This document is a comparison of Articles 362 to 377 of CRR and RTS No 529/2014 against Annex 3 of Market Risk: Internal Model Approach (CRR) Part of draft PRA Rulebook: CRR Firms: (CRR) (No 2) Instrument [2025].

This comparison document accompanies PRA consultation paper "Basel 3.1: Adjustments to the Market Risk Framework" (CP17/25).

While the PRA has taken care in the preparation of this comparison document, it is provided for general information only and users should confirm its accuracy by reference to Articles 362 to 377 of Regulation (EU) No 575/2013, Commission Delegated Regulation (EU) No 529/2014 and the draft rules set out in PRA CP17/25.

This comparison document is not a source of law or legal advice and should not be relied on as such.

PART A

In this Part, the baseline is Articles 362 to 377 of Regulation (EU) No 575/2013, which is compared against Part A of Annex 3 of Market Risk: Internal Model Approach (CRR) Part of the draft PRA Rulebook: CRR Firms: (CRR) (No 2) Instrument [2025]. New text is underlined and deleted text is struck through.

USE OF INTERNAL MODELS TO CALCULATE OWN FUNDS REQUIREMENTS (PART THREE, TITLE IV, CHAPTER 5 OF CRR)

Section 1 Permission and own funds requirements

Article 362 SPECIFIC AND GENERAL RISKS

Position risk on a traded debt instrument or equity instrument or derivative thereof may be divided into two components for purposes of this Chapter. The first shall be its specific risk component and shall encompass the risk of a price change in the instrument concerned due to factors related to its issuer or, in the case of a derivative, the issuer of the underlying instrument. The general risk component shall encompass the risk of a price change in the instrument due in the case of a traded debt instrument or debt derivative to a change in the level of interest rates or in the case of an equity or equity derivative to a broad equity-market movement unrelated to any specific attributes of individual securities.

[Note: This rule corresponds to Article 362 of *CRR* as it applied immediately before revocation by the *Treasury*]

Article 363 PERMISSION TO USE INTERNAL MODELS

1. ~~After having verified an institution's compliance with the requirements of Sections 2, 3 and 4 as relevant, competent authorities shall grant permission to institutions to~~

   (a) An institution may with the prior permission of the *PRA* calculate ~~their~~ its own funds requirements for one or more of the following risk categories by using ~~their~~ its internal models instead of or in combination with the methods in ~~Chapters 2 to 4~~the Market Risk: Advanced Standardised Approach (CRR) Part, to the extent and subject to any modifications in the permission:

   (i~~a~~) general risk of equity instruments;

   (ii~~b~~) specific risk of equity instruments;

   (iii~~c~~) general risk of debt instruments;

   (iv~~d~~) specific risk of debt instruments;

   (v~~e~~) foreign-exchange risk;

   (vi~~f~~) commodities risk.

   (b) An institution applying for a permission under this paragraph must be able to demonstrate to the satisfaction of the *PRA* that it complies with the requirements of Sections 2, 3 and 4 as relevant.

[Note: This is a permission created under sections 144G and 192XC of *FSMA* to which Part 8 of the *Capital Requirements Regulations* applies]

2. For risk categories for which the institution has not been granted the permission referred to in paragraph 1 to use its internal models, that institution shall ~~continue to~~ calculate own funds requirements in accordance with the Market Risk: Advanced Standardised Approach (CRR) Part ~~those Chapters 2, 3 and 4 as relevant~~. Permission by the ~~competent authorities~~*PRA* for

the use of internal models shall be required for each risk category.~~ and ~~ An institution applying for the permission in paragraph 1 must be able to demonstrate to the satisfaction of the *PRA* that ~~shall be granted only if~~ the internal model covers a significant share of the positions of a certain risk category.

2A. An institution with an *IMA transitional permission* shall not use its internal models to calculate own funds requirements for positions assigned to the non-trading book in accordance with the Trading Book (CRR) Part, other than for the purposes of point (c) of paragraph 3 of Article 92 of the Required Level of Own Funds (CRR) Part.

3. Material changes to the use of internal models that the institution has received permission to use, the extension of the use of internal models that the institution has received permission to use, in particular to additional risk categories, and the initial calculation of stressed value-at-risk in accordance with Article 365(2) require a separate permission by the ~~competent authority~~*PRA*.

Institutions shall notify the ~~competent authorities~~*PRA* of all other extensions and changes to the use of those internal models that the institution has received permission to use.

[Note: This is a permission created under sections 144G and 192XC of *FSMA* to which Part 8 of the *Capital Requirements Regulations* applies]

4. [Note: Provision left blank]~~The PRA may make technical standards to specify the following:~~

~~(a) the conditions for assessing materiality of extensions and changes to the use of internal models;~~

~~(b) the assessment methodology under which it permits institutions to use internal models;~~

~~(c) the conditions under which the share of positions covered by the internal model within a risk category shall be considered significant as referred to in paragraph 2.~~

[Note: This rule corresponds to Article 363 of *CRR* as it applied immediately before revocation by the *Treasury*]

Article 364 OWN FUNDS REQUIREMENTS WHEN USING INTERNAL MODELS

1. Each institution using an internal model shall fulfil, in addition to own funds requirements calculated in accordance with the Market Risk: Advanced Standardised Approach (CRR) Part~~Chapters 2, 3 and 4~~ for those risk categories for which permission to use an internal model has not been granted, an own funds requirement expressed as the sum of points (a) and (b):

   (a) the higher of the following values:

      (i) its previous day's value-at-risk number calculated in accordance with Article 365(1) (VaR_{t-1});

      (ii) an average of the daily value-at-risk numbers calculated in accordance with Article 365(1) on each of the preceding sixty *business days* (VaR_{avg}), multiplied by the multiplication factor (m_c) in accordance with Article 366;

   (b) the higher of the following values:

      (i) its latest available stressed-value-at-risk number calculated in accordance with Article 365(2) ($sVaR_{t-1}$); and

      (ii) an average of the stressed value-at-risk numbers calculated in the manner and frequency specified in Article 365(2) during the preceding sixty *business days* ($sVaR_{avg}$), multiplied by the multiplication factor (m_s) in accordance with Article 366;

2. Institutions that use an internal model to calculate their own funds requirement for specific risk of debt instruments shall fulfil an additional own funds requirement expressed as the sum of the following points (a) and (b):

(a) the own funds requirement calculated in accordance with Article 337 and 338 of the *CRR*, as it applied immediately before revocation by the *Treasury*, for the specific risk of securitisation positions and n^{th} to default credit derivatives in the trading book with the exception of those incorporated in an own funds requirement for the specific risk of the correlation trading portfolio in accordance with ~~Section 5~~Article 377 and, where applicable, the own funds requirement for specific risk in accordance with Chapter 2, Section 6 of the *CRR*, as it applied immediately before revocation by the *Treasury*, for those positions in CIUs for which neither the conditions in Article 350(1) nor Article 350(2) of the *CRR*, as it applied immediately before revocation by the *Treasury*, are fulfilled;

(b) the higher of:

(i) the most recent risk number for the incremental default and migration risk calculated in accordance with Section 3;

(ii) the average of this number over the preceding 12 weeks.

3. Institutions that have a correlation trading portfolio, which meets the requirements in Article 338(1) to (3) of the *CRR*, as it applied immediately before revocation by the *Treasury*, may fulfil an own funds requirement on the basis of Article 377 instead of ~~Article 338(4)~~ the own funds requirement calculated in accordance with the Market Risk: Advanced Standardised Approach (CRR) Part, calculated as the higher of the following:

(a) the most recent risk number for the correlation trading portfolio calculated in accordance with ~~Section 5~~Article 377;

(b) the average of this number over the preceding 12 ~~-~~weeks;

(c) 8% of the own funds requirement that would, at the time of calculation of the most recent risk number referred to in point (a), be calculated in accordance with Article 338(4) of the *CRR*, as it applied immediately before revocation by the *Treasury*, for all those positions incorporated into the internal model for the correlation trading portfolio.

[Note: This rule corresponds to Article 364 of *CRR* as it applied immediately before revocation by the *Treasury*]

Section 2 General requirements

Article 365 VAR AND STRESSED VAR CALCULATION

1. The calculation of the value-at-risk number referred to in Article 364 shall be subject to the following requirements:

(a) daily calculation of the value-at-risk number;

(b) a 99^{th} ~~th~~ percentile, one-tailed confidence interval;

(c) a 10-day holding period;

(d) an effective historical observation period of at least one year except where a shorter observation period is justified by a significant upsurge in price volatility;

(e) at least monthly data set updates.

The institution may use value-at-risk numbers calculated according to shorter holding periods than 10 days scaled up to 10 days by an appropriate methodology that is reviewed periodically.

2. In addition, the institution shall at least weekly calculate a 'stressed value-at-risk' of the current portfolio, in accordance with the requirements set out in the first paragraph, with value-at-risk model inputs calibrated to historical data from a continuous 12-month period of significant financial stress relevant to the institution's portfolio. The choice of such historical data shall be subject to at least annual review by the institution, which shall notify the outcome to the ~~competent authorities~~*PRA*.

[Note: This rule corresponds to Article 365 of *CRR* as it applied immediately before revocation by the *Treasury*]

Article 366 REGULATORY BACK TESTING AND MULTIPLICATION FACTORS

1. The results of the calculations referred to in Article 365 shall be scaled up by the multiplication factors (m_c) and (m_s).

2. Each of the multiplication factors (m_c) and (m_s) shall be the sum of at least 3 and an addend between 0 and 1 in accordance with Table 1. That addend shall depend on the number of overshootings for the most recent 250 *business days* as evidenced by the institution's back-testing of the value-at-risk number as set out in Article 365(1).

Table 1

Number of overshootings	**addend**
Fewer than 5	0.00
5	0.40
6	0.50
7	0.65
8	0.75
9	0.85
10 or more	1.00

3. The institutions shall count daily overshootings on the basis of back-testing on hypothetical and actual changes in the portfolio's value. An overshooting is a one-day change in the portfolio's value that exceeds the related one-day value-at-risk number generated by the institution's model. For the purpose of determining the addend the number of overshootings shall be assessed at least quarterly and shall be equal to the higher of the number of overshootings under hypothetical and actual changes in the value of the portfolio.

Back-testing on hypothetical changes in the portfolio's value shall be based on a comparison between the portfolio's end-of-day value and, assuming unchanged positions, its value at the end of the subsequent day.

Back-testing on actual changes in the portfolio's value shall be based on a comparison between the portfolio's end-of-day value and its actual value at the end of the subsequent day excluding fees, commissions, and net interest income.

4. ~~The *competent authorities*~~ An institution may, with the prior permission of the *PRA*, ~~may in individual cases~~ limit the addend to that resulting from overshootings under hypothetical changes, where the number of overshootings under actual changes does not result from deficiencies in the internal model, to the extent and subject to any modifications set out in the permission.

