



EBA/RTS/2014/10

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4 July 2014

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# EBA FINAL draft Regulatory Technical Standards

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on the conditions for assessing the materiality of extensions and changes of internal approaches when calculating own funds requirements for market risk under Article 363(4) of Regulation (EU) No 575/2013 (the Capital Requirements Regulation — CRR)

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# 1. Executive Summary

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The Capital Requirements Regulation ('CRR') and the Capital Requirements Directive ('CRD')<sup>1</sup> set out prudential requirements for banks and other financial institutions, which apply from 1 January 2014. The CRR contains specific mandates for the EBA to develop draft regulatory technical standards ('RTS') to specify the conditions for assessing the materiality of extensions and changes of internal approaches when calculating own funds requirements for market risk.

## **Main features of the draft RTS**

These draft regulatory technical standards complement the draft RTS on materiality of extensions and changes of internal approaches when calculating own funds requirements for credit and operational risk, published by the EBA on 5 December 2013<sup>2</sup>, which they amend by adding specific rules relating to extensions and changes of internal approaches when calculating own funds requirements for market risk. They also follow the same approach regarding the classification of the changes into different levels of materiality, as well as the combination of qualitative criteria with quantitative backstop limits.

With the above considerations in mind, the core of the proposed draft RTS provide (in the annexes) lists of qualitative criteria for classification of extensions and changes to the internal models for market risk into one of the following categories: material extensions and changes, which require permission from the competent authorities, and extensions and changes of a lesser materiality, but still of a degree of materiality that requires notification to the competent authorities before their implementation. Extensions and changes of an even lesser degree of materiality need only be notified to the competent authorities at regular intervals, following implementation.

The draft RTS also propose 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 or change. These thresholds are based on the percentage change of a point-in-time approximation of an institution's own funds requirements for market risk (5%) and on the percentage change of each of the risk numbers calculated by the VaR model, the Stressed VaR model, the Incremental Risk Charge (IRC) model or the internal model for correlation trading (10%), before and after the planned extension or change.

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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> <http://www.eba.europa.eu/regulation-and-policy/model-validation/draft-regulatory-technical-standards-on-the-conditions-for-assessing-the-materiality-of-extensions-and-changes>.

However, unlike in the case of credit and operational risk, an additional threshold is also included, which exempts changes or extensions of a lesser materiality from the computation of the backstop thresholds. The aim of this additional threshold is to reduce the computational burden that the calculation of these thresholds may cause in the context of quickly changing markets, in particular in the case of minor changes or extensions, the impact of which may not justify a delayed implementation. As a result, extensions and changes that lead to a change, computed for the first business day of the testing of the impact of the extension or change, of less than 1% of each of the relevant Internal Models Approach (IMA) risk numbers, may be considered as non-material changes, which, unless they fall under any of the extensions and changes described in the new Annex III Part I, Section 2 or Part II, Section 2, need to be notified after implementation at least on an annual basis.

For changes with an impact greater than 1%, institutions need to continue to compute the quantitative effects of the extensions and changes for 14 further days or until they meet either of the above materiality thresholds, whichever is earlier. If at the end of the 15 days neither of the above thresholds has been met, the extension or change is considered immaterial; if it falls under Annex III it will be subject to *ex-ante* notification, otherwise only to *ex-post* notification.

Finally, as these draft RTS constitute an amendment to Regulation (EU) No 529/2014 (RTS on model changes for credit risk and operational risk) published on 20 May 2014 in the Official Journal of the European Union, the relevant general provisions of that document, in particular in relation to documentation, also apply for market risk.

## 2. Background and rationale

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The Capital Requirements Regulation ('CRR') and the Capital Requirements Directive ('CRD')<sup>1</sup> set out prudential requirements for banks and other financial institutions, which apply from 1 January 2014. The CRR contains specific mandates for the EBA to develop draft regulatory technical standards ('RTS') to specify the conditions for assessing the materiality of extensions and changes of internal approaches when calculating own funds requirements for market risk.

### Background on the draft RTS

These draft regulatory technical standards complement the draft RTS on materiality of extensions and changes of internal approaches when calculating own funds requirements for credit and operational risk, published by the EBA on 5 December 2013<sup>1</sup>, which they amend by adding specific rules relating to extensions and changes of internal approaches when calculating own funds requirements for market risk.

As a result, these draft RTS follow the same approach regarding, firstly, the classification of the changes into different levels of materiality. 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 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 believes that it would be more efficient and less burdensome for institutions to collect information on these changes of minor importance and notify the competent authorities at regular intervals. This approach, which is already supervisory practice in several Member States, would reduce the supervisory burden on both the competent authorities and the institutions.

Secondly, these draft RTS follow the same approach as the RTS on the materiality of extensions and changes of internal approaches when calculating own funds requirements for credit and operational risk regarding the combination of qualitative criteria with quantitative back-stop limits, for the same reasons explained therein, i.e. that extensions and changes that fall under one of the 'qualitatively defined' categories of lesser materiality may still alter the own funds requirements in a considerable manner, which therefore needs to be quantified.

With the above considerations in mind, the core of the proposed draft RTS provides (in the annexes) lists of qualitative criteria for classifying extensions and changes to the internal models

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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.

for market risk in one of the following categories: material extensions and changes that require permission from the competent authorities, and extensions and changes of a lesser materiality, but still of a degree of materiality that requires notification to the competent authorities before implementation. Extensions and changes of an even lesser degree of materiality need only be notified to the competent authorities at regular intervals, following implementation.

The draft RTS also propose 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. Two types of thresholds are included: one threshold that relates to the effect of the extension or change on the overall own funds requirements for market risk before and after the planned extension or change, which the EBA has set to 5%, and one threshold that relates to the effect of the extension or change on each particular model, which the EBA has set to 10%, before and after the planned extension or change.

Following consultation on these draft RTS, the EBA decided to base the 5% threshold on a point-in-time approximation of an institution’s own funds requirements for market risk. As a result, the 60-business-day average and the preceding 12-week average do not need to be considered for the purposes of these RTS.

In addition to the above materiality thresholds, unlike in the case of credit and operational risk, the EBA decided, with the aim of reducing the computational burden that the calculation of these quantitative thresholds may cause in the context of quickly changing markets, and ensuring that the implementation of necessary non-material changes is not overly delayed, to:

- Include a threshold that exempts from the computation of the 5% and 10% thresholds of Article 7a(1)(c) extensions and changes that lead to a change, computed for the first business day of the testing of the impact of the extension or change, of less than 1% of each of the relevant IMA risk numbers. Instead, these changes may be considered non-material changes and should be notified after implementation on at least an annual basis unless they fall under any of the extensions and changes described in the new Annex III Part I, Section 2 or Part II, Section 2;
- Reduce the time window for the calculation of the thresholds from 60 to a maximum of 15 business days.

For changes with an impact on one day greater than 1%, institutions need to continue to compute the quantitative effects of the extensions and changes for 14 further days or until they meet either of the above materiality thresholds, whichever is earlier. If at the end of the 15 days neither of the above thresholds has been met, the extension or change is considered immaterial; if it falls under Annex III it will be subject to *ex-ante* notification, otherwise only to *ex-post* notification.

Furthermore, the draft RTS have reduced the list of qualitative conditions subject to *ex-ante* notification and have introduced a shorter pre-notification period of two weeks.

Finally, since these draft RTS constitute an amendment to Regulation (EU) No 529/2014 (RTS on model changes for credit risk and operational risk) published on 20 May 2014 in the Official Journal of the European Union, the relevant general provisions of that document, in particular in relation to documentation, also apply for market risk.

### 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 market risk under Article 363(4) of Regulation (EU) No 575/2013 (Capital Requirements Regulation — CRR)

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EUROPEAN COMMISSION

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

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

**of **XXX****

[...]

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

**of **XXX****

**COMMISSION DELEGATED REGULATION (EU) No .../...**  
**supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards for assessing the materiality of extensions and changes of internal approaches when calculating own funds requirements for market risk in accordance with Article 363(4) and amending Regulation (EU) No 529/2014 of 12 March 2014 of the European Commission**

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EU) No 575/2013 of 26 June 2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012<sup>2</sup> and in particular the third subparagraph of Article 363(4) in relation to point (a) thereof,

Whereas:

- (1) The provisions in this Regulation are closely linked with the provisions of Regulation (EU) No 529/2014, since they also refer to extensions and/or changes to internal approaches for own funds requirements and since relevant supervisory issues and procedures are similar for all types of internal approaches, i.e. relating to credit, operational or market risk. 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 to include all of the regulatory technical standards required by Regulation (EU) No 575/2013 on extensions and changes to internal models for credit, operational and market risk, in a single Regulation.
- (2) Similarly to Regulation (EU) No 529/2014, given that for changes that are subject to notification according to Regulation (EU) No 575/2013, there is no indication on whether the change should be notified before or after its implementation, and given that extensions or changes of minor importance need not be known to competent authorities in advance and it would 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, and it would also reduce the supervisory burden on the competent authorities, while also being prudent, given that the notification before implementation would allow competent authorities the possibility to review the correct application of this Regulation, extensions and changes requiring notification should be further distinguished into

<sup>2</sup>

OJ L 176, 27.06.2013, p. 1.

extensions and changes requiring notification before implementation and extensions and changes only requiring notification after implementation, also in the area of market risk.

