



**SII Actuarial Function**  
Preparing for 1 January 2016

**Year End Workshop for Senior Life Actuaries and AFHs**  
**John Hoskin and Scott Robinson**  
30 September 2014

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**Agenda**

**This session will:**

- 1 Try to clarify the "Actuarial Function" and "Actuarial Function Holder"
- 2 Consider the positioning of the Actuarial Function within the governance structure
- 3 Recap the duties of the Actuarial Function under Solvency II and consider the requirements compared to current AFH responsibilities
- 4 Provide an overview of what you and your firms should be doing now to prepare for Solvency II

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**Agenda**

- 1 "Actuarial Function" and "Actuarial Function Holder"
- 2 Consider the positioning of the Actuarial Function within the governance structure
- 3 Recap the duties of the Actuarial Function under Solvency II and consider the requirements compared to current AFH responsibilities
- 4 Provide an overview of what you and your firms should be doing now to prepare for Solvency II

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## Actuarial Function/Holder

### What is a function?

- 'Function' within a system of governance means an internal capacity to undertake practical tasks (Level 1)
- Key functions include all persons performing tasks related to a key function (Level 3)
- 'Actuarial Function' is the administrative capacity to undertake the governance tasks described in Article 48 (ESAP 2)

### What are Function Holders?

- Key function holders are the persons responsible for a key function as opposed to persons having, carrying out or performing a key function (Level 3)
- (key function holders)...means the person who is responsible for a key function. In case of outsourcing of a key function, the function holder is the person who has the oversight over the outsourcing at the undertaking (Level 3)

### Interpretation...

- The Actuarial Function is not (necessarily) a single person
- The Actuarial Function performs the Article 48 tasks
- The Actuarial Function Holder will usually be the approved person responsible for delivering the Article 48 tasks
- If the Actuarial Function is outsourced, the Actuarial Function Holder will be the approved person responsible for oversight of the outsourcing

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## Actuarial Function Holder

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**Should a UK actuary be required to hold a technical practising certificate if they are the Solvency II Actuarial Function Holder?**

- Yes
- No

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## Agenda

1. To clarify the 'Actuarial Function' and 'Actuarial Function Holder'
2. Positioning of the Actuarial Function within the governance structure
3. Settle the duties of the Actuarial Function under Solvency II and consider the requirements (compared to current AIF requirements)
4. Provide an overview of what you and your firms should be doing now to prepare for Solvency II

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### Position within governance framework

Where will the Actuarial Function sit within your firm?

1. Line 1 (Day to day management and control of risks)
2. Line 2 (Oversight and challenge of risk taking)
3. Straddle lines 1 and 2
4. Undecided

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### Position within governance framework

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### Position within governance framework

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## Agenda

1. Introduction: Role of "Supervisory Function" and "Actuarial Function Holder"
2. Introduction to the role of the Actuarial Function within the governance structure
3. Duties of the Actuarial Function under Solvency II and consider the requirements compared to current AFH responsibilities
4. Provide an overview of what you and your firm should be doing now to prepare for Solvency II

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## Actuarial Function duties

- | Article 40<br>Actuarial function  | Article 272<br>Actuarial function  |
|---|--|
| 1. Insurance and reinsurance undertakings shall provide for an effective actuarial function to:   | 1. ...   |
| (a) coordinate the calculation of technical provisions;   | 8. The actuarial function shall produce a written report to be submitted to the administrative, management or supervisory body, at least annually. The report shall document all tasks that have been undertaken by the actuarial function and their results, and shall clearly identify any deficiencies and give recommendations as to how such deficiencies should be remedied. |
| (b) ensure the appropriateness of the methodologies and underlying models used as well as the assumptions made in the calculation of technical provisions;  |  |
| (c) assess the sufficiency and quality of the data used in the calculation of technical provisions;   |  |
| (d) compare best estimates against experience;  |  |
| (e) inform the administrative, management or supervisory body of the reliability and adequacy of the calculation of technical provisions;   |  |
| (f) oversee the calculation of technical provisions in the cases set out in Article 82;   |  |
| (g) express an opinion on the overall underwriting policy;  |  |
| (h) express an opinion on the adequacy of reinsurance arrangements; and   |  |
| (i) contribute to the effective implementation of the risk-management system referred to in Article 44, in particular with respect to the risk modelling underlying the calculation of the capital requirements set out in Chapter 15, Sections 4 and 5, and to the assessment referred to in Article 45. |  |

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## Actuarial Function Duties – Seismic change?