[Note: This is a permission created under sections 144G and 192XC of *FSMA* to which Part 8 of the *Capital Requirements Regulations* applies]

5. In order to allow ~~competent authorities~~the *PRA* to monitor the appropriateness of the multiplication factors on an ongoing basis, institutions shall notify promptly, and in any case no later than within five ~~working days~~*business days*, the ~~competent authorities~~*PRA* of overshootings that result from their back-testing programme.

[Note: This rule corresponds to Article 366 of *CRR* as it applied immediately before revocation by the *Treasury*]

Article 367 REQUIREMENTS ON RISK MEASUREMENT

1. Any internal model used to calculate capital requirements for position risk, foreign exchange risk, commodities risk and any internal model for correlation trading shall meet all of the following requirements:

   (a) the model shall capture accurately all material price risks;

   (b) the model shall capture a sufficient number of risk factors, depending on the level of activity of the institution in the respective markets. Where a risk factor is incorporated into the institution's pricing model but not into the risk-measurement model, the institution shall be able to justify such an omission to the satisfaction of the ~~competent authority~~*PRA*. The risk-~~-~~measurement model shall capture nonlinearities for options and other products as well as correlation risk and basis risk. Where proxies for risk factors are used they shall show a good track record for the actual position held.

2. Any internal model used to calculate capital requirements for position risk, foreign exchange risk or commodities risk shall meet all of the following requirements:

   (a) the model shall incorporate a set of risk factors corresponding to the interest rates in each currency in which the institution has interest rate sensitive on-balance sheet or off-balance sheet positions. The institution shall model the yield curves using one of the generally accepted approaches. For material exposures to interest-rate risk in the major currencies and markets, the yield curve shall be divided into a minimum of six maturity segments, to capture the variations of volatility of rates along the yield curve. The model shall also capture the risk of less than perfectly correlated movements between different yield curves;

   (b) the model shall incorporate risk factors corresponding to gold and to the individual foreign currencies in which the institution's positions are denominated. For CIUs the actual foreign exchange positions of the CIU shall be taken into account. Institutions may rely on third party reporting of the foreign exchange position of the CIU, where the correctness of that report is adequately ensured. If an institution is not aware of the foreign exchange positions of a CIU, this position shall be carved out and treated in accordance with Article 353(3) of the *CRR*, as it applied immediately before revocation by the *Treasury*;

(c) the model shall use a separate risk factor at least for each of the equity markets in which the institution holds significant positions;

(d) the model shall use a separate risk factor at least for each commodity in which the institution holds significant positions. The model shall also capture the risk of less than perfectly correlated movements between similar, but not identical, commodities and the exposure to changes in forward prices arising from maturity mismatches. It shall also take account of market characteristics, notably delivery dates and the scope provided to traders to close out positions;

(e) the institution's internal model shall conservatively assess the risk arising from less liquid positions and positions with limited price transparency under realistic market scenarios. In addition, the internal model shall meet minimum data standards. Proxies shall be appropriately conservative and shall be used only where available data is insufficient or is not reflective of the true volatility of a position or portfolio.

3. Institutions may, in any internal model used for purposes of this Chapter, use empirical correlations within risk categories and across risk categories only if the institution's approach for measuring correlations is sound and implemented with integrity.

[Note: This rule corresponds to Article 367 of *CRR* as it applied immediately before revocation by the *Treasury*]

Article 368 QUALITATIVE REQUIREMENTS

1. Any internal model used for purposes of this Chapter shall be conceptually sound and implemented with integrity and, in particular, all of the following qualitative requirements shall be met:

(a) any internal model used to calculate capital requirements for position risk, foreign exchange risk or commodities risk shall be closely integrated into the daily risk-management process of the institution and serve as the basis for reporting risk exposures to senior management;

(b) the institution shall have a risk control unit that is independent from business trading units and reports directly to senior management. The unit shall be responsible for designing and implementing any internal model used for purposes of this Chapter. The unit shall conduct the initial and on-going validation of any internal model used for purposes of this Chapter, being responsible for the overall risk management system. The unit shall produce and analyse daily reports on the output of any internal model used for calculating capital requirements for position risk, foreign exchange risk and commodities risk, and on the appropriate measures to be taken in terms of trading limits;

(c) the institution's management body and senior management shall be actively involved in the risk-control process and the daily reports produced by the risk-control unit are reviewed by a level of management with sufficient authority to enforce both reductions of positions taken by individual traders as well as in the institution's overall risk exposure;

(d) the institution shall have sufficient numbers of staff skilled in the use of sophisticated internal models, and including those used for purposes of this Chapter, in the trading, risk-control, audit and back-office areas;

(e) the institution shall have established procedures for monitoring and ensuring compliance with a documented set of internal policies and controls concerning the overall operation of its internal models, and including those used for purposes of this Chapter;

(f) any internal model used for purposes of this Chapter shall have a proven track record of reasonable accuracy in measuring risks;

(g) the institution shall frequently conduct a rigorous programme of stress testing, including reverse stress tests, which encompasses any internal model used for purposes of this Chapter and the results of these stress tests shall be reviewed by senior management and reflected in the policies and limits it sets. This process shall particularly address illiquidity of markets in stressed market conditions, concentration risk, one-~~-~~way markets, event and jump-to-default risks, non-linearity of products, deep out-of-the-money positions, positions subject to the gapping of prices and other risks that may not be captured appropriately in the internal models. The shocks applied shall reflect the nature of the portfolios and the time it could take to hedge out or manage risks under severe market conditions;

(h) the institution shall conduct, as part of its regular internal auditing process, an independent review of its internal models, and including those used for purposes of this Chapter.

