

CONTENT		SUBTITLE	TITLE
<div class="crrArticle">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.</div>		Subject matter	Article 1
<ol class="crrNumList" style="list-style-type: none"> <p>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 the materiality of the extensions and changes for the Advanced Measurement Approach (extensions and changes in the AMA) or the materiality 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:</p> <ol class="crrCharList" style="list-style-type: none"> 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; other extensions and changes, which require notification to the competent authorities. <p>The extensions and changes referred to in point (b) of paragraph 1 shall further be classified into:</p> <ol class="crrCharList" style="list-style-type: none"> extensions and changes that require notification before their implementation; extensions and changes that require notification after their implementation. 		Categories of extensions and changes	Article 2
<ol class="crrNumList" style="list-style-type: none"> The classification of changes in the IRB approach shall be carried out in accordance with this Article and Articles 4 and 5. The classification of extensions and changes in the AMA shall be carried out in accordance with this Article and Articles 6 and 7. The classification of extensions and changes in the IMA shall be carried out in accordance with this Article and Articles 7a and 7b. <p>Where institutions are required to calculate the quantitative impact of any extension or change on own funds requirements or, where applicable, on risk-weighted exposure amounts, they shall apply the following methodology:</p> <ol class="crrCharList" style="list-style-type: none"> for the purpose of the assessment of the quantitative impact institutions shall use the most recent data available; where a precise assessment of the quantitative impact is not feasible, institutions shall instead perform an assessment of the impact based on a representative sample or other reliable inference methodologies; for changes having no direct quantitative impact, 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. <p>One material extension or change shall not be split into several changes</p> 		Principles of	

<p>or extensions of lower materiality.</p> <p>In case of doubt, institutions shall assign extensions and changes to the category of the highest potential materiality.</p> <p>Where competent authorities have provided their permission in relation to a material extension or change, institutions shall calculate the own funds requirements based on the approved extension or change from the date specified in the new permission which shall replace the prior one. The non-implementation on the date specified in the new permission of an extension or change for which permission from competent authorities has been given, shall require a new permission from competent authorities which shall be applied for without undue delay.</p> <p>In case of delay of the implementation of an extension or change for which permission from the competent authority has been granted, the institution shall notify the competent authority and present to the competent authority a plan for a timely implementation of the approved extension or change, which it shall apply within a period to be agreed with the competent authority.</p> <p>Where an extension or change is classified as one requiring prior notification to competent authorities, and where, subsequently to the notification, institutions decide not to implement the extension or change, institutions shall notify without undue delay the competent authorities of this decision.</p>	classification of extensions and changes	Article 3
<p>Changes to the IRB approach shall be considered material if they fulfil any of the following conditions:</p> <ul style="list-style-type: none"> they fall under any of the changes to the range of application of a rating system or internal models approach to equity exposures described in Annex I, Part I, Section 1; they fall under any changes to the rating systems or internal models approach to equity exposures described in Annex I, Part II, Section 1; they result in either of the following: <ul style="list-style-type: none"> a decrease of 1,5 % of either of the following: <ul style="list-style-type: none"> the overall EU parent institution's consolidated risk-weighted exposure amounts for credit and dilution risk, the overall risk-weighted exposure amounts for credit and dilution risk in the case of an institution which is neither a parent institution, nor a subsidiary; a decrease of 15 % or more of the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or internal models approach to equity exposures. <p>For the purposes of paragraph (1)(c)(i) of this Article, and in accordance with Article 3(2), the impact of the change shall be assessed as a ratio calculated as follows:</p> <ul style="list-style-type: none"> in the numerator, the difference in the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or the internal models approach to equity exposures before and after the change at the EU parent institution's consolidated level or at the institution level which is neither a parent institution, nor a subsidiary; in the denominator the overall risk-weighted exposure amounts for 	Material changes to the IRB approach	Article 4

credit and dilution risk before the change at the EU parent institution's consolidated level or, respectively, at the institution level which is neither a parent institution, nor a subsidiary.

