of a rating system or an internal models approach to equity exposures, or of changes to the rating systems or internal models approach to equity exposures, for the Internal Rating Based approach ('changes in the IRB approach'); or of the extensions and changes for the Advanced Measurement Approach, ('extensions and changes in the AMA') shall be classified into one of the following categories:
  - (a) material extensions and changes, which, according to Articles 143(3) and 312(2) of Regulation (EU) No 575/2013, require permission from the relevant competent authorities;
  - (b) other extensions and changes, which require notification to the competent authorities.
2. The extensions and changes mentioned in paragraph 1(b) shall further be classified into:
  - (a) extensions and changes that require notification before their implementation;
  - (b) extensions and changes that require notification after their implementation.

#### *Article 2*

##### *Principles of categorisation of extensions and changes*

1. The classification referred to in Article 1 shall be carried out:
  - (a) in accordance with Articles 3 and 4, for changes in the IRB approach;
  - (b) in accordance with Articles 5 and 6, for extensions and changes in the AMA.
2. Where, in the course of the classification referred to in paragraph 1, institutions are required to calculate the quantitative impact of any extension or change on own funds requirements or, where applicable, on risk-weighted exposure amounts, they shall do so by applying the following methodology:
  - (a) for the purpose of the assessment of the quantitative impact institutions shall use the most recent data available;

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- (b) where a precise assessment of the quantitative impact is not feasible, institutions shall instead perform an assessment of the impact based on a representative sample or other reliable inference methodologies;
    - (c) for changes having no direct quantitative impact, such as organisational changes, internal process changes or risk management process changes, no quantitative impact as laid down in Article 3, paragraph (1)(c) for IRB approach or Article 5 paragraph (1)(c) for AMA needs to be calculated.
  3. For the purposes of the classification referred to in paragraph 1, one material extension or change shall not be split into several changes or extensions of lower materiality.
  4. In case of doubt, institutions shall assign extensions and changes to the category of the highest potential materiality.
  5. Where competent authorities have provided their permission in relation to a material extension or change, institutions shall calculate the own funds requirements based on the approved extension or change from the date specified in the new permission which shall replace the prior one. The non-implementation of an extension or change for which permission from competent authorities has been given, shall require a new permission from competent authorities.
  6. In case of delay of the implementation of an extension or change for which permission from the competent authority has been granted, the institution shall notify the competent authority and present to the satisfaction of the competent authority a plan for a timely implementation of the approved extension or change, which it shall apply within a period to be agreed with the competent authority.
  7. Where an extension or change is classified as one requiring prior notification to competent authorities, and where, subsequently to the notification, institutions decide not to implement the extension or change, institutions shall again notify without undue delay the competent authorities of this development.

## **TITLE II**

### **Conditions for classification of IRB approach changes**

#### *Article 3*

##### *Material changes to the IRB approach*

1. Changes to the IRB approach shall be considered material if they fulfil any of the following conditions:
  - (a) they fall under any of the changes referred to in Annex 1, Part I, Title I ('Changes to the range of application of a rating system or internal models approach to equity exposures');

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- (b) they fall under any of the referred to in Annex 1, Part II, Title I ('Changes to the rating systems or internal models approach to equity exposures');
  - (c) they result in either of the following:
    - (i) in a decrease of 1.5% or more of either of the following:
      - the overall EU parent institution's consolidated risk-weighted exposure amounts for credit and dilution risk;
      - the overall risk-weighted exposure amounts for credit and dilution risk in the case of an institution which is neither a parent institution, nor a subsidiary;
    - (ii) in a decrease of 15% or more of the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or internal models approach to equity exposures.
2. For the purposes of paragraph (1)(c)(i), and taking into consideration Article 2(2), the impact of the change shall be assessed as a ratio calculated as follows:
- (a) in the numerator, the difference in the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or the internal models approach to equity exposures before and after the change at the EU parent institution's consolidated level or at the institution level which is neither a parent institution, nor a subsidiary;
  - (b) in the denominator the overall risk-weighted exposure amounts for credit and dilution risk before the change at the EU parent institution's consolidated level or, respectively, at the institution level which is neither a parent institution, nor a subsidiary.

The calculation shall refer to the same point in time.

The determination of the impact on risk-weighted exposure amounts shall refer only to the impact of the change to the IRB approach, and therefore the set of exposures shall be assumed to remain constant.

3. For the purposes of paragraph (1)(c)(ii), and taking into consideration Article 2(2), the impact of the change shall be assessed as a ratio calculated as follows:
- (a) in the numerator, the difference in the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or the internal models approach to equity exposures before and after the change;
  - (b) in the denominator, the risk-weighted exposure amounts for credit and dilution risk before the change associated with the range of application of the rating system or the internal models approach to equity exposures.

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The calculation shall refer to the same point in time.

The determination of the impact on risk-weighted exposure amounts shall refer only to impact of the change to the IRB approach, and therefore the set of exposures shall be assumed to remain constant.

#### *Article 4*

##### *Other changes to the IRB approach*

1. Changes to the IRB approach, other than those described in Article 3, which need to be notified to competent authorities according to Article 143(4) of Regulation (EU) No 575/2013, shall be notified in the following manner:
  - (a) changes which fulfil any of the following conditions shall be notified to competent authorities at least two months before their implementation:
    - (i) changes described in Annex 1, Part I, Title II;
    - (ii) changes described in Annex 1, Part II, Title II;
    - (iii) changes which result in a decrease of at least 5% of the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or internal models approach to equity exposures.
  - (b) all other changes shall be notified to the competent authorities after their implementation at least on an annual basis.
2. For the purposes of paragraph (1)(a)(iii), and taking into consideration Article 2(2), the impact of the change shall be assessed as a ratio calculated as follows:
  - (a) in the numerator, the difference in the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or the internal models approach to equity exposures before and after the change;
  - (b) in the denominator, the risk-weighted exposure amounts for credit and dilution risk before the change associated with the range of application of the rating system or the internal models approach to equity exposures.

The calculation shall refer to the same point in time.

The determination of the impact on risk-weighted exposure amounts shall refer only to impact of the change to the IRB approach, and therefore the set of exposures shall be assumed to remain constant.

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## TITLE III

### Conditions for classification of AMA extensions and changes

#### Article 5

##### *Material extensions and changes to the AMA*

1. Extensions and changes to the AMA shall be considered material, if they fulfil any of the following conditions:
  - (a) they fall under any extensions described in Annex 2, Part I, Title I;
  - (b) they fall under any changes described in Annex 2, Part II, Title I;
  - (c) they result in either of the following:
    - (i) in a decrease of 10% or more of either of the following:
      - the overall EU parent institution's consolidated own funds requirements for operational risk;
      - the overall own funds requirements for operational risk in the case of an institution which is neither a parent institution, nor a subsidiary;
    - (ii) in a decrease of 10% or more of either of the following:
      - the overall own funds requirements for operational risk at the consolidated level of a parent institution which is not an EU parent institution;
      - the overall own funds requirements for operational risk of a subsidiary where the parent institution has not received the permission to use the AMA.
2. For the purposes of paragraph (1)(c)(i), and taking into consideration Article 2(2), the impact of any extension or change shall be assessed as a ratio calculated as follows:
  - (a) in the numerator, the difference in the own funds requirements for operational risk associated with the scope of application of the AMA model before and after the extension or change at the EU parent institution's consolidated level or at the institution level which is neither a parent institution, nor a subsidiary;
  - (b) in the denominator, the overall own funds requirements for operational risk before the extension or change at the EU parent institution's consolidated level or, respectively, at the institution level which is neither a parent institution, nor a subsidiary.

The calculation shall refer to the same point in time.

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The determination of the impact on the own funds requirements shall refer only to impact of the extension and change to the AMA, and therefore the operational risk profile shall be assumed to remain constant.

3. For the purposes of paragraph (1)(c)(ii), and taking into consideration Article 2(2), the impact of any extension or change shall be assessed as a ratio calculated as follows:
  - (a) in the numerator, the difference in the own funds requirements for operational risk associated with the scope of application of the model before and after the extension or change at the consolidated level of a parent institution which is not an EU parent institution or at the subsidiary level where the parent institution has not received the permission to use the AMA;
  - (b) in the denominator, the overall own funds requirements for operational risk before the extension or change at the consolidated level of a parent institution which is not an EU parent institution or, respectively, at the subsidiary level where the parent institution has not received the permission to use the AMA.

The calculation shall refer to the same point in time.

The determination of the impact on the own funds requirements shall refer only to impact of the extension and change to the AMA, and therefore the operational risk profile shall be assumed to remain constant.

#### *Article 6*

##### *Other extensions and changes to the AMA*

Extensions and changes to the AMA, other than those described in Article 5, which need to be notified to competent authorities according to Article 312(3) of Regulation (EU) No 575/2013, shall be notified in the following manner:

- (a) extensions and changes falling under Annex 2, Part I, Title II, and Part II, Title II, shall be notified to competent authorities at least two months before their implementation;
- (b) all other extensions and changes shall be notified to the competent authorities after their implementation at least on an annual basis.

### **TITLE IV**

#### **Documentation of extensions and changes**

##### *Article 7*

1. For extensions and changes classified as requiring competent authorities' approval, institutions shall submit, together with the application, the following documentation:



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- (a) description of the extension or change, its rationale and objective;
  - (b) implementation date;
  - (c) scope of application affected by the model extension or change, with volume characteristics;
  - (d) technical and process document(s);
  - (e) reports of the institutions' independent review or validation;
  - (f) confirmation that the extension or change has been approved through the institution's approval processes by the relevant bodies; including the approval committee or relevant delegated bodies and date of approval;
  - (g) where applicable, the quantitative impact of the change or extension on the risk weighted exposure amounts or the own funds requirements;
  - (h) records of the institution's current and previous version number of internal models which are subject to approval.
2. For extensions and changes classified as requiring notification either before or after implementation, institutions shall submit, together with the notification, the documentation elements referred to in points 1(a), 1(b), 1(c), 1(f) and 1(g).

## **TITLE V**

### **Final provisions**

#### *Article 8*

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

*Position]*

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## ANNEX 1 - CHANGES TO THE IRB APPROACH

### *Part I- Changes to the range of application of rating systems or internal models approaches to equity exposures*

#### *Title I – Changes requiring competent authorities’ approval (‘material’)*

(1) Extending the range of application of a rating system to:

- (a) exposures in an additional business unit, that are of the same type of product or obligor;
- (b) exposures of an additional type of product or obligor unless the additional type of product or obligor falls within the range of application of an approved rating system based on the criteria as referred to in points (c)(i) and (ii);
- (c) additional exposures related to the lending decision of a third party to the group, unless the institution can prove that the additional exposures fall within the range of application of an approved rating system, based on all of the following criteria:
  - (i) the ‘representativeness’ of the data used to build the model to assign exposures to grades or pools with respect to the key characteristics of the institution’s additional exposures where the lending decision has been taken by a third party, according to Article 174(c) of Regulation (EU) No 575/2013;
  - (ii) the ‘comparability’ of the population of exposures represented in the data used for estimation, the lending standards used when the data was generated and other relevant characteristics with the ones of the additional exposures where the lending decision has been taken by a third party, according to Article 179(1)(d) of Regulation (EU) No 575/2013.

For the purposes of establishing ‘representativeness’ and ‘comparability’ under points (i) and (ii) institutions shall provide a complete description of the criteria and measures used.

(2) Extending the range of application of an internal models approach to equity exposures, to one of the following type of exposures:

- (a) to the Simple risk weight method according to Article 155(2) of Regulation (EU) No 575/2013;
- (b) to the PD/LGD approach according to Article 155(3) of Regulation (EU) No 575/2013;
- (c) to the temporary partial use provision according to Article 495 of Regulation (EU) No 575/2013;
- (d) to the same type of product in an additional business unit;

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- (e) to an additional type of product unless the institution can prove that it falls within the range of application of an existing internal models approach to equity exposures.

#### *Title II – Changes requiring prior notification to competent authorities*

- (1) Reducing the range of application or the scope of use of a rating system.
- (2) Reducing the range of application of an internal models approach to equity exposures.
- (3) Extending the range of application of a rating system for which it can be shown that it does not fall under Part 1, Title I, (1) of this Annex.
- (4) Extending the range of application of an internal models approach to equity exposures where such extension does not fall under Part 1, Title I, (2) of this Annex.

#### *Part II- Changes to rating systems or an internal models approach to equity exposures*

##### *Title I – Changes requiring competent authorities' approval ('material')*

- (1) Changes in the methodology of assigning exposures to exposure classes and rating systems. These include:
  - (a) changes in the methodology used for assigning exposures to different exposure classes according to Article 147 of Regulation (EU) No 575/2013;
  - (b) changes in the methodology used for assigning an obligor or a transaction to a rating system according to Article 169(1) of Regulation (EU) No 575/2013.
- (2) The following changes in the algorithms and procedures used for: assigning obligors to obligor grades or pools; for assigning exposures to facility grades or pools; or for quantifying the risk of obligor default or associated loss ('changes in the rating methodology for IRB systems'):
  - (a) changes of the modelling approach for assigning an obligor to grades or pools and/or exposures to facility grades or pools according to Article 171(1) and Article 172(1)(a) to (d) of Regulation (EU) No 575/2013;
  - (b) changes to the institution's approach to the 'one-obligor-one-rating principle' according to Article 172(1)(e) of Regulation (EU) No 575/2013;
  - (c) changes in the rating system's philosophy. These refer to the assumptions behind ratings which relate to the extent by which a change in economic conditions is expected to result in a net migration of a large number of exposures, obligors or facilities across grades or pools of the model, as opposed to migration of only some exposures, obligors or facilities due only to their individual characteristics the measure and significance levels of which are defined by the institution;
  - (d) changes to the rating criteria as referred to in Article 170(1)(c) and (e) and Article 170(4) of Regulation (EU) No 575/2013 and/or their weights, sequence or hierarchy, if any of the following conditions are met:

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- (i) they change the rank ordering referred to in Article 170(1)(c) and (3)(c) of Regulation (EU) No 575/2013 in a significant manner, the measure and level of which will have been defined by the institution;
  - (ii) they change the distribution of obligors, facilities or exposures across grades or pools according to Article 170(1)(d) and (f) and Article 170(3)(b) of Regulation (EU) No 575/2013 in a significant manner, the measure and level of which will have been defined by the institution.
- (e) introduction or withdrawal of an external rating as a primary factor determining an internal rating assignment according to Article 171(2) of Regulation (EU) No 575/2013;
  - (f) change in the fundamental methodology for estimating PDs, LGDs including best estimate of expected loss, and conversion factors according to Articles 180, 181, 182 of Regulation (EU) No 575/2013, including the methodology for deriving a margin of conservatism related to the expected range of estimation errors according to Article 179(1)(f) of Regulation (EU) No 575/2013. For LGDs and conversion factors this includes also changes in the methodology for accounting for an economic downturn according to Articles 181(1)(b) and 182(1)(b) of Regulation (EU) No 575/2013;
  - (g) inclusion of additional types of collateral into the LGD estimation according to Article 181(1)(c) to (g) of Regulation (EU) No 575/2013 if their treatment differs from procedures that have already been approved.
- (3) Changes in the definition of default according to Article 178 of Regulation (EU) No 575/2013.
  - (4) Changes in the validation methodology and/or validation processes which lead to changes in the institution's judgement of the accuracy and consistency of the estimation of the relevant risk parameters, the rating processes or the performance of their rating systems according to Article 185(a) of Regulation (EU) No 575/2013.
  - (5) Changes in the internal models approach to equity exposures. These include:
    - (a) changes in the value-at-risk modelling approach to estimate risk weighted exposure amounts for equity exposures according to Article 155(4) of Regulation (EU) No 575/2013;
    - (b) changes in the methodology for adjusting estimates of potential loss to achieve appropriate levels of realism and/or conservatism, or changes in the analytical method to convert shorter horizon period data to quarterly data according to Article 186(a) of Regulation (EU) No 575/2013;
    - (c) changes in the model capture of material risk drivers considering the specific risk profile and complexity, including non-linearities of the institution's equity portfolio according to Article 186(b) and (c) of Regulation (EU) No 575/2013;
    - (d) changes in the fundamental methodology for mapping of individual positions to proxies, market indices or risk factors according to Article 186(d) of Regulation (EU) No 575/2013.

