



# ACTUARIAL ASSOCIATION OF EUROPE

**The organization, vision, values and strategic objectives**

**&**

**Summary of the EAN on ORSA and ESAP3 ED**

Lauri Saraste

17/12/2019 – Finnish actuarial association monthly meeting

# Actuarial Association of Europe

The Actuarial Association of Europe (AAE) was established in 1978 under the name [Groupe Consultatif](#) to represent actuarial associations in Europe. Its purpose is to provide advice and opinions to the various organisations of the European Union – the Commission, the Council of Ministers, the European Parliament, EIOPA and their various committees – on actuarial issues in European legislation.



Falco Valkenburg  
Chairperson

The AAE currently has 36 [member associations](#) in 35 European countries, representing over 24,000 actuaries.

Advice and comments provided by the AAE on behalf of the European actuarial profession are totally independent of industry interests.

# AAE Board of Directors



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# Vision and Values

The vision of the Actuarial Association of Europe (AAE) is for actuaries throughout Europe to be recognised as the leading quantitative professional advisers in financial services, risk management and social protection, contributing to the well-being of society, and for European institutions to recognise the valuable role that the AAE plays as a leading source of advice on actuarial and related issues.

The AAE shares the following values:

- concern for the public interest
- Integrity
- Independence
- collaboration and respect
- transparency and accountability



# Strategic Objectives

## **Strategic Objective 1: Enhance relations with European institutions**

Establish and maintain relationships with key European institutions, so that the AAE can effectively provide them with high quality professional advice to improve the soundness of decisions from an actuarial perspective.

- Play a prominent role in shaping the development of new European legislation, and in the review and refinement of existing legislation, affecting the work of actuaries in traditional areas and in wider fields as actuaries extend their areas of involvement;
- Reinforce existing relationships with the European Commission and EIOPA;
- Build and enhance relationships with the European Parliament and the Council of the EU; and
- Maintain contact with other European organisations such as industry and consumer protection bodies.

# Strategic Objectives

## Strategic Objective 2: Promote Professionalism

Promote consistent standards of education and professionalism among actuaries in Europe.

- prescribe minimum requirements for the education of actuaries to be applied by member associations;
- facilitate continuing professional development of actuaries;
- ensure that all member associations have a code of professional conduct which reflects at least the requirements of the AAE's Code of Professional Conduct, and an appropriate disciplinary process;
- develop and maintain model standards of actuarial practice for work undertaken by actuaries in relation to EU regulatory requirements;
- maintain a mutual recognition agreement which is consistent with the requirements of the EU Recognition of Professional Qualifications Directive;
- support the development and recognition of individual member associations;
- help to ensure that regulated actuarial work is performed by those properly qualified to undertake it and subject to relevant professional and technical actuarial standards; and
- support the development and recognition of actuarial work in wider fields as actuaries extend their areas of involvement.

# Strategic Objectives

## **Strategic Objective 3: Promote a European community of actuaries**

Promote a European community of actuaries between AAE member associations, their members and the AAE.

- encourage the exchange of information and ideas;
- facilitate networking between actuaries, especially in wider fields;
- strengthen awareness among member associations and their members of the work of the AAE; and
- facilitate mutual assistance between member associations.