- (3) The Internal Models Approach (IMA) comprises any internal model which competent authorities have granted permission to be used to calculate capital requirements, including the VaR for all the risk categories specified in Article 363(1) of Regulation (EU) No 575/2013, as well as market risk modelling approaches required or permitted additionally when approval for using VaR for the risk categories according to Article 363(1) of Regulation (EU) No 575/2013 is granted. These additional modelling approaches are: the calculation of the Stressed VaR according to Article 365(2) of Regulation (EU) No 575/2013; the internal Incremental Default and Migration Risk (IRC) model according to Section 4 of Title IV of Regulation (EU) No 575/2013 and the internal model for the calculation of own funds requirements for the correlation trading portfolio according to Article 377 of Regulation (EU) No 575/2013.
- (4) Materiality of extensions or changes in the models will 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 (which should be reflected in the quantitative criteria).
- (5) Quantitative thresholds should be designed to take into account the overall impact of an extension or change on the risk numbers computed by any internal model affected by the extension or change, as well as on the capital required based on both internal and standardised approaches, in order to reflect the extent to which internal approaches are used for the overall own funds requirements for market risk. However, in order to reduce the burden for institutions, it is appropriate, for the purposes of computing these quantitative thresholds, not to consider, when calculating each of the required risk numbers over the observation period of 15 business days, the average of relevant IMA risk numbers over the preceding 60 business days, but rather the most recent risk number.
- (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 of 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 should not affect supervisory internal model review approaches or administrative processes foreseen by Article 20(8) of Regulation (EU) No 575/2013.
- (7) 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, correction of errors or minor adjustments necessary for the day-to-day maintenance of the models, which occur in the strict limit of the already approved methods, processes, controls, data collection and IT systems, should not be covered by this Regulation.

- (8) Delegated Regulation (EU) No. 529/2014 should therefore be amended accordingly.
- (9) This Regulation is based on the draft regulatory technical standards submitted by the European Banking Authority to the Commission.
- (10) 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 of the European Parliament and of the Council<sup>3</sup>,

HAS ADOPTED THIS REGULATION:

*Article 1*

*Amendments to Regulation (EU) No 529/2014*

Regulation (EU) No 529/2014 is amended as follows:

1. Article 1 is replaced by the following:

‘This Regulation lays down the conditions for assessing the materiality of extensions and changes to the Internal Rating Based approaches, the Advanced Measurement Approaches and the Internal Models Approach permitted in accordance with Regulation (EU) No 575/2013, including the modalities of the notifications of such changes and extensions.’

2. Article 2(1) is replaced by the following:

‘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’) or of the extensions and changes for the Internal Models Approach (‘extensions and changes in the IMA’) shall be classified into one of the following categories:

- (a) material extensions and changes, which, according to Articles 143(3), and 312(2) and 363(3) 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.’

3. Article 3 is amended as follows:

- (a) In paragraph 1 a third subparagraph is added:

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<sup>3</sup> Regulation (EU) No 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/78/EC (OJ L 331, 15.12.2010, p. 12).

‘The classification of extensions and changes in the IMA shall be carried out in accordance with this Article and Articles 7a and 7b.’

(b) Point (c) of paragraph 2 is replaced by the following:

‘(c) for changes having no direct quantitative impact, such as organizational changes, internal process changes or risk management process changes, no quantitative impact as laid down in Article 4(1)(c) for IRB approach or Article 6(1)(c) for AMA or Article 7a(1)(c) for IMA needs to be calculated.’

4. The following Articles 7a and 7b are inserted:

‘Article 7a

**Material extensions and changes to the IMA**

1. Extensions and changes to the IMA shall be considered material, if they fulfil any of the following conditions:

(a) they fall under any of the extensions described in Annex III, Part I, Section 1;

(b) they fall under any changes described in Annex III, Part II, Section 1;

(c) they result in a change in absolute value of 1% or more, computed for the first business day of the testing of the impact of the extension or change, of one of the relevant risk numbers referred to in Article 364(1)(a)(i), or Article 364(1)(b)(i), or Article 364(2)(b)(i) or Article 364(3)(a) of Regulation (EU) 575/2013, and associated with the scope of application of the relevant IMA model to which the risk number refers, and result in either of the following:

(i) in a change of 5% or more of the sum of the risk numbers referred to in Article 364(1)(a)(i), Article 364(1)(b)(i), scaled up by the multiplication factors ( $m_c$ ) and ( $m_s$ ) respectively according to Article 366 of Regulation (EU) 575/2013, Article 364(2)(b)(i) and Article 364(3)(a) of Regulation (EU) 575/2013, and the own funds requirements according to Chapter 2, 3 and 4 of Title IV of that Regulation, as applicable, computed at the level of the EU parent institution or, in the case of an institution which is neither a parent institution nor a subsidiary, at the level of that institution;

(ii) in a change of 10% or more of one or more of the relevant risk numbers referred to in Article 364(1)(a)(i), or Article 364(1)(b)(i), or Article 364(2)(b)(i) or Article 364(3)(a) of Regulation (EU) 575/2013, and associated with the scope of application of the relevant IMA model to which the risk number refers.

2. For the purposes of paragraph (1)(c)(i), and in accordance with Article 3(2), the impact of any extension or change shall be assessed as the highest absolute value over the period referred to in paragraph 4 of a ratio calculated as follows:

(a) in numerator, the difference between the sum referred to in paragraph (1)(c)(i) with and without the extension or change;

- (b) in the denominator, the sum referred to in paragraph (1)(c)(i) without the extension or change.
3. For the purposes of paragraph (1)(c)(ii), and in accordance with Article 3(2), the impact of any extension or change shall be assessed as the highest absolute value over the period referred to in paragraph 4 of a ratio calculated as follows:
- (a) in the numerator, the difference between the risk number referred to in Article 364(1)(a)(i), Article 364(1)(b)(i), Article 364(2)(b)(i) or Article 364(3)(a) of Regulation (EU) 575/2013 with and without the extension or change;
  - (b) in the denominator, the risk number referred to, respectively, in Article 364(1)(a)(i), or Article 364(1)(b)(i), or Article 364(2)(b)(i) or Article 364(3)(a) without the extension or change.
4. For the purposes of paragraph (1)(c)(i) and (1)(c)(ii) the ratios referred to in paragraphs 2 and 3 shall be calculated for a period the duration of which is the shortest between (a) and (b):
- (a) 15 consecutive business days starting from the first business day of the testing of the impact of the extension or change;
  - (b) until such day where a daily calculation of either one of the ratios referred to in paragraphs 2 and 3 results in an impact equal or greater than the percentages referred to in either paragraph (1)(c)(i) or paragraph (1)(c)(ii), respectively.

#### Article 7b

#### **Extensions and changes to the IMA not considered material**

Extensions and changes to the IMA, which are not material but are to be notified to competent authorities according to Article 363(3), second subparagraph of Regulation (EU) No 575/2013, shall be notified in the following manner:

- (a) extensions and changes falling under Annex III, Part I, Section 2, and Part II, Section 2, shall be notified to competent authorities two weeks before their planned implementation;
  - (b) all other extensions and changes shall be notified to the competent authorities after implementation at least on an annual basis.’
5. Article 8(1) is replaced by the following:
- ‘1. For extensions and changes to the IRB approach, or to the AMA or to the IMA classified as requiring competent authorities' approval, institutions shall submit, together with the application, the following documentation:
- (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 competent bodies and date of approval;
  - (g) where applicable, the quantitative impact of the change or extension on the risk weighted exposure amounts, or on the own funds requirements, or on the relevant risk numbers or sum of relevant own funds requirements and risk numbers;
  - (h) records of the institution's current and previous version number of internal models which are subject to approval.'
6. The Annex to this Regulation is added as Annex III of Regulation (EU) No 529/2014.

*Article 2*

*Final provisions*

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]*

*‘ANNEX III*

**EXTENTIONS AND CHANGES TO THE IMA**

PART I

**EXTENSIONS TO THE IMA**

*SECTION 1*

**Extensions requiring competent authorities’ approval (‘material’)**

1. Extension of the market risk model to an additional location in another jurisdiction, including extending the market risk model to the positions of a desk located in a different time zone, or for which different front office or IT systems are used.
2. Integration in the scope of an IMA model of product classes, for which the VaR number, computed according to Article 364(1)(a)(i) of Regulation (EU) 575/2013, exceeds 5% of the VaR number, computed according to Article 364(1)(a)(i) of Regulation (EU) 575/2013, of the total portfolio forming the scope of that IMA model before the integration.
3. Any reverse extensions such as cases where the institutions aim at applying the standardized method to risk categories for which they are granted permission to use an internal market risk model.

*SECTION 2*

**Extensions requiring ex ante notification to competent authorities**

The inclusion in the scope of an IMA model of product classes requiring other risk modeling techniques than those forming part of the permission to use that IMA model, such as path-dependent products, or multi-underlying positions, according to Article 367 of Regulation (EU) No 575/2013.

## PART II

### CHANGES TO THE IMA

#### *SECTION 1*

#### **Changes requiring competent authorities' approval ('material')**

1. Changes between historical simulation, parametric or Monte Carlo VaR.
2. Changes in the aggregation scheme such as where a simple summation of risk numbers is replaced by integrated modelling.

#### *SECTION 2*

#### **Changes requiring ex ante notification to competent authorities**

1. Changes in the fundamentals of statistical methods according to Article 365, Article 374 or Article 377 of Regulation (EU) No 575/2013, including but not limited to any of the following:
  - (a) reduction in the number of simulations;
  - (b) introduction or removal of variance reduction methods;
  - (c) changes to the algorithms to generate the random numbers;
  - (d) changes in the statistical method to estimate volatilities or correlations between risk factors;
  - (e) changes in the assumptions about the joint distribution of risk factors.
2. Changes in the effective length of the historical observation period, including a change in a weighting scheme of the time series according to Article 365(1)(d) of Regulation (EU) No 575/2013.
3. Change in the approach for identifying the stressed period in order to calculate a Stressed VaR measure, according to Article 365(2) of Regulation (EU) No 575/2013.
4. Changes in the definition of market risk factors applied in the internal VaR model, including migration to an OIS discounting framework, a move between zero rates, par rates or swap rates.

