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EUROPEAN STANDARD OF ACTUARIAL PRACTICE 2

(ESAP2)

ACTUARIAL FUNCTION REPORT UNDER DIRECTIVE 2009/138/EC

Approved as a model standard

by the General Assembly of the Actuarial Association of Europe

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Preface

This European Standard of Actuarial Practice (ESAP) is a model for actuarial standard-setting bodies to consider.

The Actuarial Association of Europe (AAE) encourages relevant actuarial standard-setting bodies to maintain a standard or set of standards that is substantially consistent with this ESAP to the extent that the content of this ESAP is appropriate for actuaries in their jurisdiction. This can be achieved in many ways, including:

- adopting this ESAP as a standard with only the modifications in the Drafting Notes;
- customising this ESAP by revising the text of the ESAP to the extent deemed appropriate by the standard-setting body, while ensuring that the resulting standard or set of standards is substantially consistent with this ESAP;
- endorsing this ESAP by declaring that this ESAP is appropriate for use in certain clearly defined circumstances;
- modifying existing standards to obtain substantial consistency with this ESAP; or
- confirming that existing standards are already substantially consistent with this ESAP.

A standard or set of standards that is promulgated by a standard-setting body is considered to be substantially consistent with this ESAP if:

- there are no material gaps in the standard(s) in respect of the principles set out in this ESAP; and
- the standard or set of standards does not contradict this ESAP.

If an actuarial standard-setting body wishes to adopt or endorse this ESAP, it is essential to ensure that existing standards are substantially consistent with ESAP1 as this ESAP relies upon ESAP1 in many respects. Likewise, any customisation of this ESAP, or modification of existing standards to obtain substantial consistency with this ESAP, should recognise the important fact that this ESAP relies upon ESAP1 in many respects.

If this ESAP is translated for the purposes of adoption, the adopting body should select three verbs that embody the concepts of “must”, “should”, and “may”, as described in paragraph 1.5.1 Language of this ESAP, even if such verbs are not the literal translation of “must”, “should”, and “may”.

This ESAP uses various terms whose specific meanings are defined in the document “Glossary of defined terms used in European Standards of Actuarial Practice” (the AAE Glossary).

This ESAP is binding upon an actuary only if so directed by the actuary’s standard-setting body or if the actuary states that some or all of the work has been performed in compliance with this ESAP (e.g. if the actuary is directed by the principal to comply with this ESAP).

This ESAP was originally adopted by the AAE General Assembly on 31 January 2016. This revision was adopted by the AAE General Assembly on XX Month YYYY.

[Drafting Notes: when an actuarial standard-setting organisation adopts this standard it should:

1. *Replace "ESAP" throughout the document with the local standard name, if applicable;*
2. *Modify references to ESAP1 in paragraphs 1.2.2 and 2.1.2.3 to point to the local standard(s) that are substantially consistent with ESAP1, rather than referring to ESAP1 directly, if appropriate;*
3. *Choose the appropriate date for insertion in paragraph 1.7.1;*
4. *Review this standard for, and resolve, any conflicts with the local law and code of professional conduct; and*
5. *Delete this preface (including these drafting notes and the reference in the Table of Contents) and the footnote associated with paragraph 1.7.1.]*

Section 1. General

1.1. Purpose

1.1.1 This ESAP provides guidance to actuaries when issuing an Actuarial Function Report (AFR) in connection with an undertaking's compliance with the reporting requirements in Article 48 (1) of the Solvency II Directive and in paragraph 8 of Article 272 of the Commission delegated regulation (EU) 2015/35.

1.1.2 The purpose of this ESAP is that the intended users of the AFR should be able to place a high degree of reliance on the **AFR**, its relevance, transparency of assumptions, completeness and comprehensibility, including the communication of any uncertainty inherent in the results stated in the **AFR**. In particular it does this by ensuring that the AFR

- includes sufficient information to enable intended users to judge the relevance of the contents of the AFR;
- includes sufficient information to enable intended users to understand the implications of the contents of the AFR; and
- such information is presented in a clear and comprehensible manner.

1.1.3 This standard will contribute to ensuring consistent, efficient and effective practices within the Actuarial Function (AF) across undertakings in the European Union concerning the preparation of the AFR. This will strengthen and contribute towards harmonised and consistent application of EU legislation.

1.2 Scope

1.2.1 This ESAP applies to actuaries performing actuarial services when issuing an AFR in connection with an undertaking's compliance with Article 48 (1) of the Solvency II Directive and paragraph 8 of Article 272 of the Commission delegated regulation (EU) 2015/35.

