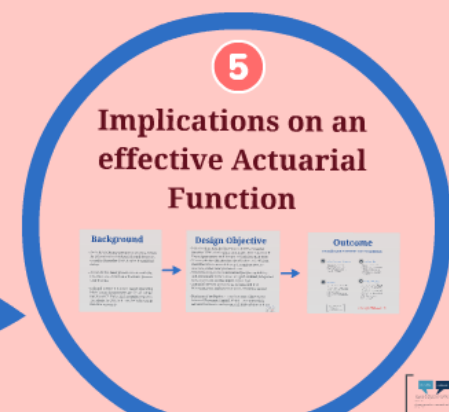




"Son of Solvency II"

Philip Long
Jonathan Pears
3 October 2013





Institute
and Faculty
of Actuaries

"Son of Solvency II"

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Views of Solvency II presented to consider implications of Solvency II, IFRS 9, the Common and Consolidated Supervised Entity (CCSE) and the challenges of operating in an insurance regime

3

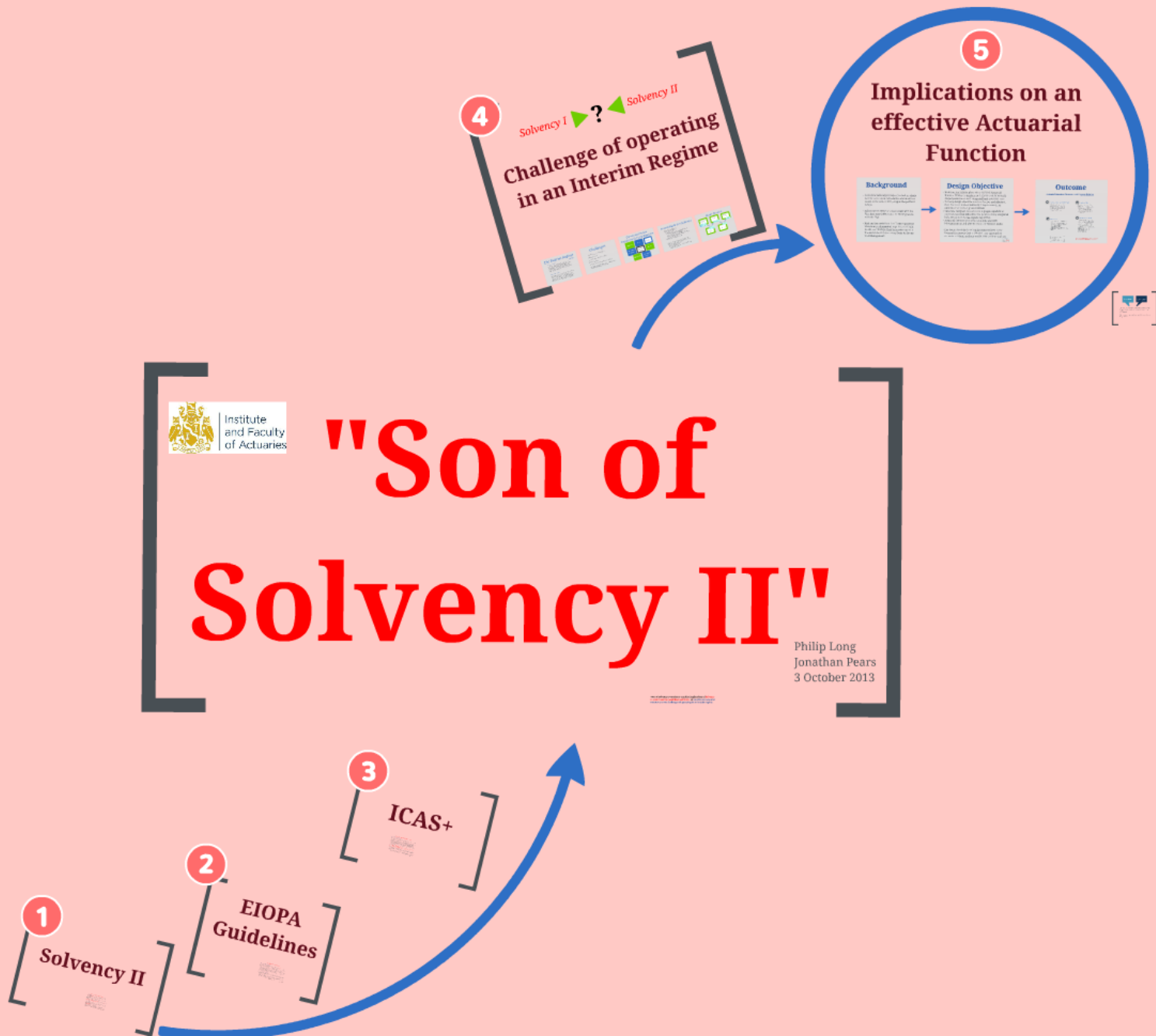
ICAS+

“Son of Solvency II” session to consider implications of Solvency II, EIOPA Interim Guidelines and ICAS+ on an effective actuarial function and the challenges of operating in an interim regime



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Solvency II

[illegible][illegible]

Responsibilities of the Actuarial Function under Solvency II

Article 48 - Actuarial function

1. Insurance and reinsurance undertakings shall provide for an effective actuarial function to undertake the following:
- (a) to **coordinate the calculation of technical provisions**;
 - (b) to ensure the appropriateness of the methodologies and underlying models used as well as the assumptions made in the calculation of technical provisions;
 - (c) to assess the sufficiency and quality of the data used in the calculation of technical provisions;
 - (d) to compare best estimates against experience;
 - (e) to inform the administrative or management body of the reliability and adequacy of the calculation of technical provisions;
 - (f) to oversee the calculation of technical provisions in the cases set out in Article 81;
 - (g) to express an opinion on the overall underwriting policy;
 - (h) to express an opinion on the adequacy of reinsurance arrangements;
 - (i) to **contribute to the effective implementation of the risk management system** referred to in Article 43, **in particular with respect to the risk modelling underlying the calculation of the capital requirements** set out in Chapter VI, Sections 4 and 5 and the assessment referred to in Article 44.

Article 44 – Risk Management

4. Insurance and reinsurance undertakings shall provide for a risk management function which shall be structured in such a way as to facilitate the implementation of the risk management system