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*Title II - Changes requiring ex ante notification to competent authorities*

- (1) Changes in the treatment of purchased receivables according to Article 153(6) and (7) and Article 154(5) of Regulation (EU) No 575/2013.
- (2) The following changes in the rating methodology for IRB systems:
  - (a) changes in the internal procedures and criteria for assigning risk weights to specialised lending exposures according to Articles 153(5) and 170(2) of Regulation (EU) No 575/2013;
  - (b) changes from the use of direct estimates of risk parameters for individual obligors or exposures to the use of a discrete rating scale or vice versa according to Article 169(3) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Title I of this Annex;
  - (c) changes to the rating scale in terms of the number or structure of rating grades according to Article 170(1) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Title I of this Annex;
  - (d) changes to the rating criteria and/or their weights or hierarchy according to Article 170(1)(c) and (e) and 170(4) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Title I of this Annex;
  - (e) changes to the grade or pool definitions or criteria according to Articles 171(1) and 172 of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Title I of this Annex;
  - (f) changes in the scope of information used to assign obligors to grades or pools according to Article 171(2) of Regulation (EU) No 575/2013 or inclusion of new or additional information in a model for parameter estimation according to Article 179(1)(d) of Regulation (EU) No 575/2013;
  - (g) changes in the rules and processes for the use of overrides according to Article 172(3) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Title I of this Annex;
  - (h) changes in the methodology for estimating PDs, LGDs including best estimate of expected loss, and conversion factors according to Articles 180, 181, 182 of Regulation (EU) No 575/2013 including the methodology for deriving a margin of conservatism related to the expected range of estimation errors according to Article 179(1)(f) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Title I of this Annex. For LGDs and conversion factors this includes also changes in the methodology for accounting for an economic downturn according to Article 181(1)(b) and Article 182(1)(b) of Regulation (EU) No 575/2013;
  - (i) changes in the way or extent to which conditional guarantees are accounted for in the LGD estimation according to Article 183(1)(c) of Regulation (EU) No 575/2013;

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- (j) inclusion of additional types of collateral into the LGD estimation in accordance to Article 181(1)(c) to (g) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Title I of this Annex;
  - (k) if an institution maps its internal grades to the scale used by an ECAI and then attributes the default rate observed for the external organisation's grades to the institutions' grades according to Article 180(1)(f) of Regulation (EU) No 575/2013, changes in the mapping used for this purpose unless already classified as material according to Part II, Title I of this Annex.
- (3) Changes in the validation methodology and/or process according to Articles 185 and 188 of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Title I of this Annex.
- (4) Changes in processes. These include:
- (a) changes in the credit risk control unit according to Article 190 of Regulation (EU) No 575/2013 as regards its position within the organisation and its responsibilities;
  - (b) changes in the validation unit's position according to Articles 190(1) and (2) of Regulation (EU) No 575/2013 within the organisation and its responsibilities;
  - (c) changes in the internal organisational or control environment or key processes that have an important influence on a rating system.
- (5) Changes in the data. These include:
- (a) if an institution starts or ceases to use data that is pooled across institutions according to Article 179(2) of Regulation (EU) No 575/2013;
  - (b) change of the data sources used in the process of allocating exposures to grades or pools or for parameter estimation according to Articles 176(5)(a) and 175(4)(a) of Regulation (EU) No 575/2013;
  - (c) change in the length and composition of time series used for parameter estimation according to Article 179(1)(a) that goes beyond the annual inclusion of the latest observations, unless already classified as material according to Part II, Title I of this Annex.
- (6) Changes in the use of models, if an institution starts using risk parameter estimates for internal business purposes that are not those used for regulatory purpose and, where this was previously not the case, within the lines set out according to Article 179(1) of Regulation (EU) No 575/2013.
- (7) Changes in the internal models approach to equity exposures. These include:
- (a) changes of the data used to represent return distributions for equity exposures under the internal models approach according to Article 186(a) of Regulation (EU) No 575/2013;

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- (b) changes in the internal organisational or control environment or key processes that have an important influence on the internal models approach to equity exposures.

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## ANNEX 2 – EXTENSIONS AND CHANGES TO THE AMA

### *Part I- Extensions*

#### *Title I- Extensions requiring competent authorities' approval ('material')*

- (1) First-time introduction of measures to capture expected losses in the institutions' business practices offset according to Article 322(2)(a) of Regulation (EU) No 575/2013.
- (2) First-time introduction of operational risk mitigation techniques such as insurance or other risk transfer mechanisms according to Article 323(1) of Regulation (EU) No 575/2013.
- (3) First-time recognition of correlations in operational risk losses according to Article 322(2)(d) of Regulation (EU) No 575/2013.
- (4) First-time introduction of methodology for allocating operational risk capital among the different entities of the group according to Article 20(1)(b) and 322(2)(a) of Regulation (EU) No 575/2013.
- (5) The introduction of the AMA within parts of the institution or group of institutions not yet covered by the approval or the approved roll out plan according to Article 314(1) of Regulation (EU) No 575/2013, where those additional areas account for more than 5 % of the EU parent institution on a consolidated level or of the institution which is neither a parent institution, nor a subsidiary.

The above calculation shall be made at the end of the preceding financial year using the amount of the relevant indicator assigned to the areas to which the AMA will be rolled out as defined in Article 316 of Regulation (EU) No 575/2013.

#### *Title II – Extensions requiring ex ante notification to competent authorities*

The introduction of the AMA within parts of the institution or group of institutions not yet covered by the approval or the approved roll out plan according to Article 314(1) of Regulation (EU) No 575/2013, where those additional areas account with respect to the EU parent institution on a consolidated level or of the institution which is neither a parent institution, nor a subsidiary for both of the following:

- (a) more than 1 %;
- (b) less than or equal to 5 %.

The above calculation shall be made at the end of the preceding financial year using the amount of the relevant indicator assigned to the areas to which the AMA will be rolled out, as defined in Article 316 of Regulation (EU) No 575/2013.

### *Part II- Changes to the AMA*

#### *Title I – Changes requiring competent authorities' approval ('material')*

- (1) Changes in the organisational and operational structure of the independent risk management function for operational risk according to Article 321 of Regulation (EU) No



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575/2013 which reduce the ability of the operational risk management function to oversee and inform the decision making processes of the business and support units they control.

- (2) Changes to the measurement system for operational risk if they fulfil any of the following criteria:
  - (a) they change the architecture of the measurement system regarding the combination of the four data elements of internal and external loss data, scenario analysis, business environment and internal control factors, according to Article 322(2)(b) of Regulation (EU) No 575/2013;
  - (b) they change the logics and drivers of the methodology for allocating the operational risk capital between the different entities of a group according to Article 20(1)(b) and 322(2)(a) of Regulation (EU) No 575/2013.
- (3) Changes to the procedures relating to internal and external data, scenario analysis and business environment and internal control factors where they:
  - (a) reduce the level of controls regarding the completeness and quality of operational risk data collected according to Article 322(3) and (4) of Regulation (EU) No 575/2013;
  - (b) change the external data sources to be used within the measurement system according to Article 322(4) and 322(5) of Regulation (EU) No 575/2013 unless the data are comparable and representative for the operational risk profile.
- (4) Changes to the overall method on how insurance contracts and/or other risk transfer mechanisms are recognized within the calculation of the AMA capital charge according to Article 323(1) of Regulation (EU) No 575/2013.
- (5) Reducing the part of the operational risk captured by the AMA within the institution or group of institutions using the AMA according to Article 314(2) and (3) of Regulation (EU) No 575/2013, where one of the following conditions is met:
  - (a) the areas to which the AMA will no longer be applied account for more than 5 % of the overall own funds requirements for operational risk of the EU parent institution on a consolidated level or of the institution which is neither a parent institution, nor a subsidiary;
  - (b) the reduction of the areas covered under the AMA leads to a use of the AMA in a part of the institution which account for a lower percentage as required by the competent authority under Article 314(3) of Regulation (EU) No 575/2013.

This calculation shall be made when the institution applies for the change and shall be based on the capital requirement as calculated at the end of the preceding financial year.

#### *Title II- Changes requiring ex ante notification to competent authorities*

- (1) Changes to the way the operational risk measurement system is integrated into the day-to-day management process through operational risk processes and policies according to Article 321(a) and (c) of Regulation (EU) No 575/2013, where the changes have one of the following characteristics:

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- (a) they change the extent to which the operational risk measurement system contributes to relevant information in the institutions' risk management and related decision making processes, including the approval of new products, systems and processes and definition of the operational risk tolerance;
  - (b) they reduce the scope, groups of recipients and frequency of the reporting system for informing all relevant parts of the institution about the results of the operational risk measurement system and decisions taken in response to material operational risk events.
- (2) Changes in the organisational and operational structure of the independent risk management function for operational risk according to Article 321(b) of Regulation (EU) No 575/2013 if they fulfil any of the following criteria:
- (a) they reduce the hierarchical level of the operational risk management function or of its head;
  - (b) they lead to a relevant reduction the duties and responsibilities of the operational risk management function;
  - (c) they extend the duties and responsibilities of the operational risk management function, unless no conflicts of interests exist and appropriate additional resources are provided to the operational risk management function;
  - (d) they lead to a reduction of the available resources in terms of budget and headcount of more than 10 %, of the institution or group, since the last approval according to Article 312(2) of Regulation (EU) No 575/2013 was granted, unless the available resources in terms of budget and headcount at the institution or group level has been reduced with the same proportion.
- (3) Changes to validation processes and the internal review according to Article 321(e) and (f) of Regulation (EU) No 575/2013 if they change the logic and methodologies used for internally validating or reviewing the AMA framework.
- (4) Changes to the calculation of the operational risk capital charge which change one of the following:
- (a) structure and characteristics of the data set used for the calculation of the operational risk capital requirement (the 'calculation data set'), including any of the following:
    - (i) the definition of gross loss amount to be used within the calculation data set according to Article 322(3)(d) of Regulation (EU) No 575/2013;
    - (ii) the reference date of loss events to be used within the calculation data set according to Article 322(2)(a) of Regulation (EU) No 575/2013;
    - (iii) the method used to determine the length of the time series of loss data to be used within the calculation data set according to Article 322(2)(a) of Regulation (EU) No 575/2013;

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- (iv) the criteria to group losses caused by a common operational risk event or by related events over time according to Article 322(3)(b) and (3)(e) of Regulation (EU) No 575/2013;
  - (v) the number or the type of risk classes, or equivalent, over which the operational risk capital requirement is calculated;
  - (vi) the method for setting the threshold for the level of losses above which the model is fitted to the data according to Article 322(2)(a) of Regulation (EU) No 575/2013;
  - (vii) where applicable, the method for setting the threshold for differentiating the body and tail regions of the data, when fitted by different methods according to Article 322(2)(a) of Regulation (EU) No 575/2013;
  - (viii) the processes and criteria for assessing the relevance, for scaling or for doing other adjustments to the operational risk data according to Article 322(3)(f) of Regulation (EU) No 575/2013;
  - (ix) change the external data sources to be used within the measurement system according to Article 322(4) and 322(5) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Title I of this Annex.
- (b) the criteria for the selection, update and review of used distributions and methods for the estimation of their parameters according to Article 322(2)(a) of Regulation (EU) No 575/2013;
  - (c) criteria and procedures for the determination of the aggregated loss distributions and for the calculation of the pertinent operational risk measure at the regulatory confidence level according to Article 322(2)(a) of Regulation (EU) No 575/2013;
  - (d) methodology for the determination of expected losses and their capturing within internal business practices according to Article 322(2)(a) of Regulation (EU) No 575/2013;
  - (e) methodology about how correlations in operational risk losses across individual operational risk estimates are recognised according to Article 322(2)(d) of Regulation (EU) No 575/2013.
- (5) Changes to the standards relating to internal data, scenario analysis and business environment and internal control factors if they:
- (a) change the internal processes and criteria for collecting internal loss data according to Article 322(3) of Regulation (EU) No 575/2013, including any of the following:
    - (i) increase of the threshold for the collection of internal loss data according to Article 322(3)(c) of Regulation (EU) No 575/2013;
    - (ii) methods or criteria for the exclusion of activities or exposures from the scope of the internal data collection according to article 322(3)(c) of Regulation (EU) No 575/2013.

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- (b) change the internal processes and criteria for one of the following:
- (i) performing scenario analysis according to Article 322(5) of Regulation (EU) No 575/2013;
  - (ii) determining business environment and internal control factors according to Article 322(6) of Regulation (EU) No 575/2013.
- (6) Changes to the standards relating to insurance and other risk transfer mechanisms according to Article 323 of Regulation (EU) No 575/2013, if they fulfil one of the following conditions:
- (a) they cause a relevant alteration of the level of coverage provided;
  - (b) they alter the processes and criteria for calculating the haircuts in the amount of insurance recognition, introduced to capture the uncertainty of payment, the mismatches in coverage and the policy's residual and cancellation terms, where less than one year according to article 323(4) of Regulation (EU) No 575/2013.
- (7) Relevant changes to the IT systems used to process the AMA, including the collection of data and their administration, reporting procedures and the measurement system for operational risk according to article 312(2) of Regulation (EU) No 575/2013 and the general risk management standards set out in article 74 of Directive 2013/36/EU, which reduce the integrity and availability of the data or IT systems.

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## 4. Accompanying documents

### 4.1 Cost- Benefit Analysis / Impact Assessment

#### **Problem identification (market failure and/or regulatory failure)**

##### Problem definition and objectives of the RTS

As documented in the impact assessment accompanying the Regulation (EU) No 575/2013 (CRR), the objectives of own funds requirements are: i) ensuring that institutions have robust risk management and measurement systems in place against the risks arising from their activities (own funds requirements contribute to aligning the risk-taking incentives of institutions' shareholders with the ones of creditors and depositors) and ii) ensuring that institutions are financially sound and are able to absorb unexpected losses in a going-concern situation.

Allowing the use of internal approaches to calculate own funds requirements ensures that:

- i. own funds requirements of individual institutions better reflect their specific risk profile; and
- ii. the use and development of internal approaches support institutions to improve their risk management.

To guarantee that the CRR rules are fulfilled on an on-going basis and that own funds requirements meet their objectives, extensions and changes to internal approaches will be necessary whenever one or more of the following situations occur:

- i. A change in institution-specific business conditions, due to, for example, the introduction of/expansion into new business areas, mergers and acquisitions, changes in the organisational structure, etc.
- ii. Relevant external events in the markets where institutions operate, and/or in technology, and/or in macro-economic systems.
- iii. Developments in risk management and measurement systems and practices.
- iv. Changes to own funds and/or other regulatory requirements.

The supervision of extensions and changes to internal approaches is therefore justified by the importance of these extensions and changes for the achievement of regulatory objectives.

Institutions have to ensure that internal approaches comply with regulatory requirements at all times, including changes in internal or external conditions, and that all potential factors affecting the reliability of internal approaches are effectively identified and addressed. Two sets of factors may play an important role:

- The technical challenges to which internal approaches are unavoidably exposed.
- The economic incentives influencing the development of internal approaches that result in less conservative own funds requirements, hence minimising of the costs related to regulatory capital.

To foster more risk-sensitive and harmonised supervision the proposed draft RTS set out conditions to categorise extensions and changes in internal approaches which require authorisation or notification.

