

**CEIOPS' Advice for Level 2 Implementing  
Measures on Solvency II on:  
The procedure to be followed for the approval of  
an internal model**

(former Consultation Paper 37)

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# 1. Introduction

- 1.1 One of CEIOPS' primary responsibilities is to provide technical support to the European Commission in developing a new solvency system for insurance and reinsurance undertakings (there after "undertakings") in the EU – Solvency II.
- 1.2 In its letter of 19 July 2007, the European Commission requested CEIOPS to provide final, fully-consulted Advice on Level 2 Implementing measures by October 2009 and recommended CEIOPS to develop Level 3 guidance on certain areas to foster supervisory convergence. On 12 June 2009 The European Commission sent a letter with further guidance regarding the Solvency II project, including the list of implementing measures and timetable until implementation<sup>1</sup>.
- 1.3 The main objective of this document is therefore to provide the European Commission with sufficient technical Advice so that it is in a position to finalise its proposal for the Level 2 implementing measures setting out:  
  
*"The procedure to be followed for the approval of an internal model" (Article 114(1) of the Solvency II Level 1 text, hereafter: Level 1 text).<sup>2</sup>*
- 1.4 Generally, the Advice in this Paper may be seen as an extension of the Level 1 text. This provides further detail on specific issues or offers greater clarity with respect to the general provisions for the procedure to be followed for the approval of full and partial internal models, both at solo and group level. Some specific requirements apply only to the approval process of a partial internal model or of a group internal model.
- 1.5 Throughout the Paper CEIOPS has taken account of the proportionality principle described in Article 29(4) of the Level 1 Text. CEIOPS has already published Advice on proportionality<sup>3</sup>, including Advice on its application to internal models and that underpins this Advice.
- 1.6 CEIOPS is developing further detailed Advice to the Commission of the European Communities to ensure a harmonised approach to the use of internal models and to enhance the better assessment of the risk profile and management of undertakings with respect to:
  - Articles 120 to 126 of the Level 1 text; and
  - Partial Internal Models
- 1.7 Furthermore, CEIOPS will also work to develop Level 3 standards and guidance to enable further convergence of supervisory practice. The first

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<sup>1</sup> See <http://www.ceiops.eu/content/view/5/5/>

<sup>2</sup> Latest version from 19 October 2009 available at <http://register.consilium.europa.eu/pdf/en/09/st03/st03643-re01.en09.pdf>

<sup>3</sup> [http://www.ceiops.eu/media/docman/public\\_files/publications/submissionstotheec/AdviceProportionality.pdf](http://www.ceiops.eu/media/docman/public_files/publications/submissionstotheec/AdviceProportionality.pdf)

step in this process will be consultation in early 2010 on further guidance for the pre-application process.

- 1.8 This Advice has been subject to public consultation. CEIOPS has carefully considered comments from stakeholders on its Consultation Paper and has revised the contents, where appropriate. The final Advice has been submitted to the European Commission. An explanation of how each comment has been addressed has been published by CEIOPS.
- 1.9 Finally, CEIOPS would like to acknowledge the significant contribution made by stakeholder groups during the preparation of this Advice, the Stock-taking report on the use of internal models in insurance<sup>4</sup> and the support provided through the past QIS exercises. Good working-level contacts have been established with a number of groups, enabling CEIOPS to receive expert input and to test ideas quickly.

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<sup>4</sup> CEIOPS (2009) - "Stock-taking report on the use of internal models in insurance", available at: <http://www.ceiops.eu/media/files/publications/reports/Stock-taking-report-on-the-use-of-Internal-Models-in-Insurance.pdf>

## 2. Legal basis

### 2.1 Key extracts from the Level 1 text

- 2.1 This Section reproduces the key extracts from the Level 1 text which are directly relevant for the procedure to be followed for the approval of an internal model.
- 2.2 Articles 100 and 101 deal with the general provisions for the Solvency Capital Requirement (SCR) using the standard formula or an internal model. More specifically, according to Article 100:

*Article 100  
General provisions*

*"Member States shall require that insurance and reinsurance undertakings hold eligible own funds covering the Solvency Capital Requirement.*

*The Solvency Capital Requirement shall be calculated, either in accordance with the standard formula in Subsection 2 or using an internal model, as set out in Subsection 3".*

- 2.3 Whereas, according to Article 101:

*Article 101  
Calculation of the Solvency Capital Requirement*

*"1. The Solvency Capital Requirement shall be calculated in accordance with paragraphs 2 to 5:*

*2 The Solvency Capital Requirement shall be calculated on the presumption that the undertaking will pursue its business as a going concern.*

*3. The Solvency Capital Requirement shall be calibrated so as to ensure that all quantifiable risks to which an insurance or reinsurance undertaking is exposed are taken into account. It shall cover existing business, as well as the new business expected to be written over the following 12 months. With respect to existing business, it shall cover only unexpected losses.*

*It shall correspond to the Value-at-Risk of the basic own funds of an insurance or reinsurance undertaking subject to a confidence level of 99,5 % over a one-year period.*

*4. The Solvency Capital Requirement shall cover at least the following risks:*

- (a) non-life underwriting risk;*
- (b) life underwriting risk;*
- (c) health underwriting risk;*
- (d) market risk;*

*(e) credit risk;*

*(f) operational risk.*

*Operational risk as referred to in point (f) of the first subparagraph shall include legal risks, and exclude risks arising from strategic decisions, as well as reputation risks.*

*5. When calculating the Solvency Capital Requirement, insurance and reinsurance undertakings shall take account of the effect of risk-mitigation techniques, provided that credit risk and other risks arising from the use of such techniques are properly reflected in the Solvency Capital Requirement”.*

2.4 Article 112 deals with the general provisions for the approval of full and partial internal models:

#### *Article 112*

##### *General provisions for the approval of full and partial internal models*

*1. Member States shall ensure that insurance or reinsurance undertakings may calculate the Solvency Capital Requirement using a full or partial internal model as approved by the supervisory authorities.*

*2. Insurance and reinsurance undertakings may use partial internal models for the calculation of one or more of the following:*

*(a) one or more risk modules, or sub-modules, of the Basic Solvency Capital Requirement, as set out in Articles 104 and 105;*

*(b) the capital requirement for operational risk as set out in Article 107;*

*(c) the adjustment referred to in Article 108.*

*In addition, partial modelling may be applied to the whole business of insurance and reinsurance undertakings, or only to one or more major business units.*

*3. In any application for approval, insurance and reinsurance undertakings shall submit, as a minimum, documentary evidence that the internal model fulfils the requirements set out in Articles 120 to 125.*

*Where the application for that approval relates to a partial internal model, the requirements set out in Articles 120 to 125 shall be adapted to take account of the limited scope of the application of the model.*

*4. The supervisory authorities shall decide on the application within six months from the receipt of the complete application.*

*5. Supervisory authorities shall give approval to the application only if they are satisfied that the systems of the insurance or reinsurance undertaking for identifying, measuring, monitoring, managing and reporting risk are adequate and in particular, that the internal model fulfils the requirements referred to in paragraph 3.*

6. *Any decision by the supervisory authorities to reject the application for the use of an internal model shall state the reasons on which it is based.*

7. *After having received approval from supervisory authorities to use an internal model, insurance and reinsurance undertakings may, by means of a decision stating the reasons, be required to provide supervisory authorities with an estimate of the Solvency Capital Requirement determined in accordance with the standard formula, as set out in Subsection 2”.*

2.5 Article 113 deals with the specific provisions for the approval of partial internal models

#### *Article 113*

##### *Specific provisions for the approval of partial internal models*

2.6 1. *In the case of a partial internal model, supervisory approval shall be given only where that model fulfils the requirements set out in Article 112 and the following additional conditions:*

*(a) the reason for the limited scope of application of the model is properly justified by the undertaking;*

*(b) the resulting Solvency Capital Requirement reflects more appropriately the risk profile of the undertaking and in particular complies with the principles set out in Subsection 1;*

*(c) its design is consistent with the principles set out in Subsection 1 so as to allow the partial internal model to be fully integrated into the Solvency Capital Requirement standard formula.*

2. *When assessing an application for the use of a partial internal model which only covers certain sub-modules of a specific risk module, or some of the business units of an insurance or reinsurance undertaking with respect to a specific risk module, or parts of both, supervisory authorities may require the insurance and reinsurance undertakings concerned to submit a realistic transitional plan to extend the scope of the model.*

*The transitional plan shall set out the manner in which insurance and reinsurance undertakings plan to extend the scope of the model to other sub-modules or business units, in order to ensure that the model covers a predominant part of their insurance operations with respect to that specific risk module”.*

2.7 Article 115 deals with the policy for changing the full and partial internal models:

#### Article 115

##### *Policy for changing the full and partial internal models*

*"As part of the initial approval process of an internal model, the supervisory authorities shall approve the policy for changing the model of the insurance or reinsurance undertaking. Insurance and reinsurance undertakings may change their internal model in accordance with that policy.*

*The policy shall include a specification of minor and major changes to the internal model.*

*Major changes to the internal model, as well as changes to that policy, shall always be subject to prior supervisory approval, as laid down in Article 112.*

*Minor changes to the internal model shall not be subject to prior supervisory approval, insofar as they are developed in accordance with that policy".*

- 2.8 Article 116 deals with the responsibilities of the administrative and management bodies:

#### Article 116

##### *Responsibilities of the administrative, management or supervisory bodies*

*"The administrative, management or supervisory bodies of the insurance and reinsurance undertakings shall approve the application to the supervisory authorities for approval of the internal model referred to in Article 112, as well as the application for approval of any subsequent major changes made to that model.*

*The administrative, management or supervisory body shall have responsibility for putting in place systems which ensure that the internal model operates properly on a continuous basis".*

- 2.9 Article 231 deals with the approval process for a group internal model:

#### Article 231

##### *Group internal model*

*1. In the case of an application for permission to calculate the consolidated group Solvency Capital Requirement, as well as the Solvency Capital Requirement of insurance and reinsurance undertakings in the group, on the basis of an internal model, submitted by an insurance or reinsurance undertaking and its related undertakings, or jointly by the related undertakings of an insurance holding company, the supervisory authorities concerned shall cooperate to decide whether or not to grant that permission and to determine the terms and conditions, if any, to which such permission is subject.*

*An application as referred to in the first subparagraph shall be submitted to the group supervisor.*

*The group supervisor shall inform the other supervisory authorities concerned without delay.*

*2. The supervisory authorities concerned shall do everything within their power to reach a joint decision on the application within six months from the date of receipt of the complete application by the group supervisor.*

*The group supervisor shall forward the complete application to the other supervisory authorities concerned without delay.*

*3. During the period referred to in paragraph 2, the group supervisor and any of the other supervisory authorities concerned may consult CEIOPS. CEIOPS shall also be consulted where the participating undertaking so requests.*

*Where CEIOPS is being consulted, all the supervisory authorities concerned shall be informed and the period referred to in paragraph 2 shall be extended by two months.*

*4. Where CEIOPS has not been consulted in accordance with the first subparagraph of paragraph 3, and in the absence of a joint decision of the supervisory authorities concerned within six months from the date of receipt of the complete application by the group supervisor, the group supervisor shall request CEIOPS, within a further two months, to deliver advice to all the supervisory authorities concerned. The group supervisor shall take a decision within three weeks of the transmission of that advice, taking full account thereof.*

*5. Irrespective of whether CEIOPS has been consulted, the group supervisor's decision shall state the full reasons and shall take into account the views expressed by the other supervisory authorities concerned.*

*The group supervisor shall provide the applicant and the other supervisory authorities concerned with the decision.*

*The supervisory authorities concerned shall comply with the decision.*

*6. In the absence of a joint decision within the periods set out in paragraphs 2 and 3 respectively, the group supervisor shall make its own decision on the application.*

*In making its decision, the group supervisor shall duly take into account the following:*

*(a) any views and reservations of the other supervisory authorities concerned expressed during the applicable period;*

*(b) where CEIOPS has been consulted, its advice.*

*The decision shall state the full reasons and shall contain an explanation of any significant deviation from the positions adopted by CEIOPS.*

*The group supervisor shall transmit the decision to the applicant and the other supervisory authorities concerned.*

*That decision shall be recognised as determinative and applied by the supervisory authorities concerned.*

*7. Where any of the supervisory authorities concerned considers that the risk profile of an insurance or reinsurance undertaking under its supervision deviates significantly from the assumptions underlying the internal model approved at group level, and as long as that undertaking has not properly addressed the concerns of the supervisory authority, that authority may, in accordance with Article 37, impose a capital add-on to the Solvency Capital Requirement of that insurance or reinsurance undertaking resulting from the application of such internal model.*

*In exceptional circumstances, where such capital add-on would not be appropriate, the supervisory authority may require the undertaking concerned to calculate its Solvency Capital Requirement on the basis of the standard formula referred to in Title I, Chapter VI, Section 4, Subsections 1 and 2. In accordance with points (a) and (c) of Article 37(1), the supervisory authority may impose a capital add-on to the Solvency Capital Requirement of that insurance or reinsurance undertaking resulting from the application of the standard formula.*

*The supervisory authority shall explain any decision referred to in the first and second subparagraphs to both the insurance or reinsurance undertaking and the group supervisor”.*

## **2.2 Legal basis for the level 2 implementing measures**

2.10 This Section deals with the identification of the legal basis for the Level 2 implementing measure being examined, i.e. identification of the Article(s) calling for an implementing measure with respect to that issue. Nevertheless, other implementing provisions that we have not mentioned in this Section may be impliedly drawn on in relation to related or ancillary areas, such as internal controls referred to under Chapter IV, Section 2 of the Directive.