5. For insurance and reinsurance undertakings using a partial or full internal model approved in accordance with Articles 110 and 111 the risk management function shall cover the following additional tasks:
- (a) to **design and implement the internal model**;
 - (b) to **test and validate the internal model**;
 - (c) to document the internal model and any subsequent changes made to it;
 - (d) to inform the administrative or management body about the performance of the internal model, suggesting areas needing improvement, and up-dating that body on the status of efforts to improve previously identified weaknesses;
 - (e) to analyse the performance of the internal model and to produce summary reports thereof.

(DIRECTIVE 2009/138/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II))

ITOPRA-CP-13/06: ITOPRA Consultation Paper on the Proposal for Guidelines on the System of Governmental

EIOPA Guidelines for the Actuarial Function

Guideline 1- General provisions for Guidelines

National competent authorities should take the appropriate steps in order to put in place from **1 January 2014** the present Guidelines on System of Governance.

National competent authorities should ensure that insurance and reinsurance undertakings and groups take the appropriate steps to:

- a. build an effective system of governance according to the Solvency II Directive which provides for sound and prudent management;
- b. build an effective risk-management system comprising strategies, processes and reporting procedures necessary to identify, measure, monitor, manage and report, on a continuous basis the risks, at an individual and at an aggregated level, to which they are or could be exposed, and their interdependencies; and
- c. build qualitative information supporting the system of governance that will allow national competent authorities to review and evaluate the quality of the information

Guideline 40 - Tasks of the actuarial function

In accordance with Article 48 of Solvency II, national competent authorities should ensure that the undertaking takes appropriate measures to address the potential conflicts of interests, if the undertaking decides to add additional tasks or activities to the tasks and activities of the actuarial function.