The calculation shall refer to the same point in time.

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

For the purposes of paragraph (1)(c)(ii) of this Article, and in accordance with Article 3(2), the impact of the change shall be assessed as a ratio calculated as follows:

- in the numerator, the difference in the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or the internal models approach to equity exposures before and after the change;
- in the denominator, the risk-weighted exposure amounts for credit and dilution risk before the change associated with the range of application of the rating system or the internal models approach to equity exposures.

The calculation shall refer to the same point in time.

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

- Changes to the IRB approach, which are not material but are to be notified to competent authorities according to Article 143(4) of Regulation (EU) No 575/2013, shall be notified in the following manner:

 - changes which fulfil any of the following conditions shall be notified to competent authorities at least two months before their implementation:
 - changes described in Annex I, Part I, Section 2;
 - changes described in Annex I, Part II, Section 2;
 - changes which result in a decrease of at least 5 % of the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or internal models approach to equity exposures.- all other changes shall be notified to the competent authorities after their implementation at least on an annual basis.

For the purposes of paragraph (1)(a)(iii) of this Article, and in accordance with Article 3(2), the impact of the change shall be assessed as a ratio calculated as follows:

- in the numerator, the difference in the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or the internal models approach to equity exposures before and after the change;
- in the denominator, the risk-weighted exposure amounts for credit and dilution risk before the change associated with the range of application of the rating system or the internal models approach to equity exposures.

The calculation shall refer to the same point in time.

The determination of the impact on risk-weighted exposure amounts shall refer only to impact of the change to the IRB approach, and the set of

Changes to the IRB approach not considered material

Article 5

ARTICLE

the change to the IRB approach, and the set of exposures shall be assumed to remain constant.

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

- they fall under any extensions described in Annex II, Part I, Section 1;
- they fall under any changes described in Annex II, Part II, Section 1;
- they result in either of the following:
 - in a decrease of 10 % or more of either of the following:
 - the overall EU parent institution's consolidated own funds requirements for operational risk,
 - the overall own funds requirements for operational risk in the case of an institution which is neither a parent institution, nor a subsidiary;
 - in a decrease of 10 % or more of either of the following:
 - the overall own funds requirements for operational risk at the consolidated level of a parent institution which is not an EU parent institution,
 - the overall own funds requirements for operational risk of a subsidiary where the parent institution has not received the permission to use the AMA.

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 a ratio calculated as follows:

- in the numerator, the difference in the own funds requirements for operational risk associated with the scope of application of the AMA model before and after the extension or change at the EU parent institution's consolidated level or at the institution level which is neither a parent institution, nor a subsidiary;
- in the denominator, the overall own funds requirements for operational risk before the extension or change at the EU parent institution's consolidated level or, respectively, at the institution level which is neither a parent institution, nor a subsidiary.

The calculation shall refer to the same point in time.

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

- 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 a ratio calculated as follows:
 - in the numerator, the difference in the own funds requirements for operational risk associated with the scope of application of the model before and after the extension or change at the consolidated level of a parent institution which is not an EU parent institution or at the subsidiary level where the parent institution has not received the permission to use the AMA;
 - in the denominator, the overall own funds requirements for operational risk before the extension or change at the consolidated level of a parent institution which is not an EU parent institution or, respectively, at the subsidiary level where the parent institution has not received the permission to use the AMA.

