



BANK OF ENGLAND  
PRUDENTIAL REGULATION  
AUTHORITY

Supervisory Statement | SS12/16

[Deleted in its entirety]

# Solvency II: Changes to internal models used by UK insurance firms

July 2018

(Updating September 2016)

Effective from 31 December 2024



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Effective from 31 December 2024

## 1 Introduction

1.1 This Prudential Regulation Authority (PRA) supervisory statement is relevant to firms with an internal model approval under Solvency II. It may also be of interest to UK Solvency II firms seeking approval to use an internal model in the future and also to UK Solvency II firms that are part of European Economic Area (EEA) or non-EEA groups with a group internal model. For the remainder of this supervisory statement reference to internal models should be taken to mean both full and partial internal models.

1.2 This supervisory statement sets out the PRA's expectations in respect of firms applying for approval for a major change to their approved internal models (either an individual major change or major change triggered by an accumulation of minor changes) or an extension of scope to an approved internal model (eg to cover new business units or risks). This supervisory statement also sets out the PRA's expectations in respect of firms applying to alter their approved internal model change policy. Where the firm is part of an EEA or non-EEA group the college of supervisors may need to co-ordinate and agree the overall process for approving a major change application, which may differ to that set out in the supervisory statement.

1.3 In the remainder of this supervisory statement the use of the phrase 'model change application' should be taken to mean any of these applications set out in paragraph 1.2, unless otherwise specified.

1.4 In particular, the supervisory statement covers the:

- interaction with the PRA before and during a model change application;
- quality of a model change application; and
- information to be provided with a model change application.

1.5 The PRA's approach to reviewing model change applications will have similarities to the internal model approval process (IMAP). It will form part of the PRA's overall approach in ensuring a firm's internal model continues to meet the Solvency II requirements and the Solvency Capital Requirement (SCR) remains appropriate for its risk profile.

1.6 The PRA will adopt the same supervisory approval process for: model change applications in respect of individual major changes; major changes triggered by an accumulation of minor changes; and extensions of the scope of the internal model (eg to cover new business units or risks). Applications to alter the internal model change policy will be subject to a standalone review process; however, a firm may wish to align an application to alter its internal model change policy with a model change application.

## 2 Interaction with the PRA before and during a model change application

2.1 This chapter sets out the PRA's expectations on firms when interacting with the PRA before and during a model change application, as well as interaction with the PRA when altering an internal model change policy.

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1 As per Regulation 48 of the Solvency 2 regulations (2015/575).

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## Interaction with the PRA before a model change application

2.2 The PRA expects firms to engage as early as possible with their supervision teams about planned changes and developments to their internal models. This should include any model changes that may arise from expected future changes in the firm's risk profile: for example as a result of a potential business transaction. In particular, the PRA expects firms to give notice of their proposed model change application(s) as soon as firms consider an application likely.

2.3 When giving notice of a model change application, the PRA expects firms to provide a summary of their planned model change(s), the reasons for the change(s), the potential impact (both qualitative and quantitative) and the intended timescales for implementation.

2.4 The PRA expects firms to discuss the scope of their model change application with their usual supervisory contact. The PRA expects model change applications to address past PRA feedback, past data audits, limitations of the model, improvements driven by ongoing use of the model<sup>1</sup>, validation findings and findings arising from the PRA's supervisory review process. In addition, the PRA expects firms to articulate clearly how they have identified and prioritised the model change(s) included in their application as opposed to other model improvements in their model development plan.

2.5 The PRA will discuss with firms whether it would be useful to enter into a pre-application review process before submitting a formal model change application. This is likely to depend on the complexity, scale and quantum of model changes proposed. The length of any pre-application will also be subject to discussion with the PRA and will reflect the extent of review work considered necessary. If firms choose to make use of a pre-application period, feedback would be provided by the PRA during this process; however, this is not a substitute for the firm's own internal governance or validation process.

2.6 The PRA expects firms to submit no more than one model change application per year. This application may comprise several individual major changes (and include any extensions of scope of the internal model), which will be reviewed together under the same supervisory approval process. This will help to ensure that firms are able to provide robust governance over model changes and that the PRA is able to commit appropriate resources to the review of the application. However, the PRA understands that business or market conditions may, in some circumstances, lead to more than one model change application in a year.

2.7 A planned transaction (for example an acquisition or investment in a new asset class), or other event, may lead to a change in the firm's risk profile, and the firm may therefore instigate a model change application. In such situations firms should consider whether the PRA can realistically approve the model change application by the time the transaction takes place. If approval of the model change application is not expected to be obtained in time, firms should discuss with the PRA how they will calculate revised capital requirements and remain adequately capitalised immediately after the transaction or event takes place.

2.8 Where an event occurs which causes a firm to consider whether changes might be required to its internal model, the PRA recognises that it might take some time for the firm to determine what changes are required and for any changes to be implemented within the model in a way that meets the Solvency II requirements. In such circumstances, the PRA expects firms to discuss with the PRA what other steps might be taken in the interim until a model change application can be made and a decision can be taken.

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1 As per Guideline 11 (Incentive to improve the quality of the internal model) of the EIOPA Guidelines on the use of internal models, [https://www.eiopa.europa.eu/publications/guidelines-use-internal-models\\_en](https://www.eiopa.europa.eu/publications/guidelines-use-internal-models_en)

## Interaction with the PRA during a model change application

2.9 Following the submission of a model change application, a firm should continue to use its existing approved internal model when determining its SCR for formal Solvency II reporting purposes. The firm should use the version of the model which has been approved on or before the last day of the reporting period for the purposes of Solvency II reporting at that date. However, the firm can include minor changes implemented within the existing approved internal model as long as these fall below the firm's threshold in respect of accumulating minor changes.