In accordance to Article 246 of Solvency II, the national competent authorities should ensure that the entity responsible for fulfilling the governance requirements at group level requires that the actuarial function gives in addition an opinion on the reinsurance policy and the reinsurance program for the group as a whole.

(EIOPA-CP-13/08 EIOPA Consultation Paper on the Proposal for Guidelines on the System of Governance)



ICAS+

FSA Letter of 29 Jan 2013 on Key Elements of ICAS+ Approach

The key elements of the new phase 'ICAS+' approach:

Current KSA rules will continue to apply, including the requirement to carry out an ICA and the setting of individual capital guidelines (ICGs). Banks' own approaches to setting ICGs will continue to be used.

We have set out the information needed from firms for an ICAS+ review in the appendix. This includes the reconciliations we would need to understand the relationship between the firm's Subscribing Period and its previous Individual Capital Assessment (ICA) model. We will seek to use sharing (ICAP) material provided by the firm whenever appropriate in our review of the ICA for Data will need to confirm the scope of material that should form part of the ICAP review.

The scope of the ICAP review will seek to leverage ICAP work already conducted. To the extent that the review as ICAP, extensive use of publicly available data is required, we will seek to provide as much detailed feedback on ICAP progress as possible. The detail will depend on the quality of the data, the key elements of the review and our resources available. The existing approach to future cases on ICAP approach will continue to provide the same level of detail.

In the interests of efficiency, we intend to coordinate ICAP and MAP processes and governance. There are three main outcomes of an ICAP review: (i) a report of the firm's ICA and setting KSA; (ii) feedback to the firm on the development of the Subscribing Period model; and (iii) an updated work plan for the Subscribing Period model review.

We will review the in-development ICAS+ to confirm the ICA approach, for instance as a way of bringing together business model analysis, forward looking capital planning, assessment of stress and scenario testing, on-balance of assets and capital risk management. It is our intention to work with our expert how best to develop ICAS+ to be used to assess the current ICA and to ensure consistency.

(From FSA (PRA) letter of 29 January 2013 to firms in the internal model approval process at 29 January 2013, not final) approach to allow firms to use their Subscribing Period work to meet the current regulatory requirements under the Individual Capital Assessment Standards (ICAS+).

FSA Letter of 29 Jan 2013 on Key Elements of ICAS+ Approach

The key elements of the two-phase 'ICAS+' approach

Current ICAS rules will continue to apply, including the requirement to carry out an ICA and the setting of individual capital guidance (ICG). ICAS+ does not require Solvency II tests and standards to be met.

We have set out the information needed from firms for an ICAS+ review in the appendix. This includes the reconciliations we would need to understand the relationship between the firm's Solvency II model and its previous Individual Capital Assessment (ICA) model. We will seek to use existing IMAP material provided by the firm wherever appropriate in our review of the ICA but firms will need to confirm the scope of material that should form part of the ICAS+ review. The scope of the ICAS review will seek to leverage IMAP work already conducted. To the extent that we receive an ICAS+ submission of sufficiently high quality (see appendix), we will seek to provide as much detailed feedback on IMAP progress as possible. The detail will depend on timing, quality of materials, policy certainty, the scope of the review and our resource availability. Our starting assumption is that our current ICAS approach will continue for groups (see below).

In the interests of efficiency, **we intend to combine ICAS+ and IMAP processes and governance. There are three main outcomes of an ICAS+ review: i) a review of the firm's ICA and setting ICG; ii) feedback to the firm on the development of the Solvency II internal model; and iii) an updated work plan for the Solvency II model review.**

