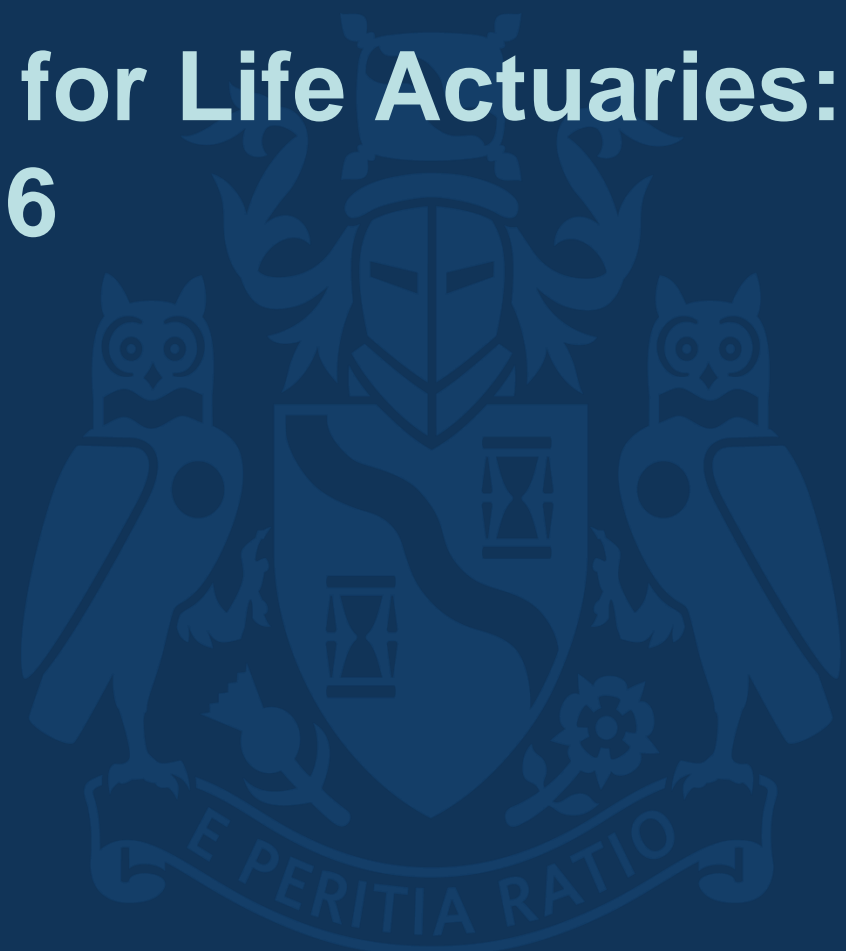




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Practical Solvency II for Life Actuaries: The Roadmap to 2016