2. The review referred to in point (h) of paragraph 1 shall include both the activities of the business trading units and of the independent risk-control unit. At least once a year, the institution shall conduct a review of its overall risk-management process. The review shall consider the following:

(a) the adequacy of the documentation of the risk-management system and process and the organisation of the risk-control unit;

(b) the integration of risk measures into daily risk management and the integrity of the management information system;

(c) the process the institution employs for approving risk-pricing models and valuation systems that are used by front and back-office personnel;

(d) the scope of risks captured by the risk-measurement model and the validation of any significant changes in the risk-measurement process;

(e) the accuracy and completeness of position data, the accuracy and appropriateness of volatility and correlation assumptions, and the accuracy of valuation and risk sensitivity calculations;

(f) the verification process the institution employs to evaluate the consistency, timeliness and reliability of data sources used to run internal models, including the independence of such data sources;

(g) the verification process the institution uses to evaluate back-testing that is conducted to assess the model's~~'~~ accuracy.

3. As techniques and best practices evolve, institutions shall apply those new techniques and practices in any internal model used for purposes of this Chapter.

[Note: This rule corresponds to Article 368 of *CRR* as it applied immediately before revocation by the *Treasury*]

Article 369 INTERNAL VALIDATION

1. Institutions shall have processes in place to ensure that all their internal models used for purposes of this Chapter have been adequately validated by suitably qualified parties independent of the development process to ensure that they are conceptually sound and adequately capture all material risks. The validation shall be conducted when the internal model is initially developed and when any significant changes are made to the internal model. The validation shall also be conducted on a periodic basis but especially where there have been any significant structural changes in the market or changes to the composition of the portfolio which might lead to the internal model no longer being adequate. As techniques and best practices for internal validation evolve, institutions shall apply these advances. Internal model

validation shall not be limited to back-testing, but shall, at a minimum, also include the following:

(a) tests to demonstrate that any assumptions made within the internal model are appropriate and do not underestimate or overestimate the risk;

(b) in addition to the regulatory back-testing programmes, institutions shall carry out their own internal model validation tests, including back-testing, in relation to the risks and structures of their portfolios;

(c) the use of hypothetical portfolios to ensure that the internal model is able to account for particular structural features that may arise, for example material basis risks and concentration risk.

2. The institution shall perform back-testing on both actual and hypothetical changes in the portfolio's value.

[Note: This rule corresponds to Article 369 of *CRR* as it applied immediately before revocation by the *Treasury*]

Section 3 Requirements particular to specific risk modelling

Article 370 REQUIREMENTS FOR MODELLING SPECIFIC RISK

An internal model used for calculating own funds requirements for specific risk and an internal model for correlation trading shall meet the following additional requirements:

(a) it explains the historical price variation in the portfolio;

(b) it captures concentration in terms of magnitude and changes of composition of the portfolio;

(c) it is robust to an adverse environment;

(d) it is validated through back-testing aimed at assessing whether specific risk is being accurately captured. If the institution performs such back-testing on the basis of relevant sub-portfolios, these shall be chosen in a consistent manner;

(e) it captures name-related basis risk and shall in particular be sensitive to material idiosyncratic differences between similar but not identical positions;

(f) it captures event risk.

[Note: This rule corresponds to Article 370 of *CRR* as it applied immediately before revocation by the *Treasury*]

Article 371 EXCLUSIONS FROM SPECIFIC RISK MODELS

1. An institution may choose to exclude from the calculation of its specific risk own funds requirement using an internal model those positions for which it fulfils an own funds requirement for specific risk in accordance with Article 332(1)(e) or Article 337 of the *CRR*, as it applied immediately before revocation by the *Treasury*, with exception of those positions that are subject to the approach set out in Article 377.

2. An institution may choose not to capture default and migration risks for traded debt instruments in its internal model where it is capturing those risks through the requirements set out in Section 4.

[Note: This rule corresponds to Article 371 of *CRR* as it applied immediately before revocation by the *Treasury*]

Section 4 Internal model for incremental default and migration risk

Article 372 REQUIREMENT TO HAVE AN INTERNAL IRC MODEL

An institution that uses an internal model for calculating own funds requirements for specific risk of traded debt instruments shall also have an internal incremental default and migration risk ('IRC') model in place to capture the default and migration risks of its trading book positions that are incremental to the risks captured by the value-at-risk measure as specified in Article 365(1). The institution shall be able to demonstrate to the *PRA* that its internal model meets the following standards under the assumption of a constant level of risk, and adjusted where appropriate to reflect the impact of liquidity, concentrations, hedging and optionality:

(a) the internal model provides a meaningful differentiation of risk and accurate and consistent estimates of incremental default and migration risk;

(b) the internal model's estimates for potential losses play an essential role in the risk management of the institution;

(c) the market and position data used for the internal model are up-to-date and subject to an appropriate quality assessment;

(d) the requirements in Article 367(3), Article 368, Article 369(1) and points (b), (c), (e) and (f) of Article 370 are met.

[Note: This rule corresponds to Article 372 of *CRR* as it applied immediately before revocation by the *Treasury*]

Article 373 SCOPE OF THE INTERNAL IRC MODEL

The internal IRC model shall cover all positions subject to an own funds requirement for specific interest rate risk, including those subject to a 0% specific risk capital charge under Article 336 of the *CRR*, as it applied immediately before revocation by the *Treasury*, but shall not cover securitisation positions and n-th-to-default credit derivatives.