Item	Impact
coordinate the calculation of technical provisions	↔
ensure the appropriateness of the methodologies and underlying models used as well as the assumptions made in the calculation of technical provisions	↔
assess the sufficiency and quality of the data used in the calculation of technical provisions	↔
compare best estimates against experience	↔
inform the administrative, management or supervisory body of the reliability and adequacy of the calculation of technical provisions	↔
oversee the calculation of technical provisions in the cases set out in Article 82	↔
express an opinion on the overall underwriting policy	↑
express an opinion on the adequacy of reinsurance arrangements	↑
contribute to the effective implementation of the risk-management system	↑

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### Actuarial Function Duties – Seismic change?

Item	Impact
coordinate the calculation of technical provisions	↑
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assess the sufficiency and quality of the data used in the calculation of technical provisions	↑
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inform the administrative, management or supervisory body of the reliability and adequacy of the calculation of technical provisions	↑
oversee the calculation of technical provisions in the cases set out in Article 82	↑
express an opinion on the overall underwriting policy	↑
express an opinion on the adequacy of reinsurance arrangements	↑
contribute to the effective implementation of the risk-management system	↑

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### Actuarial Function Duties – Seismic change?

Item	Impact
coordinate the calculation of technical provisions	↗
ensure the appropriateness of the methodologies and underlying models used as well as the assumptions made in the calculation of technical provisions	↗
assess the sufficiency and quality of the data used in the calculation of technical provisions	↗
compare best estimates against experience	↗
inform the administrative, management or supervisory body of the reliability and adequacy of the calculation of technical provisions	↗
oversee the calculation of technical provisions in the cases set out in Article 82	↗
express an opinion on the overall underwriting policy	↗
express an opinion on the adequacy of reinsurance arrangements	↗
contribute to the effective implementation of the risk-management system	↗

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### Sources of information

Post 1 January 2016
<ul style="list-style-type: none"> <li>• Level 1 – Framework</li> <li>• Draft Level 2 – Delegated Acts</li> <li>• Draft Level 3 – Guidance - Pillar 1</li> <li>• Draft Level 3 – Guidance - Systems of Governance and ORSA</li> </ul>
Preparatory phase
<ul style="list-style-type: none"> <li>• Level 3 – Guidance – Systems of Governance</li> <li>• Working draft European Standard of Actuarial Practice 2</li> </ul>

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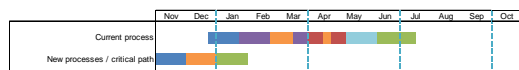
### Coordinating the calculation of technical provisions

	Examples
<b>Governance</b>	<ul style="list-style-type: none"> <li>Introduction of formal cycle of assumption sign-off with changes not permitted outside this period</li> <li>Re-negotiate SLAs with asset managers re WDT for asset data</li> </ul>
<b>Optimising the critical path</b>	<ul style="list-style-type: none"> <li>Most processes were designed around the ICA – Solvency II is a new challenge demanding a re-think of the critical path</li> </ul>
<b>Invest to accelerate</b>	<ul style="list-style-type: none"> <li>Accelerate the production of balance sheet valuations and runs; eliminate manual processes, code optimisation, hardware improvements</li> <li>Availability of base balance sheet</li> </ul>
<b>New processes</b>	<ul style="list-style-type: none"> <li>Advanced modelling such as sampling techniques</li> <li>Calibration prior to quarter end and roll-forward with true-up</li> </ul>

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### Coordination ... optimising the critical path

- A key part of the solution is identifying the critical path



- A new critical path standardises the reporting year
  - QE – 2: preparation
  - QE – 1: calibration
  - QE: reporting
- Much calibration work is done before the QE
- Roll-forward and true-up is used
- Hard close balance sheet processes become critical path

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### Validation of technical provisions (Article 48 1. (b) to (f))

Analysis	Enrichment	Justification	Improvement	Documentation
<ul style="list-style-type: none"> <li>Experience</li> <li>Trends</li> <li>Outliers</li> <li>Sensitivity/Drivers</li> <li>Checks</li> <li>Analysis of change</li> </ul>	<ul style="list-style-type: none"> <li>Benchmarks</li> <li>Expert judgement</li> <li>Does not replace data collection</li> </ul>	<ul style="list-style-type: none"> <li>Proportionality</li> <li>Explain what</li> <li>Explain why</li> </ul>	<ul style="list-style-type: none"> <li>Identify</li> <li>Propose remedies</li> <li>Justify</li> </ul>	<ul style="list-style-type: none"> <li>Clear communication</li> <li>Convincing narrative</li> </ul>

*Greater transparency of what is done*

Test result			
Validation areas	Green	Amber	Red
Data	13	1	0
Methods	10	1	1
Assumptions	11	0	1
External models and data	1	1	0
Documentation	9	3	2
Results	2	1	0
Expert judgement	3	2	2
Systems and IT	6	0	1
<b>TOTAL</b>	<b>56</b>	<b>8</b>	<b>7</b>

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## Underwriting



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## Underwriting – an example approach...