David Hare





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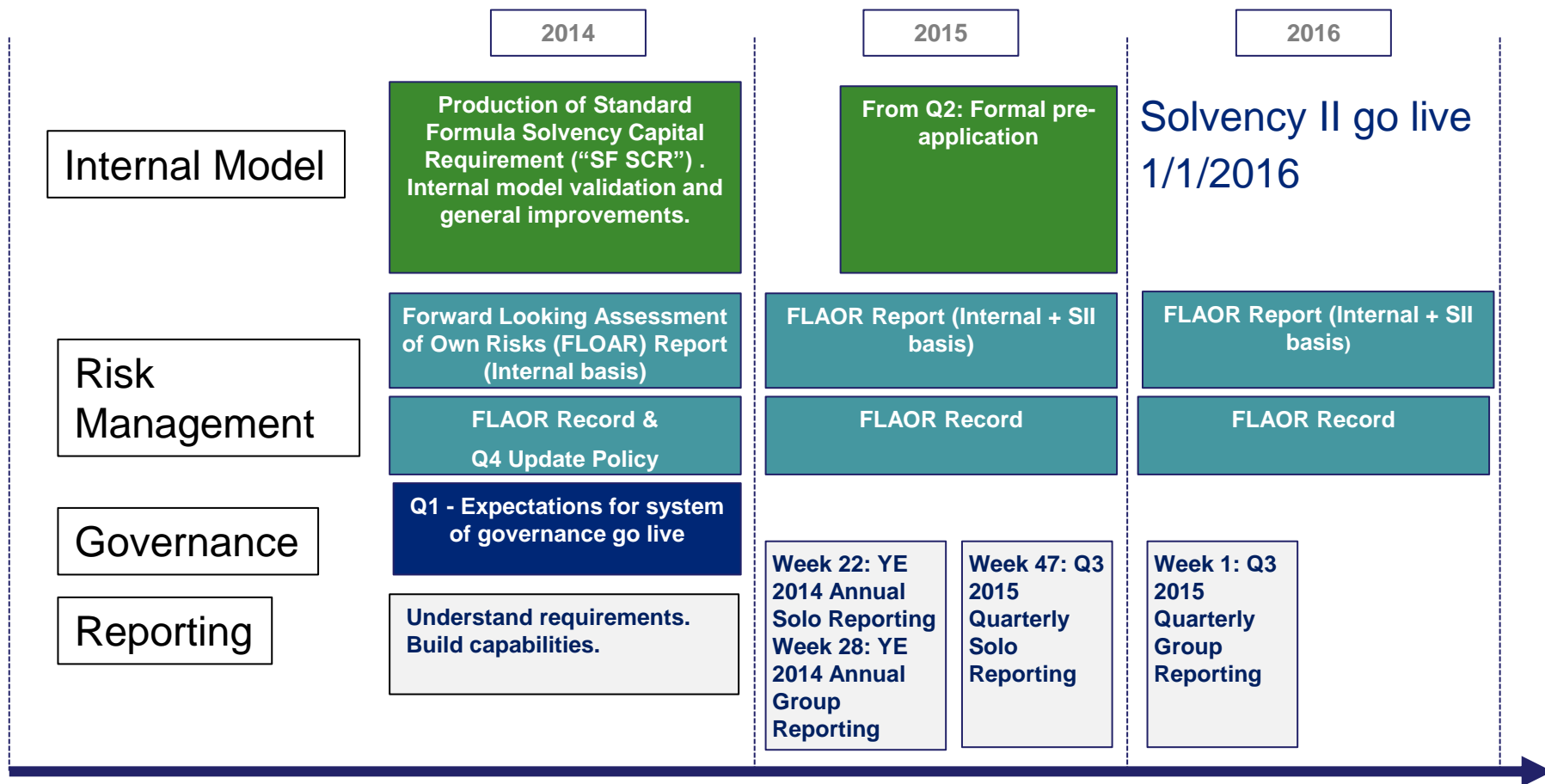
Solvency II: The Roadmap to 2016

- Roadmap to meet Regulatory Requirements
- Roadmap to meet Business Requirements
- Obstacles
- How ready is your firm?
- SII Readiness

ertise
ponsorship
Thought leadership
Progress
Community
Sessional Meetings
Education
Working parties
Volunteering
Research
Shaping the future
Networking
Professional support
Enterprise and risk
Learned society
Opportunity
International profile
Journals
Support