1.3 Underlying Principles

1.3.1 This ESAP is based on four principles, which should be borne in mind in any assessment of compliance with this ESAP.

1.3.2 **Principle 1**: Actuarial services related to the AFR must be carried out consistently with Solvency II regulations and guidelines.

1.3.3 **Principle 2**: Actuarial services related to the AFR should be carried out in a way which is proportional to the nature, scale and complexity of the underlying risks of the undertaking. (Principle of Proportionality)

1.3.4 **Principle 3**: Actuarial services related to the AFR should be consistent with the code of professional conduct of the actuarial profession and with any applicable general actuarial standards.

1.3.5 **Principle 4**: The AFR should be structured according to the needs of the intended users, in particular the Administrative, Management or Supervisory Body (AMSB).

1.4 Relationship to ESAP1

1.4.1 Insofar as possible, this ESAP does not repeat guidance already provided in ESAP1. Any actuary who asserts compliance with this ESAP (as a model standard) must also comply with ESAP1. References in ESAP1 to "this ESAP" should be interpreted as applying equally to this ESAP2, where appropriate.

1.4.2 A failure to follow the principles in this standard need not be considered a departure if it does not have a material effect. The contents of this standard should be read in that context, even where the term material is not explicitly used or where the word "must" is used.

1.5 Language

1.5.1 Some of the language used in all ESAPs is intended to be interpreted in a very specific way in the context of a decision of the actuary. In particular, the following words are to be understood to have the meanings indicated:

- "must" means that the indicated action is mandatory and failure to follow the indicated action will constitute a failure to comply with this ESAP, unless the departure is due to a conflict with law (ESAP1 1.3.1) or code of professional conduct (ESAP1 1.3.2).
- "should" (or "shall") means that, under normal circumstances, the actuary is expected to follow the indicated action, unless the departure is due to a conflict with law (ESAP1 1.3.1) or code of professional conduct (ESAP1 1.3.2). However, in all other cases, if following the indicated action would produce a result that would be inappropriate or would potentially mislead the intended users of the actuarial services, the actuary should depart from that guidance and disclose that fact and provide the reason for not following the indicated action as described in ESAP1 1.3.3.
- "may" means that the indicated action is not required, nor even necessarily expected, but in certain circumstances is an appropriate activity, possibly among other alternatives. Note that "might" is not used as a synonym for "may", but rather with its normal meaning.

- "any" (as in e.g. "any report") means all such items if they exist, while acknowledging they may not exist. Such a reference does not give rise to a requirement to create such an item.

1.5.2 This ESAP uses various terms whose precise meaning are defined in the AAE Glossary. These terms are highlighted in the text with a dashed underscore and in blue (e.g. actuary).

1.6 Cross-references

1.6.1 This ESAP refers to the content of the Solvency II Directive and the Commission Delegated Regulation (EU) 2015/35 supplementing the Solvency II Directive, both as amended as per the approval date of this ESAP. If the Solvency II Directive or the Commission Delegated Regulation (EU) 2015/35 is subsequently amended, restated, revoked, or replaced after this date, the actuary should apply the principles in this ESAP to the extent they remain relevant.

1.7 Effective Date

1.7.1. This standard applies to actuarial services relating to an Actuarial Function Report performed after [Date[1]].

[1] Date to be inserted by standard-setter adopting or endorsing this ESAP

Section 2. Appropriate Practices

2.1 General principles

2.1.1 The Actuarial Function Report and its core parts

2.1.1.1 The Actuarial Function (AF) must produce a written report (the Actuarial Function Report (AFR)) to be submitted to the Administrative, Management or Supervisory Body (AMSB), at least annually. The actuary should consider that the intended user is the AMSB but may also include other functions of the undertaking or any related undertaking and the relevant supervisory authorities.

2.1.1.2 The AFR should have a form, structure, style, level of detail and content which is appropriate to the particular circumstances, taking into account the intended users. This may lead to an AFR consisting of several component reports focusing on specific content which may be provided to the AMSB separately and at different points of time.

2.1.1.3 The AFR should:
(a) state which Actuarial Standards apply to the work that has been carried out and whether the work complies with those Actuarial Standards;
(b) state which Actuarial Standards apply to the AFR and whether the AFR complies with those Actuarial Standards; and
(c) give particulars of any material departures from the Actuarial Standards referred to in (a) and (b) above.