5. Changes in how shifts in market risk factors are translated into changes of the portfolio value, such as changes in instrument valuation models - used to calculate sensitivities to risk factors or to re-value positions when calculating risk numbers -, changes from analytical to simulation-based pricing model, changes between Taylor-approximation and full revaluation, or changes in the sensitivity measures applied, according to Article 367 of Regulation (EU) No 575/2013.
  6. Changes in the methodology for defining proxies.
  7. Change in the hierarchy of sources of ratings used for determining the rating of an individual position in the IRC.
  8. Change in the methodology regarding the loss given default rate (LGD) or the liquidity horizons for IRC or correlation trading models according to Section 4 or Section 5 of Chapter 5 of Title IV of Regulation (EU) No 575/2013.
  9. Changes in the methodology used for assigning exposures to individual exposure classes in the IRC or correlation trading models according to Section 4 or Section 5 of Chapter 5 of Title IV of Regulation (EU) No 575/2013.
  10. Change of methods for estimating exposure or asset correlation for IRC or correlation trading models according to Section 4 or Section 5 of Chapter 5 of Title IV of Regulation (EU) No 575/2013.
  11. Changes in the methodology for calculating either actual or hypothetical profit and loss when used for back-testing purposes according to Article 366(3) and 369(2) of Regulation (EU) No 575/2013.
  12. Change in the internal validation methodology according to Article 369 of Regulation (EU) No 575/2013.
  13. Structural, organisational or operational changes to the core processes in risk management or risk controlling functions, according to Article 368(1) of Regulation (EU) No 575/2013 including any of the following:
    - (a) senior staff changes;
    - (b) the limit setting framework;
    - (c) the reporting framework;
    - (d) the stress testing methodology;
    - (e) the new product process;
    - (f) the internal model change policy.
  14. Changes in the IT environment, including any of the following:
-

- (a) changes to the IT system, which result in amendments in the calculation procedure of the internal model;
- (b) applying vendor pricing models;
- (c) outsourcing of central data collection functions.’

## 4. Accompanying documents

### 4.1 Illustration of the characterisation of extensions and changes

Figure 1 below illustrates the tests of materiality that need to be performed under these draft RTS to characterise extensions and changes to the IMA as material, and therefore requiring separate permission from the competent authority.

Where an extension or change falls under the extensions and changes described in Annex III Part I, Section 1 or Part II, Section 1, it is considered material regardless of its quantitative impact.

Where an extension or change results in a change, computed for the first business day of the testing of the impact of the extension or change, of less than 1% of each of the relevant IMA risk numbers, it is considered non-material, and therefore subject to notification as shown in Figure 2.

For extensions and changes with an impact on the first day greater than 1%, but less than 5% or 10% respectively, institutions will need to continue to compute the quantitative impact of the extensions and changes for 14 further days or until they meet the 5% or 10% materiality thresholds, whichever is earlier. If at the end of the 15 days neither of the two thresholds has been met, the extension or change is considered non-material, and therefore subject to notification as shown in Figure 2.

Figure 1.: Tests of materiality for the IMA

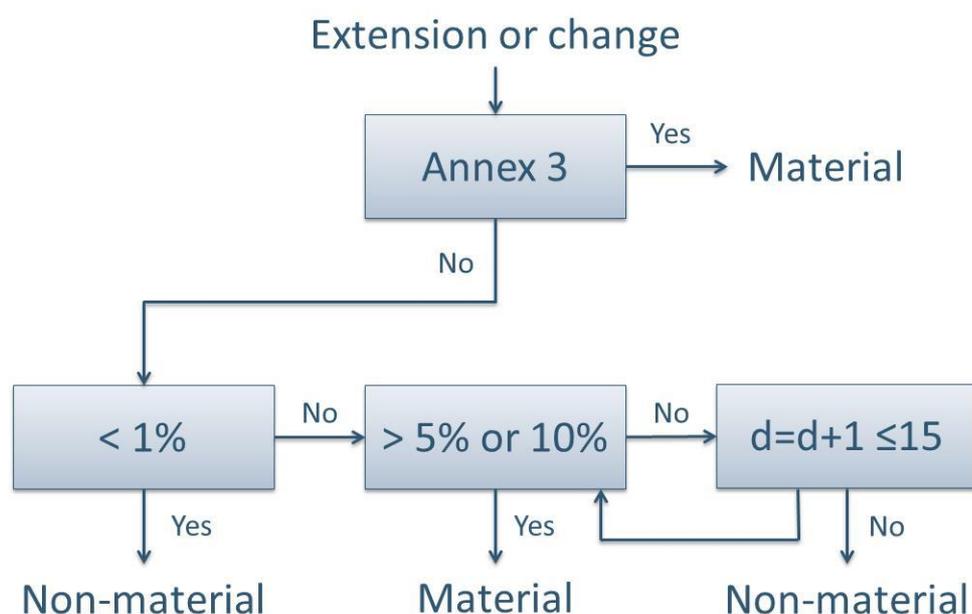
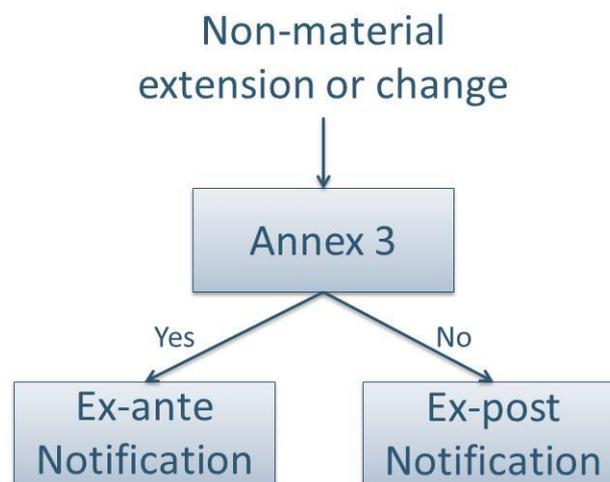


Figure 2 below shows how extensions and changes failing the materiality test should be notified to the competent authorities. Unless they fall under any of the extensions and changes described in Annex III Part I, Section 2 or Annex III Part II, Section 2, extensions and changes failing the materiality test should be notified after implementation at least on an annual basis.

Figure 2.: Notification of non-material extensions or changes



## 4.2 Cost- Benefit Analysis / Impact Assessment

### 4.2.1 Problem definition

As documented in the impact assessment accompanying the CRR, the objectives of own funds requirements are:

- ensuring that institutions have in place robust risk measurement and management systems against the risks arising from their activities (own funds requirements contribute to aligning the risk-taking incentives of institutions' shareholders with those of creditors and depositors); and
- ensuring that institutions are financially sound and are able to absorb unexpected losses in a going-concern situation.

Specifically, the use of internal approaches for calculating own funds requirements contributes to:

- computing own funds requirements of individual institutions that better reflect each institution's specific risk profile; and
- supporting institutions in improving their risk management.

To ensure that the CRR rules are complied with and that own funds requirements will therefore achieve their objectives, extensions and changes to internal approaches will be necessary whenever one or more of the following situations occur:

- A change in institution-specific business conditions, due to, for example, expansion into new business areas, mergers and acquisitions or changes to the organisational structure;
- A change in external market, technological or macro-economic conditions internal models may be required to cope with;
- Scientific developments in risk measurement and management systems and practices, with which internal models need to be updated; and
- Changes to the regulatory requirements framework that require, suggest or imply changes to internal models.

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

Institutions must ensure that internal approaches comply with the regulatory requirements at all times, including changes in internal or external conditions, and that all factors potentially affecting the reliability of internal approaches are effectively identified and addressed. Two sets of factors may affect the reliability of the internal approaches:

- The technical challenges that internal approaches are exposed to;
- The development of less conservative internal models led by the objective of minimising the cost of 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 for market risk that require (a) authorisation or (b) notification.

A supervisory treatment of extensions and changes to internal approaches that varies as a function of the impact of those extensions and changes ensures enhanced risk-sensitive supervision, 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 ‘*ex-ante*’ (before implementation) and ‘*ex-post*’ (after implementation) notifications of extensions and changes allows supervisory actions to be performed more promptly on extensions and changes that could potentially pose more severe risk management concerns.

Harmonisation is ensured by taking further steps towards a single market where the following regulatory objectives are met:

- Creation of level playing field conditions in relation to the management of internal approaches;
- Minimisation of regulatory arbitrage opportunities that provide incentives for using internal approaches that are usually less costly in terms of own funds requirements;
- Cost-efficiency and legal clarity of the supervision of cross-border institutions for both market participants (institutions) and supervisors.

The baseline is represented by current market and regulatory practices. The EBA circulated a questionnaire among the competent authorities requesting information on current supervisory practices relating to extensions and changes to internal approaches, and the expected costs and other qualitative impacts of the draft RTS.

A total of 17 competent authorities responded to the EBA questionnaire. Based on 2010 data on total assets within the single market, the banks in respondents’ jurisdictions cover approximately 90% of total assets in the EU.

Respondents highlighted heterogeneous supervisory practices across Member States.

Only half of respondents review internal models for market risk on a regular basis. The majority of respondents indicated that revision of market risk models is carried out less frequently than annually. Only four respondents said that they adjust the frequency of model revision based on institution-specific characteristics such as size, portfolio risk profile and overall satisfaction with the specific internal models.

Guidelines defining criteria for assessing the materiality of extensions and changes to internal approaches appear to be implemented by approximately two thirds of respondents for both credit and operational risk. As far as market risk is concerned, fewer than half of respondents report having implemented guidelines on materiality of extensions and changes to internal approaches. Although some jurisdictions have not implemented guidelines, policy requirements on model changes do exist and require institutions to adopt their own criteria. These internal policies typically have to be approved by the competent authorities.

Almost two thirds 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.

A total of two thirds of respondents also report that they require some form of documentation covering extensions and changes to internal approaches. These requirements exist even in jurisdictions that do not currently have any regulations or guidelines on materiality of extensions and changes to internal approaches.