2.11 Article 114 calls for an implementing measure for the procedure to be followed for the approval of an internal model:

### *Article 114* Implementing measures

*“The Commission shall adopt implementing measures setting out the following:*

*(1) the procedure to be followed for the approval of an internal model;*

*(2) the adaptations to be made to the standards set out in Articles 120 to 125 in order to take account of the limited scope of the application of the partial internal model.*

*Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 301(3)".*

- 2.12 Article 234 deals with implementing measures linked to the calculation of group consolidated Solvency Capital Requirement (SCR) and the approval process for group internal models:

*Article 234  
Implementing measures*

*"The Commission shall adopt implementing measures specifying the technical principles and methods set out in Articles 220 to 229 and the application of Articles 230 to 233 to ensure uniform application within the Community".*

# 3. Procedure to be followed for the approval of an internal model

## 3.1 Pre-application

### 3.1.1. General Provisions

- 3.1 The Level 1 text imposes a tight timeframe of six months after receipt of a complete application during which supervisory authorities shall reach a decision on the application for approval of an undertaking's internal model for use in calculating the SCR. CEIOPS' work with industry during the preparation of the Stock-take report<sup>5</sup> suggests that undertakings' internal models may be extremely complex and varied, and that even the best-prepared undertakings are still some way short of the expected Solvency II standards in at least some areas.
- 3.2 To ensure that the approval process for both the undertaking and its supervisory authority is conducted in an efficient, coordinated and effective manner, supervisory authorities will need to spend significant amounts of time reviewing the internal models against the requirements in the Level 1 text, as well as reviewing the undertaking's risk management framework.
- 3.3 To facilitate this process, many undertakings have suggested during the preparation of the stock-taking exercise that they would welcome a period of engagement with supervisory authorities prior to the submission of their formal application, to enable them to develop and refine their internal model practices in preparation for meeting Solvency II requirements.
- 3.4 CEIOPS are also of the opinion that undertakings that have engaged with the Solvency II project prior to implementation are likely to be more prepared for actual implementation. This can be seen from the undertakings that have taken part in the QIS exercises – those that completed the spreadsheets have a much greater understanding of what will be required from them, and are hence better able to prepare. In order to prepare for a smooth transition to Solvency II, CEIOPS proposes that the pre-application stage is able to be accessed by undertakings before November 2012. CEIOPS expects that supervisory authorities will be able to undertake this preparatory work under their respective national mandates, without the need for an early implementation of the relevant provisions of Solvency II.
- 3.5 As a consequence, CEIOPS has analysed the pros and cons of introducing a pre-application stage prior to the undertaking's formal application for internal model approval. This would not be a compulsory part of the

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<sup>5</sup> CEIOPS (2009) - "Stock-taking report on the use of internal models in insurance", available at: <http://www.ceiops.eu/media/files/publications/reports/Stock-taking-report-on-the-use-of-Internal-Models-in-Insurance.pdf>

approval process, but we would expect that undertakings will find it valuable and that few will not choose to make use of it.

- 3.6 The aim of the pre-application would be for the supervisory authorities to give a view on how prepared the undertaking is to submit an application, including the scope of the application and the time schedule for the submission of the formal application; the supervisory authority's view shall be communicated to the undertaking, so that the undertaking is aware of the completeness of its application. A view that the undertaking has a complete application would not imply that approval will necessarily be granted.
- 3.7 A pre-application stage requires more resources from the supervisory authorities, but should prove more efficient in the long run as supervisory authorities will be better able to plan resources for assessing internal models. This will also give supervisory authorities the opportunity to become familiar with the undertaking's internal model, making the assessment stage more straightforward with a direct positive effect on the quality of future applications. The undertaking shall also be able to come to a view about the likely success of its application and review any elements of the internal model that may require further work before making a formal application.
- 3.8 Several regulatory regimes have already introduced a pre-application stage, although with different levels of formality<sup>6</sup>. For example, CEBS Guidelines introduced this stage to facilitate banks' preparation of their internal model approval application<sup>7</sup>.
- 3.9 CEIOPS would not wish to specify in the Level 2 implementing measures the format of the pre-application. For example, it does not wish to specify whether it should include a face-to-face meeting between the undertaking and the supervisory authorities, although it does consider that this will generally be desirable<sup>8</sup>. The content of the pre-application discussion with the supervisory authorities may vary. CEIOPS considers that it is reasonable to assume that the initial discussion shall at least include items (a) to (f) listed below
- a) An indication that the undertaking intends to apply for approval to use its internal model to calculate the SCR and when it plans to apply.
  - b) The **scope of the internal model** application, including which risks, entities, lines of business and/or major business units are covered by the model.

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<sup>6</sup> CEIOPS (2009) - "Stock-taking report on the use of internal models in insurance", available at: <http://www.ceiops.eu/media/files/publications/reports/Stock-taking-report-on-the-use-of-Internal-Models-in-Insurance.pdf>

<sup>7</sup> CEBS (2006) - "Guidelines on the implementation, validation and assessment of Advanced Measurement (AMA) and Internal Ratings Based (IRB) Approaches", available at: <http://www.cebs.org/formupload/ab/abdd0561-d123-4961-81aa-6b2cad7c272b.pdf>

<sup>8</sup> CEIOPS will provide further guidance on the pre-application process at Level 3

- c) An initial view from the undertaking on how the internal model meets the requirements for approval in the Level 1 text (i.e. a **self-assessment of internal model readiness**). The self-assessment of internal model readiness shall not be a substitute for the internal model requirements in the Level 1 text. The format of the self-assessment might develop over time, based on the supervisory authorities' experience of internal model approvals, or could be based on experience in other countries and industries. Supervisory authorities will need to consider the extent to which a standard format could be developed for all undertakings, and how the format should vary according to the nature, scale and complexity of risks borne by the undertaking and how the undertaking is managed.
  - d) The undertaking shall also be able to explain their concrete project **plan for meeting the internal model requirements** by the date of the application.
  - e) Any information the undertaking deems necessary and relevant to understand the model at the provisional stage of pre-application (e.g. a draft of the information to be submitted later for the internal model approval application). An undertaking indicating that they intend to apply for internal model approval should be expected to be well on the way to preparing the documentation for the application.
  - f) Access to any draft documentation of the internal model as set out by Article 125 of the Level 1 text.
- 3.10 CEIOPS emphasises these are minimum requirements, and supervisory authorities may consider other relevant information or documents as part of the pre-application discussions. Subsequently, the pre-application stage may include a review of this information by the supervisory authorities, including one or more on-site inspections, if appropriate. This review would be alongside the information that the supervisory authorities already has from the undertaking through supervisory review process including the standard reporting to supervisory authorities. The supervisory authorities could also require any further information from the undertaking to assist in the review.
- 3.11 The pre-application stage may take place while the undertaking is developing its application. Since it consists principally of the undertaking sharing with its supervisory authority material that would need in any case to be prepared for the application CEIOPS believes that it will not add materially to the time needed to prepare the application.
- 3.12 CEIOPS expects that the pre-application stage will end when the supervisory authority has given a view to the undertaking on how prepared the undertaking is to submit an application.
- 3.1.2. Specificities related to groups**
- 3.13 CEIOPS may provide further guidance about the pre-application stage for groups in Level 3 measures.

- 3.14 The format of the pre-application for group internal models, if any, shall be consistent with the solo requirements. The main difference may be related to the scope of the group internal model and possible adjustments to take into account the co-operation between supervisory authorities during the pre-application phase.
- 3.15 If several supervisory authorities are involved in the approval process, CEIOPS recommends that they liaise before the formal application to allocate tasks for the assessment of the group internal model.
- 3.16 To facilitate this allocation of tasks, it is desirable that the different supervisory authorities know in advance the plans of the group to develop its internal model. In particular, the group shall explain during the pre-application the intended scope of application.

## **CEIOPS' Advice**

### **Pre-application**

#### **General Provisions**

- 3.17 CEIOPS considers that a "pre-application" stage to the approval process will be of benefit to undertakings as it would give them the opportunity to liaise with their supervisory authorities as they develop and embed their internal models and prepare their application for approval. This will also facilitate the subsequent approval process and enable supervisory authorities to start from an informed position when reviewing the internal models for approval.
- 3.18 Therefore, CEIOPS recommends that such a pre-application stage is developed by supervisory authorities and is consistently applied on a regular basis both before and after the implementation date for Solvency II.
- 3.19 The aim of the pre-application would be for the supervisory authorities to give a view on how prepared the undertaking is to submit an application, including the scope of the application and the time schedule for the submission of the formal application.
- 3.20 During this pre-application period, it would be desirable that:
- a) Supervisory authorities understand the extent and nature of the intended use, scope of application and coverage of the internal model (for example, which risks, business units, and exposures are to be covered, how internal model components are being rolled out across the undertaking, governance and risk management arrangements, data collection and management, and testing).
  - b) The undertaking familiarises itself with the approval framework and the requirements and standards concerning the information that it will need to submit.

- c) There is early identification and communication of any specific concerns or issues that need to be factored into the process.

### **Specificities related to groups**

3.21 The format of the pre-application for group internal models, if any, shall be consistent with the solo requirements. In addition, for groups CEIOPS expects that:

- a) The pre-application will assess the scope of the group internal model and its consistency with the scope of group supervision according to Article 214 or deviates, as well as the architecture of the model, e.g. how responsibilities are split within the group.

- b) All supervisory authorities mentioned in paragraph 3.130 establish jointly a cooperative and consultative framework. This framework needs to encompass the following:

- b.1a) Which other supervisory authorities involved in the group supervision mentioned in paragraph 3.132 may be consulted;

- b.1b) The respective roles, as well as the allocation of specific tasks. As set out in paragraph 3.78 of CEIOPS Advice on Cooperation and Colleges of supervisors, any supervisory authority which is able to participate in any supervisory team would be permitted to do so. Concerned supervisory authorities of undertakings that are material to the group by their scale or risk exposure would be encouraged to participate in the approval process.

- b.2) A communication strategy and escalation process; and

- b.3) The procedures to reach a joint decision among the supervisory authorities concerned pursuant to Article 231.

- c) For each individual pre-application, supervisory authorities develop together with the group an overall supervisory plan of action that covers each step of the approval process including priority issues and a timetable.

## 3.2 Application

### 3.2.1. General Provisions

- 3.22 Article 112(1) requires that "*Member States shall ensure that insurance or reinsurance undertakings may calculate the Solvency Capital Requirement using a full or partial internal model as approved by the supervisory authorities*".
- 3.23 To decide on an application, supervisory authorities need an overview of the model that the undertaking uses or plans to use, the scope of application and coverage, and of how it will be implemented in the insurer's policies, procedures and risk management. Detailed information will be required on the construction and calibration of the models, the database and the technological environment<sup>9</sup>, including the insurer's control environment. Some of this may have been provided during the pre-application process, but it is important that the latest version is supplied.
- 3.24 Permission to use an internal model, full or partial, shall be requested in writing by a cover letter to the relevant supervisory authority stating that the supervised undertaking applies for permission to use an internal model to calculate its SCR, starting from a specified date. Attached to this cover letter the undertaking shall provide an adequate description of the model and its scope together with all the documents ('application pack') that constitute the documentary evidence that the internal model meets the requirements set out in the Level 1 text including Articles 100, 112 and 120 to 126 and is appropriate to calculate the SCR, that the undertaking has adequate systems for monitoring and managing risk, and the specific provisions for partial internal models set out in Article 113(1), if applicable. All this information shall be provided in an official language of the Member State, unless the supervisory authority agrees that information may be provided in another language. Therefore, the undertaking is responsible for carrying out any translation of documents related to the application.
- 3.25 The application shall not contain irrelevant information to ensure that the application is appropriately focussed and it shall also be easily navigable.
- 3.26 The six-month period for taking a decision on an application shall begin from the date that a complete application is received by the supervisory authorities, as set out in Article 112(4). The six-month period therefore cannot start before the relevant supervisory authorities have received an application that is complete. Completeness is objectively measured and if the supervisory authority is of the view that the received documentation is not complete in the sense that the submitted documents do not fulfil the requirements as set out in 3.29 of this Paper or are not readily comprehensible for a knowledgeable third party, then the supervisory

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<sup>9</sup> See paragraph 3.119 or definition of this term

authority must inform the undertaking that additional documentation/information must be provided. In these circumstances, if the additional documentation/information is not provided, the six-month period will not start.

So, for example, if the supervisory authority receives an application on 1 January (2013) and after one month (1 February) makes the decision about the completeness of the application, we have then two possible scenarios:

1) After the period of assessment (one month in the example), the supervisory authority decides that the application is indeed complete. The period in this case applies retroactively: i.e. the supervisory authority has received a complete application as of 1 January, and therefore must make a decision by 30 June 2013.

2) After the period of assessment the supervisory authority decides that the application is not complete. The commencement of the six-month period cannot start since the application is not complete and the supervisory authority must inform the undertaking that additional documentation/information is needed in order to make complete the application. Let's assume the undertaking sends supplementary documentation after one month, i.e. on 1 March. The supervisory authority reassesses the completeness of the application and after one month (1 April 2013) decides that this time the documentation is complete. On 1 April 2013 the supervisory authority informs the undertaking that the documentation is complete. The six-month period will have started on 1 March 2013 and there are therefore five months – until 1 September 2013 – for the decision on the model.

The pre-application process will help to facilitate the supervisor to determine that the application is complete, as set out in paragraph 3.6 of this Paper.

### 3.27 If the application:

- a) is not complete in all essential aspects, including being provided in the official language, or
- b) it raises any significant doubts or non fulfilment in this regard, or
- c) if it does not meet the standards set out in the Level 3 guidelines or in more detailed standards imposed by the competent supervisory authorities,

Then the application shall not enter the formal assessment process and the six-month period shall not start. Any decision by the supervisory authorities not to proceed with the formal assessment of the application on the basis of non-completeness shall be accompanied by the reasons that it is not complete. These may include an indication of the necessary steps the undertaking may follow in order to achieve a complete application.