# AAE Committee Chairpersons

*Risk  
Management*



*Malcolm  
Kemp*

*Insurance*



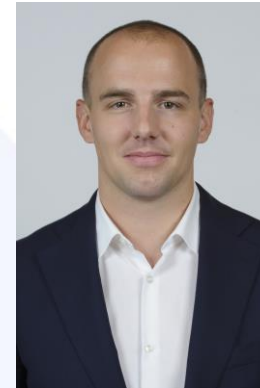
*Tony  
O'Riordan*

*Pensions*



*Maitane  
Mancebo*

*Professionalism*



*Christophe  
Heck*

*Education*



*Henning  
Wergen*

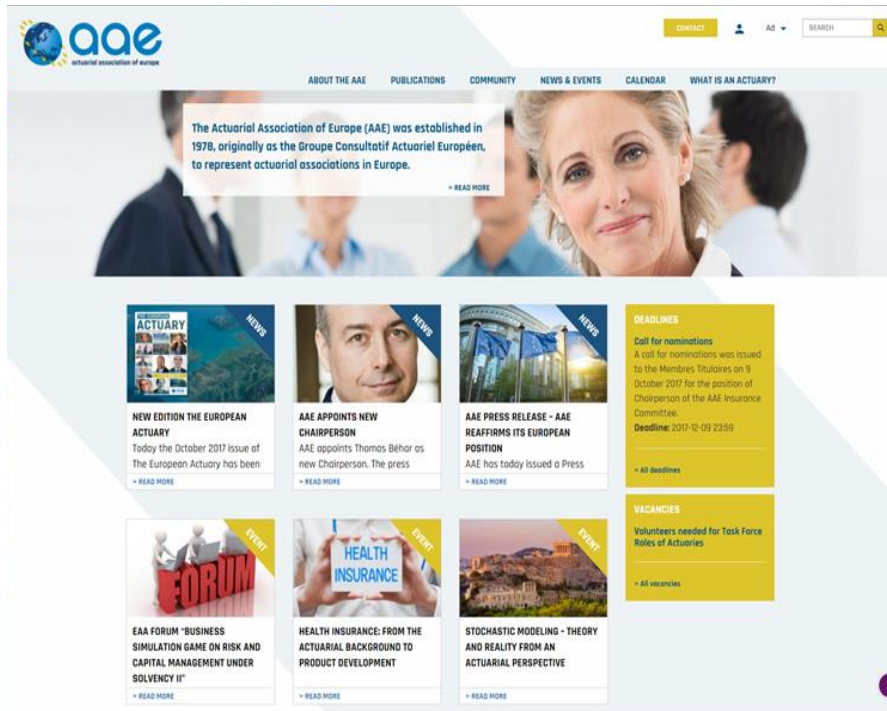


# EU Stakeholders



# Informing

## Website



## Publications



## Magazine



## Congress



- **3.1 Design of the ORSA process**
  - 3.1.1 Establishing a structured approach to uncertainty.
  - 3.1.2 Deviation from Solvency II balance sheet approach and methodology.
  - 3.1.3 The ORSA consideration period.
  - 3.1.4 Inconsistency with the undertaking's risk management approach.
- **3.2 Performance of the ORSA process**
  - 3.2.1 Quantitative risk assessment and financial projections
  - 3.2.2 Qualitative risk assessment

# Table of contents

## **1 Introduction**

- 1.1 Due process on this EAN
- 1.2 This EAN on the ORSA and ESAP 3
- 1.3 Executive summary
- 1.4 List of abbreviations used

## **2 Supplementary notes to ESAP 3 definitions**

- 2.1 Additional material relating to "Risks", "Uncertainties" and "Exposures"
- 2.2 Additional material relating to an "ORSA-triggering event"

## **3 Supplementary notes to ESAP 3 text**

- 3.1 ESAP 3, Section 3.1 "Design of the ORSA process"
  - 3.1.1 ESAP 3, Section 3.1.1 "Establishing a structured approach to uncertainty"
  - 3.1.2 ESAP 3, Section 3.1.2 "Deviation from Solvency II balance sheet approach and methodology"
  - 3.1.3 ESAP 3, Section 3.1.3 "The ORSA consideration period"
  - 3.1.4 ESAP 3, Section 3.1.4 "Inconsistency with the undertaking's risk management approach"
- 3.2 ESAP 3, Section 3.2 "Performance of the ORSA process"
  - 3.2.1 ESAP 3, Section 3.2.1 "Quantitative risk assessment and financial projections"
  - 3.2.2 ESAP 3, Section 3.2.2 "Qualitative risk assessment"

# Table of contents

## **4 Other relevant subjects relevant to the ORSA process**

### **4.1 Differences in methodology**

- 4.1.1 A business projection model and multiple bases
- 4.1.2 Overall Solvency Needs
- 4.1.3 Risk measures: VaR, CVaR, TVaR, burn-through, long-term ALM & liquidity, etc
- 4.1.4 Risk measurement time frames
- 4.1.5 Projection basis: what is Best Estimate and why?
- 4.1.6 Risk capital versus policyholders' protective risk capital
- 4.1.7 Fungibility of capital
- 4.1.8 Risk-neutral Economic Scenario Generator (ESG) implementation
- 4.1.9 Economic best estimate liability

### **4.2 Differences in modelling**

- 4.2.1 Nature of stresses
- 4.2.2 Dependencies, correlations, interactions and cause-and-effect relationships
- 4.2.3 Loss absorbing capacity of deferred taxes
- 4.2.4 Loss absorbing capacity of technical provisions
- 4.2.5 Defaults, downgrades, credit spreads, and market values

### **4.3 Differences in assumptions**

- 4.3.1 Contract boundaries
- 4.3.2 "Risk neutral" versus "real world"
- 4.3.3 Future new business
- 4.3.4 Discount curves
- 4.3.5 Sovereign credit risk