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A supervisory treatment of extensions and changes to internal approaches that varies as a function of the impact of those extensions and changes ensures there is enhanced sensitivity to risk, in particular as follows:

- The definition of 'material' extensions and changes, as mandated by the CRR text, allows the supervisory work of model authorisation to focus exclusively on those extensions and changes to internal approaches that could potentially pose risk management and measurement concerns.
- The distinction between extensions and changes that are to be notified 'ex-ante' (before implementation), and extensions and changes that can be notified after implementation, allows supervisory activity on non-material extensions and changes to be tighter on changes that could potentially pose more severe risk management concerns.

The harmonising role of the draft RTS ensures that further steps are taken towards the following regulatory objectives:

- A Single Market where institutions operate in a condition of a level playing field in relation to the management of internal approaches.
- A Single Market where opportunities of regulatory arbitrage in the use of internal approaches for the calculation of own funds requirements are minimised.
- A Single Market where supervision of cross-border institutions that adopt internal approaches is more cost-efficient and where legal clarity is enhanced for both market participants and regulators.

## Baseline

1. The baseline is represented by the market and regulatory practices that exist before the implementation of the rules to be introduced by the draft RTS. The EBA circulated a questionnaire among competent authorities on current supervisory relating to extensions and changes to internal approaches, and the expected costs and impacts of the draft RTS.
2. A total of 17 competent authorities replied to the EBA questionnaire. Based on 2010 data on total assets within the Single Market the jurisdictions that contributed to the collection of evidence cover approximately 90% of total assets in the EU.
3. Respondents highlighted heterogeneous supervisory practices both across Member States and across types of risk (i.e. credit and operational risk).
4. All but one respondent undertake regular reviews of the internal models for credit risk, while only half of them regularly review internal models for operational risk. The revision of models for credit risk is carried out annually by most respondents, and occurs every two to four years for others. The revision of models for operational risk tends to be carried out less frequently. Only four respondents report that they adjust the frequency of model revision according to institution-specific characteristics such as size, portfolio risk profile and overall satisfaction with the specific internal models.
5. Guidelines defining criteria for assessing the materiality of extensions and changes to internal approaches for both credit and operational risk appear to be implemented by approximately 2/3 of the respondents. In some of the jurisdictions where guidelines are not implemented, model change policy requirements exist and require institutions to adopt own criteria. Those internal policies typically have to be approved by the competent authorities.
6. Almost 2/3 of the current guidelines on materiality to extensions and changes to internal approaches for all the risks covered already distinguish between ex-ante and ex-post notification requirements.

7. A total of 2/3 of respondents also report that they require some form of documentation covering matters of extensions and changes to internal approaches. These requirements exist even in jurisdictions which currently do not have any regulation or guidelines on materiality of extensions and changes to internal approaches.
8. Six jurisdictions implement backstop thresholds for identifying of extensions and changes to internal approaches which are to be authorised and/or notified ex-ante. Only in two jurisdictions backstop thresholds are currently in use for credit and operational risk. Lastly, three jurisdictions only implement backstop thresholds in the supervision of internal model changes for credit risk, and one jurisdiction only for operational risk.
9. The different approaches to the use of backstop thresholds for identifying material extensions and changes to internal approaches are summarised in Table 1 (see end of this section).

*Table 1: Backstop thresholds for material extensions and changes to internal approaches in the current non-harmonised regulatory frameworks.*

Jurisdiction 1	Credit risk: Threshold 1	5%	Decrease of the RWA at portfolio level
	Credit risk: Threshold 2	1%	Change in the RWA at consolidated level within the jurisdiction
	Operational risk: Threshold 1	10%	Decrease in the own funds requirements for operational risk
Jurisdiction 2	Credit risk: Threshold 1	10%	Decrease in the own funds requirements for credit risk
Jurisdiction 3	Credit risk: Threshold 1	20%	Change in the RWA at portfolio level
	Credit risk: Threshold 2	5%	RWA change at total level
	Operational risk: Threshold 1	10%	Change in the own funds requirement for operational risk
Jurisdiction 4	Credit risk: Threshold 1	3%	Change in the RWA
	Credit risk: Threshold 2	15%	Change in the RWA resulting from change in the range of application of a model/rating system
Jurisdiction 5	Credit risk: Threshold 1	5%	Change in the RWA or own funds requirement at portfolio level
	Credit risk: Threshold 2	1%	Change in the RWA or capital requirement at consolidated level
Jurisdiction 6	Operational risk	>20%	Relative change in model result: (new-old)/new

### Technical decisions: options considered and options preferred

*Table 2: Materiality conditions that combine qualitative criteria and quantitative backstop thresholds.*

Option 1:	Qualitative criteria as the only regulatory measure for the assessment of materiality of extensions and changes to internal approaches
	<p><b>Advantages:</b> Specifying materiality criteria using a qualitative approach enables the competent authority to consider all relevant aspects that relate to the appropriateness and reliability of internal approaches are taken into account when determining whether an extension or change is material or not. Using qualitative criteria ensures that an extension or change which materially changes how an internal approach works must undergo a supervisory assessment, even though it might not result in a significant change in the risk-weighted exposure amounts or own funds requirements or in any other measure of risk at the actual point in time when the model change is implemented.</p> <p><b>Disadvantages:</b> Specifying materiality criteria using a qualitative approach means that judgement and discretion can be exercised by institutions when implementing extensions and changes</p>

	<p>to internal approaches, and by competent authorities when evaluating the materiality of those extensions and changes on a case-by-case basis. Due to the high variety and complexity of modelling techniques qualitative criteria alone cannot ensure that extensions and changes to internal approaches resulting in significant changes of risk-weighted exposure amounts or own funds requirements are duly captured for supervisory assessment.</p> <p>Qualitative criteria are more likely to result in less harmonised application of the rules as opposed to 'automatic' quantitative measures.</p>
Option 2:	The draft RTS proposes both, qualitative criteria and quantitative backstop thresholds for the assessment of materiality of extensions and changes to internal approaches
	<p><b>Advantages:</b></p> <p>As opposed to a framework with only qualitative criteria, quantitative criteria ensure that the limitations to identifying qualitative circumstances for the materiality of extensions and changes to internal approaches do not imply that extensions or changes which result in significant variations in risk-weighted exposure amounts or own funds requirements escape supervisory assessment.</p> <p>Furthermore, the backstop threshold approach, being an automatic quantitative rule that does not require intervention of the competent authority, helps to harmonise the supervisory framework for the assessment of materiality of extensions and changes to internal approaches across competent authorities.</p> <p><b>Disadvantages:</b></p> <p>Quantitative backstop thresholds, imposed in addition to the qualitative criteria, may increase the number of changes or extensions subject to approval and thus result in additional supervisory costs for competent authorities. (As discussed further below, however, the chosen levels for the thresholds are such that it should be possible to identify most of the extensions and changes to internal approaches subject to supervisory assessment by the qualitative criteria in the first instance).</p> <p>Furthermore, institutions implementing extensions and changes to internal approaches will have to carry out modelling activity to compute the quantitative implications. The expectation is, however, that the modelling work required is already being carried out by the majority of institutions adopting internal approaches, regardless of the backstop rules.</p>
<b>Proposed option:</b> Option 2	Taking account of the advantages and disadvantages of Options 1 and 2 set out above, the draft RTS propose the approach described in Option 2. The option of choosing an approach only based on quantitative rules has not been considered as it does not include the qualitative principles on the materiality of extensions and changes to internal approaches that are part of the CRR mandate.

Table 3: Quantitative thresholds as backstop rule for the assessment of materiality of extensions and changes to internal approaches as regards to credit and operational risk

<b>Proposed option:</b> Option 1	<i>Credit risk</i>
	- decrease of 1.5% or more of the overall EU parent institution's consolidated risk-weighted exposure amounts for credit and dilution risk or of the overall risk-weighted exposure amounts for credit and dilution risk for an institution which is neither a parent institution, nor a subsidiary;
	- decrease of 15% or more of the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or internal models approach to equity exposures.
	<i>Operational risk</i>
	- decrease of 10% or more of the overall EU parent institution's consolidated own funds requirements for operational risk or of the overall own funds requirements for operational risk in the case of an institution which is neither a parent institution, nor a subsidiary;
	- decrease of 10% or more of the overall own funds requirements for operational risk at the consolidated level of a parent institution which is not an EU parent institution or of the overall own funds requirements for operational risk of a subsidiary where the parent institution has not received the permission to use the AMA.



<b>Alternative options considered for both risk types</b>	
Option 2:	Lower thresholds
	<p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>- Lower thresholds automatically trigger more frequently the rule binding institutions to submit to supervisory assessment of extensions and changes to internal approaches. Lower thresholds widen the scope of materiality of extensions and changes to internal approaches and mean that there can be less fluctuation in risk-weighted exposure amounts or own funds requirements and/or model outcomes resulting from extensions and changes to internal approaches. Lower thresholds thus result in a more conservative approach to the supervision of own funds requirements.</li> </ul> <p><b>Disadvantages:</b></p> <ul style="list-style-type: none"> <li>- Lower thresholds are not consistent with their purpose, since they should kick in only once it has not been possible to identify 'material' extensions and changes using the exhaustive list of qualitative criteria.</li> <li>- Lower thresholds increase the expected supervisory assessment of extensions and changes to internal approaches, increasing the overall costs for competent authorities.</li> <li>- Lower thresholds increase the probability that extension or change to internal approaches that are deemed non-material under the exhaustive list of qualitative criteria might cause inefficient supervisory workload for the processing of applications due to the automatic quantitative trigger.</li> <li>- Lower thresholds increase the likelihood that institutions will erroneously identify material extensions or changes to internal approaches in those cases where quantification of the impact requires estimation/inference type analysis. This is inevitably subject to estimation errors. Estimation/inference is often required since it is not possible to assess the impact of all extensions and changes to internal approaches before actual implementation.</li> </ul>
Option 3:	Higher thresholds
	<p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>- Higher thresholds reduce the expected supervisory assessment of extensions and changes to internal approaches, reducing the overall costs for competent authorities.</li> <li>- Higher thresholds reduce the probability that extensions and changes to internal approaches that are deemed non-material under the qualitative criteria might cause inefficient supervisory workload for the processing of applications, due to the automatic quantitative trigger.</li> <li>- Higher thresholds are less likely to result in erroneous classification of material extensions and changes to internal approaches in the cases where estimation/inference analysis is necessary to assess the impact of the extensions and changes.</li> </ul> <p><b>Disadvantages:</b></p> <ul style="list-style-type: none"> <li>- Higher thresholds automatically trigger less frequently the rule binding institutions to submit to supervisory assessment, thus decreasing this assessment of extensions and changes to internal approaches. Higher thresholds narrow the scope of materiality of extensions and changes to internal approaches and mean that there can be more fluctuation of risk-weighted exposure amounts or own funds requirements and/or model outcomes resulting from extensions and changes to internal approaches. Higher thresholds thus result in a less conservative approach to the supervision of own funds requirements.</li> </ul>

Table 4: Quantitative thresholds as backstop rule for changes in IRB Approach based on the risk-weighted exposure amounts metric.

<b>Proposed option:</b> Option 1	The proposed backstop thresholds for identifying material changes of the IRB Approach are based on the metric of the risk-weighted exposure amounts.
Option 2:	The proposed backstop thresholds for identifying material changes of the IRB Approach are based on the metric of the own funds requirements.
	Option 2 is discarded due to rule out effects from provisioning; as for certain changes in credit risk parameters or model features, the resulting changes in the risk-weighted

	exposure amounts, on the one hand, and on the expected loss amounts (EL amounts), on the other hand, may go in different directions and hence partly or fully balance each other out. The own funds requirements, which depend on both risk-weighted exposure amounts and EL amounts, may thus vary very little as a result of model changes.
Option 3:	Two thresholds are proposed in terms of two different metrics: risk-weighted exposure amounts and own funds requirements.
	Option is discarded given that it would increase the complexity of the assessment work. Increased complexity is less desirable given the aim of designing a threshold mechanism that is only binding as a backstop measure.

Table 5: Different backstop thresholds are defined for each risk category to cover different levels of consolidation.

<b>Proposed option:</b> Option 1	The proposed metrics for identifying material extensions and changes to internal approaches cover different levels of aggregation for each risk category: consolidated/stand alone and scope of application level for credit risk; consolidated/stand alone and sub-consolidated level for operational risk.
Option 2:	The proposed metrics for identifying material extensions and changes to internal approaches focus on the scope of application impact (for credit risk) and the sub-consolidated impact for operational risk.
	<p><b>Advantages:</b> Reduces the complexity of the assessment compared to the option proposed (option 1).</p> <p><b>Disadvantages:</b> This metric would capture only those extensions and changes in credit risk whose impact is material with respect to the size and characteristics of the scope of application to which the model applies. The metric might not capture extensions and changes that have a relatively reduced impact on the scope of application to which the model applies, but that result in large quantitative impact on the risk-weighted exposure amounts of the institution, due to the very large weight of the scope of application under consideration on the overall credit risk profile of the institution. In the case of operational risk the approach on scope of application impact is not considered due to the development of the models for overall operational risk.</p>
Option 3:	The proposed metrics for identifying material extensions and changes to internal approaches focus only on the 'consolidated/stand alone level' for all of the risk categories.
	<p><b>Advantages:</b> Reduces the complexity of the assessment work if compared to the option proposed.</p> <p><b>Disadvantages:</b> This metric would capture only those extensions and changes to internal approaches implemented on scope of applications that have a relatively large weight in the overall credit risk profile of the institution. It might not capture extensions or changes that are very material for the risk management of relatively small scope of applications held by the institution. Moreover, for operational risk material extensions and changes from a sub-consolidated perspective may cumulatively result in non-material aggregate extensions or changes at the level of the EU parent (consolidating) institution.</p>

### Impact on markets and institutions

10. By proposing common qualitative criteria and quantitative backstop thresholds for the assessment of materiality of extensions and changes to internal approaches and of the extensions and changes to be pre/post-notified, the draft RTS harmonises an EU regulatory framework that is currently heterogeneous, as described in the 'Baseline' section.
11. The objectives defined in the section 'Problem definition and objectives of the RTS' constitute the main benefits of the proposed draft RTS.

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12. The implications of the proposed draft RTS in terms of costs for market participants and competent authorities are expected to be twofold. On the one hand, both sides are likely to incur additional costs as a result of some of the provisions proposed. On the other hand, achieving the objectives specified is expected to result in cost savings/cost optimisation. Estimating how these two items balance out is very difficult, given that it is not possible to quantify the benefits, and cost savings stemming from those benefits, from the data available.
  13. Furthermore, some of the costs and benefits associated with the provisions introduced by the RTS would come about in the Single Market, as things currently stand, even without the RTS. This is because the requirements for authorisation of material extensions and changes to internal approaches and for notification of all extensions and changes to internal approaches are included in the level 1 text of the CRR.
  14. Nonetheless, the extent to which the costs and benefits would come about without the RTS can neither be estimated nor quantified.
  15. Before publishing the draft RTS for stakeholder consultation, the EBA asked competent authorities to provide a separate estimate of the expected impact (increase/no change/decrease) of the proposed qualitative criteria and quantitative backstop thresholds on the annual number of authorisations granted for material extensions and changes. The aim of the exercise was twofold, based on the responses received:
    - i. to see how conservative the proposed qualitative criteria and quantitative thresholds in identifying material extensions and changes look compared to the current supervisory practices of competent authorities that responded to the questionnaire; and
    - ii. to obtain a tentative picture of the expected supervisory workload in the EU related to the authorisation of material extensions and changes.
  16. The impact analysis on the costs for competent authorities of carrying out authorisations of material extensions and changes to internal approaches focused exclusively on the following assumptions:
    - i. The provisions proposed are not expected to materially affect institutions' decisions to implement extensions and changes to internal approaches, nor are they expected to increase to a material extent the costs institutions face in implementing those decisions. In the current baseline situation, institutions already have to comply at all times with the requirements on the use of internal approaches. Because of this, institutions are expected already to have processes in place for mapping extensions and changes according to their materiality. Documentation requirements for extensions and changes to internal approaches that would probably generate compliance costs on institutions are already in use in more than 2/3 of the jurisdictions that responded to the questionnaire. The harmonisation of the documentation and communication requirements increases legal clarity and should result in a more efficient reporting framework.
    - ii. The costs for competent authorities related to monitoring and processing pre/post-notifications resulting from the proposed draft RTS are expected to be of a lower scale of magnitude than the costs of authorisation activities. Hence the analysis does not focus on the supervisory costs of notifications.
  17. A total of 14 competent authorities<sup>5</sup> responded on the expected impact in the number of authorisations stemming from the qualitative and quantitative criteria in the area of credit risk. Overall:
    - i. A total of 7 out of 14 respondents (50%) report an expected increase in the number of authorisations.