The calculation shall refer to the same

Material extensions and changes to the AMA

Article 6

<p>The calculation shall refer to the same point in time.
The determination of the impact on the own funds requirements shall refer only to impact of the extension and change to the AMA, and therefore the operational risk profile shall be assumed to remain constant. </p>		
<div class="crrArticle"> <p><p>Extensions and changes to the AMA, which are not material but are to be notified to competent authorities according to Article 312(3) of Regulation (EU) No 575/2013, shall be notified in the following manner:</p> <ol class="crrCharList" style="list-style-type: none"> extensions and changes falling under Annex II, Part I, Section 2 and Part II, Section 2, shall be notified to competent authorities at least two months before their implementation; all other extensions and changes shall be notified to the competent authorities after their implementation at least on an annual basis. </p></div>	Extensions and changes to the AMA not considered material	Article 7
<ol class="crrNumList" style="list-style-type: none"> <p>Extensions and changes to the IMA shall be considered material, if they fulfil any of the following conditions:</p> <ol class="crrCharList" style="list-style-type: none"> they fall under any of the extensions described in Annex III, Part I, Section 1; they fall under any changes described in Annex III, Part II, Section 1; 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) No 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: <ol class="crrRomanList" style="list-style-type: none"> 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 ($m \cdot c$) and ($m \cdot s$) respectively according to Article 366 of Regulation (EU) No 575/2013, Article 364(2)(b)(i) and Article 364(3)(a) of Regulation (EU) No 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; 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) No 575/2013, and associated with the scope of application of the relevant IMA model to which the risk number refers. <p>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 this Article of a ratio calculated as follows:</p> <ol class="crrCharList" style="list-style-type: none"> in numerator, the difference between the sum referred to in paragraph (1)(c)(i) with and without the extension or change; in the denominator, the sum referred to in paragraph (1)(c)(i) without the extension or change. 	Material extensions and changes to the IMA	Article 7a

(1)(c)(i) without the extension or change.

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 this Article of a ratio calculated as follows:

- 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) No 575/2013 with and without the extension or change;
- 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.

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 the following points (a) and (b):

- 15 consecutive business days starting from the first business day of the testing of the impact of the extension or change;
- 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.

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

- 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;
- all other extensions and changes shall be notified to the competent authorities after implementation at least on an annual basis.

Extensions and changes to the IMA not considered material

Article 7b

- 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:
 - description of the extension or change, its rationale and objective;
 - implementation date;
 - scope of application affected by the model extension or change, with volume characteristics;
 - technical and process document(s);
 - reports of the institutions' independent review or validation;
 - confirmation that the extension or change has been approved through the institution's approval processes by the competent bodies and date of approval;
 - 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;
 - records of the institution's current and previous version number of internal models which are subject to approval.
- For extensions and changes classified as requiring notification either before or after

Documentation of extensions and changes

Article 8

requiring notification either before or after implementation, institutions shall submit, together with the notification, the documentation referred to in points (a), (b), (c), (f) and (g) of paragraph 1.		
<div> This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union. </div>	Entry into force	Article 9

CONTENT	SUBTITLE	TITLE
<p> PART I </p> <p> CHANGES TO THE RANGE OF APPLICATION OF RATING SYSTEMS OR INTERNAL MODELS APPROACHES TO EQUITY EXPOSURES </p> <p> SECTION 1 </p> <p> Changes requiring competent authorities' approval (material) </p> <ol style="list-style-type: none"> Extending the range of application of a rating system to: <ol style="list-style-type: none"> exposures in an additional business unit, that are of the same type of product or obligor; exposures of an additional type of product or obligor unless the additional type of product or obligor falls within the range of application of an approved rating system based on the criteria as referred to in points (c)(i) and (ii); additional exposures related to the lending decision of a third party to the group, unless the institution can prove that the additional exposures fall within the range of application of an approved rating system, based on all of the following criteria: <ol style="list-style-type: none"> the representativeness of the data used to build the model to assign exposures to grades or pools with respect to the key characteristics of the institution's additional exposures where the lending decision has been taken by a third party, according to Article 174(c) of Regulation (EU) No 575/2013; the comparability of the population of exposures represented in the data used for estimation, the lending standards used when the data was generated and other relevant characteristics with the ones of the additional exposures where the lending decision has been taken by a third party, according to Article 179(1)(d) of Regulation (EU) No 575/2013. <p> For the purposes of establishing </p> <p> "2018" ID="QS0007" REF.END="QE0007" </p> <p> representativeness </p> <p> "2019" ID="QE0007" REF.START="QS0007" </p> <p> and "2018" ID="QS0008" REF.END="QE0008" </p> <p> comparability </p> <p> "2019" ID="QE0008" REF.START="QS0008" </p> <p> under points (i) and (ii) of the first paragraph institutions shall provide a complete description of the criteria and measures used.</p> <ol style="list-style-type: none"> Extending the range of application of an internal models approach to equity exposures, to one of the following type of exposures: <ol style="list-style-type: none"> to the Simple risk weight method according to 		