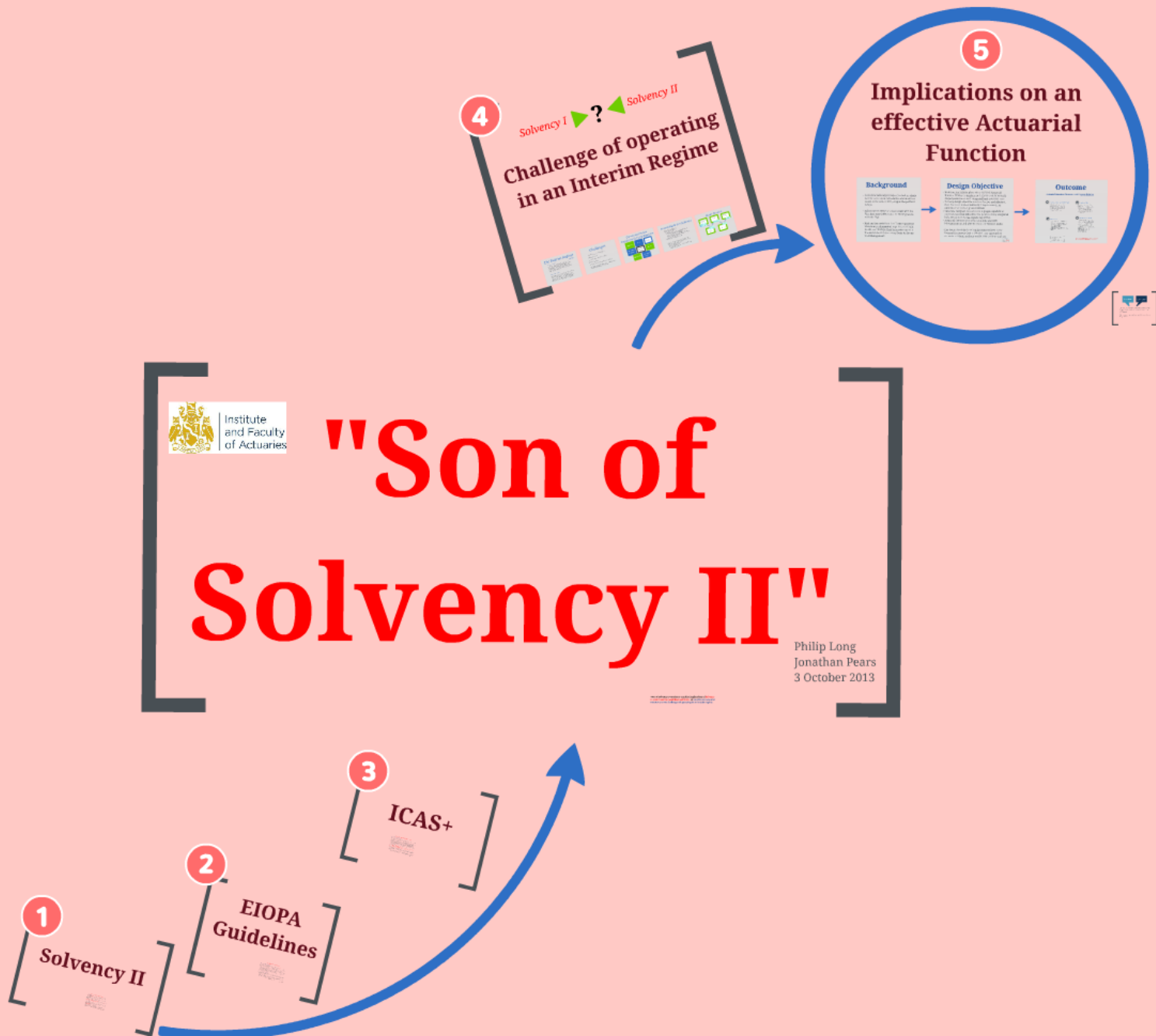
We will review the in-development ORSA to facilitate the PRA approach, for instance as a way of bringing together business model analysis, forward-looking capital planning, assessment of stress and scenario testing, evidence of use and capital risk management. Firms should discuss with their supervisor how their in-development ORSA may be used to meet the current INSPRU requirements.