2.1.2 The Actuarial Function

2.1.2.1 The AFR must document a summary of all major tasks that have been undertaken by the AF and their results.

2.1.2.2 The AFR should set out information identifying relevant conflicts of interest and describing how they have been managed including any potential conflicts of interest between the individual undertaking and any group of which it is a part.

2.1.2.3 In applying 2.3 and 3.2.3.f of ESAP1 the AF should disclose any material reliance on other persons' work and how the AF gained assurance on the reliability of the other persons' work.

2.1.2.4 The AFR must identify the individuals responsible for writing the AFR, and, if applicable, the person taking overall responsibility for its production.

2.1.2.5 The AFR may provide information to demonstrate that each of the contributors to the AFR, and, if applicable, the individual taking overall responsibility for the AFR, has the relevant knowledge and experience to fulfil the role.

2.1.3 Content of the Actuarial Function Report

2.1.3.1 The AFR must clearly identify any deficiencies and give recommendations as to how such deficiencies should be remedied having regard to materiality and proportionality.

2.1.3.2 The AFR should include sufficient information and discussion about each area covered so as to enable the AMSB to judge its implications.

2.1.3.3 The AFR should summarise the key data used to reach the opinions expressed and should draw attention to any material areas of uncertainty and their sources, and also to any material professional judgement made in the assessments by the AF.

2.1.4 Feedback on the Actuarial Function Report

2.1.4.1 The AF should discuss its conclusions and recommendations with management when finalizing the AFR. After submission of an AFR to the AMSB, the AF should seek feedback from the AMSB on the contents of the AFR and should have regard to that feedback when preparing future AFRs.

2.1.4.2 Details of whether recommendations in the AFR have been accepted and, if so, on progress towards implementation, should be summarised in the next AFR.

2.2 Technical Provisions

2.2.1 Conclusions on adequacy and reliability of Technical Provisions

2.2.1.1 The AFR must clearly state the conclusions of the AF with regard to its analysis of the adequacy and reliability of the Technical Provisions. The conclusions should include any concerns the AF has in this regard and identify material shortcomings or deficiencies, with recommendations as to how these could be remedied.

2.2.1.2 The AFR should include the results of an assessment whether the Technical Provisions have been calculated in accordance with Articles 75 to 86 of the Solvency II Directive and advise if any changes are necessary in order to achieve compliance.

2.2.1.3 The AFR must clearly state the sources and degree of uncertainty the AF has assessed in relation to the estimates made in the calculation of the Technical Provisions. The AFR should explain the potential sources of uncertainty and, where appropriate, illustrate uncertainty by reference to possible scenarios.

2.2.2 Important information about Technical Provisions

2.2.2.1 The AF should ensure that the factors which have a material impact on the amount of Technical Provisions, including risk drivers and assumptions, are made clear in the AFR.

2.2.2.2 In particular the AFR should draw attention to any material judgements made in the identification of the boundary of insurance or reinsurance contracts and in the calculation of Technical Provisions.

2.2.3 Disclosure of opening and closing Technical Provisions

2.2.3.1 The AFR should disclose the opening and closing Technical Provisions, split, to the extent possible, between best estimate and risk margin. A commentary on the impact on the Own Funds of the main items of movement of Technical Provisions should be provided.

2.2.4 Co-ordination of process

2.2.4.1 The AFR should include a broad overview of the overall process employed in respect of the calculation of the Technical Provisions.

2.2.5 Sufficiency and quality of data

2.2.5.1 The AFR must include an overview of the controls surrounding the data used in the calculation of Technical Provisions and an explanation of how the AF is comfortable that the data is appropriate, accurate, reliable and complete.

2.2.5.2 The AFR must identify any material uncertainties or limitations in the data and outline the approach taken to these in the context of the calculation of Technical Provisions. Limitations might include, but are not restricted to, its fitness for purpose, consistency over time, timeliness, information technology systems, availability of individual policy and claims data and of historical data.

2.2.5.3 The AFR should give an overview of the business covered by the Technical Provisions, the split of data into homogeneous risk groups and how this split has been assessed for appropriateness in relation to the underlying risks of the undertaking.

2.2.5.4 The AFR should consider relevant information provided by financial markets and generally available data on underwriting risks and explain how it is integrated into the assessment of the Technical Provisions.

2.2.5.5 The AFR should disclose any concern the AF has on the documentation describing the process of the collection of data and analysis of its quality and other information that relates to the calculation of Technical Provisions, including any concern the AF has on the directory of the data used in the calculation of the Technical Provisions.