Article 155(2) of Regulation (EU) No 575/2013;
 to the PD/LGD approach according to Article 155(3) of Regulation (EU) No 575/2013;
 to the temporary partial use provision according to Article 495 of Regulation (EU) No 575/2013; to the same type of product in an additional business unit; to an additional type of product unless the institution can prove that it falls within the range of application of an existing internal models approach to equity exposures. </p>
 <p class="title-gr-seq-level-2">SECTION 2</p>
 <p class="subtitle-gr-seq-level-2">Changes requiring prior notification to competent authorities</p> <ol class="crrNumList">
 Reducing the range of application or the scope of use of a rating system.
 Reducing the range of application of an internal models approach to equity exposures.
 Extending the range of application of a rating system for which it can be shown that it does not fall under Part I, Section 1, point 1 of this Annex.
 Extending the range of application of an internal models approach to equity exposures where such extension does not fall under Part I, Section 1, point 2 of this Annex.
 <p class="title-gr-seq-level-1">PART II</p>
 <p class="subtitle-gr-seq-level-1">CHANGES TO RATING SYSTEMS OR AN INTERNAL MODELS APPROACH TO EQUITY EXPOSURES</p> <p class="title-gr-seq-level-2">SECTION 1</p>
 <p class="subtitle-gr-seq-level-2">Changes requiring competent authorities' approval (material)</p> <ol class="crrNumList">
 Changes in the methodology of assigning exposures to exposure classes and rating systems. These include:<p><ol class="crrCharList">
 changes in the methodology used for assigning exposures to different exposure classes according to Article 147 of Regulation (EU) No 575/2013;
 changes in the methodology used for assigning an obligor or a transaction to a rating system according to Article 169(1) of Regulation (EU) No 575/2013.
 </p>
 The following changes in the algorithms and procedures used for: assigning obligors to obligor grades or pools; for assigning exposures to facility grades or pools; or for quantifying the risk of obligor default or associated loss (changes in the rating methodology for IRB systems):<p><ol class="crrCharList">
 changes of the modelling approach for assigning an obligor to grades or pools and/or exposures to facility grades or pools according to Article 171(1) and Article 172(1)(a) to (d) of Regulation (EU) No 575/2013;
 changes to the institution's approach to the one-obligor-one-rating principle according to Article 172(1)(e) of Regulation (EU) No 575/2013;
 changes in the rating system's assumptions behind ratings relating to the extent by which a change in economic conditions is expected to result in a net migration of a large number of exposures, obligors or facilities across grades or pools of the model, as opposed to migration of only some exposures, obligors or facilities due only to their individual characteristics the measure and significance levels of which are defined by the institution;
 changes to the rating

DOCUMENT SECTION

criteria as referred to in Article 170(1)(c) and (e) and Article 170(4) of Regulation (EU) No 575/2013 and/or their weights, sequence or hierarchy, if any of the following conditions are met:

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

SECTION 2

Changes

CHANGES
TO THE IRB
APPROACH

ANNEX
I

requiring ex ante notification to competent authorities

<ol class="crrNumList">

Changes in the treatment of purchased receivables according to Article 153(6) and (7) and Article 154(5) of Regulation (EU) No 575/2013.