### **4.4 Risk Maps and the ORSA**



# Introduction of the EAN

- **To be read alongside the ESAP** but provides discussion and explanation at a level of detail beyond a standard of practice for actuaries.
- The **regulations relating to the ORSA are broad and general**, but leave significant room for interpretation and even inventing new good business practices by those responsible for the ORSA.
- Is structured in the order of the ESAP **clarifying some of the ideas with examples and discussions**.
- The main underlying currents:
  - The professional and methodical **handling of uncertainty** by actuaries for the ORSA
  - The thorough and comprehensive **treatment of risks** by actuaries for the ORSA
  - The value to an insurer of venturing to **assess all material risks and uncertainties objectively and independently** of regulations and other rules
  - The value to an insurer of **investigating various "baseline" ORSA scenarios** and several other scenarios
  - the value of **extending the ORSA models** to incorporate any other frameworks relevant to the insurer, e.g. **reserving, accounting or capital management**.

## Section 2 – Supplementary notes to the ESAP 3 definitions

- **Risks, exposures and uncertainties** are discussed by covering common conventions and introducing a set of terminology intended to aide in the **understanding of cause-and-effect relationships**.
- General and specific examples are given for “**ORSA-triggering events**”. General examples include:
  - macro-economic events,
  - changes to a company’s exposures due to legislative changes,
  - adopting new risk management strategies,
  - fundamental changes to a business plan (e.g. by entering or exiting a market or product type),
  - abrupt changes to risks or exposures (e.g. driverless cars or a cure for cancer).
- Specific examples of **thresholds for identifying ORSA-triggering events** are provided, including links to risk appetite, monetary loss, non-monetary damage, and breaching limits (e.g. SCR or internal risk limits).

# Section 3.1 – Topics relevant to the "Design of the ORSA process"

- Ensuring that the **multi-stakeholder business process** of setting assumptions for ORSA includes **management plans and the business planning process**.
- The **need for objectivity in the setting of a "baseline"** ORSA scenario and the potential usefulness of having multiple, plausible baselines.
- The goal—shared by regulators and insurers—of integrating the ORSA within the **day-to-day running and prudential management of an insurer's business**. E.g. hypothetical aggressive business plan
- Setting forward-looking business assumptions; the difficulties the actuary may encounter in setting an **objective "best estimate" baseline**; and the importance of **distinguishing (aggressive) assumptions from assumptions appropriate** for the projection and calculation of regulatory reserves and capital.
- Uncertainty and the idea presented in the ESAP of adopting a **"structured approach to uncertainty"**.  
Overview of **different "types" of uncertainty**, examples of the importance of feedback loops in dealing with risk and uncertainty within the ORSA process or its sub-processes.
- **Different types of reasoning** (deductive, inductive, abductive)

# Section 3.1 – Topics relevant to the "Design of the ORSA process"

- Potential reasons for **deviation within the ORSA from the Solvency II principles**.
  - Companies may be seeking a **better understanding** and hence management of its risks and exposures,
  - Facilitated by methods which cover **all material risks**
  - **Measure risks differently** from how those risks are perceived by the company or its stakeholders.
  - Potential deviations include the **modelling of quantitative risks**, the **assessment of qualitative risks** (i.e. risks which are hard to quantify *reliably*), **potential differences in accounting methods** and in the calculation of reserves and capital management.
- The usefulness of **distinguishing between the "real world" and the "modelled world"** as relates to the ORSA process in the inclusion of all material risks;
  - the awareness of the dependency of the ORSA on the underlying models for the **assessment of exposures and hence model risk**;
  - the **completeness and relevance of data**;
  - the use, modelling and reliability of **management actions** and the use of **professional judgment**.

# Section 3.1 – Topics relevant to the "Design of the ORSA process"

- The ORSA as a idealised, comprehensive "**business projection model**" which projects all of an insurer's relevant metrics, including their interactions over time. This might include:
  - The **Solvency II** balance sheet
  - **Local GAAP** balance sheet and profit and loss account
  - **IFRS** balance sheet and accounts
  - **Credit rating** agency capital needs
  - An insurer's **own internal capital** assessment or "economic balance sheet"
  - **Additional regulatory** and accounting bases for multi-national insurers,
  - The availability and reliability of **future dividends** for limited companies or **re-attributable surpluses** for mutual insurers.
- The idealised "business projection model" is used to discuss potential deviations from Solvency II principles in terms of methodology, modelling and assumptions.
- Also investigating a company's **Overall Solvency Needs**.