The institution may, ~~subject to permission by the competent authorities~~with the prior permission of the *PRA*, choose to consistently include all listed equity positions and derivatives positions based on listed equities~~. The permission shall be granted if~~ where such inclusion is consistent with how the institution internally measures and manages risk, and to the extent and subject to any modifications set out in the permission.

[Note: This is a permission created under sections 144G and 192XC of FSMA to which Part 8 of the *Capital Requirements Regulations* applies]

[Note: This rule corresponds to Article 373 of *CRR* as it applied immediately before revocation by the *Treasury*]

Article 374 PARAMETERS OF THE INTERNAL IRC MODEL

1. Institutions shall use the internal model to calculate a number which measures losses due to default and internal or external ratings migration at the 99.9% confidence interval over a time horizon of one year. Institutions shall calculate this number at least weekly.

2. Correlation assumptions shall be supported by analysis of objective data in a conceptually sound framework. The internal model shall appropriately reflect issuer concentrations. Concentrations that can arise within and across product classes under stressed conditions shall also be reflected.

3. The internal IRC model shall reflect the impact of correlations between default and migration events. The impact of diversification between, on the one hand, default and migration events and, on the other hand, other risk factors shall not be reflected.

4. The internal model shall be based on the assumption of a constant level of risk over the one-year time horizon, implying that given individual trading book positions or sets of positions that have experienced default or migration over their liquidity horizon are re-balanced at the end of their liquidity horizon to attain the initial level of risk. Alternatively, an institution may choose to consistently use a one-year constant position assumption.

5. The liquidity horizons shall be set according to the time required to sell the position or to hedge all material relevant price risks in a stressed market, having particular regard to the size of the position. Liquidity horizons shall reflect actual practice and experience during periods of both systematic and idiosyncratic stresses. The liquidity horizon shall be measured under conservative assumptions and shall be sufficiently long that the act of selling or hedging, in itself, would not materially affect the price at which the selling or hedging would be executed.

6. The determination of the appropriate liquidity horizon for a position or set of positions is subject to a floor of three months.

7. The determination of the appropriate liquidity horizon for a position or set of positions shall take into account an institution's internal policies relating to valuation adjustments and the management of stale positions. When an institution determines liquidity horizons for sets of positions rather than for individual positions, the criteria for defining sets of positions shall be defined in a way that meaningfully reflects differences in liquidity. The liquidity horizons shall be greater for positions that are concentrated, reflecting the longer period needed to liquidate such positions. The liquidity horizon for a securitisation warehouse shall reflect the time to build, sell and securitise the assets, or to hedge the material risk factors, under stressed market conditions.

[Note: This rule corresponds to Article 374 of *CRR* as it applied immediately before revocation by the *Treasury*]

Article 375 RECOGNITION OF HEDGES IN THE INTERNAL IRC MODEL

1. Hedges may be incorporated into an institution's internal model to capture the incremental default and migration risks. Positions may be netted when long and short positions refer to the same financial instrument. Hedging or diversification effects associated with long and short positions involving different instruments or different securities of the same obligor, as well as long and short positions in different issuers, may only be recognised by explicitly modelling gross long and short positions in the different instruments. Institutions shall reflect the impact of material risks that could occur during the interval between the hedge's maturity and the liquidity horizon as well as the potential for significant basis risks in hedging strategies by product, seniority in the capital structure, internal or external rating, maturity, vintage and other differences in the instruments. An institution shall reflect a hedge only to the extent that it can be maintained even as the obligor approaches a credit or other event.

2. For positions that are hedged via dynamic hedging strategies, a rebalancing of the hedge within the liquidity horizon of the hedged position may be recognised provided that the institution:

   (a) chooses to model rebalancing of the hedge consistently over the relevant set of trading book positions;

   (b) is able to demonstrate to the *PRA*~~s~~ that the inclusion of rebalancing results in a better risk measurement;

   (c) is able to demonstrate to the *PRA*~~s~~ that the markets for the instruments serving as hedges are liquid enough to allow for such rebalancing even during periods of stress. Any residual risks resulting from dynamic hedging strategies shall be reflected in the own funds requirement.

[Note: This rule corresponds to Article 375 of *CRR* as it applied immediately before revocation by the *Treasury*]

Article 376 PARTICULAR REQUIREMENTS FOR THE INTERNAL IRC MODEL

1. The internal model to capture the incremental default and migration risks shall reflect the nonlinear impact of options, structured credit derivatives and other positions with material nonlinear behaviour with respect to price changes. The institution shall also have due regard to the amount of model risk inherent in the valuation and estimation of price risks associated with such products.
2. The internal model shall be based on data that are objective and up-to-date.
3. As part of the independent review and validation of their internal models used for purposes of this Chapter, inclusively for purposes of the risk measurement system, an institution shall in particular do all of the following:
   (a) validate that its modelling approach for correlations and price changes is appropriate for its portfolio, including the choice and weights of its systematic risk factors;
   (b) perform a variety of stress tests, including sensitivity analysis and scenario analysis, to assess the qualitative and quantitative reasonableness of the internal model, particularly with regard to the treatment of concentrations. Such tests shall not be limited to the range of events experienced historically;
   (c) apply appropriate quantitative validation including relevant internal modelling benchmarks.
4. The internal model shall be consistent with the institution's internal risk management methodologies for identifying, measuring, and managing trading risks.
5. Institutions shall document their internal models so that its correlation and other modelling assumptions are transparent to the ~~competent authorities~~*PRA*.
6. The internal model shall conservatively assess the risk arising from less liquid positions and positions with limited price transparency under realistic market scenarios. In addition, the internal model shall meet minimum data standards. Proxies shall be appropriately conservative and may be used only where available data is insufficient or is not reflective of the true volatility of a position or portfolio.