General	Recent new business	Forward looking
<ul style="list-style-type: none"> <li>Review of u/w policy and consistency with risk appetite etc</li> <li>Compare actual v expected</li> <li>Impacts and implications including charges, premiums, risk mitigation</li> </ul>	<ul style="list-style-type: none"> <li>Specific consideration of actual v expected</li> <li>What has gone right / wrong v pricing and lessons learned.</li> <li>Build up a source of information re historic pricing basis and performance</li> </ul>	<ul style="list-style-type: none"> <li>Pricing models</li> <li>Profitability and volatility</li> <li>Sensitivity and scenario analysis</li> <li>Market and environment issues</li> </ul>

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## Reinsurance

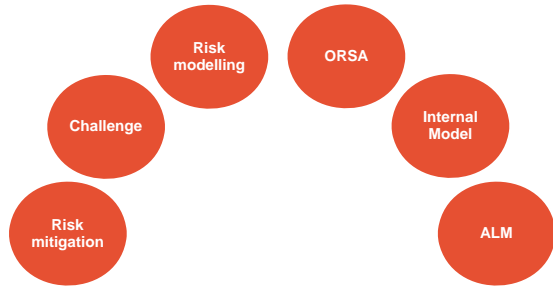
The opinion of the actuarial function shall include analysis on the adequacy of:

Level 2	Comment
Risk profile and underwriting policy	<ul style="list-style-type: none"> <li>Consider performance of arrangements v risk appetite and limits etc</li> <li>Are any changes needed?</li> <li>What services are provided?</li> </ul>
Calculation of reinsurance recoverables	<ul style="list-style-type: none"> <li>Consider calculation of reinsurance asset – overall level, movement</li> <li>Impact under the SCR and also under ORSA</li> </ul>
Reinsurance providers (credit standing)	<ul style="list-style-type: none"> <li>Exposure to counterparty risk</li> <li>How this is managed?</li> </ul>
Expected cover under stress scenarios	<ul style="list-style-type: none"> <li>Review of stress and scenario tests</li> <li>Further risk mitigation actions</li> </ul>

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## Contribution to risk management



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## Annual report

### Level 3



- Include all material tasks
- Doesn't have to be a single report
- Clearly identify deficiencies and propose remedies

### European Standard of Actuarial Practice 2

- Drafting appropriate for the audience
- Identify individuals responsible for writing the report and person taking overall responsibility
- Flag if non-Article 48 task

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## Agenda

1. Lay to rest the "European Standard of Actuarial Practice" debate
2. Consider the positioning of the actuarial function within the governance structure
3. Highlight changes in the regulatory landscape under Solvency II and consider the requirements imposed on current and responsible acts
4. Overview of what you and your firms should be doing now to prepare for Solvency II

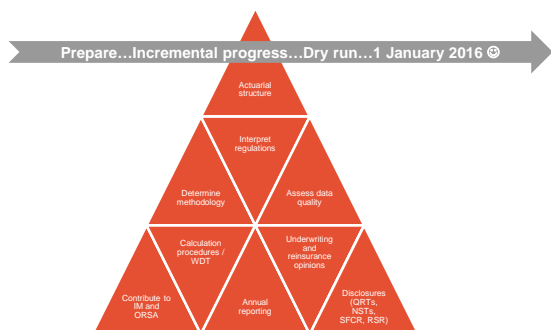
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### What needs to be done now?



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Vote Now

With regards to the Actuarial Function, which statement reflects your current position?

1. I/my firm is totally on top of things and is well prepared for SII
2. I/my firm has made good progress, although there is still much work to be done
3. I/my firm has done some initial planning, but little more than that
4. I/my firm hasn't started thinking about these things yet

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Vote Now

Do you expect the Solvency II Actuarial Function Holder to be the same individual as the current AFH?

1. Yes
2. No
3. Don't know

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