Six jurisdictions implement backstop thresholds for identifying extensions and changes to internal approaches that are to be authorised and/or notified *ex-ante*. However, only three jurisdictions implement backstop thresholds for market risk.

The different approaches to the use of backstop thresholds for identifying material extensions and changes to internal approaches are summarised in Figure 1.

Figure 3.: 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 in the risk weighted assets (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

	Market risk: Threshold 1	10%	Change in the own funds requirement for market risk at portfolio level
	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 4	Market risk: Threshold 1 (material change to be authorised)	20%	Change in the own funds requirement for market risk compared to average value at risk (VaR) of last 60 days
	Market risk: Threshold 2 (significant change to be pre-notified)	10%	Change in the own funds requirement for market risk compared to average VaR of last 60 days
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
	Market risk: Threshold 1 (significant change)	>10%	Change in VAR output
	Market risk: Threshold 2 (material change)	>20%	Change in VAR output

#### 4.2.2 Technical options considered

Figure 4.: 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></p> <p>Specifying materiality criteria using a qualitative approach enables the competent authority to ensure that all relevant aspects relating 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 that materially affects an internal approach must undergo a supervisory assessment, even though it may 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></p> <p>Specifying materiality criteria using a qualitative approach means that discretion can be exercised by institutions when implementing extensions and changes to internal</p>

	<p>approaches, and by the competent authorities when evaluating the materiality of those extensions and changes on a case-by-case basis. Due to the high level of 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:	<p>The draft RTS propose both qualitative criteria and quantitative backstop thresholds for the assessment of the materiality of extensions and changes to internal approaches</p> <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 mean that extensions or changes that 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 therefore result in additional supervisory costs for the competent authorities. (As discussed 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	<p>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 based only 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.</p>

Figure 5.: Quantitative thresholds as backstop rule for the assessment of materiality of extensions and changes to internal approaches as regards market risk

<b>Proposed option:</b> Option 1	<ul style="list-style-type: none"> <li>- Change of 5% or more of the overall point-in-time own fund requirements for market risk;</li> <li>- Change of 10% or more of an IMA model calculation result associated with the scope of application of the specific model.</li> </ul>
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### Alternative options considered

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#### Option 2: Lower thresholds

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**Advantages:**

- Lower thresholds automatically lead institutions to submit to supervisory assessment extensions and changes to internal approaches more frequently.
- Lower thresholds widen the scope of materiality of extensions and changes to internal approaches and mean that there can be less fluctuation in 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.

**Disadvantages:**

- Lower thresholds are not consistent with their purpose as a backstop, since they should kick in only when it has not been possible to identify 'material' extensions and changes using the exhaustive list of qualitative criteria.
- Lower thresholds increase the expected supervisory assessment of extensions and changes to internal approaches, increasing the overall costs for competent authorities.
- Lower thresholds increase the probability that extensions or changes 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.
- Lower thresholds increase the likelihood that institutions will have to delay changes that may need to be implemented quickly, until they receive permission from competent authorities.

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#### Option 3: Higher thresholds

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**Advantages:**

- Higher thresholds reduce the expected supervisory assessment of extensions and changes to internal approaches, reducing the overall costs for competent authorities.
- 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.
- Higher thresholds are less likely to result in delayed implementation of necessary changes.

**Disadvantages:**

- Higher thresholds automatically lead institutions to submit to supervisory assessment extensions and changes to internal approaches less frequently, thus decreasing the burden linked with the assessment of extensions and changes.
  - Higher thresholds narrow the scope of materiality of extensions and changes to internal approaches and allow greater fluctuation of 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.
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### 4.2.3 Impact on markets and institutions

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 harmonise an EU regulatory framework that is currently heterogeneous, as described in the 'Baseline' section.

The objectives defined in the 'Problem definition and objectives of the RTS' section constitute the main benefits of the proposed draft RTS.

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 will balance out is very difficult, given that it is not possible to quantify the benefits and the cost savings stemming from those benefits, based on the data available.

Furthermore, some of the costs and benefits associated with the provisions introduced by the RTS would arise 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.

Nonetheless, the extent to which the costs and benefits would arise without the RTS can be neither estimated nor quantified.

Before publishing the draft RTS for stakeholder consultation, the EBA asked the 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:

- to determine how conservative the proposed qualitative criteria and quantitative thresholds in identifying material extensions and changes are compared to the current supervisory practices of competent authorities that responded to the questionnaire; and
- to obtain a tentative picture of the expected supervisory workload in the EU related to the authorisation of material extensions and changes.

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:

- 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 with the requirements relating to the use of internal approaches at all times. Institutions are therefore expected to already 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 two thirds 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;

- The costs for the competent authorities related to monitoring and processing pre/post-notifications resulting from the proposed draft RTS are expected to be of a lower order of magnitude than the costs of authorisation activities. For this reason, the analysis does not focus on the supervisory costs of notifications.

A total of 10 competent authorities<sup>4</sup> responded on the expected impact on the number of authorisations in the area of market risk. The results vary slightly depending on whether the qualitative or quantitative criteria are considered:

- Six out of 10 respondents (60%) do not expect the number of authorisations to change as a result of the proposed qualitative criteria;
- Of the remaining respondents, three competent authorities (30%) expect an increase in the number of authorisations and one competent authority (10%) expects a decrease in the number of authorisations.

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 to, on average, a decrease no larger than 5%.

The average impact should be read taking into account the following caveats:

- Not all competent authorities that reported increases or decreases in the number of authorisations were able to quantify the impact and these authorities are therefore not included in the overall figures;
- 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 to the authorisation of material extensions and changes, putting greater emphasis on the resources devoted to the processing of all applications rather than to the operations related to the completed authorisation processes;

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<sup>4</sup> Institutions operating in these jurisdictions hold almost 80% of total assets in the EU according to 2010 data.

- 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.

Discussions with the competent authorities and consultation of other stakeholders raised concerns about the estimation of the expected impact, 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 supervisors and the 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.

The EBA acknowledges that the costs linked to the implementation of the rules proposed may be greater than implied by the estimates presented above. 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 following the official consultation of stakeholders led to a series of amendments to address the specific concerns raised by institutions and supervisors about the operational burdens, as follows:

- 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;
- Removal of the operational burden to calculate the aggregate impact of minor (non-material) individual subsequent changes;
- Reduction in the documentation requirements, highlighted 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;
- Clarification of the scope of models covered under the IMA (in particular, removal of CVA advanced method);
- Reduction in the list of qualitative criteria for the IMA;
- Introduction of an additional materiality threshold based on the computation of a 1-day impact;

- Reduction of the time window for the calculation of the thresholds from 60 to a maximum of 15 business days;
- Reduction of the pre-notification period from one month to two weeks.

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

This section sets out the BSG's comments on the draft 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 CRR.

### 4.3.1 General comments

Overall, the number of approval requests is expected to increase. The requirement to calculate the impact of the model extension and change on own fund requirements is particularly criticised. It is considered particularly burdensome for market risk.

Specific comments are made on the quantitative criteria, the lack of clarity on how to deal with a supervisor's recommendations or requests, and the fact that the qualitative list is too general and the level of categorisation of extensions and changes is not always very pragmatic. The issue of the lack of information concerning supervisors' duties (response time, and cooperation between home and host supervisors) is also raised.

### 4.3.2 Comments on specific consultation questions on the IMA part

**Question 9:** The provisions are clear.

**Question 10:** A threshold of 10% change in the model calculation result seems quite low. The majority of model extensions and changes are expected to trigger this threshold and, therefore, to qualify as material. This would burden both supervisors and institutions. It is therefore suggested that there should not be a threshold per IMA model. Instead, only the threshold in terms of overall capital requirements for market risk should be kept, and this threshold should be increased from 5% to 10%.

**Question 11:** The one-month period for *ex-ante* notification seems long; it unduly slows the development of model improvements and the correction of errors. Therefore, all non-material extensions and changes should be subject to *ex-post* notification.

**Question 12:** A 60-day observation period will result in unnecessary delays in the implementation of changes. Furthermore, it is unnecessarily burdensome for smaller changes resulting in insignificant changes in capital. Therefore, the proposal is not supported and a much shorter period is suggested.

**Question 13:** Whereas an assessment based on 12 weekly observations is in line with the 60-day observation period, it would hamper institutions' ability to implement risk management initiatives in a timely manner.

**Question 14:** There should be only one category of immaterial changes, which should be notified *ex-post* only.

## 4.4 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. The EBA received 23 responses, of which 20 were published on the EBA website.

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

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

Changes to the draft RTS have been incorporated as a result of the responses received during the public consultation. 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 the reference is to these draft RTS.

### 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) Most respondents believe that the number of approvals will increase significantly once the RTS come into force and that extensions or changes requesting *ex-ante* notification will impose an excessive burden on both supervisors and institutions.
- (2) Some respondents requested clarification of home-host cooperation in the implementation of these RTS, in particular in the context of the joint decision process required for material extensions and changes. They consider that clarification of the supervisory response to *ex-ante* notifications or requests for approval is required in order to avoid undue delays to the effective implementation of model extensions and changes.
- (3) Some respondents request clarification of the scope of the models covered by the draft RTS, in particular whether the Internal Model Method (IMM) is covered by these draft RTS.
- (4) Some respondents consider that, instead of referring to 'overall own funds requirements for market risk', which would require the computation of the regulatory 60-day average for IMA models, the 5% threshold should be based on a point-in-time approximation of the institution's own funds requirements for market risk.

(5) Some respondents find 5% or 10% too low, potentially resulting in an excessive supervisory burden and a backlog of model improvements, and suggest increasing these figures; other respondents however agree with the proposed figures.

(6) A great majority of respondents consider a one month pre-notification period and a 60-day testing period too long and believe that periods of this length would unduly delay the development of IMA models.