- 3.28 Supervisory authorities may request supplementary information, either in the initial application or at a later stage, to allow an effective assessment of the application. These documents, like all internal documentation, have to be made available to the supervisory authorities upon request.
- 3.29 The required minimum documentation for such an application shall be divided into:
- a) **Cover letter requesting approval** approved and signed by the administrative, management or supervisory body of the undertaking. The letter shall at least include the following information:
- a.1. request for permission to use the internal model starting from a specified date and general information;
- a.2. a formal confirmation that:
- all the necessary measures and processes concerning the structure and completion of the internal model have been implemented for a reasonable period<sup>10</sup> prior to the application;
  - the internal model submitted for approval has been used as an authoritative instrument for the quantitative measurement and control of the undertaking-specific risk for a reasonable period prior to the application;
  - the use of the internal model for the quantitative measurement and control of undertaking-specific risks and for determining the regulatory SCR is deemed appropriate; and
  - that the documents presented are complete
- a.3. the rationale for the internal model;
- a.4. contact information for relevant people (e.g. members of the modelling team, etc.);
- a.5. the letter should also confirm that the material attached to the application is a true and fair summary of the topics covered. 'True and fair summary' means that the document provides only a summary of the topic in question, 'true' means that the information contained in the summary is not false or misleading, and 'fair' means that the information presents a reasonable overall summary, without omitting material facts.

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<sup>10</sup> It is not possible to define a "reasonable period" in terms of time: this should be proportionate to the nature, scale and complexity of the undertaking, its risks and its model. Nor would the model precisely as submitted need to have been in use: the period before submission, especially for early applications, is likely to be one when development of the model is intensive. For more information on what is expected, see the discussion on the Use Test in CEIOPS Advice on Test and Standards for Internal Models Approval

- b) A written declaration from the administrative, management or supervisory bodies of the undertaking to confirm that all clarifications and supporting document have been provided and no material facts and/or details relevant to the approval have been knowingly concealed.
- c) A copy of the application approval of the administrative, management or supervisory bodies as set out in Article 116 (e.g. extracts from the relevant minutes).
- d) The results of the latest ORSA and details of the undertaking's business and risk strategies as set out in Article 45 (e.g. if the undertaking wants to use an internal model to calculate its SCR from the earliest possible date then it will need to have completed an ORSA at least one year before the implementation date of Solvency II to comply with this).
- e) **Scope of application for full and partial internal models and model coverage** - The undertaking shall explain what elements, including material quantifiable risks, lines of business and entities are proposed to be covered by the internal model.

For a full internal model, an undertaking:

- e.1. shall explain the overall scope of the full internal model and
- e.2. why it considers each of its model components to adequately cover the risk, not only partially, but fully in its domain of definition, according to concrete regulatory criteria developed by CEIOPS in another Consultation Paper in 2009.

For a partial internal model, an undertaking:

- e.3. shall also justify the limited scope of the model;
  - e.4. explain why it considers that using partial internal modelling for determining regulatory capital requirements is more consistent with the risk profile of the business than the application of the standard formula; and
  - e.5. explain why it considers its design consistent with the general provisions for the SCR so as to allow the partial internal model to be fully integrated in the standard formula.
- f) **Risk management process and risk profile** - The undertaking shall demonstrate in the context of the internal model that it has in place an adequate and effective risk management system, including an agreed risk appetite, a procedure for recording risks and that its related results are adequately documented. Using an adequate process of analysis, the undertaking must be able to understand the nature of the risks it has identified, their origins, the possibility or need to control them and the effects that could arise, both in terms of losses and opportunities. The process of analysis includes a qualitative assessment and, for

quantifiable risks, the adoption of methods to measure the exposure to risk.

- g) **Self-assessment** - The self-assessment shall identify strengths and weaknesses of the internal model and demonstrate compliance with the regulatory requirements, including provisions set out in Articles 100 and 112(3)<sup>11</sup>. The self-assessment carried out by the undertaking shall at least :
- g.1. provide information on the reconciliation process used to ensure the accuracy of input data and its accurate transfer into the internal model;
  - g.2. describe the testing performed to ensure that internal model outputs are reasonable, accurate, complete, appropriate and comprehensive;
  - g.3. provide a description of any internal model limitations or shortcomings identified during the validation process and the steps taken to address these - where any risks may be identified, but outside of scope of the quantitative tool, these may be indicated;
  - g.4. describe the process used to demonstrate the appropriateness of internal model structure, parameters and methodologies;
  - g.5. end with a statement by the administrative, management or supervisory body of the undertaking about the deviance of the model from the existing risk profile.
- h) **Technical Characteristics** - The undertaking shall describe the structure of the internal model. This shall include a list of assumptions, such as choice of distributions or dependencies, for which the insurer is aware that making a different but still reasonable choice may cause a significant change in the capital requirement. These assumptions shall be explained and justified.
- i) **External models and data** - As set out in Article 126, "*the use of a model or data obtained from a third party shall not be considered to be a justification for exemption from any of the requirements for the internal model set out in Articles 120 to 125*". The undertaking shall disclose the use of external models and data and demonstrate the suitability for use within the internal model. It is important that the undertaking has verified that the particular external models and model outputs it uses are appropriate for its particular needs and appropriately incorporated into its internal model. The undertaking shall demonstrate how the external models and data have been

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<sup>11</sup> Level 2 implementing measures on further internal model requirements are part of further detailed Advice to the Commission of the European Communities that CEIOPS has developed: see CEIOPS Advice on Test and Standards for Internal Models Approval

validated, how the performance of external model results is regularly reviewed and how the integrity of the external data has been verified<sup>12</sup>.

- j) **Model governance, systems and controls, including documentation and a copy of organisation charts** - The undertaking shall demonstrate an appropriate organisation and an adequate system of internal controls, proportionate to the size and operational characteristics of the undertaking and the nature and complexity of its risks. Moreover, the undertaking shall demonstrate adequate resources, skills and objectivity of the people responsible for the development and review of the internal model<sup>13</sup>.
- k) **Up-to-date independent review/validation report** - The undertaking shall provide documentation of the most recent independent review/validation report of the internal model, which may be undertaken by an appropriately-qualified internal or external party. The party performing the review must be independent<sup>14</sup> from the normal business operations and the preparation of the annual financial statements of the undertaking and must not have been significantly involved in the development and calibration of the internal model. .
- l) **Policy for changing the full and partial internal models and other policies for internal model governance** - This shall include at least the draft of the proposed policy for model changes as provided in Article 115 and any other internal model governance policy required by supervisory authorities (e.g. validation policy, data policy, etc)<sup>15</sup>.
- m) **Plan for future model improvement** – The undertaking shall set out and explain any plans it has for the future development and improvement of the model. This shall include plans to address any identified weaknesses of the internal model as well as plans to extend or develop the model.
- n) **Capital requirement** - The undertaking shall provide their assessments of economic capital and the SCR from the internal model. The undertaking shall also provide the allocations of these assessments used in its system of governance (as described in Article 120) to the most granular level used. Undertakings shall also provide an estimate

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<sup>12</sup> Level 2 implementing measures on Article 124 of the Level 1 Text are part of another detailed Advice to the Commission of the European Communities that CEIOPS has developed: see CEIOPS Advice on Test and Standards for Internal Models Approval

<sup>13</sup> Level 2 implementing measures on Article 120 of the Level 1 Text are part of another detailed Advice to the Commission of the European Communities that CEIOPS has developed: see CEIOPS Advice on Test and Standards for Internal Models Approval

<sup>14</sup> Level 2 implementing measures on Article 124 of the Level 1 Text are part of further detailed advice to the Commission of the European Communities that CEIOPS is developing, and contains further details of the concept of independence and requirements for validation

<sup>15</sup> Policies for model governance are discussed in the CEIOPS Advice to the Commission of the European Communities on the Level 2 implementing measures on Articles 120 to 126 of the Level 1 Text: see CEIOPS Advice on Test and Standards for Internal Models Approval

of the SCR calculated in accordance with the standard formula<sup>16</sup>, where the undertaking is required to do so by the supervisory authority. In the case of a partial internal model this estimate shall not only encompass the overall SCR, but also at least all risk modules or sub-risk modules or risks, or business units (depending on the case) modelled by the internal model.

- 3.30 Documents (b) through (n) are considered to be part of the application pack. The application pack provides a summary of the undertaking's current or planned practices in sufficient depth to enable the supervisory authorities to make an initial supervisory assessment of the application, and to develop a risk-based plan for a more detailed assessment.
- 3.31 The application should be signed by the administrative, management or supervisory body of the undertaking.
- 3.32 The content of the documents referred to above shall be further detailed in Level 3.

### 3.2.2. **Specificities related to groups**

- 3.33 The application process and information requirements are based on those defined for individual internal models. This Section identifies the additional information required for the application of a group internal model. CEIOPS will carry out further work to explain how this will work in practice.

#### ***Additional information about the scope of application of the group internal model***

- 3.34 The application for approval of a group internal model shall, in addition to the other items set out in the application pack, include the list of related undertakings and business units that are proposed by the group to be included in the scope of the model and provide a summary of the business and risks of these entities (e.g. life or non-life, insurance or reinsurance).
- 3.35 In the present Paper, CEIOPS always considers that all the related undertakings of the group may be included in the scope of the group internal model. However, CEIOPS considers that it is unlikely that a group includes participations which the group does not control in the scope of the internal model. In these cases, it is indeed likely that it will be impossible for groups to fulfil the Use test.
- 3.36 The group shall also indicate for which undertakings it is willing to use the group internal model, as defined in Article 231, for the calculation of the solo SCR.
- 3.37 Where some related undertakings and/or business units are situated in a third country, the application shall also indicate the country and the third country supervisory authority.

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<sup>16</sup> Where the undertaking has been using the standard formula to calculate the SCR prior to its application for internal model approval it shall provide the SCR calculated in accordance with the standard formula. This may refer to applications submitted after the first date of implementation of the Solvency II regime

- 3.38 In the case of a group internal model, the application pack shall thus contain additional information about the scope of the model.
- a) **Scope and model coverage** - The group shall explain what risks are covered and to what extent by the group internal model. For all related undertakings, the group shall give its name, the relevant supervisory authority, the type of business, the consolidation method used and the percentage of consolidation.
  - b) **The overall structure of the group:** The group shall give the list of the related undertakings and the intra-group transactions (participations, internal retrocessions, loans, etc) taken into account in the model.
- 3.39 Groups may exclude some related undertakings or business units from the scope of the internal model. In this case, the group shall justify its choice and the permission to use the internal model may be subject to the inclusion of some related undertakings or business units in the model within a given timeframe. Groups shall also demonstrate that this choice does not lead to an underestimation of the risks.
- 3.40 Examples of situations where the group may choose not to include some risks in its internal model are given below:
- Risks faced in an undertaking are immaterial in comparison with the overall risk exposure of the group.
  - Risks faced in an undertaking are material, but could not be modelled appropriately by the internal model (e.g. new products not yet adequately taken into account by the model).
  - Non-(re)insurance undertakings (e.g. banks, IORPs, holdings) are excluded because their risks are very different from the core group business.
  - The undertaking has just been acquired by the group: in this case, integrating the acquired entity into the model may not be possible within a short time period.
- 3.41 To ensure that all possible situations are covered, CEIOPS thinks that groups may be allowed to use partial internal models where the word "partial" can refer to :
- some of the related undertakings are modelled but not all;
  - some of the major business units, as defined at solo level, are modelled but not all;
  - some risks are modelled but not all;
  - a combination of the previous items.
- 3.42 In this case, the group shall explain how it takes into account the risks not covered by the internal model, in order to satisfy the supervisory authority

that all material risks are covered either by the internal model or by the standard formula. In the case of a group SCR calculation, where the standard formula is used to cover some risks, the calculation must comply with the provisions set out in the CEIOPS Advice on Group solvency assessment.

- 3.43 The question about how group internal models results are merged with the results arising from the standard formula to derive the overall group consolidated solvency requirement is described in another Consultation Paper containing CEIOPS Advice to the European Commission on the Level 2 implementing measures about partial internal models, released in 2009.
- 3.44 According to the Level 1 Text the undertaking may choose to get approval for a partial internal model for one or more major business units.
- 3.45 Further consideration to the definition of a major business unit is addressed in the CEIOPS Consultation Paper relating to partial internal models, released in 2009.

***Application for approval: Language and Signatory***

- 3.46 The application pack shall be sent to the group supervisor in an official language of its Member State, unless the group supervisor agrees that information is provided in another language or a combination of both an official language and another language. Therefore, the group is responsible to carry out any translation of documents related to the application.
- 3.47 Nevertheless, where one of the supervisory authorities concerned needs to have access to a translation of the application pack or of part of it in another language, the group applying is responsible for this translation, as a translation under the responsibility of the supervisor may lead to a loss of fidelity, especially in the case where some parts of the documentation are ambiguous. This situation is expected to arise if, on a legal basis, supervisory authorities can only base their decisions on documents written in the official language of the Member State. In order to ensure the efficiency of the process, when a supervisor asks for a translation of a part of the documentation related to the internal model (in accordance with Article 153 of the Level 1 Text), he should inform the College of supervisors about it.
- 3.48 Where several supervisory authorities are involved in the approval process, CEIOPS recommends that the group agrees with them, ideally during the pre-application, about the language they shall use for the other documents describing its internal model. This is in order to avoid undue delay in the approval process, and should be done taking into account the burden implied for the undertaking and the legal constraints of the supervisors.
- 3.49 The cover letter requesting approval shall be approved and signed by all the administrative, management or supervisory bodies of the undertakings applying for permission to calculate the solo SCR with the group internal model, and of the undertaking submitting the application. .