Roadmap to meet Regulatory Requirements

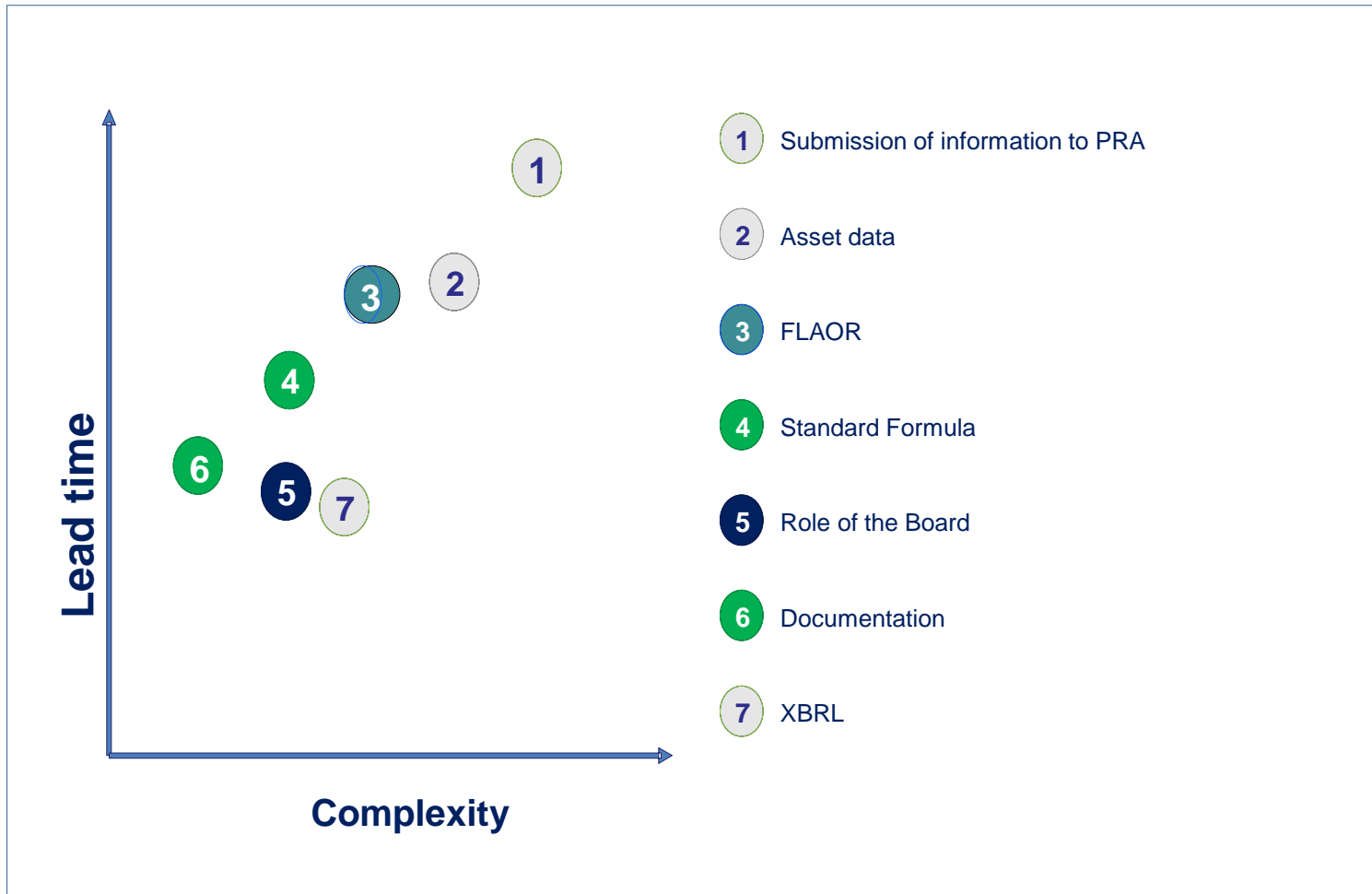
Overview of the requirements and timelines



Roadmap to satisfy Regulator

What should insurers do now?

Figure 1 – Prioritisation of key areas of work by lead time and complexity



Roadmap to satisfy Regulator

What should insurers do now?

5 Role of the Administrative, Management or Supervisory Body, AMSB

Systems of Governance

- Convincing the AMSB that SII will be a reality from 1 January 2016 and that implementation needs had to begin from 1 January 2014
- Reviewing current delegation of responsibilities and committee structure to ensure compliance with the spirit of the Guidelines
- Reviewing MI provided to the AMSB to ensure it enables the AMSB to fulfill its SII responsibilities

3 FLAOR

FLAOR

- Producing a FLAOR on an insurance regulated entity basis (vs. on Business Unit basis)
- Providing training to the AMSB so it can steer the design of a FLAOR and challenge its results.
- Designing (or reviewing if currently exists) a FLAOR report.

4 Standard Formula

6 Documentation

Internal models

- Producing of the right quality SF results to share with the NCA
- Developing of contingency plans in case internal models are not approved (e.g. if the SF SCR exceeds the available capital)
- Compliance with documentation requirements likely to require work across several areas, e.g. use of expert judgment.
- On-going validation of the internal model

1 Submission of information to PRA

2 Asset data

7 XBRL

Reporting

- Enhancement of existing reporting processes to submit quantitative information to the NCAs within the tight reporting timeframe.
- Identification of gaps in existing narrative reporting
- Producing additional narrative reporting when existing sources cannot be leveraged.
- Collecting asset data (look through) is difficult
- Implementation of XBRL (reporting tool)

Roadmap to meet Business Requirements

Overview of the considerations and timelines

Summary timeline

Solvency II go live 1/1/2016

2014

2015

2016

Investments
Strategy

Assess whether to use
Matching Adjustment,
Volatility Adjustment
or Transitional Measures.