[Note: This rule corresponds to Article 376 of *CRR* as it applied immediately before revocation by the *Treasury*]

Section 5 Internal model for correlation trading

Article 377 REQUIREMENTS FOR AN INTERNAL MODEL FOR CORRELATION TRADING

1. ~~Competent authorities shall grant permission to use an internal model for the own funds requirement for the correlation trading portfolio instead of the own funds requirement in accordance with Article 338 to institutions that are~~ An institution that is allowed to use an internal model for specific risk of debt instruments and that meets the requirements in paragraphs 2 to 6 of this Article and in Article 367(1) and (3), Article 368, Article 369(1) and points (a), (b), (c), (e) and (f) of Article 370 may, with the prior permission of the *PRA*, use an internal model for the own funds requirement for the correlation trading portfolio instead of the own funds requirement in accordance with the advanced standardised approach for *ACTP CSR positions* set out in the Market Risk: Advanced Standardised Approach (CRR) Part, to the extent and subject to any modifications set out in the permission.

[Note: This is a permission created under sections 144G and 192XC of *FSMA* to which Part 8 of the *Capital Requirements Regulations* applies]

2. Institutions shall use this internal model to calculate a number which adequately measures all price risks at the 99.9% confidence interval over a time horizon of one year under the assumption of a constant level of risk, and adjusted where appropriate to reflect the impact of liquidity, concentrations, hedging and optionality. Institutions shall calculate this number at least weekly.

3. The following risks shall be adequately captured by the model referred to in paragraph 1:

   (a) the cumulative risk arising from multiple defaults, including different ordering of defaults, in tranched products;

   (b) ~~*credit spread risk*~~*CSR*, including the gamma and cross-gamma effects;

   (c) volatility of implied correlations, including the cross effect between spreads and correlations;

   (d) basis risk, including both of the following:

      (i) the basis between the spread of an index and those of its constituent single names;

      (ii) the basis between the implied correlation of an index and that of bespoke portfolios;

   (e) recovery rate volatility, as it relates to the propensity for recovery rates to affect tranche prices;

   (f) to the extent the comprehensive risk measure incorporates benefits from dynamic hedging, the risk of hedge slippage and the potential costs of rebalancing such hedges;

   (g) any other material price risks of positions in the correlation trading portfolio.

4. An institution shall use sufficient market data within the model referred to in paragraph 1 in order to ensure that it fully captures the salient risks of those exposures in its internal approach in accordance with the requirements set out in this Article. It shall be able to demonstrate to the ~~competent authority~~*PRA* through back testing or other appropriate means that its model can appropriately explain the historical price variation of those products.

   The institution shall have appropriate policies and procedures in place in order to separate the positions for which it holds permission to incorporate them in the own funds requirement in accordance with this Article from other positions for which it does not hold such permission.

5. With regard to the portfolio of all the positions incorporated in the model referred to in paragraph 1, the institution shall regularly apply a set of specific, predetermined stress scenarios. Such stress scenarios shall examine the effects of stress to default rates, recovery rates, credit spreads, basis risk, correlations and other relevant risk factors on the correlation trading portfolio. The institution shall apply stress scenarios at least weekly and report at least quarterly to the ~~competent authorities~~*PRA* the results, including comparisons with the institution's own funds requirement in accordance with this Article. Any instances where the stress test results materially exceed the own funds requirement for the correlation trading portfolio shall be reported to the ~~competent authorities~~*PRA* in a timely manner.

6. The internal model shall conservatively assess the risk arising from less liquid positions and positions with limited price transparency under realistic market scenarios. In addition, the internal model shall meet minimum data standards. Proxies shall be appropriately conservative and may be used only where available data is insufficient or is not reflective of the true volatility of a position or portfolio.

[Note: This rule corresponds to Article 377 of *CRR* as it applied immediately before revocation by the *Treasury*]

PART B

In this Part, the baseline is Commission Delegated Regulation (EU) No 529/2014, which is compared against Part B of Annex 3 of Market Risk: Internal Model Approach (CRR) Part of the draft PRA Rulebook: CRR Firms: (CRR) (No 2) Instrument [2025]. New text is underlined and deleted text is struck through.

COMMISSION DELEGATED REGULATION (EU) NO 529/2014

Article 1 SUBJECT MATTER

~~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.~~

[Note: Provision left blank]

Article 2 CATEGORIES OF EXTENSIONS AND CHANGES

1. The ~~materiality of changes to the range of application of a rating system or an internal models approach to equity exposures, or of changes to the rating systems or internal models approach to equity exposures, for the Internal Rating Based approach ('changes in the IRB approach') or 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~~internal model approach ('extensions and changes in the IMA') shall be classified into one of the following categories:
   (a) material extensions and changes, which, according to Article~~s 143(3), and 312(2) and~~ 363(3) of ~~Regulation (EU) No 575/2013~~Part A of this Annex, require permission from the ~~relevant competent authorities~~*PRA*;
   (b) other extensions and changes, which require notification to the ~~competent authorities~~*PRA*.
2. The extensions and changes referred to in point (b) of paragraph 1 shall further be classified into:
   (a) extensions and changes that require notification before their implementation;
   (b) extensions and changes that require notification after their implementation.