These issues are addressed in detail in the summary of responses to the consultation and the EBA's analysis below. However, with respect to the above-mentioned points:

(1) The EBA has reduced the list of qualitative conditions subject to approval or *ex-ante* notification in Annex III, introduced a non-materiality threshold based on the computation of a one-day impact, clarified that the regulatory average of relevant IMA risk numbers over the preceding 60 business days does not have to be taken into account when computing the quantitative ratios, reduced the time window for the parallel calculation of the thresholds from 60 business days to a maximum of 15 business days and reduced the pre-notification period from one month to two weeks.

(2) While acknowledging that the cooperation between the competent authorities will be vital to ensuring a smooth implementation of these RTS, the EBA notes that this issue is beyond the scope of the mandate for these draft RTS.

(3) The EBA clarifies that, for a given institution, the scope of application of these RTS consists of all internal models ('IMA') of Chapter 5 of Title IV CRR, which this institution has been granted permission to use for the calculation of own funds requirements for market risk. As referred to in Recital 4 of these RTS, the regulatory risk measures in the scope of these RTS are, therefore, the VaR, the Stressed VaR, the Incremental Risk Charge (IRC) and the internal model for the calculation of own funds requirements for the correlation trading portfolio. The reference to the Credit Valuation Adjustment (CVA) advanced method was removed; therefore, the CVA advanced method is not directly part of the scope of application of these RTS. In the absence of a legal mandate to issue draft RTS on model extensions and changes for the IMM, the EBA may consider drafting guidelines in this respect in due course.

(4) The EBA agrees to base the different quantitative assessments on point-in-time risk measures: 'previous day's value-at-risk number' for the VaR, 'latest available stressed-value-at-risk number' for the Stressed VaR, 'most recent risk number' for IRC and for the internal model for correlation trading. As a result, the 60 business day average and the preceding 12-week average do not need to be considered for the purposes of these RTS.

(5) The EBA considers that 5% of overall 'point-in-time' own funds requirements for market risk and 10% of the 'point-in-time' own funds requirement computed using the internal model constitute appropriate levels and has therefore maintained these thresholds.

(6) The EBA has reduced the time window for the parallel calculation of the thresholds from 60 business days to a maximum of 15 business days and the pre-notification period from one month to two weeks.

## 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>			
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 363(3) CRR, institutions must 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 of 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 that simply notification after implementation is preferable. The inclusion of rules for <i>ex-ante</i> and <i>ex-post</i> 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 <i>ex-ante</i> notification was introduced to keep the set of material model extensions and changes as small as possible. This gives the competent authorities a chance to react before implementation, which is also in the institutions' interests. Rules for notification also harmonise notification principles and are therefore in the interests of the banking industry. Finally, the EBA has reduced the list of qualitative conditions subject to <i>ex-ante</i> notification to limit the potential burden on	Reductions in the list of qualitative conditions subject to notification before implementation.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
Home-host issues	<p>Some respondents acknowledge that the scope of the draft technical standards does not include home/host relationships. However, they emphasise the significance that this may have for institutions with operations outside the EU. Respondents encourage the EBA to initiate a dialogue with non-European supervisors on this issue.</p> <p>Some respondents request clarification of home-host cooperation in the context of extensions and changes on sub-group level that require permission and notification. They do not see a need for involving multiple national supervisors in the approval of an extension or change at the sub-group level.</p>	<p>institutions.</p> <p>The EBA takes note of these comments. The need for clarification or for additional details for dialogue with non-European supervisors on this issue will be assessed thoroughly.</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 the draft ITS on the joint decision process as per Article 20(8) CRR.</p>	No change.
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 clearly state that the 'EBA shall develop draft RTS to specify the conditions for assessing the materiality ...', and therefore the exhaustive list of conditions is proposed.</p>	No change.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
Flexibility of rules for material extensions and changes	Some respondents request that, for material extensions and changes, supervisors should be able to decide on a case-by-case basis whether formal approval is necessary.	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).	No change.
Decision period for material extensions and changes	<p>Some respondents ask about the length of the joint decision process for material extensions and changes.</p> <p>Some respondents ask whether an extension or change can be implemented in the interim for the calculation of regulatory capital and economic capital.</p>	<p>The EBA notes that this question is beyond the scope of these RTS. Under Article 20(2) CRR, a joint decision must be reached by the competent authorities within six months.</p> <p>A material extension or change can only be implemented for regulatory capital after permission is granted. The calculation of economic capital is not addressed by these draft RTS.</p>	No change.
Notifications before implementation: feedback from competent authorities	Some respondents ask for clarification of the procedures in case a competent authority does not respond before implementation, and whether an institution should take 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 of timing for extensions and changes that can be	The time period between two <i>ex-post</i> notifications should not exceed 12 months.	No change.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	<p>notified after implementation ‘at least on an annual basis’.</p>		
<p>Quantitative threshold</p>	<p>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.</p> <p>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 ‘<i>ex-ante</i> notification’ qualitative criteria is conservative enough to cover all the changes that might trigger a ‘backstop threshold’ check.</p> <p>Some respondents believe that the methodology used for market risk should be aligned with the proposed methodology for credit and operational risk, i.e. the quantitative threshold for market risk should</p>	<p>The EBA notes that to identify a material change, calculation of the quantitative threshold is not necessary if one of the qualitative criteria listed in the relevant Section of Annex III is applicable.</p> <p>The rationale for a quantitative backstop is that, irrespective of any qualitative criteria, extensions and changes with a huge impact on capital must be classified as material.</p> <p>In market risk, an increase in capital for a portfolio can become a decrease for a different portfolio, and portfolios may change quickly. It is for this reason that a change in capital, rather than a decrease only, is considered.</p>	<p>No change.</p>

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	only consider a decrease in capital.		
Adoption of the RTS	Some respondents encourage communication with the 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 the competent authorities should establish service level standards for responding to model extension notifications and applications. They stressed that responses from the competent authorities are critical for planning implementation time frames.	The EBA takes note of this issue; however, the communication process between the 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. Requests from institutions to regulators will support a move towards harmonisation across Europe, but it is not clear whether this will be the case for the answers from the regulators.	The rules of these draft RTS are applicable regardless of the banking union and are directed at institutions.	No change.
Bundling of changes subject	Some respondents ask whether changes that would require <i>ex-ante</i> notification at regular	Every single change defined in Annex III Part II Section 2 triggers an <i>ex-ante</i> notification.	No change.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
to <i>ex-ante</i> notification	intervals can be bundled to reduce the workload for both institutions and supervisors without being detrimental to an adequate degree of control.	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 role for independent review teams	Some respondents stress that the role of independent review teams, which has long been a characteristic of institutions' governance of models, is not mentioned in the draft RTS. They also suggest that the draft RTS should rely more on internal validation evaluations.	Assessment by an independent review team or a validation is required for material model extensions and changes. The EBA expects these validation assessments to be the main source for the competent authorities when investigating whether the minimum requirements have been met.	No change.
Increase in approvals may delay the improvement of models	<p>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.</p> <p>Some respondents emphasise that the RTS will inevitably require a higher assessment capacity from regulators and that supervisors will need to provide timely answers to proposals for changes, as the market environment is changing rapidly and as the frequency of model changes is tied to market</p>	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.

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	<p>events, changes in product and trading strategies, and market data quality. Otherwise, according to one respondent, a long delay in implementation could result in a material reduction in the quality of the internal models and inappropriate capital charges.</p>		
<p>Exception for changes imposed by the competent authorities</p>	<p>Some respondents request that changes that have been imposed by the competent authorities should not be subject to approval or notification.</p>	<p>The EBA is of the opinion that the materiality of changes imposed by the competent authorities (e.g. new regulations, guidelines, recommendations, specific terms and conditions, etc.) should be assessed on the basis of these draft RTS.</p>	<p>No change.</p>
<p>Exception for changes in accounting standards</p>	<p>One respondent says that changes in accounting standards leading to model changes should not be subject to approval or notification.</p>	<p>The EBA is of the opinion that the materiality of changes, regardless of whether they are driven by changes in the accounting standards, should be assessed on the basis of these draft RTS. There is no reason to treat changes stemming from accounting standards differently.</p>	<p>No change.</p>
<p>Exceptions for changes in the validation process</p>	<p>One respondent suggests that if a 'material' model change has been subject to a 'second-level' validation process, it should be considered an '<i>ex-ante</i> notification' change.</p>	<p>The presence of a group's internal 'second-level' validation process is no reason for an exemption from these draft RTS.</p>	<p>No change.</p>

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	The draft RTS should therefore support the role of the central validation functions, if they are set up with different levels/roles inside the banking group.		
Decision process	One respondent expresses the view that the draft RTS do not provide clear guidelines on the decision-making process leading to 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.
Annex 3, Part I, Title I - Material extensions – Point (2)	One respondent suggests removing Point (2) referring to an ‘extension to a location’ since it is a normal part of a model’s roll-out.	While the EBA agrees that extensions to additional legal entities or to additional risk categories are already captured under the CRR, - and have therefore been removed -, the EBA is of the opinion that extensions to an additional location, such as the opening of a new desk in another jurisdiction, should be considered material. The EBA has therefore clarified the requirement.	New Point (1) is introduced in Part I, Section 1 - Material extensions.
Annex 3, Part I, Title I - Material extensions – Point (3)	Two respondents believe that the integration of a portfolio (such as in the case of portfolio acquisitions or corporate takeovers) should be seen as material only if the thresholds are	The EBA acknowledges the industry’s concerns and has introduced a new threshold for assessing the materiality of the integration in the scope of the IMA of new product classes. Permission is now required for material	Amendment to new Point (2) in Part I, Section 1 - Material