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<sup>5</sup> Institutions operating in these jurisdictions hold almost 90% of total assets in the EU according to 2010 data.

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- ii. A total of 5 out of 14 respondents (36%) don't expect the number of authorisations to change.
  - iii. A total of 2 out of 14 respondents (14%) report an expected decrease in the number of authorisations.
18. A total of 11 competent authorities<sup>6</sup> responded on the expected impact in the number of authorisations in the area of operational risk. The results vary slightly depending on whether the qualitative or quantitative criteria are considered:
- i. A total of 7 out of 11 respondents (64%) don't expect the number of authorisations to change as a result of the proposed qualitative criteria.
  - ii. Among the remaining respondents, 2 competent authorities (18%) report an expected increase in the number of authorisations and 2 competent authorities (18%) report an expected decrease in the number of authorisations.
  - iii. Concerning the quantitative criteria, 9 out of 11 respondents (82%) don't expect the number of authorisations to change. One competent authority (9%) reports an expected increase in the number of authorisations.
19. The competent authorities were also required to report on the expected impact (as a percentage) on the number of authorisations resulting from the qualitative and quantitative criteria. The average impact across competent authorities of the combined effect of the proposed qualitative and quantitative criteria appeared to be limited:
- i. in the area of credit risk, on average an increase no larger than 5%;
  - ii. in the area of operational risk, on average a decrease in the region of 10%-15%.
20. The average impact should be read taking account of the following caveats:
- i. Not all competent authorities that reported increases or decreases in the number of authorisations were able to quantify the impact and hence are not included in the overall figures.
  - ii. One competent authority has been excluded from the calculation given the very large quantitative impact reported, which is materially different from the other responses. The estimates of this competent authority cover a wider interpretation of the supervisory workload related the authorisation of material extensions and changes, putting more emphasis on the resources devoted to the processing of all applications rather than to the operations related to the completed authorisation processes.
  - iii. Adding up the expected increase in workload on model authorisation activities due to the proposed qualitative materiality criteria on the one hand, and the proposed quantitative backstop thresholds on the other, is very likely to result in an overestimate of the overall impact. The proposed qualitative criteria are such that almost all of the extensions and changes to internal approaches that are likely to occur will be captured by the qualitative criteria for materiality, and the backstop thresholds will be expected to become binding only in a very limited number of cases. This interaction between the two supervisory tools was not factored in by competent authorities when they compared the backstop thresholds as currently implemented with the thresholds put forward by the draft RTS.
21. Discussions with competent authorities and consultation of other stakeholders raised concerns about the estimation of the expected impact as laid out in paragraphs 17 to 19 above, and, in particular, about the exclusive focus of the analysis on the workload related to approval processes. It was thought that this focus would underestimate the operational burden (costs) for

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<sup>6</sup> Institutions operating in these jurisdictions hold almost 80% of total assets in the EU according to 2010 data.

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supervisors and supervised entities of the standards proposed. There was also concern that in addition to the expected activities related to approval processes that were taken into account to estimate the impact on supervisory costs as set out above, an equally burdensome impact on costs was expected from the institutions' activities related to the submission of applications for the approval of model extensions and changes and the supervisory processing of those applications.

22. The EBA acknowledges that the costs linked to the implementation of the rules proposed may be greater than that implied by the estimates presented in paragraphs 17 to 19 above. In order to achieve a better balance between compliance and implementation costs on the one hand, and regulatory benefits on the other, the revision of the draft RTS that followed the official consultation of stakeholders, led to a series of amendments to address specific concerns of institutions and supervisors about the operational burdens, as follows:
- i. removal of those conditions for assessing the materiality of extensions and changes requirements when calculating own funds requirements for market risk that were among those with highest impact on costs according to both institutions and supervisors; more time is needed to review the preparation for the part relating to internal models approaches (IMA);
  - ii. removal of the requirement to calculate the impact of qualitative changes on quantitative requirements, for changes having no direct quantitative impact, such as organisational changes, internal process changes, or risk management process changes;
  - iii. removal of the operational burden to calculate the aggregate impact of minor (non-material) individual subsequent changes;
  - iv. reduction in the documentation requirements, flagged as a major operational burden, in relation to extensions and changes subject to approval, and to extensions and changes requiring ex-ante and ex-post notification;
  - v. partial reduction in the lists of qualitative criteria for the IRB Approach and the AMA, and removal of the quantitative threshold at subsidiary level for the IRB Approach for ex-ante notification only;
  - vi. cut the ex-ante notification periods for the IRB Approach and the AMA from three to two months.

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## 4.2 Views of the Banking Stakeholder Group (BSG)

This section sets out the BSG comments on draft Regulatory Technical Standards (RTS) on the conditions for assessing the materiality of extensions and changes of internal approaches when calculating own funds requirements for credit, market and operational risk in accordance with Articles 143(5) and 312(4)(b) and (c) of the Capital Requirements Regulation (CRR) (EBA/CP/2012/02).

Please note that references to articles of the draft RTS in the feedback statement follow the original numbering of the consultation paper proposal, unless it is directly stated that we refer to these draft RTS.

### General comments

- (1) Overall, the number of approval processes is expected to increase. There is criticism of the requirement to calculate the impact of the model extension and change on own fund requirements/risk weighted exposure amounts, even if it is very small, if the change is qualitative in nature or it yields an increase. This could be a particular burden for market and operational risk. Moreover, assessing the aggregated impact on own funds requirements is very difficult or even impossible.
- (2) Producing the documentation as described in the draft RTS would require significantly more resources and is regarded as disproportionate for notifications. Providing the list of all changes planned for the next months as required in Article 9(1)(i) of the former draft RTS is especially cumbersome and irrelevant.
- (3) There are specific comments regarding the quantitative criteria, the lack of clarification about how to deal with a supervisor's recommendation or request, and the fact that the qualitative list is too general and that the level of categorisation extensions and changes is always not very pragmatic.
- (4) The communication framework towards the supervisors is not flexible enough compared to the current process.
- (5) There is a lack of information concerning supervisors' duties (response time, cooperation between home and host supervisors).

### Comments on specific consultation questions

**Question 1:** Clarification is requested with regard to the scope of the models covered by the draft RTS, in particular, whether the models for counterparty credit risk are covered by the draft RTS.

**Question 2:** The consolidation for the calculation of the quantitative threshold of 15% is not sufficiently clear. More detail is needed on what portfolio/consolidated level the calculation should be done.

**Question 3:** Whilst the quantitative threshold applied to group level is appropriate, the supplementary sub-portfolio level is not appropriate as it opens up many borderline issues.

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**Question 4:** Three months is an unnecessarily long period for institutions to wait before implementing the extension or change.

**Question 9 – 14:** EBA note: Due to significance of comments on the IMA part of the draft RTS more time is necessary to work on the IMA part. These draft RTS and feedback table therefore relate only to the IRB Approach and the AMA.

**Question 15:** The exact content of the documentation of the scope of application affected by the model extension or change under Article 9(1)(c) of the former draft RTS and with respect to records of the institution's current and past versions of internal models under Article 9(1)(h) of the former draft RTS is unclear.

**Question 17:** The costs of calculating the quantitative impact of extensions and changes both to the IRB framework and the IMA framework will be material. Also, additional costs associated with ex-ante/ex-post notification of extensions/changes will increase significantly and will come mainly from increased IT and human resources costs.

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### 4.3 Feedback on the public consultation and on the opinion of the BSG

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

The consultation period lasted for three months and ended on 11 June 2013. A total of twenty three responses were received, of which twenty were published on the EBA website.

This paper presents a summary of the key points and other comments 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 body repeated its comments in the response to different questions. In these 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 RTS have been made as a result of the responses received during the public consultation.

#### Summary of key issues and the EBA's response

The main points raised by the industry and by the BSG with regard to the draft RTS are as follows:

- (1) Respondents request clarification about the scope of the models covered by the draft RTS, in particular whether the models for counterparty credit risk are covered by the draft RTS.
- (2) The number of approval requests and of ex-ante notifications is expected to increase, leaving too little flexibility to institutions to improve their models. A certain type of changes should therefore be exempt (for instance, those on immaterial portfolios; mandated by competent authorities; stemming from new accounting standards).
- (3) With regard to how to categorise extensions and changes, respondents particularly emphasise that calculating the cumulated effect of minor changes and postponing implementation of model changes while waiting for the completion of the permission process may be unduly burdensome. They request more flexibility on those issues. Moreover, they consider calculation of the quantitative impact unnecessary for changes which are only qualitative (for instance, change in the organisation structure).
- (4) Several respondents state that the documentation requirements are in general too burdensome and are ambiguous in some cases.
- (5) Some respondents comment that there is a lack of information concerning the supervisor's duties, for instance, time to respond, cooperation between home and host supervisors.
- (6) With regard to specific criteria for credit and operational risk, respondents request clarification about the calculation of the quantitative threshold and clarification and reduction of the qualitative criteria in Annexes I and II of the draft RTS. Some respondents argue that the quantitative thresholds are too low, mainly since these limits will result in more approval processes and therefore hinder continuous improvement of models. Some argue that the additional burden stemming from ex-ante notification should be reduced.
- (7) Several respondents are concerned that a three-month notification period for extensions and changes to credit and operational risk that are subject to ex-ante notification increases risks, as it does not allow institutions to adapt their risk management to the changing business



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environment or to align models with underlying risks in a timely manner. Instead they propose a notification period of one month.

- (8) With regard to market risk, several respondents do not support the proposal of the quantitative thresholds in terms of design, metric and level of thresholds. They suggest that it would not be possible or would be too burdensome to calculate the quantitative impact with these thresholds. Respondents also propose shortening the period for ex-ante notification and they request further clarification about several of the qualitative criteria.

These and the other issues are addressed in detail in the table 'Summary of responses to the consultation and the EBA's analysis' below. With respect to the above points:

- (1) Given the significance of comments to the IMA part of the draft RTS more time is needed to review the preparation for the IMA part. The draft RTS are therefore dedicated only to the IRB Approach and the AMA. Moreover, drafting guidelines on model changes and extensions for counterparty credit risk need to be considered in due time.
- (2) The materiality of extensions and changes to internal approaches regardless of origin, portfolio size or other reasons, should be assessed on the basis of these draft RTS.
- (3) The comments made on Article 2(3) of these draft RTS are taken into account and the requirement to calculate the aggregated impact of related changes are removed. Under Article 2(6) of these draft RTS, a delay in implementing a permitted approach should be notified and corrected in a timely manner. Moreover, under the new proposed Article 2(2)(c) of these draft RTS, if a qualitative change has no influence on the quantitative output, there is not any longer the need to calculate the quantitative impact.
- (4) The scope of the documentation is reduced under Article 7 of these draft RTS.
- (5) The requirements dedicated to the process (time to respond, cooperation between home- and host supervisors) are out of the scope of the mandates for these draft RTS.
- (6) The quantitative thresholds are to be used as a backstop measure. Given the exhaustive list of qualitative conditions, the EBA expects that the backstop will be applied only rarely. Moreover, the list of the qualitative criteria is partially reduced. Also the quantitative threshold at subsidiary level for the IRB Approach for ex-ante notification is removed given the annual notification of extensions and changes and the list of qualitative criteria which seems to represent a sufficient filter.
- (7) The initially suggested time frame is too long to achieve the correct balance between the necessary supervisory oversight and allowing institutions to respond rapidly where changes and extensions are needed. The ex-ante notification period is therefore cut from three to two months.
- (8) More time to review the preparation for the IMA part is needed, although the common requirements for all approaches should remain unchanged. These draft RTS, including the feedback table therefore relate only to the IRB Approach and the AMA.

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

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
<b>General comments</b>			
<b>all approaches</b>			
Scope of application	<p>Respondent asks whether the draft RTS are only applicable to IRB, AMA and IMA models or also to other models like internal models for counterparty credit risk.</p> <p>One respondent asks for clarification whether the draft RTS are also applicable where there are changes to a permitted Internal Assessment Approach (Article 259(3) CRR).</p>	<p>The mandates in Article 143(5), Article 312(4)(b) and (c), and Article 363(4)(a) CRR refer to internal models for IRB Approach, AMA and IMA. Internal models for counterparty credit risk are thus not covered. The EBA will consider drafting guidelines on model changes and extensions for counterparty credit risk. Also, given the significance of comments on the IMA part of the draft RTS, more time is needed to review the preparation for the IMA part. Therefore these draft RTS relate only to the IRB Approach and the AMA.</p> <p>These draft RTS do not apply to an Internal Assessment Approach permitted under Article 259(3) CRR.</p>	<p>The scope of these draft RTS is limited to the IRB Approach and the AMA.</p>
Implementation date	<p>One respondent emphasises that the rules for AMA and IMA should be submitted to the European Commission (EC) in accordance with the mandates on 31 December 2014.</p>	<p>Given the importance of these draft RTS, the EBA considers it in the interest of all relevant parties if the rules with respect to IRB Approach, AMA and IMA are submitted to the Commission by end 2013. However, given the significance of comments on the IMA part of the draft RTS, more time is needed to review the</p>	<p>The scope of these draft RTS is limited to the IRB Approach and the AMA.</p>

		preparation for the IMA part. Therefore these draft RTS relate only to the IRB Approach and the AMA. The power to adopt these draft RTS lies with the Commission.	
Add fourth category of changes	Some respondents suggest introducing an additional category of minor changes that could be implemented without being reported to the competent authorities. This category would cover normal maintenance, technical adjustments and troubleshooting exercises.	Under Article 143(4) CRR on the IRB Approach and Article 312(3) CRR on the AMA, institutions shall notify the competent authorities of all changes. The EBA notes that the comments refer to the Level 1 text and introduction in these draft RTS a category of changes that need not be notified is not in line with the CRR.	No change.
Two categories of notifications	Some respondents express the view that two categories of notifications are too burdensome and merely notification after implementation is preferable. The inclusion of rules for ex-ante and ex-post notification goes beyond the mandates.	The EBA takes note of the burden that notification before implementation may cause. However, the category of extensions and changes subject to ex-ante notification was introduced to keep the set of material model extensions and changes as small as possible. This gives competent authorities the chance to react before implementation, which is also in the institutions' interest. Rules for notification also harmonise notification principles and are thus in the interest of the banking industry. Permission to use the AMA as per Article 312(4)(c) CRR directly requires the EBA to specify the modalities of the notification. Finally, the EBA has reduced documentation requirements and the list of qualitative conditions subject of ex-ante notification in order to limit the potential burden for institutions.	Reductions in documentation requirements and in the list of qualitative conditions subject to notification before implementation.
Home-host issues	Some respondents acknowledge that the scope of the draft technical standards does not include the home/host relationships, however they emphasise the importance that this may have for institutions with operations outside	The EBA takes note of these comments. The need for clarification or for providing additional details for dialogue with non-European supervisors on this issue will be assessed thoroughly.	No change.