### **Undertakings with other solvency requirements**

- 3.50 Some related undertakings in the group may be subject to different solvency requirements than those prescribed in the Solvency II regime. For example, pension funds, credit institutions, investment firms, financial institutions, non-regulated entities, holdings, non-financial entities and non-EEA-entities. The CEIOPS Advice on Group solvency assessment gives more details about these situations.
- 3.51 The group supervisor and the other supervisory authorities concerned will need all relevant information about the specific regulatory requirements that apply to the undertakings that are outside of the Solvency II regime. The group supervisors and other supervisory authorities concerned shall in this context take into account the prudential requirements and, where applicable, take into account any regulatory actions taken against one of the related undertakings.
- 3.52 CEIOPS recommends that the group's application shall also contain an assessment of the solo regulatory capital requirements for the related undertakings not subject to the Solvency II regime. These requirements shall be assessed under the requirements of the current local regime. This information is necessary for the supervisor to assess the transferability of the capital of the related undertakings.

### **CEIOPS' Advice**

#### **Application**

##### **General Provisions**

- 3.53 Permission to use an internal model, full or partial, shall be requested in writing by a cover letter to the relevant supervisory authorities stating that the supervised undertaking applies for permission to use an internal model to calculate its SCR, starting from a specified date. Attached to this cover letter the undertaking shall provide all the documents ('application pack') that constitute the documentary evidence that the internal model meets the requirements set out in the Level 1 text, including Articles 100, 112 and 120 to 126 and the specific provisions for partial internal models set out in Article 112(1), if applicable. All these information shall be provided in an official language of the Member State, unless the supervisory authorities agree to the information being provided in another language. The undertaking is therefore responsible for carrying out any translation of documents related to the application.
- 3.54 The application shall not contain irrelevant information to ensure that the application is appropriately focussed and easily navigable.
- 3.55 The six-month period for taking a decision on an application shall begin from the date that a complete application is received by the supervisory authorities, as set out in Article 112(4). The six-month period therefore cannot start before the relevant supervisory authorities have received an application that is complete. Completeness is objectively measured and if

the supervisory authority is of the view that the received documentation is not complete in the sense that the submitted documents do not fulfil the requirements as set out in 3.29 of this Paper or are not readily comprehensible for a knowledgeable third party, then the supervisory authority shall inform the undertaking that additional documentation/ information shall be provided. In these circumstances, if the additional documentation/ information is not provided, the six-month period shall not start.

3.56 If the application:

- a) is not complete in all essential aspects, including being provided in the official language, or
- b) it raises any significant doubts or non fulfilment in this regard,, or
- c) if it does not meet the standards set out in the Level 3 guidelines or in more detailed standards imposed by the competent supervisory authorities,

then the application shall not enter the formal assessment of the application and the six-month period shall not start. Any decision by the supervisory authorities not to proceed with the formal assessment of the application on the basis of non-completeness shall be accompanied by the reasons that it is not complete. These may include an indication of the necessary steps the undertaking may follow in order to achieve a complete application.

3.57 The required minimum documentation for an application shall be divided into:

- a) Cover letter requesting approval, approved and signed by the administrative, management or supervisory body of the undertaking;
- b) Written declaration from the administrative, management or supervisory body of the undertaking confirming that all clarifications and supporting document have been provided, but no material fact and/or details relevant to the approval have been concealed;
- c) Copy of the application approval from the administrative, management or supervisory body of the undertaking, as set out in Article 116;
- d) The results of the latest ORSA and details of the undertaking's business and risk strategies as set out in Article 45;
- e) Scope of application for full and partial internal models and model coverage<sup>17</sup>;
- f) Risk management process and risk profile;

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<sup>17</sup> Criteria for the assessment of the scope of the application for internal models and the model coverage in order to achieve either a partial or a full internal model is part of other detailed Advice to the Commission of the European Communities that CEIOPS has developed, especially on Article 121: see CEIOPS Advice on Test and Standards for Internal Models Approval

- g) Self-assessment;
- h) Technical characteristics of the internal model;
- i) External models and data;
- j) Model governance, systems and controls, including documentation and a copy of organisation charts;
- k) Up-to-date independent review/validation report;
- l) Policy for changing the full and partial internal model (Article 115) and other policies for internal model governance;
- m) Plan for future model improvement; and
- n) Capital requirement.

3.58 Documents (b) through (n) are considered to be part of the application pack. The application pack provides a summary of the insurer's current or planned practices in sufficient depth to enable the supervisory authority to make an initial supervisory assessment of the application, and to develop a risk-based plan for a more detailed assessment.

3.59 Further guidance about these documents shall be provided at Level 3.

### **Specificities related to groups**

#### ***Additional documents***

3.60 In the case of an application for permission to calculate the group SCR on the basis of an internal model, the group shall at least additionally submit to the group supervisor:

- a) An application form including a list of the undertakings and major business units included of the group, the list of their relevant supervisory authorities and the method used to derive the consolidated accounts.
- b) The list of the undertakings which will use an internal model to calculate their solo capital requirements.
- c) The capital requirements for the group and each of the related undertakings intending to use the group internal model to assess its Solvency Capital Requirement.
- d) A description of the structure of the group and of the intragroup transactions.
- e) Where applicable, the list of related undertakings or business units excluded from the scope of the internal model, the rationale for this choice and the method used to assess risks in these undertakings or business units.

- f) Where applicable, the transitional plan to include undertakings not yet taken into account in the internal model.
- g) Where applicable, the regulatory capital requirements for related undertakings included in the scope of the group internal model, but subject on a solo basis to other solvency requirements than the one described in the Level 1 Text.

***Group application for approval: Language and Signatory***

- 3.61 The cover letter requesting approval shall be approved and signed by all the administrative, management or supervisory bodies of the undertakings applying for permission to calculate the solo SCR with the group internal model, and of the undertaking submitting the application.
- 3.62 The application pack shall be sent to the group supervisor in an official language of its Member State, unless the group supervisor agrees that information is provided in another language or a combination of both an official language and another language.
- 3.63 Nevertheless, where one of the supervisory authorities concerned needs to have access to a translation of the application pack or of part of it in another language, the group applying is responsible for this translation. In order to ensure the efficiency of the process, when a supervisor asks for a translation of a part of the documentation related to the internal model, he shall inform the College of supervisors about it.

### **3.3 Policy for changing the full and partial internal models**

#### **3.3.1. General Provisions**

- 3.64 The development of a model change policy is a requirement on all undertakings applying for approval to use the internal model to calculate the SCR. The model change policy forms part of the application from the undertaking, and shall be approved by the supervisory authorities (Article 115, Level 1 text).
- 3.65 It is good practice for undertakings to update their internal models, and CEIOPS expects them to, for example, update methodologies as appropriate to reflect improved techniques. The requirement for an approved change policy should not impede good modelling practice and reflects the need for supervisory authorities to be aware of changes and to be able to satisfy themselves that the internal model still complies with the requirements set out in the Level 1 text. In addition, it is a good discipline and should form a key part of the internal model governance in the undertaking.
- 3.66 Undertakings will therefore be allowed to change the internal models in accordance with these principles and the requirements of the Level 1 text. This ensures that the approval relates only to the internal model as approved by the supervisory authorities, and not to an amended model until such time as those amendments have themselves been approved. Major changes to the internal model will need prior supervisory approval, and until approval is granted the amended internal model shall not be used to calculate the SCR (except in the cases set out in paragraph 3.92). Until that approval is granted undertakings shall determine the SCR by using the approved internal model (which at that point in time excludes the major changes). In addition, any change not covered by the scope of the change policy will also need to be approved by the supervisory authorities before it takes effect. In such cases, the change policy will need to be amended and then re-approved by the supervisory authorities.
- 3.67 This conveys the idea that an internal model, as approved by the competent supervisory authorities, may be used by the undertaking to assess on an ongoing basis the SCR of the risks included in the internal model.
- 3.68 The full or partial internal model is, however, an integral part of the risk management organisation of undertakings or groups. The undertaking is therefore required to regularly review the adequacy of the full or partial internal model, including the risks covered and to adapt the model where necessary. This might be done, for example, as part of the annual responsibilities of the internal audit, but a special review would be appropriate when there was a significant change in the structure or the business of the undertaking. In this respect, for an approved internal

model, the “decision document” (i.e. the permission) also approves the undertaking’s ability to correctly implement future changes to the model.

3.69 The policy for changing the full and partial internal model shall include a specification for identifying whether changes to the internal model are major or minor (Article 115 paragraph 2). It is assumed that certain minimum changes to the model will be required each year, according to Article 121. A process to deal with these model changes shall be set out in the policy and agreed by the supervisory authorities, including internal governance for changes.

3.70 The ultimate goal is for the undertaking to develop a reliable structure to classify as far as possible any anticipated types of model changes. This structure has to be simple and clear. It also has to be flexible enough to serve both the undertaking’s need for creative innovations on risk models and the supervisory authorities’ need to control the implementation of these innovations in order to maintain the overall integrity and adequacy of the approved internal risk model in an effective and efficient way. The structure of the model change policy shall cover the criteria for the classifications, the necessary communication between undertaking and supervisory authorities regarding the model changes and the signoff procedures of the supervisory authority for these model changes, as approved by the supervisory authorities.

3.71 In developing the Advice CEIOPS considered five key issues:

- The scope of the model change policy (What changes are to be addressed by the policy?);
- The number of different model change categories;
- Principles to differentiate model changes between each of those categories;
- Reporting requirements, communication procedures and documentation standards for each model change category (including the frequency with which reports are required for minor model changes); and
- Signoff procedures for each model change category.

***Scope of the model change policy***

3.72 The scope of the model change policy sets out the changes to the undertaking’s full and partial internal model that are subject to the procedures outlined in the policy.

3.73 CEIOPS considered two extreme options, with some potential for further options in between:

Option	Arguments in favour of this option	Arguments against this option
<p><b>Minimum scope</b> The model change policy covers only changes to the calculation kernel of the internal model.</p>	<p>Little intervention into business decisions</p>	<p>Changes not directly related to the quantitative core of the model, but relevant for its appropriateness are not subject to supervisory scrutiny</p>
<p><b>Maximum scope</b> The model change policy requires that all changes to parts of the undertaking which are relevant for the internal model, including changes to the organisation, any processes or policies, or business strategy, practices or products, are assessed to determine whether a change to the model is necessary.</p>	<p>No change that is potentially relevant to the appropriateness of the model is overlooked</p>	<p>Potentially big impact on business decisions of the undertaking, as it implies a large degree of supervisory influence even where the internal model is only marginally concerned.</p>

3.74 CEIOPS considers that areas of relevance for the internal model, changes in which may lead to a need to change the model, include the system of governance mentioned in Chapter IV, Section 2 of the Level 1 text, the provisions and requirements set out in Articles 112 to 126, and any relevant changes to the risk profile of the undertaking.

3.75 CEIOPS recommends that the model change policy should require that any change which impacts these areas of relevance should be assessed to identify any need to change the model. Examples of relevant changes are changes to the undertaking's organisation and allocation of responsibilities and its strategies, processes, policies and reporting procedures. They include changes to quantitative methods used for measuring the relevant risks but also changes to qualitative elements which generate that is used in the undertaking's system of governance.

**Model change categories**

3.76 The first question is what shall be the optimal number of model change categories?

3.77 CEIOPS identified two extreme options, with some potential for further options in between.

3.78 On one hand, model changes may only be defined according to the two categories set out in Article 115: major and minor changes.

3.79 On the other hand, a different approach to separate different types of model changes may be followed. The purpose is given by the need to monitor and control model changes effectively because of their potential

impact on the adequacy of the approved internal risk model. This objective has to be balanced by an efficient supervisory approach. This may lead to a further refinement of the classification of model changes into:

- **First level** - differentiation between major and minor changes.
- **Second level** – differentiation between major model changes that require supervisory on-site inspection(s) and those that do not.

Option	Arguments in favour of this option	Arguments against this option
<p><b>Practical classification:</b> We define two categories as suggested in Article 115: major and minor changes.</p>	<p>The classification will be simple and clear for all relevant parties (undertakings and supervisory authority).</p>	<p>None</p>
<p><b>Maximal granular classification:</b> We classify the model changes by all imaginable categories of supervisory authority’s regulatory actions. (e.g. related to obligatory or facultative on-site inspection as a condition for supervisory approval)</p>	<p>The classification will comply with the supervisory authority’s needs</p>	<p>The classification may be too complex for the undertakings to comply with and restricts the supervisory authority to deciding its actions on a case-by-case base</p>

3.80 CEIOPS recommends classifying model changes into the two categories set out in Article 115 of the Level 1 text: major and minor changes. This simple classification complies with the needs of all parties. The supervisory authority is able to act as needed and is not restricted by the classification. Further Level 3 guidance will be needed in due course on how changes should be categorised, but this is ultimately something that undertakings need to define for themselves in their model change policies.

3.81 Besides changes to the model, there are **model scope extensions**. Model scope extensions denote new elements of the internal model which are not covered by the existing model approval, such as additional risk modules or sub-modules, or business units that are not included in the model. Changes to the internal model which are not model extensions shall be dealt with in the policy for model changes.

3.82 Model scope extensions may or may not be part of a transitional plan (Article 113(2)), but in any case they shall follow the same approval procedure as set out in Article 112.

3.83 Undertakings may further assign model changes to the following sub-categories:

### **Major/minor changes with respect to:**

- a.1. the calculation kernel of the internal model;
  - a.2. the risk management;
  - a.3. internal model governance; and
  - a.4. other aspects of the internal model (e.g. the model change causes a significant increase/decrease of the VaR within substantial sub-portfolios).
- 3.84 As set out in Article 115 of the Level 1 text, changes to the approved internal model change policy of the undertaking shall always be subject to prior supervisory approval.
- 3.85 Supervisory authorities have to be comfortable that undertakings will not attempt to abuse the system by changing material parts of their internal model through the use of a combination of minor changes, which individually are not subject to prior supervisory approval.
- 3.86 To further explain the regulatory philosophy, facilitate the undertaking's task and mitigate the potential misuse of minor changes CEIOPS may provide guidance about representative examples of model changes which may fall within each category (see Annex).
- 3.87 Supervisory authorities may perform an in-depth review of minor changes to the internal model; any such reviews shall be subject to the proportionality principle and be proportionate to the nature, scale and complexity of the changes concerned.