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	broken.	portfolios (5% of stand-alone VaR).	extensions.
Annex 3, Part I, Title I - Material extensions – Point (5)	One respondent suggests removing Point (5), since it is assumed that a reverse extension to the standardised approach for market risk will deliver a more conservative own funds requirement.	The EBA is of the opinion that a reverse extension to the standardised approach could, for certain risk categories, and the specific risk of debt instruments in particular, lead to a less conservative outcome. The EBA has therefore maintained this requirement.	No change.
Annex 3, Part I, Title II – Extensions requiring <i>ex-ante</i> notification – Point (1)	<p>One respondent believes that this requirement should apply only to institutions that are not involved in exotic options, for which different models and new modelling techniques are often required.</p> <p>This respondent also points out that the reference to Article 356 is not clear and that no impact can usually be given for new products. Alternatively, the respondent suggests that institutions should provide an annual overview of new products.</p>	The EBA clarifies that this requirement refers to the case of the inclusion in an IMA model of broad product classes, which would require new modelling techniques compared to those forming part of the permission to use the IMA model. It does not refer to the use of different modelling techniques within a product class that is already part of the permission to use the IMM.	Amendment to Point (1) in Part I, Section 2 – Extensions requiring <i>ex-ante</i> notification.
Annex 3, Part I, Title II – Extensions requiring <i>ex-ante</i> notification – Point (2)	Two respondents believe that, whereas monitoring of the use of proxies is deemed relevant, <i>ex-ante</i> notification should only be required if the number of proxies exceeds a	The EBA acknowledges the industry's concerns. The requirement has been removed.	Removal of old Point (2) of Part I, Section 2 – Extensions

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	<p>certain threshold (for example 5%). This is to avoid the need for <i>ex-ante</i> notifications to be made on a daily basis. Alternatively, this issue could be addressed by increasing the frequency of post notification.</p>		<p>requiring <i>ex-ante</i> notification.</p>
<p>Annex 3, Part II, Title I – Material changes</p>	<p>Many respondents believe that the provisions in this Title should be more clearly and more exhaustively defined, in particular considering that these model changes would trigger an approval.</p>	<p>Further to the comments received, the EBA moved most of the requirements that were in Section 1 ('material') to Section 2 ('ex-ante notification').</p>	<p>Amendments made throughout the Annex.</p>
<p>Annex 3, Part II, Title I – Material changes – Point (1)</p>	<p>One respondent believes that this requirement is too broadly defined and cannot encompass all additional sensitivity measures. Another respondent wonders why, since a move from Taylor approximation to full revaluation is an improvement, this should be subject to approval, and suggests requiring <i>ex-ante</i> notification only.</p> <p>Another respondent requests clarification of the nature of the changes covered by this provision and believes that Point (3) can only refer to risk models and not to valuation models; otherwise, this would result in</p>	<p>The EBA agrees with some of the concerns raised by the industry and decided to clarify this requirement and move it to Section 2 ('<i>ex-ante</i> notification').</p> <p>The EBA clarifies that this requirement applies only to instrument valuation models used to calculate sensitivities or to re-value positions, when computing risk numbers for prudential purposes. These draft RTS do not apply to valuation models used for accounting purposes.</p>	<p>Amendment to new Point (5) of Part II, Section 2 of the Annex.</p>

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	considerable interference with banks' corporate decisions.		
Annex 3, Part II, Title I – Material changes – Point (2)	Two respondents consider that the aggregation scheme that is referred to in this provision should be clarified. Does this refer to the type of aggregation for consolidation purposes?	The EBA clarifies that this requirement refers to how separate calculations, e.g. of general and specific risk or of linear vs. non-linear risk profiles, are aggregated for own funds requirement calculations, including a move from adding up components to an integrated calculation across categories referred to in Article 363(1)	No change.
Annex 3, Part II, Title I – Material changes – Point (3)	Some respondents request clarification on the objective of this provision, in particular as to what is meant by 'beyond those necessary'. As all relevant risk factors are required to be modelled, this point is unclear and seems to be obsolete.	The EBA agrees with the industry's concerns and has removed this requirement.	Deleted.
Annex 3, Part II, Title I – Material changes – Point (4)	Some respondents believe that changes to external data sources should not be considered material. They explain that data sources may be changed due to a discontinuity in data availability from an external provider and that approval cannot be requested every time a new feed into the	The EBA agrees with the industry's concerns and has removed this requirement.	Deleted.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	<p>calculation engine is changed.</p> <p>One respondent suggests introducing an additional threshold. A change would be considered material only if the expected variation in own funds requirements would exceed for example 5%. According to this respondent, not having this kind of threshold could be problematic, in particular for front office systems. Based on this additional threshold, minor IT changes would not be treated as material, and would only require notification before implementation.</p>		
Annex 3, Part II, Title I – Material changes – Point (5)	Some respondents believe that the requirement is unclear and should be clarified.	The EBA removed this requirement.	Deleted.
Annex 3, Part II, Title I – Material changes – Point (7)	One respondent states that the term ‘assumptions’ is unclear.	The EBA deleted the reference to the advanced CVA approach, clarified the requirement and moved it to Section 2 ( <i>‘ex-ante notification’</i> ).	Amendment to new Point (8) of Part II, Section 2 of the Annex.
Annex 3, Part II, Title I – Material changes – Point (8)	<p>One respondent states that Point 8 should be the only point to be maintained in this Title.</p> <p>Another respondent believes that existing CRR</p>	The EBA clarifies that this requirement refers to changes in the approach for identifying the stressed period, such as a methodological change in the judgement-based or formulaic	Moved to new Point (3) of Part II, Section 2 of the Annex.

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	<p>requirements make this point redundant.</p>	<p>approach used, or such as moving from a judgement-based approach to a formulaic approach (and vice versa), rather than to changes of the stressed period itself. The requirement is moved to Section 2 (<i>ex-ante</i> notification).</p>	
<p>Annex 3, Part II, Title II – Changes requiring <i>ex-ante</i> notification – Point (2)</p>	<p>One respondent states that this requirement is appropriate only if applied to a broad range of products. Usually, small improvements are carried out many times a year and <i>ex-ante</i> notification would, therefore, not be manageable.</p> <p>Another respondent requests clarification as to whether this provision implies that pricing models are in the scope of these RTS.</p>	<p>The EBA does not agree and has maintained the requirement.</p> <p>The EBA clarifies that these RTS apply only to instrument valuation models used for computing risk numbers for prudential purposes. These draft RTS do not apply to valuation models used for accounting purposes.</p>	<p>Moved to new Point (5) of Part II, Section 2 of the Annex.</p>
<p>Annex 3, Part II, Title II – Changes requiring <i>ex-ante</i> notification – Point (3)</p>	<p>Two respondents do not agree with the proposal to classify a change in grid points on an interest curve or an extension of an implied volatility surface as a change requiring <i>ex-ante</i> notification. This suggestion could lead to unnecessary inflexibility when it comes to adapting to new market standards, and changes on evolving markets.</p>	<p>The EBA agrees with the industry’s concerns and has removed the references to a change in grid points on an interest rate curve and to the extension of an implied volatility surface.</p>	<p>Amendment to new Point (4) of Part II, Section 2 of the Annex.</p>

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Annex 3, Part II, Title II – Changes requiring <i>ex-ante</i> notification – Point (5)	<p>Some respondents note that changes to pricing models occur frequently (and rightfully so), as banks are required to adapt valuation models to market practices. As a result, only system-wide changes should require <i>ex-ante</i> notification. The continuous improvement of individual models should not.</p> <p>Another respondent emphasises that only pricing models used for VaR purposes should be subject to these RTS and only wide changes subject to <i>ex-ante</i> notification.</p>	The EBA confirms that these RTS apply only to instrument valuation models used for computing risk numbers for prudential purposes. These draft RTS do not apply to valuation models used for accounting purposes.	Moved to new Point (5) of Part II, Section 2 of the Annex.
Annex 3, Part II, Title II – Changes requiring <i>ex-ante</i> notification – Point (7)	Some respondents request confirmation that this provision refers to a change in the proxy methodology and not to individual choices of proxy. Requiring each individual change in proxy to be pre-notified would not work in practice.	The EBA confirms that this provision refers to a change in the proxy methodology and has clarified the requirement.	Amendment to new Point (6) of Part II, Section 2 of the Annex.
Annex 3, Part II, Title II – Changes requiring <i>ex-ante</i> notification – Point (8)	One respondent claims that some competent authorities are pushing firms towards a dynamic calculation of the stressed VaR, which is considered by this respondent to be incompatible with the proposed RTS, in	The EBA confirms that either a judgement-based or a formulaic approach can be used for the identification of the stressed period and decided to remove the requirement.	Deleted.

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	<p>particular with regard to the one-month pre-notification period. The respondent asks whether this requirement means that institutions are no longer required to implement a dynamic approach to stressed VaR.</p>		
<p>Annex 3, Part II, Title II – Changes requiring <i>ex-ante</i> notification – Point (10)</p>	<p>Some respondents request confirmation that this provision refers to a change in the proxy methodology and not to individual choices of proxy.</p>	<p>The EBA has removed the requirement.</p>	<p>Deleted.</p>
<p>Annex 3, Part II, Title II – Changes requiring <i>ex-ante</i> notification – Point (16)</p>	<p>Some respondents claim that requiring pre-notification of valuation methodology changes for balance sheet purposes is a significant addition to regulatory requirements that is not justified by the purpose of these RTS. Process-wise this would inhibit financing processes for accounting purposes and would involve the competent authorities in the micro-management of trading activities. These respondents urge the EBA to work with the industry to determine how the EBA’s aims can be achieved without going beyond its remit.</p> <p>One respondent in particular points out that</p>	<p>The EBA confirms that these RTS apply only to instrument valuation models used for computing risk numbers for prudential purposes. These draft RTS do not apply to valuation models used for accounting purposes.</p>	<p>Deleted.</p>

**Comments****Summary of responses received****EBA analysis****Amendments to the proposals**

there is a lack of clarity about exactly what would trigger a notification event and asks whether this would only include one-off changes to valuation methodologies (e.g. migration to an Overnight Index Swap (OIS) discounting framework, implementation of a Funding Valuation Adjustment (FVA) on uncollateralised positions) which can be considered as 'significant events' or whether each and every change to a methodology would need to be notified. According to this respondent, the latter aspect would a) be difficult to capture exhaustively b) overly onerous to collate across multiple business areas and c) create delays in having to pre-notify. It is not fully clear whether pre-notification automatically leads to acceptance of new methodology or whether it would be challenged.