	<p>the EU. Respondents encourage the EBA to initiate a dialogue with non-European supervisors on this issue.</p> <p>Some respondents request clarification about home-host cooperation in the context of extensions and changes on sub-group level which require permission and notification. They do not see a need for involvement a multiple national supervisors for approval of an extension and change request at the sub-group level.</p>	<p>The EBA notes that home/host cooperation should be further clarified. However, it is beyond the scope of the mandate for these draft RTS. This issue will be discussed by the EBA in the context of draft RTS on the joint decision process as per Article 20(8) CRR.</p>	<p>No change.</p>
Specification of the qualitative criteria	<p>One respondent suggests that general examples of model change conditions should be listed in the annexes. These general examples could then be interpreted on an institution-specific basis under a 'model change policy' to be agreed with the competent authorities.</p>	<p>The EBA disagrees with the suggestion that the list of conditions should be replaced by general examples. The CRR mandates are clear that 'EBA shall develop draft RTS to specify the conditions for assessing the materiality ...', and therefore the exhaustive list of conditions is proposed.</p>	<p>No change.</p>
Flexibility of rules for material extensions and changes	<p>Some respondents request that, for material extensions and changes, the supervisor should be able to decide on case-by-case basis whether formal approval is necessary.</p>	<p>Definitive criteria with little room for discretion are regarded as desirable to ensure equal treatment of all similar cases across the European Economic Area (EEA).</p>	<p>No change.</p>
Decision period for material extensions and changes	<p>Some respondents ask about the length of the decision period for material extensions and changes.</p> <p>Some respondents ask whether the extension or change can be implemented in the meantime for the calculation of regulatory capital and also of economic capital.</p>	<p>The EBA notes that this question is beyond the scope of these RTS. Under Article 20(2) CRR, the decision has to be reached by the competent authorities within six months.</p> <p>Material extension or change can only be implemented for regulatory capital after permission. Calculation of economic capital is not addressed by these draft RTS.</p>	<p>No change.</p>

Notifications before implementation: feedback from competent authorities	Some respondents ask for clarification about the procedures in case the competent authority does not respond before implementation, and whether the institution should take the approval for granted and implement the extensions and changes.	The EBA notes that a standardised supervisory process for model extensions and changes would be helpful for institutions. However, it is beyond the scope of the mandate for these draft RTS.	No change.
Notification after implementation	Some respondents ask for clarification about timing for extensions and changes that can be notified after implementation 'at least on an annual basis'.	The time period between two ex-post notifications should not be longer than 12 months.	No change.
Quantitative threshold	Some respondents emphasise that the quantitative thresholds should be designed as a backstop, meaning that there should be no need to calculate the own funds requirements impact in cases where institutions have already identified an extension or change as material on the basis of the qualitative conditions.	The EBA notes that to identify a material change, the calculation of the quantitative threshold is not necessary if one of the qualitative criteria listed in the relevant Title I of the Annexes is applicable. However, under Articles 7(1)(g) and 7(2) of these draft RTS [Articles 9(1)(g) and 9(2) of the former draft RTS], the quantitative impact of the extension or change is relevant and information is needed for the analysis of extensions and changes which require approval and notification before and after implementation.	No change.
	One respondent proposes that the quantitative threshold should be related to the impact on the overall risk-weighted assets instead of one risk category (credit, market and operational risk).	The EBA disagrees with this proposal. The threshold should not be calculated based on the overall own funds requirements, as the share of the own funds for different risk categories varies between institutions and this would make the calibration of the threshold more complex.	No change.
	One respondent proposes introducing a general principle according to which the 'backstop threshold' is not applicable to changes that the Institution places in the third category (immaterial) since the list of 'ex-ante	The rational for the quantitative backstop is that independent of any qualitative criteria, extensions and changes with a huge impact on capital/RWAs shall be classified as material.	No change.

	notification' qualitative criteria is conservative enough to cover all the changes which might be of such relevance as to trigger a 'backstop threshold' check.		
Adoption of the RTS	Some respondents encourage communication with competent authorities to find out how they will adopt the technical standards and whether this is a standard that will be adopted across the EU.	These draft RTS will be directly applicable in all EEA member countries.	No change.
Communication process between competent authorities and institutions	Some respondents request that competent authorities should establish service level standards for responding to model extension notifications and applications. They stressed that responses from competent authorities are critical for planning implementation time frames.	The EBA takes note of this issue; however, the communication process between competent authorities and institutions is beyond the scope of these draft RTS.	No change.
Impact of banking union	Some respondents stress that the draft does not touch upon the banking union, but this is expected to have a huge impact. The requests from institutions to regulators will support a move towards harmonisation across Europe, but it is not clear if this will be the case for the answers from the regulators?	Rules of these draft RTS are applicable regardless of the banking union and they relate to the institutions.	No change.
Bundling of changes subject to ex-ante notification	Some respondents ask whether changes that would require ex-ante notification at regular intervals may be bundled in order to reduce the workload for both institutions and supervisors without being detrimental to an adequate degree of control.	Every single change defined in the Annexes in Part II triggers an ex-ante notification. Bundling may be reasonable for related changes if they are not assessed together. Nevertheless, bundling of changes should not remove the requirement to send notification on time.	No change.
No role for independent review teams	Some respondents stress that the role of independent review teams, which has long been a characteristic of the institutions' model governance, is not mentioned in the draft RTS. They also suggest that the draft RTS should rely more on internal validation evaluations.	Under Article 7(1)(e) of these draft RTS [Article 9(1)(e) of the former draft RTS] assessment by an independent review team or a validation is required for material model extensions and changes. The EBA expects that these validations assessment will be the main source for	No change.

		competent authorities to investigate whether the minimum requirements have been fulfilled.	
Increase in approvals may delay the improvement of models	Some respondents express the view that if the supervisory resources devoted to these assessments are not substantially increased, this will result in significant delays in the supervisory approval/response. For changes in rating models, this would imply that institutions must continue to use outdated models in the credit admission process during a lengthy period, with negative consequences in terms of risk management and losses.	The EBA is aware that the competent authorities must be able to process the requests for approvals and notifications in a timely manner.	No change.
Exception for changes imposed by the competent authorities	Some respondents ask that changes that have been imposed by the competent authorities should not be subject to approval or notification.	The EBA is of the opinion that materiality of changes imposed by the competent authorities (e.g. new regulation, guidelines, recommendations, specific terms and conditions, etc.) should be assessed on the basis of these draft RTS.	No change.
Exception for changes in accounting standards	One respondent says that changes in accounting standards leading to model changes should not be subject to approval or notification.	The EBA is of the opinion that materiality of changes, regardless whether they are driven by changes in the accounting standards, should be assessed on the basis of these draft RTS. There are no reasons to treat the changes stemming from accounting standards differently.	No change.
Exceptions for changes in the validation process	One respondent suggests that if a 'material' model change has been subject to a 'second-level' validation process, it should be considered an 'ex-ante notification' change. The draft RTS should thus support the role of the central validation functions, if they set up with different levels/roles inside the banking group.	The presence of a group's internal 'second-level' validation process is no reason for an exemption from these draft RTS.	No change.

Decision process	One respondent expresses the view that the draft RTS do not provide clear guidelines on the decision-making process that leads classification (assignment of responsibility and internal validation of classification).	The decision-making process that leads to classification is beyond the EBA mandate for these draft RTS.	No change.
<b>IRB Approach</b>			
Joint consultation of related RTS for IRB Approach on Article 144(2) CRR	One respondent expresses the view that RTS that are connected - e.g. RTS on materiality and RTS on IRB assessment methodology - should be consulted together. Criteria for material changes and supervisory assessment methodologies are strictly interconnected and should be disclosed jointly and in a harmonised way.	The EBA acknowledges that common consultations of related draft RTS would be desirable. However, a common consultation is practically impossible due to the different deadlines of these draft RTS.	No change.
Exception for changes that increase RWA	One respondent expresses the view that changes leading to a higher capital requirement need not be subject to a model change approval process.	As changes to a rating system may under some circumstances lead to an increase in RWAs, and under other circumstances lead to a decrease, the qualitative criteria also need to be taken into account to identify material extensions and changes.	No change.
No quant. threshold calculation for changes subject to ex-post notification.	One respondent suggests introducing a general principle according to which the 'backstop threshold' is not applicable to changes that the institution places in the 'ex-ante notifications' category when an increase of the average risk parameters (PDs, LGDs or EAD) is anticipated; in this case it is quite impossible to have a RWA decrease coming under the backstop thresholds.	An increase in average risk parameters does not always lead to an RWA increase. Thus calculating the RWA impact is not superfluous.	No change.
Treatment of mergers	One respondent expresses the view that the draft RTS do not indicate what needs to be communicated to the supervisor when two entities approved under IRB Approach merge.	All consequences of the merger have to be assessed taking into account the rules of these draft RTS.	No change.



Article 3(1)(a) 'range of application'	Some respondents ask that the term 'range of application' be defined more clearly. One respondent asks for clearer definition of the 'range of application of the internal rating system' for an international institution with country-specific models and taking into account Article 2(3) of the draft RTS, whether at country level or at business unit level.	The range of application is set out in recital 2 of these draft RTS based on the definitions of 'rating system' and 'type of exposures' in Articles 142(1)(1) and (2) CRR. The range of application refers to the type of exposures covered by one specific model. For the application of Article 2(3) of these draft RTS, the level of application of the model is rather not relevant, but it should be noted that the materiality of a model change should not be reduced by division; for example, by splitting a group-wide model implemented in five countries/business units into five changes at the country/business unit level.	No change.
Annex I, Part I list of qualitative conditions	One respondent made the criticism that the list of qualitative conditions proposed by the EBA is both too detailed but also not exhaustive and could have detrimental effects on both competent authority and the level playing field.	The CRR mandate is clear that 'EBA shall develop draft RTS to specify the conditions for assessing the materiality (...)'; and therefore the detailed list of conditions has been proposed. Moreover, definitive criteria with little room for discretion are regarded as desirable to ensure equal treatment of all similar cases across the EEA.	Amendments to Annex I of these draft RTS.
Annex I, Part I, Title I, point (1)(a)	Some respondents do not see enough reason for extending the range of application of models to additional business units as material. They argue that the model coverage should not be mixed with an organisational split of the entity. The primary criterion taken into account should therefore be homogeneity of clients/products covered.	The overriding criterion of homogeneity of clients/products covered holds true for additional business units.	Amendments to Annex I, Part I, Title I, point (1)(a) of these draft RTS.
Annex I, Part I, Title II, point (1)	Two respondents would appreciate more detail about the concept 'reducing the range of application'.	The EBA gives an example. If a specific rating system is dedicated to corporate exposures characterised by turnover up to EUR 50 million, then an institution's	No change.

		decision to reduce the range of application by lowering the limit to EUR 40 million should be notified to the competent authorities.	
Annex I, Part I, Title II, point (3)	Two respondents would appreciate more detail on the concept 'extending the range of application'.	The EBA gives an example. If a specific rating system is dedicated to corporate exposures characterised by turnover up to EUR 50 million, then an institution's decision to increase the range of application by raising the threshold for turnover to EUR 60 million should be notified to the competent authorities. This assumes that the sample population is still representative and comparable.	No change.
Annex I, Part I, Title II, point (4)	There is typo in the wording – rather than 'rating system' it should read 'internal models approach to equity exposures'.	The EBA agrees with this point, the wording is corrected.	Amendments to Annex I, Part I, Title II, point (4) of these draft RTS.
Annex I, Part II Title I, point (1)	Some respondents request a materiality threshold; otherwise any small change in rating systems would be treated as material. This would considerably hinder the institution being able to react in a timely manner to the changing environment. These respondents suggest adding a materiality threshold or moving this type of change to the category of other changes that have to be announced ex-ante.  It is claimed that this type of change – which happens rarely – is not within the scope of the draft RTS. A piece of rating system information can indeed be used as a way of testing asset class assignment, but a change in this framework can only come from a significant change	The EBA expects that these changes will occur very infrequently.	No change.

	<p>in the scope or range of application of the specific rating system which ought to be covered by the other rules set by the draft RTS.</p> <p>On point (1)(b), it is unclear if 'methodology used for assigning an obligor or a transaction to a rating system' pertains to a change in the model coverage or not. Further clarification is requested.</p>	Changes to the methodology of assigning exposures should not be mixed with range of application.	No change.
Annex I, Part II, Title I, point (2)(a)	Some respondents ask for clarification whether this point relates to methodology changes in the process of assigning exposures or whether it relates to changes in the algorithm or scoring system. If it refers to the latter, they believe that this type of change should not be made a condition for the implementation dates (unless the quantitative threshold is surpassed).	This condition refers to Articles 171(1) and (1)(a) to (d) CRR. It is therefore related to the assignment of exposures to rating grades or pools.	No change.
Annex I, Part II, Title I, point (2)(d)(i) and (ii)	Some respondents express view that it is not clear what exactly is meant by 'they significantly change the rank', 'they alter the distribution'. They suggest having some examples here for a better understanding and/or a defined threshold for clarification of significantly. Moreover the respondents stress that almost any change will have an impact on 'distribution of obligors, facilities or exposures (...)'. 	The EBA understands the point, however given the variety of the rating grades for different types of exposures it is not possible to define one metric. Therefore the institutions have to define their metric with regard to significant changes to rank ordering and distribution of obligors.	Amendments to Annex I, Part II, point (2)(d)(i) and (ii) of these draft RTS.
Annex I, Part II, Title I, point (2)(f)	Several respondents ask for more details about the concept of 'fundamental methodology' to avoid including small changes that are common during parameter updates. Some respondents stress that it is necessary to strengthen as much as possible the scope of this criteria compared to criteria of Annex I, Part II, Title II, point	The EBA notes that further details are necessary to harmonise the interpretation of this criteria. On the other hand, the variety of methodology for risk parameter estimation make impossible to define a comprehensive list of changes. The EBA gives some illustrative examples for changes in the fundamental methodology:	No change.

	(2)(h).	<p>For LGD parameter: (i) change in the estimation method for determining the unsecured recovery rate (the model demands a separate parameter estimation for the secured and the unsecured part); (ii) new method for including incomplete workout in the estimation; (iii) refinement of the sub-segmentation by exposure classes; (iv) a new methodology for calculation of the downturn LGD; and (v) moving from a workout-based methodology to a parameterised model.</p> <p>For PD parameter (i) change in the approach for calculating long-run PDs; (ii) for retail exposures: change from EL approach to PD and LGD estimation and vice versa; (iii) for exposures to sovereigns: a change from shadow rating to an approach based on internal default experience; and (iv) for exposures to corporates: a change from an approach based on pooled data to an approach based only on internal default data.</p>	
Annex I, Part II, Title I, point (2)(g)	<p>One respondent seeks more clarity for the wording if their treatment differs from procedures that have already been approved’.</p> <p>Furthermore, taking Part II, Title II, point (2)(j) into consideration, one respondent asks whether the interpretation is correct, that even an additional type of collateral included in the LGD estimation, without changes in the methodological approach, should be considered for the ‘ex-ante notification’.</p>	<p>The purpose of this wording is to ensure that the only cases regarded as material are those where the inclusion of a new type of collateral leads to a process of collateral evaluation/realisation that has not yet been applied for another type of collateral.</p> <p>Yes, adding a new type of collateral into the LGD estimation requires notification before implementation.</p>	<p>No change.</p> <p>No change.</p>

Annex I, Part II, Title I, point (3)	Several respondents ask for clarification of the scope of this provision. Given Article 178 CRR, they understand that changes in definition of default considered as material are aimed at the definition used for managing defaulted exposures and not the one used for the design of risk models or parameter estimation. Therefore, it should be clarified if advanced models are subject to consideration. One respondent complains that the categorisation is material.	The first alternative mentioned is correct: definition used for managing defaulted exposures as defined in Article 178 CRR.	No change.
Annex I, Part II, Title I, point (4)	Some respondents complain that the categorisation is material. Several respondents ask for clarification about the scope of this provision. They would appreciate more detail about what type of change is considered as 'material' during the validation process.	Given the importance of the internal validation processes and high leverage on their outcome by the competent authorities (also stressed by some respondents in the part for general comments) it is important to keep this type of change as material.	No change.
Annex I, Part II, Title II, point (2)(d) to (g)	Several respondents complain that the provisions under point (2)(d) to (g) may affect the day-to-day risk management. Changes are frequently made in internal models to improve them when deviations and flaws are identified. These changes should not be notified ex-ante (unless quantitative thresholds apply).	The EBA acknowledges that these changes may affect day-to-day risk management. However, as the impact of these changes on the accuracy of the own funds calculation may also be of importance, notification before implementation is deemed necessary to give the competent authority time for assessment if it seems that minimum requirements have been breached.	To limit the burden of ex-ante notifications documentation requirements are reduced and the notification period is shortened to two months.
Annex I, Part II, Title II, point (2)(h)	Several respondents request more detail about what kind of changes are considered. They agree on the material change categorisation in cases of substantial modifications in the parameter estimation methodology.	The permission of competent authorities relates to the methods, processes, controls, data collection and IT systems of the approaches, therefore ongoing alignment of the models to the calculation data-set used, based on	New recital 8 of these draft RTS.