[Note: This rule corresponds to Article 2 of Commission Delegated Regulation (EU) No 529/2014 as it applied immediately before revocation by the *Treasury*]

Article 3 PRINCIPLES OF CLASSIFICATION OF EXTENSIONS AND CHANGES

1. ~~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.
2. 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:

(a) for the purpose of the assessment of the quantitative impact institutions shall use the most recent data available;

(b) where a precise assessment of the quantitative impact is not feasible, institutions shall instead perform an assessment of the impact based on a representative sample or other reliable inference methodologies;

(c) for changes having no direct quantitative impact, 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~~ the internal model approach needs to be calculated.

3. One material extension or change shall not be split into several changes or extensions of lower materiality.

4. In case of doubt, institutions shall assign extensions and changes to the category of the highest potential materiality.

5. Where the *PRA* ~~competent authorities have~~ has provided ~~their~~ its 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 the ~~competent authorities~~*PRA* has been given, shall require a new permission from the ~~competent authorities~~*PRA* which shall be applied for without undue delay.

6. In case of delay of the implementation of an extension or change for which permission from the ~~competent authority~~*PRA* has been granted, the institution shall notify the ~~competent authority~~*PRA* and present to the ~~competent authority~~*PRA* a plan for a timely implementation of the approved extension or change, which it shall ~~apply~~ realise within a reasonable period ~~to be agreed with the competent authority~~.

7. Where an extension or change is classified as one requiring prior notification to the ~~competent authorities~~*PRA*, and where, subsequently to the notification, institutions decide not to implement the extension or change, institutions shall notify without undue delay the ~~competent authorities~~*PRA* of this decision.

[Note: This rule corresponds to Article 3 of Commission Delegated Regulation (EU) No 529/2014 as it applied immediately before revocation by the *Treasury*]

Article 4 MATERIAL CHANGES TO THE IRB APPROACH

~~1. Changes to the IRB approach shall be considered material if they fulfil any of the following conditions:~~

~~(a) they fall under any of the changes to the range of application of a rating system or internal models approach to equity exposures described in Annex I, Part I, Section 1;~~

~~(b) they fall under any changes to the rating systems or internal models approach to equity exposures described in Annex I, Part II, Section 1;~~

~~(c) they result in either of the following:~~

~~(i) a decrease of 1.5% of either of the following:~~

- ~~the overall UK parent institution's consolidated risk-weighted exposure amounts for credit and dilution risk,~~
- ~~the overall risk-weighted exposure amounts for credit and dilution risk in the case of an institution which is neither a parent institution, nor a subsidiary;~~

~~(ii) a decrease of 15.% or more of the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or internal models approach to equity exposures.~~

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

~~(a) in the numerator, the difference in the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or the internal models approach to equity exposures before and after the change at the UK parent institution's consolidated level or at the institution level which is neither a parent institution, nor a subsidiary;~~

~~(b) in the denominator the overall risk-weighted exposure amounts for credit and dilution risk before the change at the UK 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.~~

~~3. 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:~~

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

~~(b) in the denominator, the risk-weighted exposure amounts for credit and dilution risk before the change associated with the range of application of the rating system or the internal models approach to equity exposures.~~

~~The calculation shall refer to the same point in time.~~

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

[Note: Provision left blank]

Article 5 CHANGES TO THE IRB APPROACH NOT CONSIDERED MATERIAL

~~1. 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:~~

~~(a) changes which fulfil any of the following conditions shall be notified to competent authorities at least two months before their implementation:~~

~~(i) changes described in Annex I, Part I, Section 2;~~

~~(ii) changes described in Annex I, Part II, Section 2;~~

~~(iii) changes which result in a decrease of at least 5% of the risk-weighted exposure amounts for credit and dilution risk associated with the range of application of the internal rating system or internal models approach to equity exposures.~~

~~(b) all other changes shall be notified to the competent authorities after their implementation at least on an annual basis.~~

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

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

~~(b) in the denominator, the risk-weighted exposure amounts for credit and dilution risk before the change associated with the range of application of the rating system or the internal models approach to equity exposures.~~

~~The calculation shall refer to the same point in time.~~

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

[Note: Provision left blank]

Article 6 MATERIAL EXTENSIONS AND CHANGES TO THE AMA

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

~~(a) they fall under any extensions described in Annex II, Part I, Section 1;~~

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

~~(c) they result in either of the following:~~

~~(i) in a decrease of 10% or more of either of the following:~~

- ~~the overall UK parent institution's consolidated own funds requirements for operational risk,~~
- ~~the overall own funds requirements for operational risk in the case of an institution which is neither a parent institution, nor a subsidiary;~~

~~(ii) in a decrease of 10% or more of either of the following:~~

- ~~the overall own funds requirements for operational risk at the consolidated level of a parent institution which is not an UK parent institution,~~
- ~~the overall own funds requirements for operational risk of a subsidiary where the parent institution has not received the permission to use the AMA.~~

~~2. For the purposes of paragraph (1)(c)(i), and in accordance with Article 3(2), the impact of any extension or change shall be assessed as a ratio calculated as follows:~~

~~(a) in the numerator, the difference in the own funds requirements for operational risk associated with the scope of application of the AMA model before and after the extension or change at the UK parent institution's consolidated level or at the institution level which is neither a parent institution, nor a subsidiary;~~