(From FSA (PRA) letter of 29 January 2013 to firms in the internal model approval process on 29 January 2013 setting out approach to allow firms to use their Solvency II work to meet the current regulatory requirements under the Individual Capital Adequacy Standards (ICAS))



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Solvency I ► ? ◄ Solvency II

Challenge of operating in an Interim Regime

The Interim Regime RECAP

(1st Feb 2015, updated 10 April 2015)

The Interim Regime is the transitional regime for UK insurers and reinsurers between the current Solvency I regime and the new Solvency II regime. It is designed to ensure that the industry can continue to operate in a safe and sound manner while the new regime is being implemented.

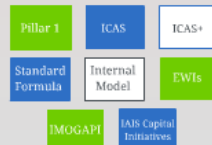
10th April 2015, updated 10 April 2015

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Challenges

- Maintaining momentum and engagement
- Closing off IMAF issues
- Uncertainty over key elements of the basis
- Solvency 2 pilots
- Volume of calculations – multiple measures and bases
- Making decisions against the backdrop of multiple current and future regulatory/capital assessments

Current and Future Regulatory Solvency Measures



Responding to the challenges

- Early engagement with the FCA
- Detailed action plan – agreed for all
- Clear objectives at all levels
- Maintain momentum towards internal model approval
- Close off potentially open ended IMAF issues
- Build a credible basis for decision making in the interim
- Start getting benefits of investment in aggregation basis in risk management and monitoring
- Defined basis for Solvency 2 calculations
- Solvency 2 programme transition to go forward basis
- Operational readiness – fully integrated with the 1st Feb 2015 financial reporting demands
- Rigorous and quality focus
- Focus for risk and solvency monitoring, risk appetite, group economic capital calculations

ICAS+ Process



The Interim Regime

RECAP

Julian Adams, 22 October 2012

“Ten days ago, the plenary vote on Omnibus 2 in the European Parliament was rescheduled from November to March 2013, and EIOPA continues its preparations for an impact assessment on the long-term guarantees package. These are two critical events that essentially render the current timetable - for Member States to transpose the Directive by 30 June 2013 and firms to implement the new regime from 1 January 2014 - as completely unrealistic. No new timetable has been proposed at this stage, although that has not stopped practitioners and policymakers alike from speculating about what a revised implementation date might be.”

EIOPA press release, 27 September 2013

“The European Insurance and Occupational Pensions Authority (EIOPA) published today the final Guidelines for the preparation of Solvency II...

“With its Guidelines EIOPA intends to significantly increase preparedness of both supervisors and insurers for Solvency II once the new framework is applicable. The Guidelines aim to ensure that National Competent Authorities (NCAs), insurance companies and groups take active steps towards implementing certain key elements of Solvency II in a consistent and convergent way. It is up to NCAs to decide how best to incorporate the Guidelines into their national regulatory or supervisory framework.”

Challenges

- Maintaining momentum and engagement
- Closing off IMAP issues
- Uncertainty over key elements of the basis
- Solvency 2 glidepath
- Volume of calculations – multiple measures and bases
- Making decisions against the backdrop of multiple current and future regulatory capital assessments