Decide on use of MA, VA
or Transitional Measures.
Put supporting processes
in place.
Review asset holdings.

New processes in place for
MA or VA.
Review ALM strategies on
SII metrics.
Review strategy & hedging.

Pricing &
Reinsurance

Pricing to allow for impact of
SII from end-2015.
Consider terms for and assets
backing annuity business.

Annuity pricing to reflect
approach to investment
strategy.
Review mix.
Review reinsurance.

Review product terms for
settled view of SII.

Corporate
Structure

Would fund/legal entity
restructuring improve the
capital position at all?

Improve liquidity reporting.

Implement restructuring.

Ensure capital can be moved
around Group if required.

Implement restructuring.

Seek further capital synergies.

Obstacles

- EIOPA/PRA Requirements: Past EIOPA Consultation Papers are on their website **with further CPs due in Q1 2015 on 2nd sets of ITS & Guidance**. Draft changes to the PRA Rulebook are set out in CP16/14. Timetable for next steps are as follows:

| | ITS Submitted to EC | Guidelines Published | |
|------------------------------------|-------------------------|--|---------------|
| When things should become clearer: | Approval Process | Late 2014 | February 2015 |
| | Pillar 1 - Quantitative | Mid 2015 | February 2015 |
| | Pillar 2 - Qualitative | Mid 2015 | July 2015 |
| | Pillar 3 - Reporting | Mid 2015 | July 2015 |
| | | PRA to issue further guidance | |
| | Matching Adjustment | Supervisory Statement in Q4 2014 | |
| | Volatility Adjustment | Communication in Q4 2014 (s/t outcome CP on SII) | |
| | Transitional Measures | Communication in Q4 2014 | |

- Operational use of MA, VA and Transitional Measures
- Volume of skilled work
- Data not held at sufficiently granular level (for Pillar 3)
- Finding additional capital

SII Readiness – Checklist

“How ready is your firm for SII?”

Interactions with PRA

- ✓ Prepare for and manage engagement with PRA
- ✓ Plan for IMAP completion and submission
- ✓ Agree timetable with supervisor
- ✓ Clarification of requirements
- ✓ Consider July SII Update on Implementation from PRA on Availability of Own Funds, Operation of limits, Deferred Tax, MA, Pension Schemes.
- ✓ Consider August CP16/14 on Transposition of SII

Internal Model

- ✓ Develop and document methodologies
- ✓ **Complete validation – are models fit for purpose**
- ✓ **Clarify Board responsibilities**
- ✓ Robust proxy modelling
- ✓ Perform stress and scenario testing
- ✓ If use Standard Formula, demonstrate appropriateness
- ✓ Review Roles of CRO & AFH

**Activity
required
across
Finance &
Risk**

Reporting

- ✓ Right technology in place
- ✓ Accessing granular data on assets & liabilities
- ✓ **Clear Working Day Timetable**
- ✓ Approach to Quarterly Reporting
- ✓ Approach to Annual Reporting
- ✓ Approach to Monthly estimates
- ✓ Robustness of P&L Attribution
- ✓ **Understand SII versus IFRS (& IFRS 4)**
- ✓ Improve liquidity reporting

Management Actions

- ✓ Optimise Capital Impact
- ✓ Mitigate impact of Contract Boundaries
- ✓ Train Board & Senior Management
- ✓ **Embed Risk Appetite Framework**
- ✓ Review Roles of CRO & AFH
- ✓ **Demonstrate FLOOR/ORSA Capabilities**
- ✓ **Decide on use of MA or VA or Transitional Measures**
- ✓ Review ALM, hedging & investments
- ✓ Review pricing and reinsurance

SII Readiness – Internal Model Validation

“Are your models fit for purpose?”