2.2.6 Methods and models

2.2.6.1 The AFR must provide an overview about how the appropriateness of the methods and models used in the calculation of the Technical Provisions has been assessed with regard to the main drivers of risk, the lines of business of the undertaking and the way in which the business is being managed.

2.2.6.2 The AFR should draw attention to any unusual or non-standard method not within usual market practices which has been used to calculate Technical Provisions, including a description of the rationale for the choice of method.

2.2.6.3 The AFR should include, where appropriate, an overview of the methods used to calculate Technical Provisions in respect of contracts where the

insufficiency of the data has prevented the application of a reliable actuarial method, specifically those cases referred to in Article 82 of the Solvency II Directive. The AFR should include an assessment of the appropriateness of the approximations used in the calculations of Technical Provisions for such contracts.

2.2.6.4 The AFR must include an assessment of the appropriateness of the methods and models used in the calculation of options and guarantees included in insurance or reinsurance contracts and in the valuation of these options and guarantees in the Technical Provisions.

2.2.6.5 The AFR should indicate if the AF assesses that the information technology systems used in the calculation of Technical Provisions do not sufficiently support the actuarial and statistical procedures.

2.2.6.6 Where the calculation of Technical Provisions depends on multiple methods or models, the AFR should make reference to any material differences between the results according to these methods or models and what allowance has been made for the differences.

2.2.6.7 The AFR should disclose and justify any material changes in methods or models from those used in the previous AFR and quantify the effect on the Technical Provisions.

2.2.7 Assumptions

2.2.7.1 The AFR must include a description of how the appropriateness of the data and methods used to determine the assumptions underlying the Technical Provisions have been assessed.

2.2.7.2 The AFR should disclose the key assumptions underlying the calculation of the Technical Provisions and explain their appropriateness in relation to the main drivers of risk likely to affect the insurance or reinsurance obligations of the undertaking.

2.2.7.3 The AFR should disclose any material changes made to the assumptions used compared to the previous AFR.

2.2.7.4 The AFR should disclose its assessment of the appropriateness of material judgements made in the determination of assumptions. These may include, but are not restricted to, assumptions or interpretations made in relation to the following:

- contractual options and guarantees;
- policyholder behaviour;
- future management actions;
- amounts recoverable from counterparties;
- areas of future discretion exercised by the undertaking which might impact its insurance or reinsurance obligations; and
- obligations which might exist over and above contractual obligations.

2.2.8 Comparing best estimates against experience

2.2.8.1 The AFR should include an overview of the process used to compare best estimates against actual experience and must draw attention to any concerns the AF has in regard to the effectiveness of this process.

2.2.8.2 The AFR should disclose the findings of the AF's review of the quality of past best estimates and the conclusions from this in relation to the appropriateness of data, methods or assumptions used in the calculation of the Technical Provisions. In reviewing the quality of past estimates, the AFR should draw attention to those areas where actual experience has deviated in a material way from the assumptions made and provide a commentary in this regard. It may assist understanding if this commentary distinguishes between deviations which are judged to arise from volatility of the underlying experience and those which are viewed as relevant to the appropriateness of the data, methods or assumptions used. The AFR should disclose any material judgement when such a distinction is made.

2.2.9 Sensitivity analysis

2.2.9.1 The AFR must report on the results of an analysis of the sensitivity of the Technical Provisions to each of the major risks underlying the obligations which are covered in the Technical Provisions.

2.3 Opinion on underwriting policy

2.3.1 Opinion on the overall underwriting policy of the undertaking

2.3.1.1 The AFR must express an opinion on the overall underwriting policy of the undertaking.

2.3.1.2 The AFR should set out how the AF has arrived at its opinion on the overall underwriting policy of the undertaking.

2.3.1.3 The AFR should explain any concerns which the AF may have as to the suitability of the overall underwriting policy.

2.3.1.4 The AFR should outline recommendations to remedy any deficiencies the AF has identified in relation to the overall underwriting policy having regard to materiality and proportionality.

2.3.2 Areas of consideration

2.3.2.1 An assessment of the suitability of the overall underwriting policy should at least include the areas set out in 2.3.3 to 2.3.7.

2.3.3 Sufficiency of premiums

2.3.3.1 The AFR must conclude whether the premiums are expected to be sufficient in the light of the operation of the overall underwriting policy. The assessment must take into consideration the impact of the underlying risks (including underwriting risks) to which the business is exposed and the impact on the sufficiency of premiums of options and guarantees included in insurance and reinsurance contracts.