Current and Future Regulatory Solvency Measures

Pillar 1

ICAS

ICAS+

Standard
Formula

Internal
Model

EWIs

IMOGAPI

IAIS Capital
Initiatives

Responding to the challenges

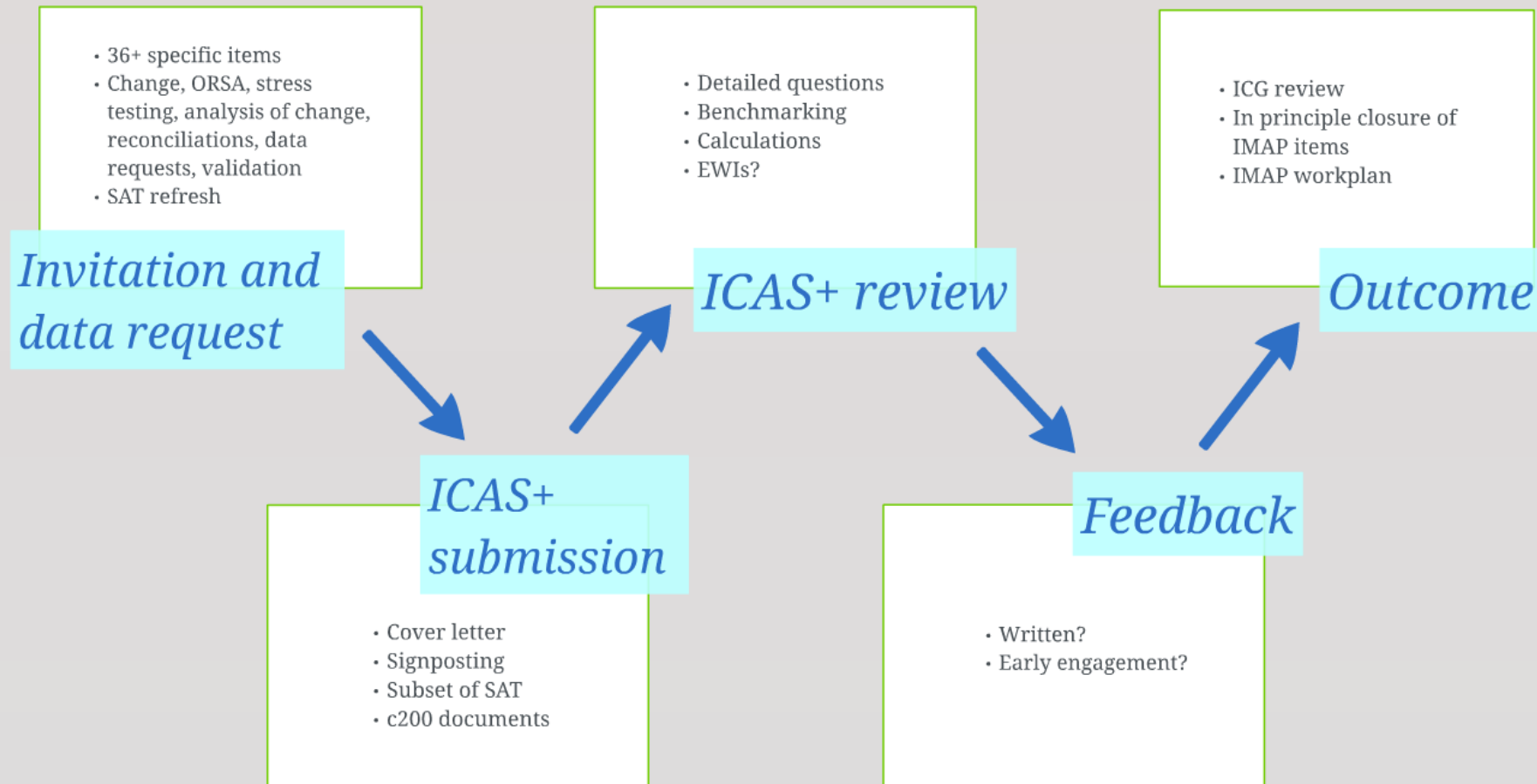
- Early engagement with the PRA
 - Defined what ICAS+ meant for us
 - Our objectives of ICAS+
 - Maintain momentum towards internal model approval
 - Close off potentially open ended IMAP issues
 - Define a stable basis for decision making in the interim
 - Start getting benefits of investment in aggregations tools in risk management and monitoring
 - Defined basis for Solvency 2 calculations
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- Solvency 2 programme transition to go-forward teams
 - Opportunity to address more fully integration with the full future financial reporting demands
 - Speed, cost and quality focus
 - Uses for risk and solvency monitoring, risk appetites, group economic capital calculations