Validation of models generally and specifically for Solvency II internal model approval should:

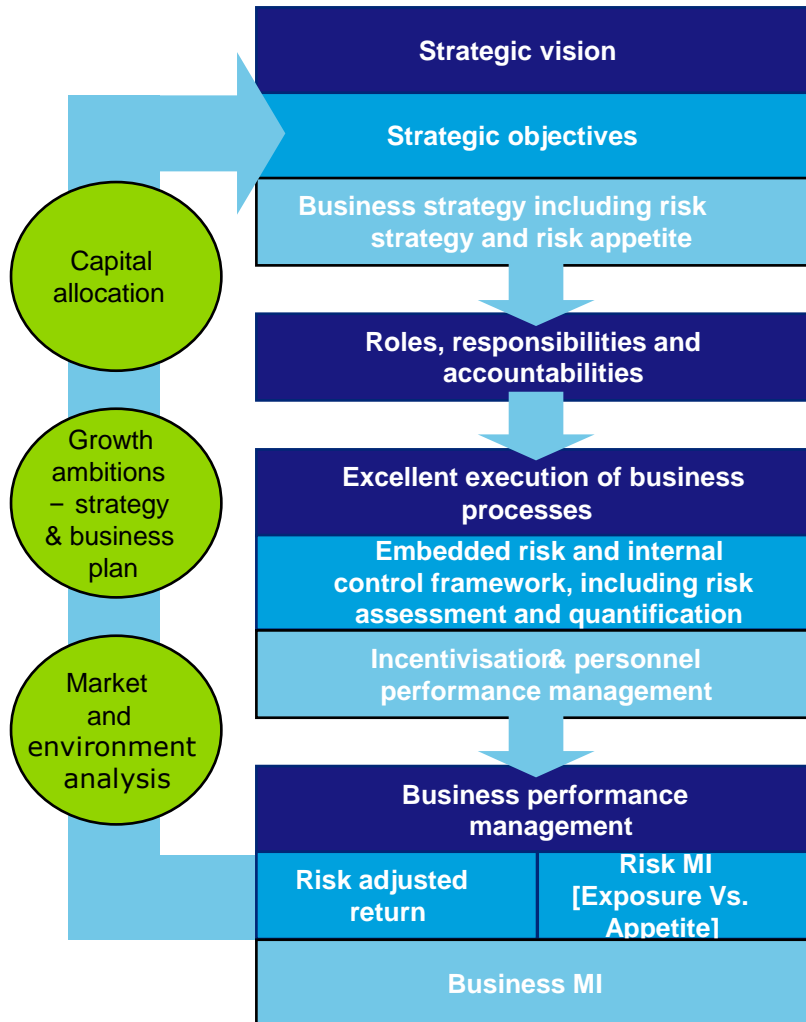
- Reassure Boards and other users that the models are fit for their intended purpose
- Enable users to know when models should not be relied on, i.e. the weaknesses and limitations
- Reassure regulator’s that decisions that may affect the risk profile or financial strength of an insurer are made based on reliable and robust modelling techniques

Risk Management Internal Model Defined Responsibilities under SII

- Design, implement, test and validate
- Document the Internal Model and any subsequent changes made to it
- Analyse the performance of the Internal Model and produce summary reports
- Inform the Board of the performance of the Internal Model, suggesting areas for improvement and updating that body on the status of efforts to improve previously identified weaknesses

SII Readiness – Effective risk management

Integrating and embedding risk and capital management



Solvency II, and in particular Pillar 2, requires risk and capital management to be more closely integrated.

- Business strategy is set within the context of risk strategy
- Roles, responsibilities and accountabilities are clearly defined and align with desired risk taking
- Risk and control frameworks are embedded
- Individuals incentivised to act in a manner consistent with risk strategy
- Business performance is measured on a risk adjusted basis with risk exposure being monitored against appetite
- Day to day decision-making is based on both risk and business MI
- The organisation proactively adjusts its risk strategy in response to the changing business environment

SII Readiness – FLOOR/ORSA Capabilities

Demonstrating FLOOR/ORSA capabilities requires evolution rather than revolution of existing practices:

Governance impacts

- Increased level of responsibility from the Board:
 - Approving the ORSA Policy
 - Steering the assessment
 - Challenging and approving the ORSA process, including signing off its execution and results
 - Challenge key SCR and ORSA assumptions
 - Challenging the management actions to be taken

Process impacts

- Scope of ORSA as entirety of risk and solvency processes executed across the year
- Required outputs at required frequency at required times
- ORSA report production process articulated
- Out of cycle (ad hoc) ORSA process determined.