The following changes in the rating methodology for IRB systems:

<ol class="crrCharList">

changes in the internal procedures and criteria for assigning risk weights to specialised lending exposures according to Articles 153(5) and 170(2) of Regulation (EU) No 575/2013;

changes from the use of direct estimates of risk parameters for individual obligors or exposures to the use of a discrete rating scale or vice versa according to Article 169(3) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Section 1 of this Annex;

changes to the rating scale in terms of the number or structure of rating grades according to Article 170(1) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Section 2 of this Annex;

changes to the rating criteria and/or their weights or hierarchy according to Article 170(1)(c) and (e) and 170(4) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Section 1 of this Annex;

changes to the grade or pool definitions or criteria according to Articles 171(1) and 172 of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Section 1 of this Annex;

changes in the scope of information used to assign obligors to grades or pools according to Article 171(2) of Regulation (EU) No 575/2013 or inclusion of new or additional information in a model for parameter estimation according to Article 179(1)(d) of Regulation (EU) No 575/2013;

changes in the rules and processes for the use of overrides according to Article 172(3) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Section 1 of this Annex;

changes in the methodology for estimating PDs, LGDs including best estimate of expected loss, and conversion factors according to Articles 180, 181 and 182 of Regulation (EU) No 575/2013 including the methodology for deriving a margin of conservatism related to the expected range of estimation errors according to Article 179(1)(f) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Section 1 of this Annex. For LGDs and conversion factors this includes also changes in the methodology for accounting for an economic downturn according to Article 181(1)(b) and Article 182(1)(b) of Regulation (EU) No 575/2013;

changes in the way or extent to which conditional guarantees are accounted for in the LGD estimation according to Article 183(1)(c) of Regulation (EU) No 575/2013;

inclusion of additional types of collateral into the LGD estimation in accordance to Article 181(1)(c) to (g) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Title I of this Annex;

if an institution maps its internal grades to the scale used by an ECAI and then attributes the default rate observed for the external organisation's grades to the institutions' grades according to Article 180(1)(f) of Regulation (EU) No 575/2013, changes in the mapping used for this purpose unless

already classified as material according to Part II, Section 1 of this Annex.

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

PART I

SECTION 1

Extensions requiring competent authorities' approval (material)

- First-time introduction of measures to capture expected losses in the institutions' business practices offset according to Article 322(2)(a) of Regulation (EU) No 575/2013.
- First-time introduction of operational risk mitigation techniques such as insurance or other risk transfer mechanisms according to Article 323(1) of Regulation (EU) No 575/2013.
- First-time recognition of correlations in operational risk losses according to Article 322(2)(d) of Regulation (EU) No 575/2013.
- First-time introduction of methodology for allocating operational risk capital among the

ARTICLE

different entities of the group according to Article 20(1)(b) and 322(2)(a) of Regulation (EU) No 575/2013.

The introduction of the AMA within parts of the institution or group of institutions not yet covered by the approval or the approved roll out plan according to Article 314(1) of Regulation (EU) No 575/2013, where those additional areas account for more than 5 % of the EU parent institution on a consolidated level or of the institution which is neither a parent institution, nor a subsidiary.

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

SECTION 2

Extensions requiring ex ante notification to competent authorities

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

- more than 1 %;
- less than or equal to 5 %.

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

PART II

CHANGES TO THE AMA

SECTION 1

Changes requiring competent authorities' approval (material)

- Changes in the organisational and operational structure of the independent risk management function for operational risk

according to Article 321 of Regulation (EU) No 575/2013 which reduce the ability of the operational risk management function to oversee and inform the decision making processes of the business and support units they control.

- Changes to the measurement system for operational risk if they fulfil any of the following criteria:
 - they change the architecture of the measurement system regarding the combination of the four data elements of internal and external loss data, scenario analysis, business environment and internal control factors, according to Article 322(2)(b) of Regulation (EU) No 575/2013;
 - they change the logics and drivers of the methodology for allocating the operational risk capital between the different entities of a group according to Article 20(1)(b) and 322(2)(a) of Regulation (EU) No 575/2013.
- Changes to the procedures relating to internal and external data, scenario analysis and business environment and internal control factors where they:
 - reduce the level of

controls regarding the completeness and quality of operational risk data collected according to Article 322(3) and (4) of Regulation (EU) No 575/2013;

- change the external data sources to be used within the measurement system according to Article 322(4) and 322(5) of Regulation (EU) No 575/2013 unless the data are comparable and representative for the operational risk profile.