	<p>However, slight changes in parameter updates should not be subject to pre-notification (unless quantitative thresholds apply). Respondents stress the fundamental difference of scoring systems due to the number of tiny changes inherent in their normal operation, and ask for direct implementation of minor changes that will be reported to the competent authority on a periodic basis (ex-post).</p>	<p>the approved methods, processes, controls, data collection and IT systems, should not be covered by these draft RTS. All other changes of parameters if not already treated by the qualitative criteria are in general changes which have to be notified annually, usually such changes would not lead to a significant change of the capital requirement. New recital 8 of these draft RTS provides clarification in this regard.</p>	
<p>Annex I, Part II, Title II, point 4(a), (b), (c)</p>	<p>Several respondents request more detail about what kind of changes fall under the scope of these provisions. One respondent stress that an ex-ante notification isn't necessary for the case if only the position of the independent credit risk control unit and the validation unit within the organisation (risk management) is changed but not the responsibilities. In such a case we think it's sufficient if this change is notified to the competent authority after implementation.</p> <p>In the context of 4(c) one respondent requests clarification about the meaning of '... that have an important influence on a rating system' and asks for examples.</p>	<p>The EBA does not agree with the comments. There is often an interdependence between change of organisational position/reporting lines and responsibilities.</p> <p>A significant effect on the rating system can result from: (i) data being generated differently; (ii) data being interpreted differently.</p>	<p>No change.</p> <p>No change.</p>
<p>Annex I, Part II, Title II, point (4)(d), (e)</p>	<p>Two respondents are against the categorisation under Title II. They consider the changes as part of the day-to-day process which should not be subject to ex-ante notification. Moreover, it will be very hard to assess that the change is already significant enough to fall under 'ex-ante' regime. They propose moving these changes to other changes announced ex-post.</p>	<p>The EBA agrees with the arguments. The criteria have been removed and therefore these changes should be notified ex-post.</p>	<p>Deletion of Annex I, Part II, Title II, point (4)(d) and (e) of the former draft RTS.</p>

<p>Annex I, Part II, Title II, points (5), (6) and (7)</p>	<p>Some respondents do not see any reason why these changes have to be announced ex-ante.</p> <p>On point (5): Stress test exercises are embedded in risk management processes of financial institutions and they are under continuous scrutiny of national supervisors. Changes in these processes should not be subject to ex-ante notification.</p> <p>On point (6): These changes take place frequently to improve models when deviations and flaws are identified. Hence, these changes should not be notified ex-ante (unless quantitative thresholds apply). A more useful trigger for changes to a rating system would be changes to a portfolio composition or business mix change. The trigger should not refer to changes in data sourcing, use and composition as these changes merely to adapt to the new profile of the institution's portfolio. Since modification of the portfolio composition structure should have been assessed, any assessment requirement related to data changes merely creates unhelpful redundancy.</p> <p>On point (6)(b), (c) and (d): These changes take place frequently due to the need for improvement once deviations and flaws are identified. Hence, these changes should not be notified ex-ante, unless quantitative criteria apply.</p>	<p>With regard to Annex I, Part II, Title II, point (5), the EBA supports the argument. Therefore this condition is removed from the list of ex-ante notification criteria.</p> <p>With regard to Annex I, Part II, Title II, point (6), the EBA partially supports the argument and the criteria in point (6)(b) is removed from the list. However, data are a critical component from an IRB rating system and therefore it is relevant for supervisors to be notified of changes in data sources that go beyond the annual inclusion of the latest observations.</p> <p>See the comment regarding Annex I, Part II, Title II, point (6).</p>	<p>Deletion of Annex I, Part II, Title II, point (5) of the former draft RTS.</p> <p>Deletion of Annex I, Part II, Title II, point (6)(b) of the former draft RTS.</p> <p>Deletion of Annex I, Part II, Title II, point (6)(b) of the former draft RTS.</p>
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	On point (7): Even though a change in the use of risk parameters for internal business purposes could be relevant for notification, we underline that no reference to the tenor of the change is made (so, even immaterial changes should be notified) and, moreover, that there is an incoherence with the ‘first application’ framework, where the use of risk parameters for internal business purposes isn’t ruled. The use of an internal model for non-regulatory purposes should not be subject to ex-ante notification requirements. Should we understand the requirement as for the use of an internal management model for regulatory purposes?	Annex I, Part II, Title II, point (7) refers to the use of different estimates for the calculation of risk weights and for internal purposes as laid down in the last sentence of Article 179(1) CRR, where this was not the case for IRB approved rating systems.	No change.
Annex I, Part II, Title II, point (8)(b) and (c)	Some respondents ask for more clarity of the scope of these provisions lit. (b): In conjunction with Article 186 (g) of the CRR an some examples are requested.  lit. (c): Clarification on the meaning of the term “... that have an important influence on the internal models approach to equity exposure”.	Given the comments on Annex I, Part II, Title II, point (5) (stress testing), for purposes of consistency, point (8)(b) is removed.  See comment on Annex I, Part II, Title II, point (4)(a), (b) and (c).	Deletion of Annex I, Part II, Title II, Point 8, lit (b) of the former draft RTS.  No change.
<b>AMA</b>			
Draft RTS versus previous GL45	Two respondents request clarification about the classification introduced in the draft RTS in relation to classification of AMA extensions and changes in GL45.	The guidelines will be repealed after adoption of these draft RTS.	No change.
Annex 2, general comments	Several respondents point out that a few quantitative items seem to be better adapted to models mainly based	The CRR requirements allow for different model approaches. All AMA have to use internal and external	Amendments to documentation



	<p>on historical data rather than scenarios, for example notifying any change in a scenario or any scenario creation/removal.</p> <p>One respondent express the view that there may be cases when it is unclear what constitutes a ‘method’ that is part of the AMA permission. For example where particular factors rely on expert judgment, but methods for analysis for arriving at that judgement have not been specified in the model documentation, and may have changed over time.</p>	<p>data, scenario analysis and business environment and internal control factors. Material changes can comprise changes of the process whereby scenario analysis are performed. We understand that the comment refers more to the annual reporting requirement. Within that, the documentation requirements are limited.</p> <p>The EBA reviewed Annex 2 to ensure that only relevant changes require ex-ante notification.</p>	<p>requirements in Article 7 of these draft RTS.</p> <p>Amendments to Annex 2 of these draft RTS.</p>
Annex 2, Part I, Title I, point (5)	<p>Some respondents ask what is the ‘relevant indicator’ in Annex 2, Part I, Title I, point (5) &amp; Title II.</p> <p>Some respondents suggest an increase to 10% of the limit, since it would delay implementation of changes. One believes that a 5% annual fluctuation of OpRisk capital charge is normal even in the absence of any underlying model change.</p> <p>One respondent points out that AMA extensions are typically managed in roll-out plans that are shared and/or approved by competent authority; competent</p>	<p>The ‘relevant indicator’ is defined within the CRR. References to the respective provision are introduced.</p> <p>This criterion refers to situations where the AMA is introduced in parts of the institution or group of institutions which is not yet covered within the approval or the approved roll out plan. The threshold does not refer to changes of the capital requirements.</p> <p>The thresholds set only refer to situations where a further roll out is planned above the approved roll out plan. Some competent authorities have imposed</p>	<p>Amendments to Annex Part I, Title I, point (5) &amp; Title II of these draft RTS.</p> <p>No change.</p> <p>No change.</p>

	authority is therefore already informed in advance of planned extensions.	minimum requirements for roll out of e.g. 85 %. Hence a further roll out, which is not yet known by the competent authority, is possible and identified under this criterion.	
Annex 2, Part I, Title II	Few respondents express the view that quantitative thresholds are too low, since a change of 1% needs at least ex-ante notification of three months, and 5% needs approval by regulators.	This criterion refers to situations where the AMA is introduced in parts of the institution or group of institutions which is not yet covered within the approval or the approved roll out plan. The threshold does not refer to changes of the capital requirements.	No change.
Annex 2, Part II, Title I, point (3)(b)	A few respondents suggest that Annex 2, Part II, Title I, point (3)(b) should be limited to models where external data are used as direct input.	External data have to be used within the AMA. When those data are used e.g. to inform the scenario analysis, the use of different data sources still can have a material impact on the estimates derived within those analysis. Further clarification is provided that this criterion is relevant unless the data are comparable and representative for the operational risk profile.	Amendments to Annex 2, Part II, Title I, point (3)(b) of these draft RTS.
Annex 2, Part II, Title I, point (5) & Title II, point (8)	One respondent requires clarification of whether the percentages apply to an institution's or a group's overall own funds requirements for OpRisk.	The threshold applies to the consolidated level. If an institution itself has an AMA approval, it refers to the institution, as no consolidation takes place. The text at Title I, point (5) was clarified and at Title II, point (8) deleted.	Amendments to Annex 2, Part II, Title I, point (5) of these draft RTS; Deletion of Annex 2, Part II, Title II, point (8) of the former draft RTS.
Annex 2, Part II, Title II	A respondent states that the requirements are problematic regarding e.g. material organisational changes, as they delay the further development of the institution. Some of the changes requiring ex-ante	All the examples cited relate to organisational changes within the institution. The changes requiring approval are very limited and are to ensure that the operational risk management function can carry out its duties. The issue	Amendments to Annex 2, Part II, Title II of these draft RTS.

	notification cannot always be anticipated, due to their type; for example, modifications to the organisational and operational structure of risk management, internal governance process and control environment.	is more relevant if such changes cannot be postponed for a while, this may conflict with the ex-ante information of competent authorities. The period for the ex-ante notification is shortened. The cases where ex-ante notifications are required have been reviewed and clarified to ensure that only relevant alterations are subject to this requirement.	
Annex 2, Part II, Title II, point (1)	Several respondents are concerned that the requirements in Annex 2, Part II, Title II, point (1) that requires pre-notification would discourage day-to-day integration and would make it difficult for reporting systems to respond rapidly to changes in the business environment. Some think the wording is too imprecise and general and that it would be difficult to implement in practice unless the scope is narrowed. One respondent suggests distinguishing between changes in the OpRisk framework that have a positive impact (i.e. using monthly instead of quarterly reporting; applying both validation and enhancement of risk management instead of applying either one method or the other)) and the changes that have a negative impact.	The EBA reviews and clarifies Annex 2, Part II, Title II, point (1)(b) which allows for improvement of the reporting system and covers functions rather than people.	Amendments to Annex 2, Part II, Title II, point (1) of these draft RTS.
Annex 2 Part II Title II, point (2)	Several concerns are raised regarding the changes in Annex 2, Part II, Title II, point (2). Regarding changes in (a) duties & responsibilities, respondents suggest this should be limited to significant/material changes (i.e. a reduction or extension in scope). One respondent also refers to the difficulty in distinguishing whether an organisational change is material or not. Regarding point (b), respondents suggest it should depend on the	The EBA has reviewed this requirement to ensure that only relevant changes require ex-ante notification. Those are in particular changes which can have a negative impact on the proper functioning of the operational risk management function. This may be caused by two things; the change in responsibilities, in particular if additional responsibilities would require additional resources or create conflicts of interest; and, reductions	Amendments to Annex 2, Part II, Title II, point (2) of these draft RTS

	<p>context of the institution at the moment of the comparison, for example if the OpRisk budget and structure is falling in the same way as the institution's overall budget, it should not be considered outstanding. Others anticipate implementation difficulties since it is difficult to specify the exact number of staff working specifically on OpRisk and that the differing designs of central and non-central operational risk functions make it difficult to compare data across banks and suggest that budget and headcount should be defined, or clarification if IT costs and headcounts are to be considered and to what extent this should be (including development, IT production, etc.). Respondents also think that the starting point, i.e. the last approval, is not an appropriate reference point and propose that standardised resources figures be notified on annually and that the last information provided constitute the reference. Others request clarification of whether 10% reduction of headcount regards group level or local level.</p>	<p>of the available resources within the operational risk management function. The percentage of the reduction refers to the staff within the operational risk management function based on the scope of application of the AMA. If the AMA is applied on group level, the reduction of 10% refers to the group level taking into account all staff within the operational risk management function. If the AMA is approved for a single institution, the reduction refers to the institution. However, the operational risk management function must have the appropriate resources to carry out its duties.</p>	
Annex 2, Part II, Title II, point (4)(a)(iii)	<p>A respondent points out that 'length of the time series' would mean that an extension of the time series would always require a three-month ex-ante notification. The respondent prefers instead 'definition of the time series'.</p>	<p>Institutions must define the length of the time series to be used within the AMA framework; only changes to the respective framework should be notified. If the framework foresees that the complete time series is always used, and this is increasing over time, this does not fall under this criterion.</p>	<p>Clarification of Annex 2, Part II, Title II, point (4)(a)(iii) of these draft RTS.</p>
Annex 2, Part II, Title II, point (4)(a)(v)	<p>One respondent considers it inappropriate to require ex-ante notification for changes to the calculation of the OpRisk capital charge that modify the number or the type of risk classes, even if the criteria underpinning the</p>	<p>The granularity of the AMA can have a major influence on the modeling results and also alter the level of detail of information available for risk management purposes. Changes to the granularity can also have impact on</p>	<p>No change.</p>

	definition of the risk classes remain the same. Others think that this only concerns models based on historical data and not models based on scenarios.	implicit and explicit diversification effects. Hence an ex-ante notification is necessary. This also holds true for models which are mainly driven by scenario analysis results.	
Annex 2, Part II, Title II, point (4)(a)(vii)	One respondent ask for clarification about the method for setting the level of losses threshold and its relationship to the loss events gathering and body-tail modeling thresholds.	Loss distributions can consist of several distributions which are fitted at different thresholds. This requirement applies only to such cases. Explaining the statistical concept is not within the scope of these draft RTS.	No change.
Annex 2, Part II, Title II, point (5)(a)(i)	Some respondents suggest that the provision should only apply to the group wide maximum threshold and not the individual entities threshold.	Such information is also relevant for institution's risk management on an entity level and the conduct of scenario analysis and therefore need to be considered.	No change.
Annex 2, Part II Title II, point (5)(b)	The notification is proposed to be limited to the validation process regarding scenarios, when a scenario based approach is used.	Scenarios are a mandatory part of the AMA. The AMA is subject to validation, and not necessarily each single scenario is subject to validation. The criterion also refers to the process and not to single scenarios.	No change.
Article 2(3) – comment on AMA	Some respondents request clarification to whether marginal changes or extensions, whatever their individual impact and even if minimal, will be subject to permission or ex-ante notification. For example if several AMA entities of small size have been subject to an AMA roll-out over the years should the last small entity, which will cause the 10% threshold to be reached, be subject to permission?	Roll out of entities, if not already covered within the approval are considered to be a material change extension under Annex 2, Part I, Title I, point (5) with a lower threshold. Clarification with regard to Article 2(3) of the draft RTS is given in response to question 1 of the consultation.	Amendments to Article 2(3) of these draft RTS.
Article 6(b)	One respondent proposes that there should be an addition to Article 6(b) of the draft RTS so as to exclude irrelevant changes; e.g. ongoing activities with regard to IT, or loss data collection. The suggested addition is: 'that have an impact on the ability of the operational risk	Under Article 312(3) CRR on the AMA, institutions shall notify the competent authorities of all changes. The EBA notes that the comments refer to the Level 1 text.	No change.