2.10 The PRA expects firms to have regard to the possibility that a model change application is not approved. This should include having contingency plans, where appropriate, and sharing these with the PRA.

2.11 While the PRA does not formally approve minor model changes, it will regularly review firms' reporting of minor changes<sup>1</sup> and may challenge any that it considers should be classified as a major model change. In addition, minor changes may be subject to review by the PRA at any time as part of the PRA's ongoing supervisory review process. If a minor change causes the model to no longer meet the Solvency II tests and standards, firms must address this issue.<sup>2</sup> Minor change accumulations will be reset at the end of an annual cycle (that firms may specify), or at the point of receiving a major change application (if that application is approved), unless otherwise agreed with the PRA.

2.11 A Firms are encouraged to discuss accumulated minor changes with the PRA prior to resetting accumulations to zero in order to ensure a common understanding of the interaction between the various minor changes and the model as a whole.

2.12 Firms are reminded that they should remain adequately capitalised at all times,<sup>3</sup> including the period when a model change application is being reviewed by the PRA. The PRA may consider use of supervisory tools (including as a temporary measure) to ensure that any risks are adequately mitigated.

2.13 In demonstrating ongoing compliance with the use test, firms are reminded to consider Guideline 12 (Use test and changes to the internal model) of the European Insurance and Occupational Pensions Authority (EIOPA) guidelines on the use of internal models.

## Alterations to the policy for changing the internal model

2.14 The PRA expects a firm to discuss with its normal supervisory contact a plan to alter its internal model change policy. Such plans may be made in a separate application and will be reviewed on a standalone basis by the PRA. Alternatively, a firm may wish to align an application to alter its internal model change policy with an existing model change application.

## 3 The quality of model change applications

3.1 The PRA expects firms' model change applications to be of a high quality. If the PRA considers a firm's model change application incomplete, or that it does not otherwise appear to be a viable application, the PRA will discuss with the firm an alternative timescale for submitting a revised application.

1 As per Guideline 8 of EIOPA's Guidelines on the use of internal models,

2 Solvency Capital Requirement – Internal Models, rule 9.1.

3 Rule 2.4 in the Fundamental Rules Part of the PRA Rulebook and rule 2.1 of the Solvency Capital Requirement – General Provisions Part.

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3.2 Firms are reminded that the internal model, following model changes, must continue to meet the Solvency II requirements. This includes the requirement to meet validation standards and that a model change application must be signed off by firms' boards prior to submission.<sup>1</sup> The PRA expects a model change application to include model outputs that include the effect of the model change.

## 4 The information to be provided with a model change application

4.1 The PRA's model change application form can be found on the Bank of England website.<sup>2</sup>

4.2 The application form should be used in respect of: individual major changes, major changes arising from an accumulation of minor changes, extensions of the scope of the internal model and alterations to the internal model change policy.

4.3 Firms' major model change applications should also include the information specified in Articles 2 and 7 of the Commission Implementing Regulation EU 2015/460 for internal models<sup>3</sup>.

4.4 In order to assist the PRA with the review of the model change application and provide evidence that the internal model continues to meet the Solvency II internal model test and standards, the PRA expects firms to provide the following:

- (a) justification for the model change(s);
- (b) a description of the changes that have been made from the latest approved model;
- (c) a log containing a record of planned and historical changes to the internal model;
- (d) evidence that the model change application has been signed-off by the board;
- (e) evidence that the model change(s) have been independently validated; and
- (f) an updated Common Application Package (CAP) indicating clearly which items of evidence relevant to the model change have been altered since the version of the model most recently approved by the PRA.

4.5 An application to alter the internal model change policy should also include the information in Article 8 of the Commission Implementing Regulation EU 2015/460 for internal models. The PRA expects firms to back-test their new policy to justify any changes in the thresholds used to classify major changes.

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1 Rules 7.1 and 14 of the Solvency Capital Requirement – Internal Models Part of the PRA Rulebook.  
2 Available at: [www.bankofengland.co.uk/prudential-regulation/authorisations/solvency-ii-approvals](http://www.bankofengland.co.uk/prudential-regulation/authorisations/solvency-ii-approvals).  
3 [http://eur-lex.europa.eu/eli/reg\\_impl/2015/460/oj](http://eur-lex.europa.eu/eli/reg_impl/2015/460/oj).

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## Annex: Summary of updates to SS12/16

This annex details the changes that have been made to this SS following its initial publication in September 2016.

### February 2024

This SS will be deleted in its entirety at the effective date of PS 2/24 – Review of Solvency II: Adapting to the UK insurance market.<sup>1</sup>

### July 2018

Following publication of Policy Statement 20/18 ‘Solvency II: Internal models update’<sup>2</sup>, this SS was updated to reflect expectations of firms in respect of the model change process. These amendments can be found in paragraphs 2.11 and 2.11A.

Effective from 31 December 2024

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<sup>1</sup> February 2024: [www.bankofengland.co.uk/prudential-regulation/publication/2024/february/review-of-solvency-ii-adapting-to-the-uk-insurance-market-policy-statement](http://www.bankofengland.co.uk/prudential-regulation/publication/2024/february/review-of-solvency-ii-adapting-to-the-uk-insurance-market-policy-statement).

<sup>2</sup> [www.bankofengland.co.uk/prudential-regulation/publication/2017/solvency-ii-internal-models-update](http://www.bankofengland.co.uk/prudential-regulation/publication/2017/solvency-ii-internal-models-update).