In addition, while a quantitative level for materiality is discussed in terms of % of RWA, the wording of point 16 suggests that impacts on economic/clean profit and loss (P&L) would be subject to *ex-ante* notification, and therefore a better metric may be to look at

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	<p>the P&amp;L impact in setting materiality. Ideally, only major issues would have to be notified to the regulator but, for example, if a controller changes a bid offer methodology that creates a small P&amp;L impact, would the regulator really require notification? There is a risk of more important changes getting lost in a morass of insignificant updates.</p>		
<p>Annex 3, Part II, Title II – Changes requiring <i>ex-ante</i> notification – Point (17)</p>	<p>Many respondents state that Point 17 should be redrafted so as to require <i>ex-ante</i> notification for a restricted set of changes only.</p> <p>Respondents point out that, while the departure of a senior manager may have some bearing on an overall department and may warrant notification to the regulator, there is limited value, if any, in notifying regulators of junior staff changes.</p> <p>(b) ‘changes to the limit setting framework’. Respondents request confirmation that this provision does not refer to any change in limit but rather whether the governance on limit setting has materially altered.</p>	<p>The EBA agrees with some of the industry’s concerns and has clarified the requirement.</p> <p>The draft RTS now refer to senior staff changes only.</p> <p>The EBA confirms that this provision refers to changes in the limit setting framework, rather than changes in limits.</p> <p>The EBA agrees with the industry’s concerns. The draft RTS now refer to the ‘stress testing methodology’.</p> <p>This requirement was removed.</p>	<p>Amendments to new Point (13) of Part II, Section 2 of the Annex.</p>

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	<p>(d) ‘stress testing changes’. Respondents request confirmation that this provision means a change in the governance such as review and signoff, or a change in operations such as moving from Greeks to full revaluation and not changes in the definitions of individual stresses, other than significant changes in the approach to calibration affecting at least one asset class.</p> <p>(f) ‘internal organisation and staff changes’. Respondents request clarification that this provision does not apply to individual staff moves, but does apply to re-organisations such as moving sub-departments in/out of a market risk management function. For example, it would not be practical to avoid filling a vacant position until the notification period ended.</p>		
Annex 3, Part II, Title II – Changes requiring <i>ex-ante</i> notification – Point (18)	According to one respondent, the concept of ‘significant product groups’ is not well defined. More guidance would be needed on what is referred to here and whether it covers geographic locations. According to this respondent, the migration of positions across	The EBA agrees with the industry’s concern and decided to remove this requirement.	Deleted.

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	<p>systems may clearly be of interest to a regulator but there would need to be some metric to assess what constitutes significant (e.g. number of trades &gt; 'X', '€Ym' pv of trades migrating from A to B, risk levels e.g. PV01 &gt; 'Z').</p>		
<p>Annex 3, Part II, Title II – Changes requiring <i>ex-ante</i> notification – Point (19)</p>	<p>Some respondents believe that this requirement is unrealistic and that only broad changes in IT should be captured. Changing the market data provider for one curve does not necessarily lead to a significant change in risk figures and if the data quality is significantly better, this should not be delayed solely for notification purposes. Sometimes a change is required because a vendor stops quoting, which should not lead to temporarily suspension of reporting of risk figures.</p> <p>(b) 'Outsourcing of central data collection functions'. One respondent requests clarification of what is meant by data collection functions.</p> <p>(c) 'Change of the market data provider for input data for the risk model'. According to one respondent, feeds are changed relatively</p>	<p>The EBA agrees with the industry's concerns and removed the requirement relating to changes of market data provider.</p>	<p>Amendment to new Point (15) of Part II, Section 2 of the Annex.</p>

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	<p>frequently, which implies significant micro management and is incompatible with the aim of the RTS towards assessing materiality.</p> <p>(d) 'Opening or closing down of trading locations'. Some respondents do not agree with changes in trading locations being subject to pre-notification. In particular, the closing down of trading locations should not require <i>ex-ante</i> notification as there will be no risks remaining.</p>		
<p><b>Responses to questions in Consultation Paper EBA/CP/2013/02 (only feedback to questions on IMA is included here)</b></p>			
<p><b>Question 9.: Are the provisions included in this draft RTS on the calculation of the quantitative threshold for the IMA sufficiently clear? Are there aspects which need to be elaborated further?</b></p>	<p>Most respondents consider the requirements to be clear overall. However, many respondents state that the scope of application of Article 7 Paragraph (c) is not sufficiently clearly defined and should be clarified. Some respondents request clarification as to the treatment of banking groups and their subsidiaries. Among these, one respondent expresses its preference for having a single model at group level accompanied by a single significant change procedure.</p>	<p>The EBA clarifies that, for a given institution, the scope of application of these RTS consists of all internal models ('<i>IMA</i>') of Chapter 5 ('<i>Use of internal models to calculate own funds requirement</i>') of CRR Title IV ('<i>Own funds requirements for market risk</i>'), which this institution has been granted permission to use for the calculation of own funds requirements for market risk. As referred to in Recital 3 of these RTS, the regulatory risk measures in the scope of these RTS are, therefore, the VaR, the Stressed VaR, the IRC and the internal model for</p>	<p>Amendments made throughout RTS.</p>

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	<p>Two respondents state that the scope of application should be the scope of application of a risk measure (not split by desk).</p> <p>Other respondents state that the proposed RTS do not provide a clear definition of the scope of application and that, instead of referring to ‘overall own funds requirements for market risk’, the thresholds should be based on the point-in-time capital measure (VaR, Stressed VaR, IRC or CRM with multipliers, but without consideration of the 60 day average). Otherwise, this would mean a use test of 120 days before application and taking into account a notification period of one month before implementation, meaning a use test of up to 150 days.</p> <p>One respondent believes that, in this quantitative assessment, greater emphasis should be placed on the stressed conditions impact of a model change.</p> <p>Another respondent claims that it is not sufficiently clear whether it is possible to bundle changes and calculate a total impact. Otherwise, the complexity would make it</p>	<p>the calculation of own funds requirements for the correlation trading portfolio. The reference to the CVA advanced method was removed; the CVA advanced method is therefore not directly part of the scope of application of these RTS.</p> <p>The EBA confirms that, for each IMA, the scope of application is the scope of application of the regulatory risk measure, for which an institution has been granted permission to use this IMA (not split by desk).</p> <p>The EBA acknowledges the relevance of the concerns raised by the industry and has decided to base the different quantitative assessments on point-in-time risk measures:</p> <p><i>‘previous day’s value-at-risk number’</i> for the VaR in accordance with Article 364(1)(a)(i);</p> <p><i>‘latest available stressed-value-at-risk number’</i> for the Stressed VaR in accordance with Article 364 (1)(b)(i);</p> <p><i>‘most recent risk number’</i> for IRC in accordance with Article 364(2)(b)(i);</p> <p><i>‘most recent risk number’</i> for the internal model</p>	

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	<p>unworkable. For example, if the VaR model for specific risk includes a risk factor for each international security identification number, new risk factors could be implemented daily on an on-going basis.</p> <p>Other respondents claim that the interaction between home and host regulators should be clarified, in particular when the host is not in Europe, but also as regards timeline.</p> <p>For extensions or changes that will be considered as material and will as a result require new permission from competent authorities, the delay will, in fact, be much longer than the three month observation period. The proposal does not set the competent authorities a deadline for granting or refusing authorisation. In the case of multiple authorisations requested (home/host), the situation is even less clear. The result for institutions will be uncertainty over the potential application date of their proposed extensions or changes, as well as prolonged delays. The competent authorities – home and host – have up to six months to produce a joint decision. This delay would</p>	<p>for correlation trading in accordance with Article 364(3)(a).</p> <p>As a result, the 60 business day average and the preceding 12 week average do not need to be considered for the purposes of these RTS.</p> <p>The impact in terms of overall own funds requirements for market risk ('point-in-time') in accordance with Article 7a(1)(c)(i) should be computed by adding:</p> <ul style="list-style-type: none"> <li>- the own funds requirement in accordance with Chapters 2, 3 and 4, where relevant ('<i>standardised approach</i>') (including the own funds requirement in accordance with Article 364(2)(a))</li> <li>- the previous day VaR number, scaled up by the multiplication factor <math>m_c</math></li> <li>- the latest available Stressed VaR number, scaled up by the multiplication factor <math>m_s</math></li> <li>- the most recent risk number for IRC</li> </ul>	

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	<p>introduce unacceptable friction in the evolution of risk management.</p> <p>As a result, these respondents suggest that the RTS set a schedule for the competent authorities in their assessment of material extensions or changes, clearly specifying the timeline for both home and host regulators. They believe that a period of one month for the competent authority to respond would be reasonable, with the potential to extend this period to a maximum of two months upon notification.</p>	<ul style="list-style-type: none"> <li>- the most recent risk number for the internal model for correlation trading.</li> </ul> <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 ITS on the joint decision process as per Article 20(8) CRR.</p>	
<p><b>Question 10.: Do you support the calculation proposal of the quantitative thresholds for the IMA in terms of design of the metrics and level of thresholds?</b></p>	<p>Some respondents advocate the exclusion of standard rules capital from the denominator of the change calculation. While including standard rules capital gives the right capital impact, it is a very poor indicator of the importance of a change in the ‘model’ to the ‘model’ itself.</p> <p>Some respondents propose also including RniVs (Risks not in VaR) in ‘modelled capital’ as well as any other risk-sensitive non-VaR type capital add-on that has been subject to</p>	<p>The EBA does not agree with the comment and has maintained the requirement to assess an impact in terms of both overall own funds requirements for market risk and own funds requirements for an IMA model.</p> <p>Only CRR IMA models referred to in Recital 3 are within the scope of these RTS.</p> <p>The EBA partially agrees and decided to include a non-materiality threshold, according to which extensions and changes that result in a change, computed for one day, of less than 1% of each</p>	<p>Amendments made throughout RTS, in particular to new Article 7a.</p>