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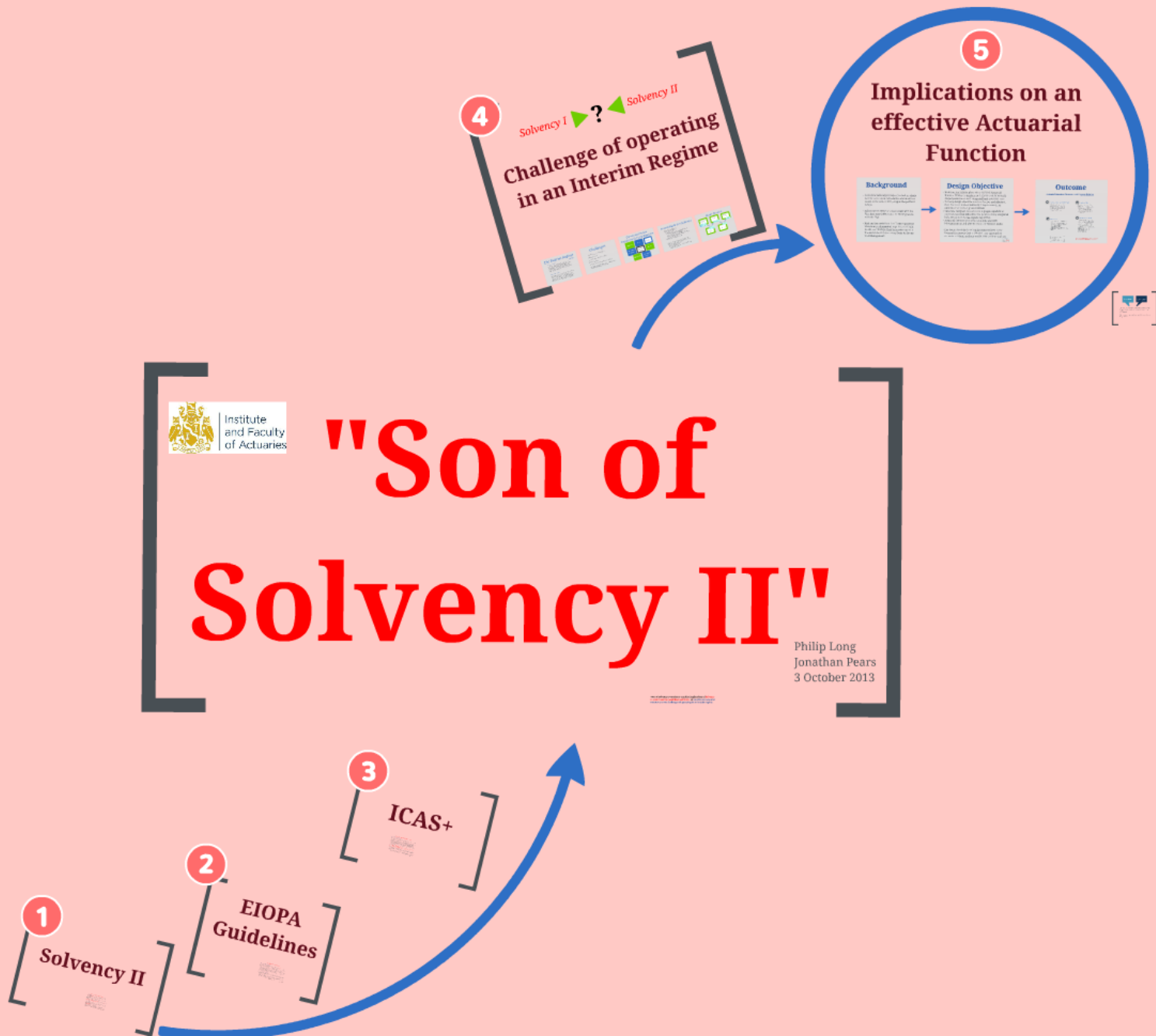
ICAS+ Process





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Background

- Swiss Re's Solvency II Project (including Admin Re UK) maintained deliverables and deadlines to end in December 2013, despite the political delays
- Admin Re UK IMAP process in train with the FSA, thus was shifted onto the ICAS+ process with the PRA
- Risk and Actuarial function Target Operating Models were determined together, as Admin Re UK and US CROs/Chief Actuaries report to the Admin Re CRO (and thus, Swiss Re Group Risk Management)