2.3.4 Environmental Changes

2.3.4.1 The AFR should describe the external environmental factors which have the potential to influence the profitability of new business including renewals. These factors might include inflation, legal risk and changes in the market in which the undertaking operates affecting business volumes and business mix.

2.3.5 Adjustments to Premiums

2.3.5.1 For products where premiums may be adjusted in response to experience, the AFR must comment on the effect of systems which adjust the premiums

policyholders pay upwards or downwards depending on their claims history (bonus-malus systems) or similar systems, implemented in specific homogeneous risk groups.

2.3.6 Anti-selection

2.3.6.1 The **AFR** must include the **AF**'s conclusions concerning anti-selection risks within the **undertaking**'s portfolio of contracts if these risks might have an adverse impact on the **Technical Provisions** or sufficiency of premiums. The **AFR** should outline the **AF**'s recommendations for improvements to the **underwriting** policy which might mitigate these risks.

2.3.7 Interrelationships

2.3.7.1 The **AFR** should outline the extent to which the overall **underwriting** policy of the **undertaking** is not consistent with other relevant policies of the **undertaking**.

2.3.7.2 This should at least include an assessment of the consistency with the risk appetite and the reinsurance arrangements of the **undertaking** and with the **underwriting** risks that the **undertaking** reflects in the calculation of the **Technical Provisions**.

2.4 Opinion on reinsurance arrangements

2.4.1 Opinion on the adequacy of reinsurance arrangements

2.4.1.1 The **AFR** must express an **opinion** on the adequacy of the reinsurance arrangements.

2.4.1.2 The **AFR** should explain any concerns which the **AF** may have concerning the adequacy of the reinsurance arrangements.

2.4.1.3 If the **AF** identifies deficiencies the **AFR** should outline recommendations to improve the reinsurance arrangements, including actions which might be taken to:

- eliminate inconsistencies in reinsurance coverage;
- reduce the risk of non-performance by reinsurance counterparties; and
- extend coverage of **material** risks.

2.4.1.4 The **AFR** should set out how the **AF** has arrived at its **opinion**.

2.4.2 Interrelationships

2.4.2.1 The **AFR** should outline the extent to which the reinsurance arrangements of the **undertaking** are not consistent with the **undertaking**'s:

- risk appetite;
- **underwriting** policy; and
- **underwriting** risk,

and include recommendations as to how any inconsistencies should be remedied.

2.4.2.2 The commentary on interrelationships should incorporate the **AF**'s assessment of the credit standing of reinsurance counterparties, including the assessment whether the **undertaking** needs to produce and use its own internal credit assessment of one or more of the reinsurance counterparties.

2.4.3 Effectiveness of reinsurance arrangements

2.4.3.1 The **AFR** should include assessments of how the reinsurance arrangements, including any special purpose vehicles, might respond in a number of stressed scenarios or refer to where this is considered in the ORSA. The scenarios might include:

- catastrophic claims experience;
- risk aggregations;

- reinsurance defaults; and
- reinsurance exhaustion.

2.4.3.2 The assessments should include indications of:

- the amounts recoverable from reinsurance contracts and special purpose vehicles; and
- the impact on the **undertaking**'s own funds.

2.4.3.3 The assessments should consider, if appropriate, the impact of reinstatements or renewal of reinsurance cover and the potential unavailability of reinsurance cover.

2.4.3.4 The **AFR** might include an assessment of the effectiveness of the reinsurance arrangements in mitigating the volatility of the **undertaking**'s own funds.

2.5 Contribution to risk management

2.5.1 The AFR should describe the areas where the AF has made a material contribution to the implementation of the risk management system and the work performed. In particular, this should cover the contribution of the AF to the risk modelling underlying the calculation of the capital requirements, including contribution to the modelling of the loss-absorbing capacity of deferred taxes. It should also cover the contribution that the AF has made with regard to the assessment of the expected profit included in future premiums (EPIFP). Other examples might include the role of the AF and its contribution in relation to the internal model, the identification of material deviations in the company's risk profile from the assumptions underlying the standard formula and the contribution of the AF to the ORSA process, including its views in relation to the stress- and scenario-testing undertaken.

2.5.2 The AFR may summarise the main findings of these activities and in such cases should provide appropriate reference to reporting from the risk management function.