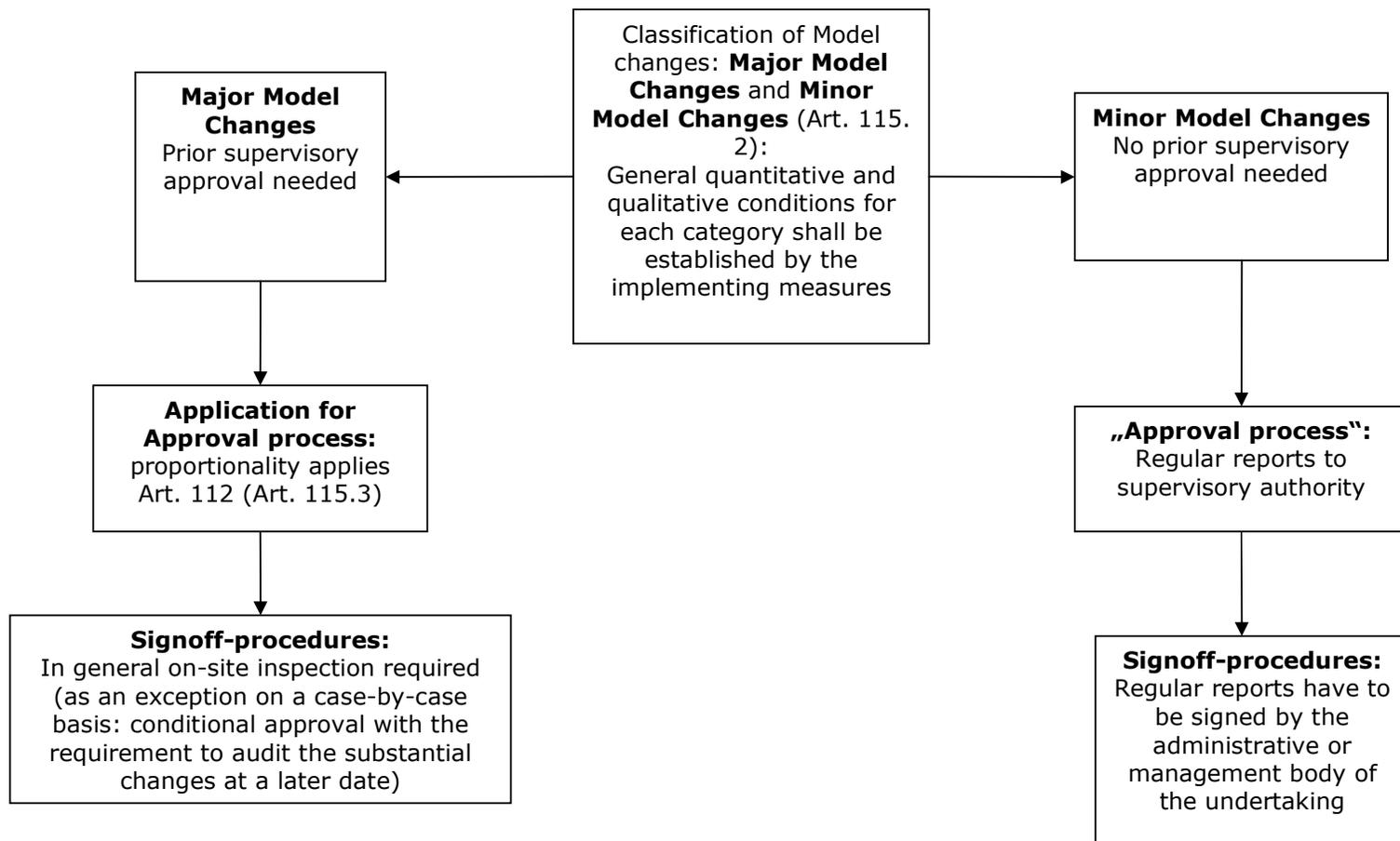
### ***Communication, documentation and sign-off procedures for model changes***

- 3.88 CEIOPS recognises that communication, documentation and approval requirements for model changes may be onerous and resource-intensive both for the undertaking and the supervisory authority. Therefore, requirements should be proportionate to the nature, scale and complexity of the impact of the intended model change.
- 3.89 CEIOPS recommends that
- Undertakings shall communicate **major changes** to the supervisory authority for approval as soon as the decision has been taken by the administrative, management or supervisory body and prior to implementing them. To facilitate appropriate planning of the process to approve major changes, undertakings shall communicate intended major changes to the supervisory authority well in advance of intended implementation. The undertaking shall support and justify the request to the supervisory authority with sufficient information about the estimated impact of the change on the quantitative and qualitative adequacy of the approved internal risk model. The administrative, management or supervisory bodies of the undertaking shall approve the request.

- Undertakings shall report **minor model changes** to the supervisory authority quarterly, or at a higher frequency if it is deemed more appropriate. Minor changes shall be communicated in a summarised report that describes both the effects of each change and the cumulative effects of the changes on the quantitative and qualitative adequacy of the approved internal model. The administrative, management or supervisory bodies of the undertaking shall approve the report and thereby the minor changes if they are in line with the approved model change policy. Since the report will summarise model documentation that should be prepared in any case as part of good model governance quarterly reporting should not be a significant burden on undertakings, but should enable supervisory authorities always to be informed about the current version of the model.
  - The supervisory authority shall have systems in place to record and track undertakings' notification requirements
- 3.90 Updates, changes, adjustments and extensions of the model are to be detailed in the report on solvency and financial condition in accordance with Articles 51, 52 to 55<sup>18</sup>.
- 3.91 Major changes, as well as changes to the model change policy itself, may be subject to a supervisory on-site inspection prior to approval.
- 3.92 The supervisory authority may also decide, on a case-by-case basis, and only in exceptional circumstances, to grant a prior conditional approval on a provisional basis of the major change based on the documentation submitted by the undertaking and if permission in favour of the applicants may be reasonably expected. If deemed necessary this can be followed up with a later on-site inspection. The approval can be withdrawn at any time if the undertaking fails to comply or cease to comply with the conditions.

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<sup>18</sup> Level 2 implementing measures on this topic are part of further detailed Advice to the Commission of the European Communities that CEIOPS has developed



### 3.3.2. Specificities related to groups

3.93 The requirements regarding the policy for changing the full and partial internal models for group internal models shall be consistent with the general provisions. In particular, the inclusion in the scope of the internal model of additional business units or related undertakings shall always be considered as model extensions and they shall follow the same approval procedure as set out in Article 112.

#### CEIOPS' Advice

##### **Policy for changing the full and partial internal models**

###### **General provisions**

###### ***Scope of application***

3.94 The undertaking has responsibility for creating the policy for changing the full and partial internal model.

3.95 CEIOPS considers that areas of relevance for the internal model, changes in which may lead to a need to change the model, include the system of governance mentioned in Chapter IV, Section 2 of the Level 1 text, the provisions and requirements set out in Articles 112 to 126, and any relevant changes to the risk profile of the undertaking.

3.96 The model change policy shall cover any change which impacts these areas of relevance.

###### ***Model change categories***

3.97 As set out in Article 115 of the Level 1 text model changes shall be classified into:

- Major changes; and
- Minor changes.

3.98 Undertakings may further assign model changes to the following sub-categories:

- **Major/minor changes** with respect to:
  - the calculation kernel of the internal model
  - the risk management
  - the internal model governance
  - the existing and regulatory approved internal model change policy of the undertaking
  - other aspects of the internal model

3.99 As set out in Article 115 of the Level 1 text, changes to the approved internal model change policy of the undertaking shall always be subject to prior supervisory approval.

- 3.100 Supervisory authorities have to be comfortable that undertakings will not attempt to abuse the system by changing material parts of their internal model through the use of a combination of minor changes, which individually are not subject to prior supervisory approval.
- 3.101 CEIOPS may provide guidance about representative examples of model changes which may fall within each category
- 3.102 Besides changes to the model, there are model scope extensions. Model scope extensions denote new elements of the internal model which are not covered by the existing scope of the model approval, such as additional risk modules or sub-modules, or business units that are not included in the scope of model.
- 3.103 Model scope extensions may or may not be part of a transitional plan (Article 113(2)), but in any case they shall follow the same approval procedure as set out in Article 112. The model change policy shall therefore exclude such extensions to the scope of the internal model.

***Communication, documentation and sign-off procedures for model changes***

- 3.104 The policy for model changes shall set out the undertaking's internal governance of changes to the model (internal approval of changes, escalation path, internal communication, documentation and validation of changes and so forth).
- 3.105 Undertakings shall communicate planned **major changes** to the supervisory authority well in advance of intended implementation. The undertaking shall support the request to the supervisory authority with sufficient information about the impact of the change on the quantitative and qualitative adequacy of the approved internal risk model. The administrative, management or supervisory bodies of the undertaking shall approve the request.
- 3.106 Major changes, as well as changes to the model change policy itself, may be subject to a supervisory on-site inspection prior to approval.
- 3.107 The supervisory authority may also decide, on a case-by-case basis, and only in exceptional circumstances, to grant a prior conditional approval on a provisional basis of the major change based on the documentation submitted by the undertaking and if permission in favour of the applicants may be reasonably expected. If it is deemed necessary, this can be followed up with an on-site inspection later in time. The approval can be withdrawn at any time if the undertaking fails to comply or cease to comply with the conditions.
- 3.108 Undertakings shall report **minor model changes** to the supervisory authority quarterly or at a higher frequency, if it is deemed more appropriate. Minor changes shall be communicated in a summarised report that describes both the effects of each change and the cumulative effects of the changes on the quantitative and qualitative adequacy of the

approved internal model. The administrative, management or supervisory bodies of the undertaking shall approve the report.

3.109 Any change not covered by the scope of the change policy will also need to be approved by the supervisory authorities. In such cases, the change policy will need to be amended and then re-approved by the supervisory authorities.

3.110 Supervisory authorities shall have processes in place to record and track undertakings' notification requirements.

3.111 Supervisory authorities may perform an in-depth review of minor changes to the internal model.

### **Specificities related to groups**

3.112 The requirements regarding the policy for changing the full and partial internal models for group internal models shall be consistent with the general provisions. In particular, the inclusion in the scope of the internal model of additional business units or related undertakings shall always be considered as model extensions and they shall follow the same approval process as set out in Article 112.

## 3.4 Assessment

### 3.4.1. General Provisions

3.113 Under Article 112(4), the supervisory authorities shall decide on the application within six months of receipt of the complete application<sup>19</sup>.

3.114 This implies that the entire approval process is subject to a decision by the competent supervisory authorities and cannot be delegated to third parties.

3.115 During the assessment the supervisory authorities shall analyse and assess the information submitted by undertakings as part of the application. This may also include supplementary information provided by the undertaking or requested by the supervisory authorities, in order to make a decision as to whether the undertaking is allowed to use the internal model to determine its SCR.

3.116 The internal model is required to be able to calculate the SCR for the undertaking, as set out in Article 100 of the Level 1 text. Pursuant to Article 112(5) of the Level 1 text, supervisory authorities shall give approval to the application only if they are satisfied that the systems of the undertaking concerned for identifying, measuring, monitoring, managing and reporting risk are adequate and in particular, that the internal model complies with the requirements referred to in Article 112(3) and the specific provisions for partial internal models set out in Article 113(1), if applicable. This process shall not only assess how the internal model meets the requirements set out in the Level 1 text in isolation, but it shall also consider any potential interrelation between these requirements. The review process shall therefore include the necessary steps and tools to ensure supervisory authorities are able to satisfy themselves that these requirements are met or otherwise.

3.117 Therefore, the assessment is likely to imply an iterative process, with feedback to undertakings resulting in modifications to their models. If such changes and improvements to the model occur, the application has to be changed retrospectively. Depending on the dimension of such changes and improvements the following processes shall apply:

- **Minor modifications:** The supervisory authorities will communicate the necessary modifications to the undertaking immediately, explain the reasons for them and require the undertaking to install the while setting a deadline. During this period, the six-month period will be suspended and shall start to run again by the receipt of the new documentation. The supervisory authority will then inform the undertaking immediately on the new end of the new six-month period.

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<sup>19</sup> Further details on what is meant by complete application have been provided in the application Section

- **Major modifications:** If major modifications become necessary, and are classified as so serious that any qualified third parties would have to evaluate them under reasonable circumstances as a new application, then the six-month period will be stopped and will start to run anew the moment the supervisory authority receives the new application of the undertaking consistent with the rules for re-applying.

These provisions could be interpreted as contravening Article 112.4 of the Level 1 text, which requires that supervisory authorities shall make a decision on the application within six months. However, in both cases, supervisory authorities have determined that the model does not meet the requirements in some way, which would justify rejection. This is unlikely to be welcome to undertakings when modifications can rectify the problems that have been identified. Supervisory authorities will try to manage this process to result in as little delay as possible.

3.118 As set out in Article 126 the use of a model or data obtained from a third party shall not be considered to be a justification for exemption from any requirement of the internal model. Therefore, where the internal model makes use of external model technology (vendor model components such as, for example, capital market scenarios and catastrophe models, software, hardware and support, etc.), the approval process shall also cover the suitability of these components<sup>20</sup>.