~~(b) in the denominator, the overall own funds requirements for operational risk before the extension or change at the UK 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.~~

~~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 a ratio calculated as follows:~~

~~(a) in the numerator, the difference in the own funds requirements for operational risk associated with the scope of application of the model before and after the extension or change at the consolidated level of a parent institution which is not an UK parent institution or at the subsidiary level where the parent institution has not received the permission to use the AMA;~~

~~(b) in the denominator, the overall own funds requirements for operational risk before the extension or change at the consolidated level of a parent institution which is not an UK parent institution or, respectively, at the subsidiary level where the parent institution has not received the permission to use the AMA.~~

~~The calculation shall refer to the same point in time.~~

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

[Note: Provision left blank]

Article 7 EXTENSIONS AND CHANGES TO THE AMA NOT CONSIDERED MATERIAL

~~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:~~

~~(a) 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;~~

~~(b) all other extensions and changes shall be notified to the competent authorities after their implementation at least on an annual basis.~~

[Note: Provision left blank]

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) No 575/2013~~Part A of this Annex, and associated with the scope of application of the relevant ~~IMA~~ internal 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) No 575/2013~~Part A of this Annex, Article 364(2)(b)(i) and Article 364(3)(a) of ~~Regulation (EU) No 575/2013~~Part A of this Annex, and the own funds requirements according to ~~Chapter 2, 3 and 4 of Title IV of that Regulation~~the Market Risk: Advanced Standardised Approach (CRR) Part~~, as applicable,~~ computed at the level of the UK 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) No 575/2013~~Part A of this Annex, and associated with the scope of application of the relevant internal ~~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 this Article 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 this Article 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) No 575/2013~~Part A of this Annex 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) of Part A of this Annex 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 the following points (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.

[Note: This rule corresponds to Article 7a of Commission Delegated Regulation (EU) No 529/2014 as it applied immediately before revocation by the *Treasury*]

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 the ~~competent authorities~~*PRA* according to the second subparagraph of Article 363(3) of ~~Regulation (EU) No 575/2013~~Part A of this Annex, 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~~the *PRA* two weeks before their planned implementation;

(b) all other extensions and changes shall be notified to the ~~competent authorities~~*PRA* after implementation at least on an annual basis.

[Note: This rule corresponds to Article 7b of Commission Delegated Regulation (EU) No 529/2014 as it applied immediately before revocation by the *Treasury*]

Article 8 DOCUMENTATION OF EXTENSIONS AND CHANGES

1. For extensions and changes to the ~~IRB approach, or to the AMA or to the~~ IMA classified as requiring the *PRA*'s ~~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.

2. For extensions and changes classified as 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.

[Note: This rule corresponds to Article 8 of Commission Delegated Regulation (EU) No 529/2014 as it applied immediately before revocation by the *Treasury*]

Article 9 ENTRY INTO FORCE

~~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.~~

[Note: Provision left blank]

ANNEX I CHANGES TO THE IRB APPROACH

[Note: Provision left blank]

ANNEX II EXTENSIONS AND CHANGES TO THE AMA

[Note: Provision left blank]

ANNEX III EXTENSIONS AND CHANGES TO THE AMA

Part I Extensions to the IMA

Section 1 Extensions requiring ~~competent authorities'~~ PRA 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 internal ~~IMA~~ model of product classes, for which the VaR number, computed according to Article 364(1)(a)(i) of ~~Regulation (EU) No 575/2013~~Part A of this Annex, exceeds 5% of the VaR number, computed according to Article 364(1)(a)(i) of ~~Regulation (EU) No 575/2013~~Part A of this Annex, 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 PRA

The inclusion in the scope of an internal ~~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 A of this Annex.

Part II Changes to the IMA

Section 1 Changes requiring ~~competent authorities'~~PRA 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~~the PRA

1. Changes in the fundamentals of statistical methods according to Articles 365, 374 or 377 of ~~Regulation (EU) No 575/2013~~Part A of this Annex, 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~~Part A of this Annex.

3. 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~~Part A of this Annex.

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~~Part A of this Annex.

6. Changes in the methodology for defining proxies.

7. Changes in the hierarchy of sources of ratings used for determining the rating of an individual position in the IRC.

8. Changes in the methodology regarding the loss given default rate ('LGD') or the liquidity horizons for IRC or correlation trading models according to Articles 372 to 376 or Article 377 ~~Section 4 or Section 5 of Chapter 5 of Title IV~~ of ~~Regulation (EU) No 575/2013~~Part A of this Annex.

9. Changes in the methodology used for assigning exposures to individual exposure classes in the IRC or correlation trading models according to Articles 372 to 376 or Article 377~~Section 4 or Section 5 of Chapter 5 of Title IV~~ of ~~Regulation (EU) No 575/2013~~Part A of this Annex.

10. Changes of methods for estimating exposure or asset correlation for IRC or correlation trading models according to Articles 372 to 376 or Article 377 ~~Section 4 or Section 5 of Chapter 5 of Title IV~~ of ~~Regulation (EU) No 575/2013~~Part A of this Annex.

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~~Part A of this Annex.

12. Changes in the internal validation methodology according to Article 369 of ~~Regulation (EU) No 575/2013~~Part A of this Annex.

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~~Part A of this Annex 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.

[Note: This rule corresponds to Annex III of Commission Delegated Regulation (EU) No 529/2014 as it applied immediately before revocation by the *Treasury*]