Design Objective

- Risk function TOM in place since 1.8.2013, Actuarial function TOM to be in place on 1.1.2014 with Solvency II Project permanent staff integrated back into BAU team
- Primary design objective is to be effective and efficient, then fine-tune to meet Solvency II requirements, so outcome, rather than process driven
- Structure designed around current people capabilities and investment in infrastructure (grid-enabled, integrated hub, automated checks, inputs, reporting)
- Actuarial deemed primarily as 1st Line and Risk Management as 2nd Line in 3 Lines of Defence Model
- Key issue of ambiguity of requirements relates to the Internal (Economic Capital) Model – our approach is Actuarial calibrate and run model, Risk validate and use

Internal Model – Risk/Actuarial Responsibilities

Guideline 46 – The actuarial function of an undertaking with an internal model under pre-application
In accordance with Article 48 of Solvency II, national competent authorities should ensure that the actuarial function of an undertaking contributes to specifying which risks are covered by the internal model, which is the subject of a pre-application, in particular with regard to the risks relating to the terms on which business is written and how dependencies between risks are derived. This opinion is based on a technical analysis and should reflect the experience and expertise of the function.

[Explanatory Text]

1.181. Article 44 (5) of Solvency II sets out that the risk management function is responsible for a number of areas of the internal model. **Despite the fact that the risk management function is responsible for the design, implementation, testing and validation of the internal model, it is expected that the actuarial function assists in these tasks.** The assistance of the actuarial function in the internal modelling is desirable also because of the close connection and consistency between the valuation of the assets, liabilities and the calculation of the loss Probability Distribution Forecast (PDF).

(BoS-13/26 Explanatory Text On the Proposal for Guidelines on the System of Governance)

Outcome

Actuarial Function Structure and Responsibilities

a *Technical Provisions / Reporting*

- Propose Technical Provision methodology and assumptions
- Review and validate Technical Provisions
- Produce required valuation reports
- Internal model validation activities for RM
- With Profit Actuary Support
- (includes GAAP, EVM reporting)

b *Capital Modelling*

- Propose risk distribution methodology and calibration
- Analyse and produce reporting for SCR, MCR, Risk margin
- Capital projections for Use Test, ORSA, SST, and capital management investigations.
- 1st line design/operation of internal model (change policy, documentation, validation process support)

c *Operations*

- Run models for Technical Provisions and Capital
- Experience analysis for assumption setting
- Reinsurance management and unit pricing
- Actuarial data governance
- Produce Solvency II BEL
- Produce stressed runs for SII calculations
- Produce experience data to calibrate SII risk models

d *Strategy & Development*

- Identification and delivery of initiatives for the actuarial management of the company
- Transaction due diligence and actuarial integration.
- Develop actuarial modelling systems and IT infrastructure
- Develop, test and maintain actuarial models as required.
- Prudential Regulatory Change
- Underwriting opinions
- Reinsurance strategy

Box ticking against EIOPA's guidelines

considered: coordination of the calculation of technical provisions
Guideline 10: Technical provisions of insurance companies (17.10)
Guideline 11: Data reliability
Guideline 12: Internal model validation
Guideline 13: Internal model validation and management
Guideline 14: The internal model of a company should be able to provide a good representation of the company's financial position
Guideline 15: The internal model should be able to provide a good representation of the company's financial position

- Unfortunately, dual running of Solvency I and II and onerous implementation of (revised) Solvency II requirements offset any efficiency gains, and can detract from good risk management



Technical Provisions / Reporting

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Box ticking against EIOPA's guidelines

Guideline 41 - Coordination of the calculation of technical provisions (A)

Guideline 42 – Valuation models of technical provisions (C, D)

Guideline 43 – Data quality (C)

Guideline 44 – Testing against experience (C)

Guideline 45 – Underwriting policy and reinsurance arrangements (D)

Guideline 46 – The actuarial function of an undertaking with an internal model under pre-application (B)

Guideline 47 - Annual internal report to the administrative, management or supervisory body (A)

- Prudential Regulatory Change
- Underwriting opinions
- Reinsurance strategy

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Questions



Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenters.



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