3.119 In summary, the assessment shall at least comprise a technical review of the model (i.e. its scope, design, build, integrity and applications), its coverage and ability to calculate the SCR for the undertaking, documentation, the risk management process, senior management role and their understanding of the model and shall be partly carried out by a set of on-site examinations. The issues that supervisory authorities are expected to assess may be broken down further into the following:

- **scope of full and partial internal models and model coverage** – supervisory authorities will examine and assess the adequacy of the internal model’s scope and the model coverage.
- **methodology and documentation** – supervisory authorities will examine and assess the internal model methodology and the quality of internal documentation supporting the model.
- **data quality.**
- **quantitative procedures** – supervisory authorities will assess the quantitative information provided by the applicant relating to performance, validation, and monitoring of the internal model. Supervisory authorities may ask applicants to undertake additional analyses and may undertake quantitative procedures of their own.
- **qualitative procedures**- supervisory authorities will assess the use test, internal governance, the role of senior management and their understanding of the model, the adequacy of internal controls, and other areas in order to assess the qualitative aspects of the internal model that

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<sup>20</sup> CEIOPS provides further details about the use of external model and data: see CEIOPS Advice on Test and Standards for Internal Models Approval

have a bearing on the approval and to check for compliance with the Level 1 text requirements.

- **technological environment** – supervisory authorities will evaluate the reliability and integration of systems, the functionality of the model and the quality of information provided by systems.

3.120 The iterative internal model assessment may include the following processes:

- Desk-based review of the information submitted by the undertaking as part of the application and any additional information provided by the undertaking or requested by the supervisory authorities;
- On-site inspections of the internal model and its use;
- Requests for further information as appropriate;
- Ad hoc conversations by phone and email to clarify points. (Any critical points covered in these will need to be recorded.)

3.121 The assessment stage will conclude with a final evaluation and decision by supervisory authorities on the appropriateness of the full or partial internal model applied by the undertaking or group to calculate the SCR. More details will be provided in the Decision Section.

#### 3.4.2. **Specificities related to partial internal models**

3.122 In the case of partial internal model, supervisory approval shall be given only if the model complies with the requirements set out in Article 112 and the additional conditions set out in Article 113(1). Therefore, when assessing applications for partial internal models supervisory authorities should give special focus on whether:

- a) the reason for the limited scope of application of the model is properly justified by the undertaking;
- b) the resulting SCR reflects more appropriately the risk profile of the undertaking and in particular meets the principles set out in Subsection 1 of Section 4 of the Level 1 text;
- c) its design is consistent with the principles set out in the above-mentioned Subsection 1 so as to allow the partial internal model to be fully integrated into the SCR standard formula.

3.123 Undertakings shall justify the limited scope of the model, whereas supervisory authorities shall assess if these justifications are reasonable. There are many reasons to justify the limited scope of the model<sup>21</sup>. Some examples are given below.

- Partial internal models may be a transitory step towards a full internal model.

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<sup>21</sup> This is list is not exhaustive

- There may be a lack of reliable information to model other risks/business lines.
- The modelling of other risks/business lines may disproportionate for the nature, complexity and scale of the risks inherent in the business of the undertaking.
- Partial internal models may encourage innovation and specialization in certain business areas.
- Mergers and/or acquisitions.

3.124 Moreover, undertakings shall demonstrate that partial internal models reflect their risk profile more appropriately and that the resulting SCR meets the principles set out in Subsection 1. These are the going concern assumption; the coverage of risks mentioned in Article 101(4); taking into account the effect of risk-mitigation techniques provided that credit risk and other risks arising from the use of such techniques are properly reflected in the SCR; and the frequency of the SCR calculation.

3.125 Neither full nor partial internal models need to follow a modular structure. However, CEIOPS recognises that for partial internal models applying a non-modular structure or covering only certain business units may pose some constraints with respect to the integration of the partial model within the standard formula. In these circumstances, undertakings shall have to demonstrate that the partial internal model may be integrated within the standard formula in a consistent way.

3.126 The integration of partial internal models and the standard formula and the adaptations to be made to the standards set out in Articles 120 to 125 in order to take into account of the limited scope of the application of the partial internal model is discussed in another Consultation Paper published in 2009.

### 3.4.3. **Specificities related to groups**

#### ***Supervisory authorities concerned with the group internal model approval process***

3.127 Article 231 states that the group supervisor shall inform without delay all the other supervisory authorities concerned with the group internal model approval process when a group applies to use an internal model to calculate the group SCR as well as the solo SCR for some undertakings in the group. The group supervisor and the supervisory authorities concerned with the internal model approval process shall try to reach an agreement on the application within six months from the receipt of the complete application.

3.128 CEIOPS provides further Advice about the organization of the group supervision (see CEIOPS Advice on Cooperation and Colleges of Supervisors). However, at this stage, and in the context of the approval process, CEIOPS considers useful to explain the concept of supervisory authorities concerned by the group internal model approval process.

- 3.129 To be consistent with Article 248 of the Level 1 Text dealing with the colleges of supervisors, CEIOPS recommends that the supervisory authorities concerned shall be the group supervisor and supervisory authorities of all the Member States in which the head office of all subsidiary undertakings is situated.
- 3.130 At first glance, it could seem logical to involve in the group approval process only the supervisory authorities dealing with undertakings or business units included in the scope of the internal model. This is because the excluded legal entities or business units will either use the standard approach or, if this is not possible, the risks they are facing will be quantified through a capital add-on, irrespective of the group internal model approval's decision.
- 3.131 However, to mitigate the risk of cherry-picking, supervisory authorities involved in the approval process will also have to check that the rationale for the exclusion of entities from the scope of the internal model provided by the undertaking is appropriate. For example, that some entities have not been excluded from the group internal model only because the capital requirements arising from the application of the standard formula were lower. This scenario highlights the importance of having the ability during the approval process to consult those supervisory authorities dealing with legal entities or business units excluded from the scope of the group internal model. These supervisory authorities may provide essential information to assess the appropriateness of the exclusions of these legal entities and/or business units.
- 3.132 In light of the above discussion, CEIOPS recommends that, as referred to in Article 231, the supervisory authorities concerned with the group internal model approval process are those supervising undertakings situated in a Member State and covered by the group internal model. Nevertheless the other supervisory authorities may be consulted during the approval process.

### ***Assessment of the scope of the model***

- 3.133 Article 214 of the Level 1 Text states that supervisory authorities may, under certain conditions, exclude some related undertakings from the scope of supervision. However, if the group uses its internal model for internal purposes without excluding these entities, CEIOPS recommends that the group supervision scope as defined in Article 214 includes at least all modelled undertakings.
- 3.134 In exceptional circumstances, and where supervisory authorities have real difficulties to have access to the information needed to assess the internal model, supervisory authorities may force the group to use the deduction and aggregation method set out in Article 220, or even the provisions of Article 229. However, since this may conflict with the strategy of the group and therefore hinders the ability of the group to meet the use test and may lead to the underestimation of the risks related to the group, CEIOPS emphasizes the exceptional character of these procedures.

3.135 The group shall take into account all material risks faced in the undertakings included in the scope of the supervision, be it using the group internal model or the standard formula (see CEIOPS Advice on Group Solvency Assessment).

***Rationale for accepting the exclusion of some entities from the modelling scope***

3.136 Supervisory authorities shall be able to analyse the scope of the model in order to make sure that the exclusion of some entities made by the group is not the result of cherry picking. In addition to the general provisions for partial internal models and in order to mitigate this risk of cherry-picking in a group internal model, supervisory authorities shall assess whether the justifications for the exclusions of undertakings or business units from the internal model provided by a group are appropriate.

3.137 CEIOPS generally expects that a group will be consistent in its judgment of the appropriateness of including or excluding related undertakings. For example, if two undertakings have exactly the same risk profile, CEIOPS would a priori expect that they are treated the same way.

3.138 These justifications do not of course concern related undertakings or business units for which the supervisory authorities concerned have already decided to prescribe the use of the standard approach or have set a capital add-on, because they are not able to review appropriately the implementation of the internal model in these related undertakings or business units.

3.139 CEIOPS expects that groups may have specific reasons not to include related undertakings or business units on a temporary basis, although they plan to include them later in the scope of the group internal model. For example, an undertaking has recently come under the scope of the group (e.g. acquisitions). Due to practical constraints, the group may not have been able to include this undertaking in the scope of the internal model.

3.140 Given the materiality of the risks in this undertaking or business unit, the group supervisors and the supervisory authorities concerned may require the group to provide a transitional plan to extend the model.

3.141 If a group excludes related undertakings from the scope of the internal model, it shall justify that the group Solvency Capital Requirement calculated using a combination of both the internal model and the standard formula reflects adequately the overall risk profile.

3.142 If supervisory authorities are not satisfied with the justifications provided by the group, then they may impose an add-on or require the group to extend the group internal model to undertakings, business units or risks not yet taken into account.

### **Consultation of CEIOPS**

- 3.143 In the Level 1 Text, Article 231 states that, during the approval process, the group supervisor or any of the supervisory authorities concerned may consult CEIOPS.
- 3.144 The group supervisor may decide whether to follow CEIOPS' Advice. Nevertheless, it shall take CEIOPS' Advice fully into account. A major implication of this consultation is that when CEIOPS Advice is sought the period that supervisory authorities have to reach a joint decision is extended by two months (i.e. from six to eight months).
- 3.145 It is therefore appropriate to question whether cases where it is possible and/or compulsory to consult CEIOPS should be defined.
- 3.146 For example, there may be a risk of an inappropriate use of this right (to consult CEIOPS) and setting up a framework for this consultation may limit this effect.
- 3.147 However, the right to consult CEIOPS aims to ensure an equality of treatment between the different applicant groups by providing additional expert judgment and mediation in situations where supervisory authorities disagree on the decision to take. Limiting the use of CEIOPS consultation to very precise situations may therefore reduce the fairness of the group approval process.
- 3.148 Moreover, from a practical perspective it is quite impossible to identify all potential situations/scenarios that could lead to the consultation of CEIOPS.
- 3.149 It could therefore be inappropriate to try to list these situations. Another possible way to ensure that the right of consultation is properly used is to ask for a justification for its exercise. This shall be reported to all supervisory authorities and to the applicant.
- 3.150 In light of the above discussion CEIOPS recommends that this right to consult CEIOPS before the end of the six-month period shall not be restricted to precise situations.

### **CEIOPS' Advice**

#### **Assessment**

#### **General Provisions**

- 3.151 During the assessment supervisory authorities shall analyse and assess the information submitted by the undertakings as part of the application. This may also include supplementary information provided by the undertaking or requested by the supervisory authorities, in order to make a decision as to whether the undertaking is allowed to use the internal model to determine its SCR.

3.152 This process shall not only assess how the internal model meets the requirements set out in the Level 1 text in isolation, but it shall also consider any potential interrelation between these requirements. The review process shall therefore include the necessary steps and tools to ensure supervisory authorities are able to satisfy themselves that these requirements are met or otherwise.

3.153 The assessment may be iterative with feedback to undertakings resulting in modifications to their models. If such changes and improvements to the model occur, the application has to be changed retrospectively. Depending on the dimension of such changes and improvements the following processes shall apply:

- **Minor modifications:** The supervisory authority will communicate the necessary modifications to the undertaking immediately, explain the reasons for them and require the undertaking to install the modifications while setting a deadline. During this period, the six-month period will be suspended and shall start to run again by the receipt of the new documentation. The supervisory authority will then inform the undertaking immediately on the new end of the new six-month period.
- **Major modifications:** If major modifications become necessary, and are classified as so serious that any qualified third parties would have to evaluate them under reasonable circumstances as a new application, then the six-month period will be stopped and will start to run anew the moment the supervisory authority receives the new application of the undertaking consistent with the rules for re-applying.

3.154 Where the internal model makes use of external models and data, as set out in Article 126 of the Level 1 text, the approval process shall also cover these components.

3.155 In summary, the assessment shall comprise at least a technical review of the model (its scope, design, build, integrity and applications), its coverage and ability to calculate the SCR for the undertaking, documentation, the risk management process, senior management role and their understanding of the model and shall be partly carried out by a set of on-site examinations. The issues that supervisory authorities are expected to assess may be broken down further into the following:

- scope of full and partial internal models and model coverage
- methodology and documentation;
- data quality;
- quantitative procedures;
- qualitative procedures;
- technological environment.

3.156 The internal model assessment may include the following processes:

- Desk-based review of the information submitted by the undertaking as part of the application and any additional information provided by the undertaking or requested by the supervisory authorities;
- On-site inspection(s) of the internal model and its use;
- Requests for further information as appropriate;
- Ad hoc conversations by phone and email to clarify points.

### **Specificities related to partial internal models**

3.157 When assessing undertakings' applications for partial internal models, supervisory authorities shall focus on whether the requirements set out in Article 113(1) of the Level 1 text are met. The undertaking shall demonstrate that the requirements set out in Article 113(1) are met.

3.158 The integration of partial internal models within the standard formula and the adaptations to be made to the standards set out in Articles 120 to 125 in order to take into account of the limited scope of the application of the partial internal model is discussed in another Consultation Paper published in 2009.

### **Specificities related to groups**

3.159 CEIOPS recommends that, as referred in Article 231, the supervisory authorities concerned shall be the group supervisor and supervisory authorities of all the Member States in which the head office of all subsidiary undertakings is situated.

3.160 Nevertheless the other supervisory authorities involved in the group supervision may be consulted during the approval process. The purpose of this is to ensure that the group does not derive any benefit from excluding parts of the business from the group model scope

### ***Rationale for accepting the exclusion of some entities from the modelling scope***

3.161 Article 214 of the Level 1 Text states that supervisory authorities may, under certain conditions, exclude some related undertakings from the scope of supervision. However, if the group uses its internal model for internal purposes without excluding these entities, CEIOPS recommends that the group supervision scope as defined in Article 214 includes at least all modelled undertakings.

3.162 In exceptional circumstances, and where supervisory authorities have real difficulties to have access to the information needed to assess the internal model, supervisory authorities may force the group to use the deduction and aggregation method set out in Article 220, or even the provisions of Article 229.