	management function to oversee and inform the decision making process of the business and support units they control’.		
<b>Responses to questions in Consultation Paper EBA/CP/2013/02</b>			
<b>all approaches</b>			
Q1: Are the provisions included in these draft RTS that specify the principles of categorisation of extensions and changes, sufficiently clear? Are there aspects which need to be elaborated further?	<p>The large groups of respondents’ ask for further clarification and simplification of the principles for categorisation of extensions and changes. The following articles are subject of comments:</p> <ul style="list-style-type: none"> <li>- Article 2(2)(a): respondents ask for clarification on the ‘use of the most recent data available’. Some respondents suggest that it may be more appropriate to use the term ‘relevant data’. They also ask whether in the context of AMA it includes changes to hierarchies and group structures.</li> <li>- Article 2(2)(b): Respondents ask for clarification and simplification of ‘assessment of the impact based on a representative sample’ or based on ‘other reliable inference methodologies’. Clarification is required about whether it would be possible to consider the portfolio volume affected by a change as a proxy for the relevance of the proposed change in cases where the calculation of the capital impact is not feasible.</li> </ul>	<p>The EBA takes note of the requests for further clarification and, as a result, several changes are introduced.</p> <ul style="list-style-type: none"> <li>- Article 2(2)(a): the institution must prove that more recent data are not available. Changing group structures would need to be considered.</li> <li>- Article 2(2)(b): more restrictive wording would unintentionally limit institutions’ methodologies, therefore the text remains unchanged. The main quantitative criterion for assessing an extension and change is its impact on risk-weighted exposure amounts or own funds requirements, therefore at least an approximate figure is required. Portfolio volume affected is in most cases not a good proxy for this. However, the portfolio volume for very small portfolios may be sufficient to show that the capital impact is negligible.</li> </ul>	<p>Amendments are described below.</p> <p>No change.</p> <p>Amendments to Article 2(2)(b) of these draft RTS.</p>

	<p>- Article 2(3): respondents express the view that the requirement to calculate the aggregated impact of related extensions and changes is probably either not feasible at all, or not at a reasonable cost. Some respondents suggest replacing it in favour of giving the competent authorities the option of asking for such analyses on a case-by-case basis. Few respondents ask how to proceed when the impact of the later phases cannot be estimated at the beginning and whether an expert estimation is sufficient. One other respondent express the view the annual notification of changes should reset the list and a grandfather clause should be introduced at the time of enforcement. Few respondents request clarification of 'triggered by the same underlying reasons'. Some respondents require an explicit statement that the 'last internal validation process' will not apply retrospectively ('grandfather clause') but only from the entry into force of these standards, saying that otherwise it will be unmanageable. One respondent asks for clarification whether Article 2(3) implies that the latest change, which may not be material itself, shall be subject to a full approval process when the aggregate quantitative assessment is above the thresholds specified in Articles 3, 5 and 7 of the draft CP. One respondent suggests calculating the net effect, because the periodic recalibration of scoring models may lead to numerous small changes resulting in many increase and decreases in the RWAs.</p>	<p>- Article 2(3): the EBA agrees that this requirement is onerous, thus the requirement to calculate the aggregated impact of related changes is removed. However, institutions must ensure that low materiality of extensions and changes is not caused by dividing one extension or change into several extensions or changes.</p>	<p>Amendments to Article 2(3) of these draft RTS.</p>
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	<p>- Article 2(4): few respondents expressed the view that dialogue between competent authorities and institution is preferable.</p> <p>- Article 2(5): few respondents request that if an institution implements a material model extension or change later than at the date specified, this should be subject to ex-ante notification but not to a new permission. Some respondents argue that in practice, implementation timelines must be fluid and flexible to allow new, more urgent changes to be prioritised. Other respondents suggest that institutions should be granted a period of three months between obtaining permission and implementation of a change if one competent authority is involved, six months in case multiple competent authorities are involved. One respondent argue that the non-implementation of an approved change requiring further approval is difficult in practice without any guarantee regarding the validation schedule.</p> <p>- Article 2(6) of the former draft RTS: respondents request further clarification about the process of notifying competent authorities if an extension or change which requires ex-ante notification is not implemented.</p> <p>Other comments: Respondents request a distinction between quantitative (model by itself) and qualitative (global operational risk framework and governance)</p>	<p>- Article 2(4): the EBA is of the opinion that institutions may always ask for clarification if they are unsure. Nonetheless, the responsibility for classification of extensions and changes lies with the institutions.</p> <p>- Article 2(5): The EBA identifies that the requirement for new permission refers to non-implementation of a model extension or change. If the implementation is postponed to a concrete date, it should be treated as delay. The new Article 2(6) of these draft RTS clarifies the rules for delay. The EBA acknowledges that an institution needs sufficient time to implement an extension and change. However, the institution is responsible for defining, during the approval process, whether the implementation date of the extension and change needs to be altered and should communicate this to the competent authority before the permission is issued. The permission process is not subject of these draft RTS.</p> <p>Article 2(7) of these draft RTS [Article 2(6) of the former draft RTS]: The EBA also indicates that this notification should be made without undue delay if a change that has been notified is not implemented.</p> <p>Other comments: the quantitative criteria were introduced to provide a backstop criterion to ensure that all material changes and extension are identified. If a</p>	<p>No change.</p> <p>Amendments to Article 2(5) and new Article 2(6) of these draft RTS.</p> <p>Amendments to Article 2(7) of these draft RTS.</p> <p>New Article 2(2)(c) of these draft RTS.</p>
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	changes for assessing the compliance with the quantitative threshold that is proposed. Items which do not have a direct impact on own funds requirement cannot be quantitatively assessed and consequently should not be covered by the quantitative threshold provision.	qualitative change has no influence on the quantitative output, it is not possible, but also not necessary, to assess the quantitative effect, other than stating that it has none. New Article 2(2)(c) of these draft RTS should clarify this.	
<b>IRB Approach</b>			
Q2: Are the provisions included in these draft RTS on the calculation of the quantitative threshold for the IRB Approach sufficiently clear? Are there aspects which need to be elaborated further?	The majority of respondents say there is a lack of clarity in the provisions on the calculation of the quantitative thresholds. Some argue that the quantitative criteria are too complicated and should be simplified and relaxed. More detail on the calculation of the percentage required to perform a model change would be appreciated. The provisions need further detail about what portfolio/consolidated level the calculation should be done. The concept of the quantitative criteria for assessing extensions and changes to the IRB Approach appears to be too strict. It is difficult to understand why it is necessary to adopt overly complex quantitative criteria. The quantitative automatic assessment should be simplified and relaxed. It is also very difficult to implement the quantitative assessment requirements, especially from an operational viewpoint. Some respondents request that 'material change' classification should depend not only on the qualitative criteria but also on the 'materiality' of the portfolio involved. This could then mean that material changes to immaterial models would not require an approval process (overall threshold).	The EBA acknowledges that the concept and the provisions themselves need to be clearer. The EBA also acknowledges that calculating the quantitative impact will impose considerable requirements in terms of staff and IT resources and will seek to find a proportionate solution. The EBA is of the opinion that an unintentional burden of assessing the quantitative impact should be limited by the following changes: - calculation of the impact of qualitative changes on quantitative requirements has been removed, for changes having no direct quantitative impact, such as organisational changes, internal process changes or risk management process changes; - calculation of the aggregate impact of minor (non-material) individual subsequent changes has been removed; - deletion of the quantitative thresholds at subsidiary level for ex-ante notification.	Amendments to Article 2(2)(c) of these draft RTS; Deletion of Article 4(1)(a)(iii) of the former draft RTS.

	<p>The provisions should be clearer about avoiding the quantitative thresholds on a consolidated level. Respondents ask how the quantitative criteria are applied for EU subsidiaries of an EU parent where the EU subsidiary is in a different Member State from the parent and, in particular, whether the quantitative test is solely based on the own funds / risk weighted exposure at the EU parent level.</p> <p>Three respondents consider the provisions on the calculation of the quantitative threshold to be clear.</p>	<p>The threshold in Article 3(1)(c)(i) refers to the EU parent institution's consolidated level defined under Article 4(29) CRR, or an institution on a stand-alone basis. This calculation relates to overall exposures (both SA and IRB exposures). The calculation is also related to changes driven by EU subsidiaries, not only the EU parent institutions.</p>	<p>No change.</p>
<p>Q3: Do you support the proposed calculation of the quantitative threshold for the IRB Approach in terms of design of the metrics and level of thresholds?</p>	<p>The largest group of respondents does not support the proposed calculation of the quantitative thresholds in terms of design, metrics and level of thresholds. They argue that the threshold's outlines are generally too stringent and will result in more changes being captured than would be helpful for supervisors. The thresholds are generally very low. This could result in unnecessary burden for banks and supervisors as well.</p> <p>The threshold of 1.5% at consolidated/stand-alone level for material changes is unreasonable low compared with the thresholds for operational risk and market risk. Credit risk should, like market risk and operational risk, receive a quantitative threshold of 10%. Furthermore, the quantitative threshold should always be based on the RWA. In some cases, the threshold on RWAs may be not consistent with some specific rating systems, for</p>	<p>The EBA is of the opinion that the quantitative threshold is to be used as a backstop measure. For IRB Approach the metrics are already very simple and the levels of the thresholds are high. Given the exhaustive list of qualitative conditions, the EBA expect that the backstop will be applied only in a limited number of situations.</p> <p>The EBA does not agree with this comment. Since in most institutions the share of the capital requirement for credit risk is much higher than for market risk or operational risk, taking the same percentage would lead to a much higher capital impact in absolute terms. As calculation of own funds requirements for operational risk is not based on RWA, the thresholds must be designed differently.</p>	<p>No change.</p> <p>No change.</p>

	<p>example sovereign rating systems. The materiality of the portfolio itself is not addressed.</p> <p>A 15% decrease at portfolio level (range of application) as a benchmark across all positions would be disproportionately stringent for an internal rating system attracting a low level of RWA. The threshold of 15% for an internal rating system may be reached by changes on non-material portfolios. Proposed improvement: minimum overall decrease in addition to the 15% decrease of the individual rating system.</p> <p>Some respondents support the proposed calculation of the quantitative threshold in terms of design, metrics and level of thresholds. In general, they support the use of quantitative criteria, because they consider these to be most objective and provide the best guarantee that all institutions will be treated in a similar way. They support the proposed calculation of the quantitative threshold and the use both of quantitative thresholds and qualitative criteria to assess materiality of extensions and changes to internal approaches</p> <p>One respondent states that recital 6 of the draft RTS states that thresholds for IRB should apply to a specific model. It is unclear how this is related to the thresholds mentioned in Article 3(1)(c)(i) and 4(1)(a)(iii) of the draft</p>	<p>The EBA considers this level adequate, given that the first conditions when assessing material changes are the qualitative ones. In fact, the inclusion of the materiality threshold was intended only as a backstop.</p> <p>The EBA takes note of these comments.</p> <p>The EBA explains that the statement cited in recital 6 on the scope of application refers only to the threshold laid down in Article 3(1)(c)(ii) of these draft RTS. It should be left to the institution to define the boundaries between</p>	<p>No change.</p> <p>No change.</p> <p>No change.</p>
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	<p>RTS. It is suggested that a minimum impact evaluation be established at the specific model level and that the term specific model be made more concrete. If, for instance, two scorecards together constitute the model for private customers, would this constitute two specific models? Moreover the threshold of 5% mentioned in Article 4(1)(a)(iii) of the draft RTS should be revised, if the Article 3(1)(c)(ii) of the draft RTS is to refer to a specific model level, and not all the portfolios covered by the IRB Approach.</p> <p>A small group of respondents give mixed answers concerning the proposed calculation of the quantitative threshold in terms of design, metrics and level of thresholds. Whilst the threshold applied to group level is appropriate, the supplementary sub-portfolio is not appropriate, as it opens up many borderline issues. In fact, any portfolio scope could be limited to a level where the threshold always will be breached, which is why the range of application needs to be clarified. A quantitative threshold seems appropriate, if it refers to the risk-weighted exposure amounts for credit risk (RWA) of the portfolio under the IRB Approach. A group-wide assessment does not appear to be justified.</p>	<p>specific models. The Article 4(1)(a)(iii) of the draft RTS has been removed.</p> <p>The range of application is clarified in recital 2 of these draft RTS based on 'rating system' and 'type of exposures' definitions on Articles 142(1)(1) and 142(1)(2) CRR. It should be left to the institution to define the boundaries between specific models.</p>	<p>No change.</p>
<p>Q4: Do you support for the IRB Approach the three-month period for notification of</p>	<p>One respondent supports the three-month period for notification of the changes before implementation for non-material changes and extensions. With regard to notification of the changes before implementation (for the IRB Approach), this institution believes that the</p>	<p>The EBA acknowledges that the time frame is too long to achieve the correct balance between the necessary supervisory oversight and allowing institutions to respond rapidly where changes are needed. The ex-ante notification period for the IRB Approach is shortened to</p>	<p>Amendments to Article 4(1)(a) of these draft RTS.</p>