Changes to the overall method on how insurance contracts and/or other risk transfer mechanisms are recognized within the calculation of the AMA capital charge according to Article 323(1) of Regulation (EU) No 575/2013.

- Reducing the part of the operational risk captured by the AMA within the institution or group of institutions using the AMA according to Article 314(2) and (3) of Regulation (EU) No 575/2013, where one of the following conditions is met:
 - the areas to which the AMA will no longer be applied account for more than 5 % of the overall own funds requirements for operational risk of the EU parent institution on a consolidated level or of the institution which is neither a parent institution, nor a subsidiary;
 - the reduction of the areas covered under the AMA leads to a use of the AMA in a part of the institution which account for a lower percentage as required by the competent authority under Article 314(3) of Regulation (EU) No 575/2013.

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

SECTION 2

Changes requiring ex ante notification to competent authorities

- Changes to the way the operational risk measurement system is integrated into the day-to-day management process through operational risk processes and policies according to Article 321(a) and (c) of Regulation (EU) No 575/2013, where the changes have one of the following characteristics:
 - they change the extent to which the operational risk measurement system contributes to relevant information in the institutions' risk management and related decision making processes, including the approval of new products, systems and processes and definition of the operational risk tolerance;
 - they reduce the scope, groups of recipients and frequency of the reporting system for informing all relevant parts of the institution about the results of the operational risk measurement system and decisions taken in response to material operational risk events.
- Changes in the organisational and operational structure of the independent risk management function for operational risk according to Article 321(b) of Regulation (EU) No 575/2013 if they fulfil any of the following criteria:
 - they reduce the hierarchical level of the operational risk management function or of its head;
 - they lead to a relevant reduction the duties and responsibilities of the operational risk management function;
 - they extend the

EXTENSIONS
AND
CHANGES
TO THE AMA

ANNEX
II

duties and responsibilities of the operational risk management function, unless no conflicts of interests exist and appropriate additional resources are provided to the operational risk management function;

- they lead to a reduction of the available resources in terms of budget and headcount of more than 10 %, of the institution or group, since the last approval according to Article 312(2) of Regulation (EU) No 575/2013 was granted, unless the available resources in terms of budget and headcount at the institution or group level has been reduced with the same proportion.

Changes to validation processes and the internal review according to Article 321(e) and (f) of Regulation (EU) No 575/2013 if they change the logic and methodologies used for internally validating or reviewing the AMA framework.

- Changes to the calculation of the operational risk capital charge which change one of the following:
 - structure and characteristics of the data set used for the calculation of the operational risk capital requirement (the calculation data set), including any of the following:
 - the definition of gross loss amount to be used within the calculation data set according to Article 322(3) (d) of Regulation (EU) No 575/2013;
 - the reference date of loss events to be used within the calculation data set according to Article 322(2)(a) of Regulation (EU) No 575/2013;
 - the method used to determine the length of the time series of loss data to be used within the calculation data set according to Article 322(2)(a) of Regulation (EU) No 575/2013;
 - the criteria to group losses caused by a common operational risk event or by related events over time according to Article 322(3)(b) and (3)(e) of Regulation (EU) No 575/2013;
 - the number or the type of risk classes, or equivalent, over which the operational risk capital requirement is calculated;
 - the method for setting the threshold for the level of losses above which the model is fitted to the data according to Article 322(2)(a) of Regulation (EU) No 575/2013;
 - where applicable, the method for setting the threshold for differentiating the body and tail regions of the data, when fitted by different methods according to Article 322(2)(a) of Regulation (EU) No 575/2013;
 - the processes and criteria for assessing the relevance, for scaling or for doing other adjustments to the operational risk data according to Article 322(3) (f) of Regulation (EU) No 575/2013;
 - change the external data sources to be used within the measurement system according to Article 322(4) and 322(5) of Regulation (EU) No 575/2013, unless already classified as material according to Part II, Section 1 of this Annex.
 - the criteria for the selection, update and review of used distributions and methods for the estimation of their parameters according to Article 322(2)(a) of Regulation (EU) No 575/2013;
 - criteria and procedures for the determination of the aggregated loss distributions and for the calculation of the pertinent operational risk measure at the regulatory confidence level according to Article 322(2)(a) of Regulation (EU) No 575/2013;
 - methodology for the determination of expected losses and their centuring within

expected losses and then capturing within internal business practices according to Article 322(2)(a) of Regulation (EU) No 575/2013;