3.163 The group shall take into account all material risks faced in the undertakings included of the scope of the supervision, be it using the group internal model or the standard formula.

3.164 Supervisory authorities shall assess whether the justifications for the exclusions of undertakings or business units from the internal model provided by a group are appropriate.

3.165 CEIOPS expects that groups may have specific reasons not to include related undertakings or business units on a temporary basis, although they plan to include them later in the scope of the group internal model. Given the materiality of the risks in these undertakings or business units, the group supervisor and the supervisory authorities concerned may require the group to provide a transitional plan to extend the model.

3.166 If supervisory authorities are not satisfied that all material risks are appropriately taken into account, be it using the group internal model or the standard formula, then they may impose an add-on or require the group to extend the group internal model to risks not yet taken into account.

***Consultation of CEIOPS***

3.167 CEIOPS recommends that the right to consult CEIOPS before the end of the six-month period shall not be restricted to precise situations.

## **3.5 Decision making process**

### **3.5.1. General Provisions**

- 3.168 The decision-making stage of the internal model approval process uses the outputs from the assessment of the model by the supervisory authorities to reach a decision on whether the model is appropriate to use to calculate the SCR, as described in Articles 100 and 101 of the Level 1 text.
- 3.169 A supervisory authority's obligation to give a decision on the application for approval encompasses both whether to approve the application and whether to reject an application if it fails to meet the Level 1 text requirements for approval.
- 3.170 The various requirements that a model needs to comply with for model approval are set out in the Level 1 text. Amongst them:
- Article 100 requires that the internal model provides an appropriate SCR calculation
  - Article 112(5) sets out that the internal model should meet the tests as set out in Articles 120 to 125;
  - Article 112(5) sets out that the insurer has adequate systems for monitoring and managing risks;
  - Article 115 sets out that the insurer has agreed a model change policy with the supervisory authorities; and
  - Article 113(1) sets specific provisions for partial internal models.
- 3.171 Some of these requirements is further elaborated by another Consultation Paper published in 2009.
- 3.172 The outputs from the assessment of the model process will set out whether the model at least complies with the requirements listed above.
- 3.173 Once the decision has been made by the supervisory authorities, the on-going compliance with the requirements is considered by the supervisory review process (SRP) described in Article 36.2.(f) of the Level 1 text. Some elements of the SRP will be dependent on the nature of the decision made by the supervisory authorities, which is considered in this Section of the Paper.
- 3.174 If supervisory authorities do not decide on the application within the six-month period, the application will not be considered as approved by the supervisory authorities.

## **Approval**

- 3.175 When the supervisory authorities have examined the application and assessed the model of the undertaking, and have concluded that all the requirements have been met, then the supervisory authorities shall approve the use of the internal model for calculation of the SCR.
- 3.176 If the application related to a partial model, the partial model shall be approved. However, in some circumstances supervisory authorities may require a transitional plan for the extension of the partial internal model.
- 3.177 An internal model may be approved for use to calculate the SCR from the date of the decision by the supervisory authorities, or from a later date as set out in the decision or permission document from the supervisory authorities.
- 3.178 An approval may or may not be subject to terms and conditions.
- 3.179 When considering possible terms and conditions supervisory authorities may take into account:
- how realistic it is for the terms and conditions to be fulfilled by the undertaking by a particular date (if any); and
  - whether compliance by the undertaking with those terms and conditions can be assessed in an objective and straightforward way.
- 3.180 Supervisory authorities shall review the ongoing compliance with these terms and conditions. If the undertaking does not comply or ceases to comply with these terms and conditions, the provisions set out in Article 118 of the Level 1 text shall be made to apply. (These require the undertaking to present and implement a plan to restore compliance or show that the non-compliance is immaterial, or revert to calculating the SCR by using the standard formula.) In some circumstances, if the undertaking does not comply or ceases to comply with these terms and conditions supervisory authorities may also require the model to incorporate an additional capital buffer to compensate for deficiencies.
- 3.181 CEIOPS envisages Level 3 standards and guidance on the subject of terms and conditions to enable further supervisory convergence in practice.
- 3.182 When supervisory authorities have granted approval subject to terms and conditions, they may require the undertaking to submit a plan indicating the necessary steps to meet the terms and conditions attached to the decision or permission document. This plan may require the undertaking to report on its progress in meeting those terms and conditions to enable supervisory authorities to check that progress. It may also specify a time limit for implementing the changes.

## **Rejection**

- 3.183 If the assessment of the undertaking's application shows that the internal model has not met the requirements, then the supervisory authorities shall not grant the undertaking approval to calculate the SCR using a full or partial internal model, as described above. However, the undertaking shall be given the possibility to withdraw the application.
- 3.184 If the undertaking does not withdraw the application in these circumstances the supervisory authorities shall reject the application. In this case (rejection) if the undertaking intends to use a partial or full internal model in the future, it shall have to submit a new application for approval.
- 3.185 If the undertaking's application for approval to use a full or partial internal model to calculate the SCR is rejected, it shall use the standard formula to calculate the SCR.
- 3.186 As set out in Article 112 of the Level 1 text any decision by the supervisory authorities to reject the application for the use of an internal model shall be accompanied by the reasons. By giving the reasons, supervisory authorities will indicate the areas in which an application has been deficient. This will help undertakings, if they wish, to rectify the failings in their application and internal model and re-apply for approval.
- 3.187 However, it is likely that an undertaking will need some time to rectify the deficiencies in its application and internal model. So, to mitigate the risk that undertakings re-apply before they have appropriately addressed the shortcomings in their application and model, CEIOPS recommends that supervisory authorities be allowed to enforce, on the basis of reasons communicated to the undertaking, a 'waiting period' before the undertaking can submit a new application.
- 3.188 A waiting period may also be imposed when the undertaking withdraws the application.
- 3.189 Any waiting period that is imposed shall be commensurate with the shortcomings that have been identified and proportionate to the deficiencies that have led to the rejection of the application.

### ***Rejection of a broader scope internal model application (e.g. full internal model) and simultaneous approval of a reduced scope partial internal model ('limited approval')***

- 3.190 It is appropriate to consider the circumstances under which supervisory authorities may decide to reject the undertaking's application for approval to use an internal model to calculate the SCR and subject to further discussions with the undertaking decide to limit the approval of the scope of the internal model to part(s) of the application.
- 3.191 Before granting limited approval supervisory authorities will tell the undertaking that it is prepared to grant only limited approval. This will

give the undertaking the opportunity to withdraw the application so that it can address the areas that need to be rectified and submit a new application.

- 3.192 For example, supervisory authorities may reject the undertaking's application for approval to use a broader scope internal model (e.g. a full internal model) to calculate the SCR and, after discussions with the undertakings, approve only those parts of the internal model that satisfy the Level 1 text requirements. In this case, the undertaking shall calculate the SCR by using the internal model only for those parts that have been approved by the supervisory authorities. The standard formula shall be used to calculate the SCR for the business units and/or risk modules for which the internal model has not been approved.
- 3.193 In effect, the parts of the model that are approved by the supervisory authorities will be a partial internal model, as referred to in Articles 112 and 113 of the Level 1 text.
- 3.194 However, supervisory authorities shall grant this 'limited approval' only if the parts of the model function indeed as a partial internal model, that is they comply with the specific provisions for partial internal models set out in Article 113(1) of the Level 1 text. Special attention should be paid with respect to compliance with the use test, the reason(s) for the limited scope of the model and dependencies with other risk modules/factors, as in this case the undertaking had originally applied for a broader scope internal model.
- 3.195 A 'limited approval' may be more efficient both for supervisory authorities and undertakings than a new application for a broader scope internal model. However, supervisory authorities need to take into account the risk of cherry-picking. For example, undertakings may deliberately fail the requirements for those business units/risk modules where the risks assessed by an internal model provide a higher SCR than that calculated by the standard approach. In these circumstances, supervisory authorities may mitigate this risk by requiring the undertaking to submit a realistic transitional plan to extend the scope of the approved internal model, as set out in Article 113(2) of the Level 1 text.
- 3.196 The integration of partial internal models into the standard formula is covered extensively in another CEIOPS Consultation Paper published in 2009.

## ***Communication with the undertaking***

### ***Approval***

- 3.197 The entire approval review process is complete when the relevant supervisory authority has confirmed that the procedures applied by the undertaking or group are adequate for all the risk modules provided for in the implementation or project plan, within the scope of benchmarking and comparisons of estimates and result at the moment of the decision.

- 3.198 Supervisory authorities may together with the approval send a review report to the undertaking concerned.
- 3.199 Undertakings that have applied for internal model approval but have not yet received any official approval shall use the standard formula to calculate the SCR until approval is granted.
- 3.200 Article 112(7) provides that once their internal model has been approved by the supervisory authorities, undertakings may be required to provide an estimate of the SCR calculated according to the standard formula. This should also be forwarded to the supervisory authorities as part of the information provided for supervisory purposes in Article 35.
- 3.201 The actual format of the approval document is left open by Article 112(4). CEIOPS considers that approval should be formally notified to the undertaking in the form of a decision or permission document. The applicant undertaking may use the internal model to calculate the regulatory SCR only from the date it is approved by the supervisory authorities, or from the date set out in the decision or permission document from the supervisory authorities.
- 3.202 When supervisory authorities reject the application for a broader scope internal model (e.g. a full internal model) and grant simultaneous approval of a limited scope internal model (i.e. limited approval) they shall give the undertaking their reasons for the rejection of those parts of the model which have not been approved..
- 3.203 The decision or permission document shall at least indicate:
- the scope of application and the internal model coverage;
  - terms and conditions attached to the use of the internal model, if any;
  - notification requirements for on-going compliance;
  - the approved policy for model changes and any other approved internal model governance policy;
  - other requirements;
  - transitional plan, if required;

### Rejection

- 3.204 Pursuant to Article 112(6), any decision by the supervisory authorities to reject the application for approval of an internal model shall be accompanied by the reasons.
- 3.205 Thus, if supervisory authorities reject the application, they shall provide reasons. This also applies to the case when the application for a full internal model has been rejected and supervisory authorities have limited the approval of the scope of the internal model to part(s) of the application.

## ***Disclosure of the application and decision***

- 3.206 The fact that an application has been submitted by an undertaking will not be disclosed publicly by the supervisory authority concerned (although there will be no objection to the undertaking itself disclosing it). Similarly, there will be no public disclosure of a withdrawal of an application by the undertaking or of a decision to reject an application. However, it is appropriate that the approval of an application should be disclosed, so the amount of the information to be disclosed on approval needs to be considered. The remainder of this Section relates to the disclosure of information when a supervisory authority has decided to approve an application to use an internal model to calculate the SCR.
- 3.207 Disclosure of the information contained in the decision or permission may enhance market discipline through greater transparency. For example, it may provide undertakings with incentives to foster sound risk management and internal modelling practices. In addition, high levels of disclosure may lead to an increase in convergence and harmonisation of practice by supervisory authorities within the EEA.
- 3.208 The Level 1 text explicitly supports transparency. More specifically, Article 31 deals with supervisory authorities transparency and accountability, whereas Chapter 4, Section 3 deals with public disclosure
- 3.209 It would be difficult to demonstrate that no one would be affected by the decision or permission. For this reason, CEIOPS considers that it will be necessary to publish this information. The benefits of disclosure accrue to a wide audience and accrue over time. For example, information about the scope of application of the model, its coverage, roll-out plans and conditions (even if these suggest or might be construed as suggesting inherent weaknesses in the models) will be useful to those who deal with the undertaking. If it is not disclosed by supervisory authorities there is a risk that persons dealing with the undertaking will be prevented from taking optimal decisions because the precise terms of the decision or permission were not known.
- 3.210 However, an appropriate balance has to be struck between the disclosure of information and the need not to prejudice the commercial interest of the undertaking to an unreasonable degree.
- 3.211 Undertakings are often too keen to generically dismiss there being any benefit from disclosing any information contained in a supervisory decision. Many undertakings are understandably reluctant to see information published which may reflect negatively on their risk management.
- 3.212 A potential concern is the reaction of the market if some of the details of the decision or permission were published. This will be a particular concern in periods of market turbulence when the risk of irrational behaviour or misinterpretation of some information contained in the decision or permission document may be more significant.

3.213 To mitigate this risk, undertakings may be asked to submit to the supervisory authorities detailed reasons why the decision or permission or any part of it shall not be published and explain the extent to which its disclosure would be detrimental to their commercial interest to an unreasonable degree.

3.214 In deciding where the balance of disclosure shall be supervisory authorities shall take into account Pillar 3 considerations. For example, an argument that publication will lead to the release of information that could prejudice the commercial interest of the undertaking to an unreasonable degree is unlikely to succeed if the information will be disclosed in any event (through Pillar 3 disclosures) or because the relevant test will not be met (disclosing this information will not cause any prejudice).

3.215 Unless supervisory authorities are satisfied that it is inappropriate or unnecessary to do so, a decision or permission shall be disclosed by the supervisory authorities in such a way as they think most suitable for bringing the decision or permission to the attention of:

- those most likely to be affected by it, and
- others who may likely to make an application for a similar decision.

### 3.5.2. **Specific issues related to partial internal models: transitional plan to extend the scope of the model (Article 113(2))**

3.216 When assessing and deciding on an application for the use of a partial internal model which covers only certain sub-modules of a specific risk module, or some of the business units of an undertaking with respect to a specific risk module, or parts of both, supervisory authorities may require the undertakings concerned to submit a realistic transitional plan to extend the scope of the model<sup>22</sup>.

3.217 Several reasons can lead the supervisory authority to require such a plan. For example, there may be concerns about cherry picking, or about the way the internal model is integrated in the standard formula.

3.218 The transitional plan shall set out the manner in which undertakings plan to extend the scope of the model to other sub-modules or business units, in order to ensure that the model covers a predominant part of their insurance operations with respect to that specific risk module.