# Section 3.1 – Topics relevant to the "Design of the ORSA process"

- ESAP section on **The ORSA consideration period** is opened more:
  - **Liability-related** timeframes ("actuarial projection horizon" and "horizon for long-term considerations")
  - **ORSA-related timeframes** ("ORSA projection period" and "ORSA projection horizon")
  - **Business planning** timeframes ("business planning period" and "business's strategy horizon")
- ESAP section on **Inconsistency with the undertaking's risk management approach**:
  - Some practically necessary **simplifications of business reality** as they are reflected within actuarial models or the overall ORSA process, such as the simplification of the insurer's hedging strategy or ALM strategy within the actuarial models.
  - Reflecting complex **reinsurance programmes**; intentional deviation by the insurer from its risk appetite or underwriting policy; and the inclusion of management actions within adverse ORSA scenarios.
  - Emphasise the importance of assessing the potential significance of such inconsistencies and whether there are **material risks** omitted from the ORSA or **material inconsistencies** affecting the reliability of the ORSA.

## Section 3.2 – Topics relevant to the "Performance of the ORSA process"

- ESAP section on "**Quantitative risk assessment and financial projections**".
  - The appropriateness of **stress and scenario testing**, including reverse stress testing;
  - The appropriateness of the **baseline(s)**;
  - The completeness of the **risk coverage of the collection of (adverse) scenarios**.
  - The importance for the ORSA of
    - **reliable processes for the analysis of historical data**
    - the **setting of assumptions**
    - the potential need for coherent treatment of **inter-dependent risks and uncertainties**.
  - **Different modelling situations** requiring deterministic, stochastic, approximate or closed-form calculations, as well as the potential down-stream effects of simplifications

## Section 3.2 – Topics relevant to the "Performance of the ORSA process"

- Also further explanation to support the ESAP section on "**Qualitative risk assessment**":
  - The importance of comprehensively and coherently incorporating **material qualitative risks** within the ORSA process.
  - Also the ORSA is to help the insurer ask "**what if**" **questions**, the assessment of qualitative risks is particularly important to the insurer's assessment and management thereof (e.g. emerging risks which the actuary or insurer feels could be material).
  - The importance for the ORSA of:
    - **combining quantitative and qualitative risks coherently**
    - the value of assessing the **required downstream precision in the assessment of qualitative risks**
    - and the importance of communicating any **limitations or caveats on the use of aggregated risk information**.

# Section 4 – Other relevant subjects relevant to the ORSA process

- Discussion of the comprehensive "**business projection model**" and its value in **supporting product pricing and profitability metrics**.
  - Such a model may necessitate multiple, inter-related bases (regulatory, statutory, accounting, tax, etc).
- A short list of considerations to feed into an insurer's **Overall Solvency Needs** calculation, including risks, reserves, capital, business strategy, product pricing, and profitability.
- Specific examples of how a company's **Overall Solvency Needs** (or internal Economic Balance Sheet basis) could **deviate from the Solvency II** principles or methods.
  - This is split into differences in methodology, modelling, and assumptions. This discussion is not exhaustive, but nonetheless valuable.
- Differences in methodology, which includes **risk measures; risk measurement timeframes;** developing set(s) of objective **best estimate assumptions;** the implications for **capital adequacy** of Solvency II's "total balance sheet approach"; the **fungibility of capital; risk-neutral ESGs;** and an "**economic BEL**".

# Section 4 – Other relevant subjects relevant to the ORSA process

- **Modelling differences** includes:
  - The **nature of stresses** (isolated or combined); risk dependencies and interactions; and the loss absorbing capacity of deferred taxes and of technical provisions.
  - Various facets of **credit risk** and how different aspects of credit risk affect the policyholders, the company at product level and at balance sheet level.
- **Differences in assumptions:**
  - **Contract boundaries** are discussed and for the forward-looking management of the business, the value of investigating the effects of varying contract boundaries and understanding products for which the Solvency II contract boundaries may not reflect the economic reality of a contract.
  - **Differences between "risk neutral" and "real-world"** assumptions are then discussed with their effects on stochastic models, liability valuation, and issues arising from dynamic modelling, e.g. of policyholder behaviour or management actions.
- Differences in assumptions are also discussed for **future new business**; considerations for **discount curves**, **pricing and profitability**, and the assessment of **long-term credit risk**; and **sovereign credit risk**.



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