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	<p>approval by a competent authority.</p> <p>Some respondents suggested also basing the materiality criterion on the effect on overall capital requirement, e.g. if the impact of a model change is less than 1% or 0.25% of total capital requirements, it should not be considered as material.</p> <p>Some respondents proposed extending (c)(iii) (now Article 7(1)(c)(ii) to include an additional minimum absolute RWA or an additional threshold based on a bank's total RWA.</p> <p>Some respondents consider 5% or 10% to be too low, potentially resulting in excessive supervisory burden and a backlog of model improvements. 10% in all cases or 10%/20% respectively are proposed. Other respondents agree with the proposed numbers.</p> <p>In the current prudential supervision practice, there is no single supervisory authority that adopts such a low level in market risk under its jurisdiction. Respondents suggest modelling the forthcoming rules on existing requirements that have stood the test of time.</p>	<p>of the relevant IMA risk numbers are exempt from the computation of the 5% and 10% thresholds of Article 7a(1)(c). They should instead, unless they fall under any of the extensions and changes described in Annex III, be notified after implementation at least on an annual basis.</p> <p>The EBA is of the opinion that, for market risk internal models, only own funds requirements for market risk should be considered.</p> <p>The EBA disagrees and considers that 5% of overall own funds requirements for market risk and 10% of the own funds requirement computed using the internal model constitute appropriate levels. Therefore, the EBA has maintained these thresholds.</p> <p>The EBA considers that the qualitative criteria and the quantitative thresholds do not need to be met simultaneously for an extension or change to qualify as material and has therefore maintained the requirement.</p> <p>The EBA decided to reduce the time window for the backstop calculation from 60 to a maximum</p>	

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	<p>Some respondents propose that both qualitative (Annex 3) and quantitative thresholds (Article 7(1)(c)) should be fulfilled to define a material change (requiring supervisory approval).</p> <p>Some respondents preferred the average over the observation period to the maximum.</p>	<p>of 15 business days, based on the comments made by the industry. Therefore, the EBA is of the opinion that, with fewer observations required, the highest value should be used, instead of the average, to be more prudent.</p>	
<p><b>Question 11.: Do you support for the IMA the one month period for notification of the changes before implementation?</b></p>	<p>While two respondents state that a one month period for pre-notification of changes constitutes a reasonable approach, one respondent points out that a one month period would only be appropriate for crucial issues, which does not correspond to all the changes currently listed in Annex 3. According to this respondent, Annex 3 would have to be shortened significantly to achieve regulatory objectives.</p> <p>All other respondents believe that a one-month period is too long and that a period of this length would unduly delay the development of model improvements, particularly if combined with the 60-day observation period. They therefore</p>	<p>The EBA acknowledges the relevance of some of the industry's comments. A shorter pre-notification period of two weeks has therefore been introduced. Furthermore, the EBA has reduced the list of qualitative conditions subject to <i>ex-ante</i> notification to limit the potential burden on institutions.</p> <p>The EBA believes that both categories of notifications should be maintained. In particular, the category of extensions and changes subject to <i>ex-ante</i> notification was introduced to keep the set of material model extensions and changes as small as possible.</p>	<p>Amendments made to new Article 7b and to the Annex.</p>

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	<p>recommend the implementation of a shorter period for pre-notification, such as two weeks.</p> <p>Most respondents suggest increasing the focus on the <i>ex-post</i> notification process, while reducing the list of changes subject to <i>ex-ante</i> notification and, in combination, increasing the reporting frequency for changes subject to <i>ex-post</i> notification (e.g. quarterly reporting instead of the suggested annual reporting). This would speed up the implementation of changes.</p> <p>Other respondents believe that a notification on release or <i>ex-post</i> would be sufficient.</p>		
<p><b>Question 12.: Do you support for the IMA the 60-day observation period for the purpose of comparing the modelling result before and after a proposed change?</b></p>	<p>A large majority of respondents believe that a 60-day testing period would be too long, inappropriate and burdensome, especially for smaller changes resulting in insignificant changes in capital, thus leading to an unworkable regulatory framework.</p> <p>Most respondents emphasise the fact that a 60-day testing period would require a high number of lengthy parallel calculations with old and new model settings being performed</p>	<p>The EBA acknowledges that the use of a 60-day observation period may be burdensome for institutions and may delay necessary changes. The EBA therefore decided to reduce the observation period to 15 business days. Furthermore, the EBA decided to base the different quantitative assessments on point-in-time risk measures, without the consideration of the regulatory 60-day averaging. Both decisions are expected to reduce the burden for</p>	<p>Amendments made to new Article 7a.</p>

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	<p>simultaneously, which would lead to considerable operational challenges and require significant IT infrastructure developments.</p> <p>Most respondents emphasise the fact that a 60-day testing period would delay implementation of changes by at least 3 months, also depending on the pre-notification period, and would therefore reduce to a very small number the contemplated extensions or changes that can be performed yearly. This would hamper institutions' ability to implement risk management improvements in a timely manner and to quickly respond to new market developments and best practices.</p> <p>One respondent urges the EBA to reconcile the assessment of extensions and changes with the necessary responsiveness of internal models to changes in market conditions, portfolios structures or new market products, and give examples of cases in which the proposals would prevent effective capital level responsiveness and likely render institutions</p>	<p>institutions.</p> <p>The EBA holds the view that a one-day observation period or a five-day observation period would leave too much space for arbitrage. However, in order to reduce the burden for institutions, a non-materiality threshold is introduced, according to which extensions and changes that result in a change, computed for one day, of less than 1% of each of the relevant IMA risk numbers are exempt from the computation of the 5% and 10% thresholds of Article 7a(1)(c). They should instead, unless they fall under any of the extensions and changes described in Annex III, be notified after implementation at least on an annual basis.</p>	

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	<p>undercapitalised:</p> <ul style="list-style-type: none"> <li>- A Greek exit from the eurozone</li> <li>- A new basis risk arising suddenly as experienced during the crisis (within a few weeks)</li> <li>- A sudden unexpected currency de-peg.</li> </ul> <p>Most respondents favour a much shorter period of parallel assessment. Three respondents state that a period of five business days would usually be sufficient to produce valid impact estimates, while two respondents suggest two weeks. For low impact extensions or changes, a one-day impact calculation or a few observations are generally considered sufficient.</p>		
<p><b>Question 13.: Do you support that for the IMA for those modelling approaches which are only required to be calculated once a week (stressed VaR, IRC, CRM) to compare only twelve</b></p>	<p>Whilst most respondents acknowledge that comparing 12 numbers for Stressed VaR, IRC and CRM would be in line with the suggested 60-day period, they reiterate their concern that a period of 12 weeks would be inappropriately long.</p>	<p>The EBA agrees that the observation period should be the same for daily and weekly computed risk numbers. Based on the industry's comments, the EBA decided to reduce the observation period from 60 to a maximum of 15 business days. For weekly computed risk numbers, the highest value of 3 observations</p>	<p>Amendments made to new Article 7a.</p>

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<b>numbers for Article 7 paragraph 1(c)(iii)?</b>	<p>Other respondents believe that a 5 measures average would be sufficient. According to these respondents, the average would not necessarily have to be computed over 5 weeks, but could rather be based on 5 consecutive measures, including daily measures if an institution computes the Stressed VaR, IRC and CRM daily.</p> <p>Two respondents also emphasise that the comparison of the model outcomes over the observation period should be based on an average rather than focussing on the highest value, so that the comparison is not distorted by outliers.</p>	<p>should, therefore, be selected.</p> <p>Where institutions compute Stressed VaR, IRC and CRM more frequently than weekly, they should use all available risk numbers computed over the 15 business days.</p> <p>Since the EBA decided to reduce the time window for the backstop calculation from 60 to 15 business days, based on the comments made by the industry, the EBA believes that, with fewer observations required, the highest value should be used, instead of the average, to be more prudent.</p>	
<b>Question 14.: Do you support that for the IMA no quantitative differentiation between changes requiring notification prior vs. post implementation is made?</b>	<p>Seven respondents broadly support the proposal, even if some of them believe that the EBA should review the split between the two categories of notifications to achieve a more appropriate balance.</p> <p>One respondent supports the distinction between changes requiring <i>ex-ante</i> notification and changes requiring <i>ex-post</i> notification, but would favour a quantitative</p>	<p>The EBA takes note of the comments and has reduced the list of qualitative conditions subject of ex-ante notification to limit the potential burden on institutions.</p> <p>The EBA believes that both categories of notifications should be kept. The category of extensions and changes subject to <i>ex-ante</i> notification was introduced to keep the set of material model extensions and changes as small</p>	<p>Amendments made throughout RTS.</p>

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	<p data-bbox="595 336 1066 368">differentiation between these changes.</p> <p data-bbox="595 408 1155 727">Eight respondents see no benefit to <i>ex-ante</i> notification and believe that there should only be one category of non-material changes, all subject to <i>ex-post</i> notification. Among those respondents, five respondents support the introduction of an immateriality threshold, below which only annual notification would be required.</p>	<p data-bbox="1178 336 1319 368">as possible.</p> <p data-bbox="1178 408 1760 807">The EBA decided to include a non-materiality threshold, according to which extensions and changes that result in a change, computed for one day, of less than 1% of each of the relevant IMA risk numbers are exempt from the computation of the 5% and 10% thresholds of Article 7a(1)(c). They should instead, unless they fall under any of the extensions and changes described in Annex III, be notified after implementation at least on an annual basis.</p>	