3.219 Generally, partial internal models according to Article 112(2) shall cover risk modules or sub-modules as a whole and /or the adjustment referred to in Article 108. Partial modelling may also be applied for the whole

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<sup>22</sup> According to Article 119 of the Level 1 Text (significant deviations from the assumptions underlying the standard formula calculation), supervisory authority may also require the undertaking, by a decision stating the reasons, to use an internal model to calculate the SCR, or the relevant risk module thereof. This Article is outside the scope of the present Advice

business of undertakings or major business units. Supervisory authorities may require a transitional plan to extend the sub module to a risk module, where the other sub modules cover material risk not modelled beforehand. If the supervisory authorities are satisfied that the undertaking is not "cherry picking" by applying for a partial internal model, then the partial internal model may be approved as a permanent solution.

3.220 If the supervisory authorities approve the application for a partial internal model subject to the undertaking submitting a transitional plan to expand the scope of the model, it shall explain to the undertaking the reasons for this decision and set the minimum scope that the internal model should cover after the implementation of the plan.

3.221 Decisions to approve a partial internal model will be disclosed in the same way as decisions to approve a full internal model. The fact that the approval is of a partial internal model will need to be disclosed, as will adequate details of the areas that the partial model applies to. If limited approval is granted this will be disclosed as the approval of a partial model; the fact that this arises from limited approval rather than an application only for approval of a partial model will not be disclosed.

3.222 The key issues regarding the transitional plan to extend the scope of the model are the following:

I. Transitional plan to extend the scope of the model

i. Time frame;

ii. Scope;

a) Extension of scope;

b) Measures to extend the scope;

c) Resources to extend the scope.

iii. Supervisory assessment

II. Failure to implement the transitional plan to extend the scope of the model

3.223 The transitional plan to extend the scope of the model must be properly documented and shall be accompanied by a statement of the administrative, management or supervisory body of the undertaking confirming that it is a true and fair summary of the topics covered.

### ***Timeframe***

3.224 Usually, extension of the scope of the model should be possible within a timeframe accepted by the supervisory authorities as appropriate, after discussion with the undertaking.

3.225 The timeframe will depend on the situation of each undertaking. Nevertheless, a number of variables could influence this decision, for example:

- The nature, scale and complexity of the risks inherent in the business of the undertaking;
- Analysis of specific stress scenarios;
- The quality of the system of governance;
- The average time the supervisory authority considers to be generally required to implement the plan;
- The time the undertaking concerned would be expected to need to implement the plan.
- The internal model approval statement and roll plan in the case where the internal model is approved with conditions.

### ***Scope***

3.226 The undertaking shall clearly identify the extension of the scope of the model. This shall at least cover the minimum scope required by the supervisory authorities, and contain an indication of the risks, sub-risk modules, risk modules and the business units to be covered.

3.227 The undertaking shall identify the necessary measures to extend the scope of the model as well as the associated timetable,

3.228 Undertakings shall indicate in the transitional plan the resources necessary to implement the proposed measures. These may include, amongst other things, human resources, IT resources, implementation tools and outsourcing.

3.229 The transitional plan shall provide clear indications of the governance of the plan, including responsibilities for the implementation and its monitoring.

3.230 Additionally, the transitional plan shall indicate the role of the administrative, management or supervisory body, internal auditing, compliance function, risk management function, actuarial function and external parties in the implementation and/or control of the set of proposed measures. This is consistent with the requirements for the original application set out in paragraph 3.29j) concerning governance.

### ***Supervisory assessment***

3.231 Supervisory authorities shall evaluate the transitional plan presented by the undertaking, and may propose and discuss amendments when they are not fully satisfied with it.

3.232 The transitional plan shall be consistent with the time period agreed by the supervisory authorities and the undertaking. It shall also cover the minimum scope required by the supervisory authorities. The transitional

plan needs supervisory approval, even though it is the undertaking's responsibility.

### ***Failure to implement the transitional plan***

3.233 If the undertaking fails to implement the transitional plan to extend the scope of the model, the supervisory authorities will be faced with several options:

- a) Extend the time period to implement the plan as it is;
- b) Extend the time period to implement the plan but require amendments to it;
- c) Require the undertaking to fully revert to the standard formula;
- d) Require the undertaking to revert to the standard formula, but allow the use of a partial internal model with a more limited scope as stated in paragraphs 3.190 to 3.196.

3.234 A capital add-on may be set if the actions listed above cannot be implemented during an appropriate timeframe, have failed or are unlikely to derive a fully satisfactory SCR or if a combination of any of these events occurs.

3.235 The decision will depend on the situation of each undertaking. Nevertheless, a number of variables could influence this decision:

- Impact of non compliance on policy holders protection;
- Impact on the assessment of the risk profile of the undertaking;
- The nature, scale and complexity of the risks inherent in the business of the undertaking;
- Impact of non compliance on the level playing field between undertakings;
- The average time the supervisory authority considers to be generally required to implement the necessary improvements.

### **3.5.3. Specificities related to groups**

#### ***Decision***

3.236 The possible decisions at group level shall be the same than those possible for solo undertakings.

3.237 The decision about the application is sent by the group supervisor to the group and to all the concerned supervisory authorities. It shall be written in an official language of the Member State of the group supervisor, and if needed, in a language commonly understandable by all the other supervisory authorities.

### ***Transitional plan***

3.238 CEIOPS does not see any reason why the transitional plan mentioned in Article 113 shall not be applicable at group level.

3.239 CEIOPS considers that the provisions defined for all undertakings about this transitional plan can be transposed without amendment at group level.

### **CEIOPS' Advice**

#### **Decision making process**

##### **General provisions**

3.240 If supervisory authorities do not decide on the application within the six-month period, the application shall not be considered as approved by the supervisory authorities.

##### **Approval**

3.241 When the supervisory authorities have examined the application and assessed the model of the undertaking, and have concluded that all requirements have been met, then the supervisory authorities shall approve the use of the model for calculation of the SCR.

3.242 In this case, the undertaking shall use the internal model to calculate the SCR as soon as it is approved by the supervisory authorities, or from a later date as set out in the decision or permission document from the supervisory authorities.

3.243 The approval may or may not be subject to terms and conditions.

3.244 When determining terms and conditions supervisory authorities may take into account:

- how realistic it is for the terms and conditions to be fulfilled by the undertaking by a particular date (if any); and
- whether compliance by the undertaking with those terms and conditions can be assessed in an objective and straightforward way (by the supervisory authorities).

3.245 When supervisory authorities have granted approval subject to terms and conditions, they may require the undertaking to submit a plan indicating the necessary steps to meet the terms and conditions attached to the decision or permission document and require reporting on progress.

3.246 CEIOPS envisages Level 3 standards and guidance on the subject of terms and conditions to enable further supervisory convergence in practice.

## **Rejection**

- 3.247 If the assessment of the undertaking's application shows that the internal model has not met the minimum requirements, the supervisory authorities shall not grant the undertaking approval to calculate the SCR using a full or partial internal model approval. However, the undertaking shall be given the possibility to withdraw the application.
- 3.248 If the undertaking does not withdraw the application in these circumstances the supervisory authorities shall reject the application. In this case (rejection) if the undertaking intends to use a partial or full internal model in the future, it shall have to submit a new application for approval.
- 3.249 If the undertaking's application for approval to use a full or partial internal model to calculate the SCR is rejected, it shall use the standard formula to calculate the SCR.
- 3.250 If supervisory authorities reject an undertaking's application for approval to use a full or partial internal model to calculate the SCR, they may enforce, on the basis of reasons communicated to the undertaking, a 'waiting period' before the undertaking can submit a new application. This period shall give the undertakings time to appropriately address the shortcomings in the original application.
- 3.251 The waiting period may also be imposed when the undertaking withdraws the application.

## ***Rejection of a broader scope internal model application (e.g. full internal model) and simultaneous approval of a reduced scope partial internal model ('limited approval')***

- 3.252 Supervisory authorities may reject the undertaking's application for approval to use a broader scope internal model (e.g. a full internal model) and approve only those parts of the internal model that satisfy the Level 1 text requirements.
- 3.253 Before granting limited approval supervisory authorities will tell the undertaking that it is prepared to grant only limited approval. This will give the undertaking the opportunity to withdraw the application so that it can address the areas that need to be rectified and submit a new application.
- 3.254 If limited approval has been granted the undertaking shall calculate the SCR by using the internal model only for those parts that have been approved by the supervisory authorities. The standard formula shall be used to calculate the SCR for the business units and/or risk modules for which the internal model has not been approved.
- 3.255 Supervisory authorities shall only grant this 'limited approval' if the parts of the model function indeed as a partial internal model, that is, they comply with the specific provisions for partial internal models set out in Article 113(1) of the Level 1 text.

### ***Format of the decision or permission document***

3.256 The approval of the undertaking's application to calculate the SCR using a full or partial internal model is officially notified to the undertaking in the form of a decision or permission document.

3.257 The decision or permission document shall at least indicate:

- the scope of application and the internal model coverage;
- terms and conditions attached to the use of the internal model, if any;
- notification requirements for on-going compliance;
- the approved policy for model changes and any other approved internal model governance policy;
- other requirements;
- transitional plan, if required;

### ***Disclosure of the decision or permission***

3.258 The fact that an application has been submitted, rejected or withdrawn will not be disclosed by the supervisory authorities. Only approvals, including limited approvals, will be subject to disclosure.

3.259 Unless supervisory authorities are satisfied that it is inappropriate or unnecessary to do so, a decision or permission shall be disclosed by the supervisory authorities in such a way as they think most suitable for bringing the decision or permission to the attention of:

- those most likely to be affected by it, and
- others who may likely to make an application for a similar decision

3.260 In deciding whether it is inappropriate or unnecessary to disclose the decision or permission, supervisory authorities shall consider whether the disclosure would prejudice to an unreasonable degree the commercial interest of the undertaking concerned.

**3.261** Undertakings shall justify why the decision or permission shall not be disclosed and how the undertaking's commercial interest would be prejudiced to an unreasonable degree.

### **Specificities related to partial internal models**

3.262 If the supervisory authorities approve the application for a partial internal model subject to the undertaking submitting a transitional plan to expand the scope of the model, it shall explain to the undertaking the reasons of this decision and set the minimum scope that the internal model shall cover after the implementation of the plan.

3.263 The undertaking shall submit to supervisory approval the referred plan clearly identifying the time frame, extension of scope, the measures to extend the scope and the respective resources. Supervisory authority shall

evaluate the plan presented by the undertaking, and propose and discuss amendments in case they are not fully satisfied with it.

3.264 If the undertaking fails to implement the transitional plan to extend the scope of the model, the supervisory authority will be faced with several options:

- Extend the time period to implement the plan as it is;
- Extend the time period to implement the plan but require amendments to it;
- Require the undertaking to fully revert to the standard formula;
- Require the undertaking to revert to the standard formula, but allow the use of a partial internal model with a more limited scope.

3.265 A capital add-on may be set if the actions listed above cannot be implemented during an appropriate timeframe, have failed or are unlikely to derive a fully satisfactory SCR or if a combination of any of these events occurs.

### **Specificities related to groups**

#### ***Decision***

3.266 The possible decisions at group level shall be the same than those possible for solo undertakings.

3.267 The decision about the application is sent by the group supervisor to the group and to all the concerned supervisory authorities. It shall be written in an official language of the Member State of the group supervisor, and if needed, in a language commonly understandable by all the other supervisory authorities.

#### ***Transitional plan***

3.268 After having consulted the supervisory authorities involved in the group supervision, the group supervisor may require the group applying for internal model approval, to submit a realistic transitional plan to extend the scope of the group internal model.

3.269 The requirements for the group internal model transitional plan shall be consistent with the general requirements about transitional plans for partial internal models as set out in Article 113(2).

Annex: <b>Examples of changes to the model</b>					
Categories of changes	Examples	Classes of business	Major/Minor	Time required	Special characteristics/procedures
Parameter adjustments (= no change to the model)	Calibration of the ESG (economic scenario generator) (only the data are updated, the methods are unchanged when using new data)	All			
	New reserve triangle, method unchanged	Non life			
	New NatCat update	Non life			
	New NatCat update	Reinsurance			

Categories of changes	Examples	Classes of business	Major/Minor	Time required	Special characteristics/procedures
Changes to the model	Use of another ESG (also in units)	All			
	Use of another NatCat model (also in units)	All			
	Modelling of large claims with change of the large claim limit and selection of a new distribution (in major business units)	Non life			
	Change of the reinsurance model structure	Non life			
	Significant estimates (e.g. in the ESG) are changed	All			
	General model improvements	All			
	Provision for spreads	All			
	Modelling of previously unmodelled risks	All			
	Change of security model structure				
	Initial introduction of fast close and required adjustments				
	Changes to the model points due to the change in the aggregation procedure in Life/Health				
	Management rules (see below)				
	Change to the calibration deadline	All			
	Change to estimates for components	All			
	Deduction of the portfolio at another point in time	All			
Portfolio adjustments (= no change to model)	New insurance products/assets, provided they can be adequately represented in the existing model structure	All			

Categories of changes	Examples	Classes of business	Major/Minor	Time required	Special characteristics/procedures
Legal changes	Integration of Minimum Allocation Ordinance change to the model)	Life			
	Change to the tax system, if not represented in existing model (= change to the model)	Life (all?)			
	Rebate rules	All			
	Change of the rules for minimum surrender values	Life			
Operational adjustments					
	Switch from internal to external data sources	All			
	New software version (without functional change)	All			
	Change of key processes (content: approval, validation, etc.; change of responsibilities not relevant)				
Management rules					
	Change of rules concerning the adjustment of profit sharing	Life			
	Change of rules concerning strategic asset allocation, reinsurance protection	All			
	Change of rules concerning dividend policies (dividends, distribution between policyholders and shareholders)	All			