- methodology about how correlations in operational risk losses across individual operational risk estimates are recognised according to Article 322(2)(d) of Regulation (EU) No 575/2013.

Changes to the standards relating to internal data, scenario analysis and business environment and internal control factors if they:

- change the internal processes and criteria for collecting internal loss data according to Article 322(3) of Regulation (EU) No 575/2013, including any of the following:
 - increase of the threshold for the collection of internal loss data according to Article 322(3) (c) of Regulation (EU) No 575/2013;
 - methods or criteria for the exclusion of activities or exposures from the scope of the internal data collection according to article 322(3)(c) of Regulation (EU) No 575/2013.
- change the internal processes and criteria for one of the following:
 - performing scenario analysis according to Article 322(5) of Regulation (EU) No 575/2013;
 - determining business environment and internal control factors according to Article 322(6) of Regulation (EU) No 575/2013.

Changes to the standards relating to insurance and other risk transfer mechanisms according to Article 323 of Regulation (EU) No 575/2013, if they fulfil one of the following conditions:

- they cause a relevant alteration of the level of coverage provided;
- they alter the processes and criteria for calculating the haircuts in the amount of insurance recognition, introduced to capture the uncertainty of payment, the mismatches in coverage and the policy's residual and cancellation terms, where less than one year according to article 323(4) of Regulation (EU) No 575/2013.

Relevant changes to the IT systems used to process the AMA, including the collection of data and their administration, reporting procedures and the measurement system for operational risk according to article 312(2) of Regulation (EU) No 575/2013 and the general risk management standards set out in article 74 of Directive 2013/36/EU, which reduce the integrity and availability of the data or IT systems.

Extensions and changes to the IMA

PART I

EXTENSIONS TO THE IMA

Section 1

Extensions requiring competent authorities' approval (material)

- 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.
- 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) No 575/2013, exceeds 5 % of the VaR number, computed according to Article 364(1)(a)(i) of Regulation (EU) No 575/2013, of the total portfolio forming the scope of that IMA model before the integration.

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 modelling 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)

- Changes between historical simulation, parametric or Monte Carlo VaR.
- 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

- Changes in the fundamentals of statistical methods according to Articles 365, 374 or 377 of Regulation (EU) No 575/2013, including but not limited to any of the following:
 - reduction in the number of simulations;
 - introduction or removal of variance reduction methods;
 - changes to the algorithms to generate the random numbers;
 - changes in the statistical method to estimate volatilities or correlations between risk factors;
 - changes in the assumptions about the joint distribution of risk factors.
- 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.
- Changes 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.
- 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.
- 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

Extensions
and changes
to the IMA

ANNEX
III

application and re-evaluation, or changes in the sensitivity measures applied, according to Article 367 of Regulation (EU) No 575/2013.

- Changes in the methodology for defining proxies.
- Changes in the hierarchy of sources of ratings used for determining the rating of an individual position in the IRC.
- Changes 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.
- 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.
- Changes 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.
- 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.
- Changes in the internal validation methodology according to Article 369 of Regulation (EU) No 575/2013.
- 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:
 - senior staff changes;
 - the limit setting framework;
 - the reporting framework;
 - the stress testing methodology;
 - the new product process;
 - the internal model change policy.
- Changes in the IT environment, including any of the following:
 - changes to the IT system, which result in amendments in the calculation procedure of the internal model;
 - applying vendor pricing models;
 - outsourcing of central data collection functions.

SUBTITLE

TITLE