<p>the changes before implementation?</p>	<p>three-month period proposed in the draft RTS is quite reasonable and determines a good balance between the competent authorities' and institutions' needs.</p> <p>The majority of respondents do not support the three-month period for notification of the changes before implementation for non-material changes and extensions. Most of these respondents consider that for non-material changes the three-month notification period is too long. A three-month period for notification of the changes before implementation will limit the institution's flexibility of necessary risk management actions needed. A period of three months after notification before implementing changes might delay the implementation of necessary changes and considerably hamper the further development of the IRB Approach. A three-month lead time incurs the risk of clearly delaying the implementation of material changes. A shorter period would be more workable. In their opinion, a one-month notification period would achieve the correct balance between the necessary supervisory oversight and allowing banks to respond rapidly where changes are needed. A mandatory maximum response time of three months would be only appropriate for material changes. In both cases, the lack of response should be considered as a tacit approval. Only a small number of respondents argue that a period for ex-ante authorisation of two weeks would be more feasible and would also reflect the current practices of supervisors in</p>	<p>two months.</p>	
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	some countries. One respondent suggests reducing the period to two months.		
<b>AMA</b>			
Q5: Are the provisions included in these draft RTS on the calculation of the quantitative threshold for the AMA sufficiently clear? Are there aspects which need to be elaborated further?	<p>Several respondents point out that there is no reasonable quantitative assessment for the changes in Annex 2 that is related to qualitative items, consequently they do not see how to assess the aggregate impact on OpRisk own fund requirement that is required by Article 2(2) of the draft RTS. They suggest that the provision in this Article should only apply to changes with a quantitative impact. Moreover, the proposal that extension be done per legal entity does not seem to be sufficiently justified.</p> <p>One respondent requests clarification of 'own funds requirement' and wants to know whether it refers to 'Operational Risk Regulatory Capital'; others request clarification of 'consolidated own funds requirement for OpRisk' and whether it refers to consolidated AMA figures on group level or to the consolidated figures of all OpRisk approaches (AMA, BIA and TSA).</p> <p>Respondents suggested that the draft RTS are to be interpreted in such a way that the change of parameters according to the approved AMA is not to be considered as a material change, even if the capital requirement changed by 10% or more.</p>	<p>The quantitative criteria were introduced to provide a backstop criterion to ensure that all material changes and extension are identified. If a qualitative change has no influence on the quantitative output it is not possible, but also not necessary to assess the quantitative effect, other than stating that it has none. Calculation of the aggregate impact of minor (non-material) individual subsequent changes has been removed. The calculation of the quantitative threshold in Article 5(1)(c)(i) of these draft RTS is done either on consolidated level or, if there is no consolidated level, on the single institution level.</p> <p>The own funds requirement for operational risk is the overall capital required for operational risk, regardless of the approach under which it is calculated.</p> <p>The permission of competent authorities relates to the methods, processes, controls, data collection and IT systems of the approaches, therefore ongoing alignment of the models to the calculation data set used, based on the approved methods, processes, controls, data</p>	<p>New Article 2(2)(c) of these draft RTS Amendments to Article 2(3) of these draft RTS.</p> <p>No change.</p> <p>New recital number 8 of these draft RTS.</p>

		collection and IT systems, should not be covered by these draft RTS. All other changes of parameters, if not already treated by the qualitative criteria, are, in general, changes which have to be notified annually; usually such changes would not lead to a significant change of the capital requirement. If the change of the risk profile of an institution is extensive, one must assume that the AMA would also need to be changed. New recital 8 of these draft RTS provides clarification in this regard.	
Q6: Do you support the proposed calculation of the quantitative thresholds for the AMA in terms of design of the metrics and level of thresholds?	Several respondents support the quantitative threshold in general but believe the limits are too low, and suggest using a 20% threshold. One argument is that the threshold has a secondary level of significance due to the comprehensive range of cases for material extension and changes already covered in Annex 2. Another point out that the 10% limit falls easily within the normal time variability and this respondent proposes 15%.	The EBA is of the opinion that the quantitative threshold is to be used as a backstop measure. For the IRB Approach the metrics are already very simple and the levels of the thresholds are high. Given the detailed list of qualitative conditions, the EBA expect that the backstop will be applied only in a limited number of situations.	No change.
Q7: Do you support for the AMA the three-month period for notification of the changes before implementation?	Some respondents support a three-month notification period while others are concerned that it increase risks as it does not allow firms to adapt their risk management operations to changing business environment and to align models with underlying risk in a timely manner. One points out that it would incur a lead time of approx. three to four quarters which would be incompatible with the objective of continuously strengthening the banks' OpRisk management. The opinion of several respondents is that one-month notification period is sufficient; one proposes two months. Yet another sees	The EBA acknowledges that the time frame is too long to achieve the correct balance between the necessary supervisory oversight and allowing institutions to respond rapidly where changes are needed. The ex-ante notification period for the AMA is shortened to two months.	Amendments to Article 6 of these draft RTS.

	only ex-post notification as necessary.		
Q8: Do you support that for the AMA no quantitative differentiation between changes requiring notification prior vs. post implementation is made?	Most respondents support no quantitative differentiation or do not have any opinion. Others do not understand the question and think it is unclear since there is a quantitative differentiation between ex-ante and ex-post notification in Annex 2, Part II, Title II, point (8) of the former draft RTS. Another support no differentiation but asked whether changes to business areas which are structural and merging/consolidation of operations are classified as major structural change. Yet another proposes a materiality threshold for both types of notification.	The question refers to the change of the operational risk capital as calculated under Article 5(1) of these draft RTS and not to the cited part of the annex which deals with changes of the coverage of the AMA e.g. in the course of organisational changes in an institution using different approaches in a partial use. Considering concerns regarding the quantitative threshold raised by some respondents, the EBA deems it not appropriate to introduce a further differentiation of thresholds. The AMA needs to be appropriate at all times for an institution. If an institution's organisation changes significantly, it usually needs to change the model and risk management organisation as well and hence in most cases this will lead to a material model change under these draft RTS.	No change
<b>Documentation</b>			
Q15: Are the provisions included in these draft RTS on the documentation requirements sufficiently clear? Are there aspects which need to be elaborated further?	The vast majority of respondents emphasise the additional burden stemming from documentation requirements. Respondents stress that the documentation requirements for ex-ante and ex-post notification are too detailed. Individual respondents request information and clarification about documentation requirements: - Article 9(1)(c) of the former draft RTS: scope of application affected by the model extension and change needs to be deleted. One respondent says the concept	The EBA acknowledges the additional burden stemming from documentation requirements. The documentation requirements for ex-ante and ex-post notification are reduced. With regard to the specific issues raised the EBA points out that:  - Article 7(1)(c) of these draft RTS [Article 9(1)(c) of the former draft RTS]: information on scope of application is fundamental for assessing an extension and changes as	Changes are described below.  No change.



	<p>'volume characteristics' is unclear.</p> <ul style="list-style-type: none"> <li>- Article 9(1)(d) of the former draft RTS: process document(s) is only required only if the change concerns processes. As a starting point, the documentation required should be based on internal documents that are already available.</li> <li>- Article 9(1)(e) of the former draft RTS: reports of independent review or validation are appropriate for material extensions and changes, but not necessary for other extensions and changes. One respondent asks whether they refer to a prior review that has already been carried out or to standard validation and testing during the development of models. Other respondent asks whether the institutions' independent review of validation can refer also to 'assessment notes' specifically issued for the relevant extension/change.</li> <li>- Article 9(1)(f) of the former draft RTS: it is not necessary that each extension or change is approved by a committee; for non-material extensions and changes in particular this requirement is disproportionately burdensome. Moreover depending on the institutions' internal rules that could be other relevant body.</li> </ul>	<p>it characteristics the portfolio/exposure type. For example, the volume characteristics are size of the portfolio affected by the model extension or change measured by exposure value for IRB Approach and operational risk estimate for AMA.</p> <ul style="list-style-type: none"> <li>- Article 7(1)(d) of these draft RTS [Article 9(1)(d) of the draft RTS]: documentation describing how the model changes are approved is relevant for the approval of material changes. Processes often change due to other changes as well.</li> <li>- Article 7(1)(e) of these draft RTS [Article 9(1)(e) of the draft RTS]: reports for independent review only remain for material extensions and changes (it is deleted from Article 7(3) of these draft RTS). Reports for standard validation and testing during the development of models are sufficient for this documentation requirement. The concept 'assessment notes' is not clear, therefore it is not possible to assess by the EBA whether it is in line with the requirements.</li> <li>- Article 7(1)(f) of these draft RTS [Article 9(1)(f) of the draft RTS]: it is clarified in the documentation requirement that the relevant bodies are the approval committee or relevant delegated bodies.</li> </ul>	<p>No change.</p> <p>Reduction of documentation requirements for ex-ante notification on Article 7(2) of these draft RTS.</p> <p>Amendments to Article 7(1)(f) of these draft RTS.</p>
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	<p>- Article 9(1)(g) of the former draft RTS: it should be specified that quantitative impact is required when it is available (e.g. changes in processes). One respondent expresses the view that the quantitative impact should be deleted.</p> <p>- Article 9(1)(h) of the former draft RTS: record of the institution's current and past version of internal models should be deleted on the ground that supervisors should already have at their disposal all records relating to certification and past extensions/changes. In particular it is not necessary for notifications. One respondent emphasises that model extensions and changes should be part of the regular interaction between an institutions and competent authorities and be independent of the individual changes. Other respondents request further information about this documentation requirement and clarification about what level of documentation should be submitted.</p> <p>- Article 9(1)(i) of the former draft RTS: details of extensions and changes planned over next 12 months should be deleted, because the benefits are not clear, it is not consistent with industry practice, any information on planned extensions/changes would always be incomplete and the priorities and time-to-delivery might change during the year. Planning horizons for model</p>	<p>- Article 7(1)(g) of these draft RTS [Article 9(1)(g) of the draft RTS]: where applicable (for non-qualitative changes) the quantitative impact must be calculated. The information on the impact in figures is an important part of the assessment of the materiality of extension and change.</p> <p>- Article 7(1)(h) of these draft RTS [Article 9(1)(h) of the former draft RTS]: this documentation requirement was limited to the current and previous version number. This documentation requirement is removed from ex-post notification. Clarification about the level to which the documentation must be submitted is related to the process and therefore is beyond the scope of these draft RTS.</p> <p>- Article 9(1)(i) of the former draft RTS: this requirement is conceptually correct; nonetheless, it would be difficult to implement so it is deleted.</p>	<p>Amendments to Article 7(1)(g) of these draft RTS.</p> <p>Reduction of documentation requirements for ex-post on Article 7(2) of these draft RTS.</p> <p>Deletion of Article 9(1)(i) of the former draft RTS.</p>
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	<p>changes usually are significantly shorter. This requirement could also increase the gap between risk model used for internal risk management and the models used for regulator purpose, since institutions will not be able to implement changes when needed.</p> <p>- Article 9(3) of the former draft RTS: deletion of the results of the calculation of the aggregated quantitative impact referred to Article 2(3) of these draft RTS.</p> <p>- Other points: introduction of a template which should enable consistency of format and approach. One respondent suggests including in the documentation requirements a unique reference number for each extension/change application to facilitate tracking. Another respondent asks for clarification about what is meant by 'appropriate' documentation in recital 9 of the draft RTS.</p>	<p>- Article 7(2) of these draft RTS [Article 9(3) of the draft RTS]: due to changes to Article 2(3) of these draft RTS, the reference to the aggregated quantitative impact for ex-post notification is no longer relevant and is removed from this Article. Moreover for extensions and changes subject of notification before and after implementation, the scope of documentation is aligned.</p> <p>- Other points: such a template could be helpful for institutions, however an introduction of this template could go beyond the mandates of these draft RTS. The suggestion of introducing a number for tracking the changes is too detailed to be introduced in these draft RTS. Recital 9 refers to Article 7 of these draft RTS [Article 9 of the former draft RTS] where appropriate documentation is specified.</p>	<p>Amendments to Article 7(2) of these draft RTS.</p> <p>No change.</p>
<b>Impact Assessment</b>			
<p>Q16: Do you support the view that costs arising for institutions from the documentation requirements</p>	<p>The vast majority of respondents stress that the costs of implementation of the RTS are material, in particular, it is expected that the documentation requirements will generally lead to higher costs.</p> <p>The institutions expect the number of both requested authorisations and notifications to the competent</p>	<p>The EBA notes the additional costs stemming from documentation requirements. However, the transparency with regard to documentation requirements benefits institutions as the expectations from the competent authorities are transparent and this can substantially speed the approval and notification</p>	<p>Amendments to Article 7 of these draft RTS.</p>

<p>included in the draft RTS are not expected to be material? If not, could you please indicate:</p> <ul style="list-style-type: none"> <li>- the main cost driver: i) additional IT equipment, ii) additional ongoing Staff/hours, iii) other (please specify).</li> <li>- the % increase in total annual costs of internal models management for credit/operational/ market risk induced by the proposed documentation requirements (specify whether the costs arise only for some of the risk categories covered by the provisions).</li> <li>- indicative monetary amount</li> </ul>	<p>authorities to increase sharply. The main cost would be related to: (i) additional staff; (ii) operational cost due to increased need for coordination of many actors from several functions of a banking group (reporting, model, IT, business lines, etc.); (iii) the problem of costs will be compounded if it also affects other entities within the group if the documentation concerns the whole application perimeter; (iv) also included are software developments and IT related costs.</p>	<p>process.</p> <p>In order to limit the costs, the documentation requirements are reduced in relation to extensions and changes subject to approval as well as extensions and changes requiring ex-ante and ex-post notifications.</p>	
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of these additional costs (specifying currency and unit)			
<p>Q17: Do you support the view that the additional costs, for institutions, of calculating the quantitative impact of the implemented model extensions/change s are expected to be non-material, given that institutions already carry out impact analysis in the current framework? If not please indicate:</p> <ul style="list-style-type: none"> <li>- the main cost driver: i) additional IT equipment, ii) additional ongoing Staff/hours, iii) other (please specify).</li> </ul>	<p>The vast majority of responses expect that the additional costs of calculating the quantitative impact for their institution may be significant. The costs will be material, in particular, in terms of considerable IT costs to produce impact studies and enhance the IT infrastructure. The cost is material in particular for credit and market risk. Respondents stress that it will be particularly costly to compute the full scale impact on all extensions and changes in market risk which is linked with a 60-day parallel run of the new and old models. It will require setting up a new environment replicating in its entirety the live production environment which implies a duplication of IT equipment. This will create additional staff costs, and coordination of activities will also require additional resources overall. For IMA, a few respondents envisage 100% increase of costs in staff and IT cost.</p>	<p>The EBA also acknowledges that calculating the quantitative impact will impose considerable requirements in terms of staff and IT resources and will seek a reasonable solution. The burden of assessing the quantitative impact should be reduced in the following ways:</p> <ul style="list-style-type: none"> <li>- The conditions for assessing the materiality of extensions and changes requirements when calculating own funds requirements for market risk, which were among the ones with highest impact on costs according to both institutions and supervisors, have been removed. More time to review the preparation for the IMA part is needed.</li> <li>- The requirement to calculate the impact of qualitative changes on quantitative requirements has been removed for changes having no direct quantitative impact, such as organisational changes, internal process changes or risk management process changes.</li> <li>- The proportionality clause was introduced for IRB Approach for quantitative thresholds which trigger the approval.</li> <li>- The quantification at subsidiary level for ex-ante notification for IRB Approach has been removed.</li> </ul>	<ul style="list-style-type: none"> <li>- The scope of these draft RTS is limited to the IRB Approach and the AMA;</li> <li>- New Article 2(2)(c) of these draft RTS;</li> <li>- Amendments to Article 2(3) of these draft RTS.</li> <li>- Amendments to Article 3(1) of these draft RTS.</li> <li>- Deletion of Article 4(1)(a)(iii) of the former draft RTS.</li> </ul>

<p>- the implied % increase in total annual costs of internal model management for credit/operational/market risk induced by the quantitative impact analysis (specify whether the costs arise only for some of the risk categories covered by the provisions).</p> <p>- indicative monetary amount of these additional costs (specifying currency and unit).</p>			
<p>Q18: Do you support the view that, for institutions, the costs of ex-ante/ex-post notification of extensions/change s are expected to be non-material? If not, please</p>	<p>Based on the currently proposed quantitative thresholds and qualitative criteria, the vast majority of respondents assume a higher number of changes will require regulatory approval and notification prior to implementation. This will have a significant impact on internal change processes and thus increase costs. Moreover, the proposed in the draft RTS period of three months (IRB, AMA) or one month (AMA) for changes requiring notification prior to implementation, and no specified period for changes requiring approval prior to</p>	<p>The EBA recognises the material impact resulting from ex-ante and ex-post notification expressed by the industry. However, the CRR requires that all extensions and changes are notified to the competent authorities. Therefore, the additional impact of these RTS needs to be separated from the impact of the CRR provisions. Introduction of the ex-ante notification category reduces the burden for institutions because the changes of higher materiality are only notified and do not require a permission process. Furthermore, the quantitative</p>	<p>Amendments to Articles 4(a), 6(a) and Annexes I and II of these draft RTS.</p>

<p>indicate:</p> <ul style="list-style-type: none"> <li>- the main cost driver: i) additional IT equipment, ii) additional ongoing staff/hours, iii) other (please specify).</li> <li>- the % increase in total annual costs of internal models management for credit/operational/ market risk induced by the notification requirements (specify whether the costs arise only for some of the risk categories covered by the provisions).</li> <li>- an indicative monetary amount of these additional costs (specifying currency and unit).</li> </ul>	<p>implementation will slow down change processes and significantly increase headcount requirements and IT costs. Some respondents stress that the workload for institutions will increase substantially; the main driver will be the requirements for quantifying the impact and providing documentation.</p>	<p>threshold and documentation requirements are reduced (as explained in questions Q16 and Q17) to limit the burden. Moreover the list of qualitative conditions in Annexes I and II, for the IRB Approach and the AMA respectively, is partially reduced, and the length of the ex-ante notification period is shortened to two months.</p>	
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