Key business impacts

Reporting impacts

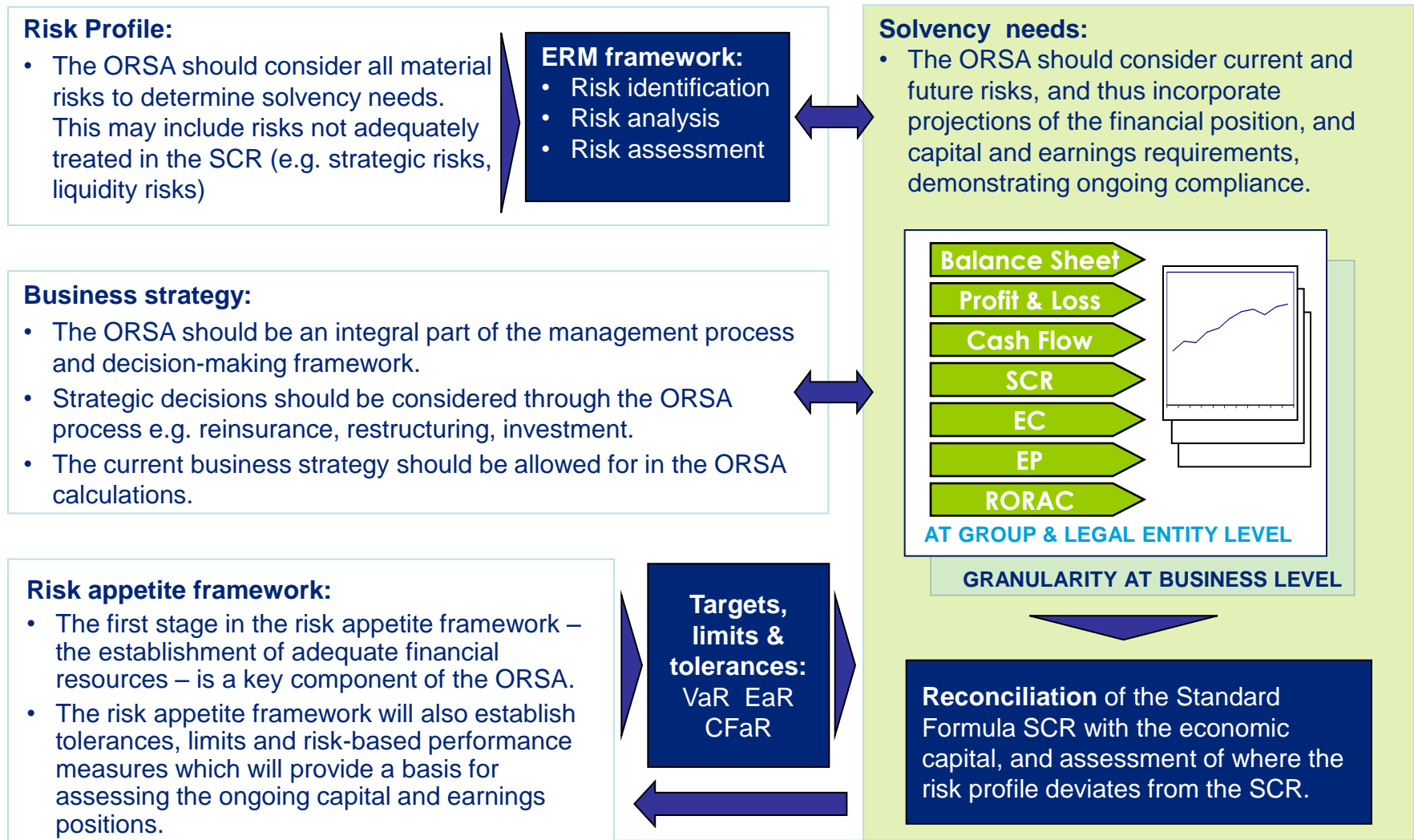
- Ongoing ORSA evidenced through inventory of ORSA papers
- Group – wide ORSA report:
 - Annual record of the assessment
 - Way to provide regulated entity assessment to Group
 - Acts as supervisory report

Functionality

- Base balance sheet and capital requirements:
 - SII Base balance sheet, the SCR/ MCR and whether **internal management view** of capital requirements differ from this
- Capital consumption by risk
- Key drivers of solvency identified
- Granularity of asset and liability data.

SII Readiness – ORSA Capabilities

Determining solvency needs

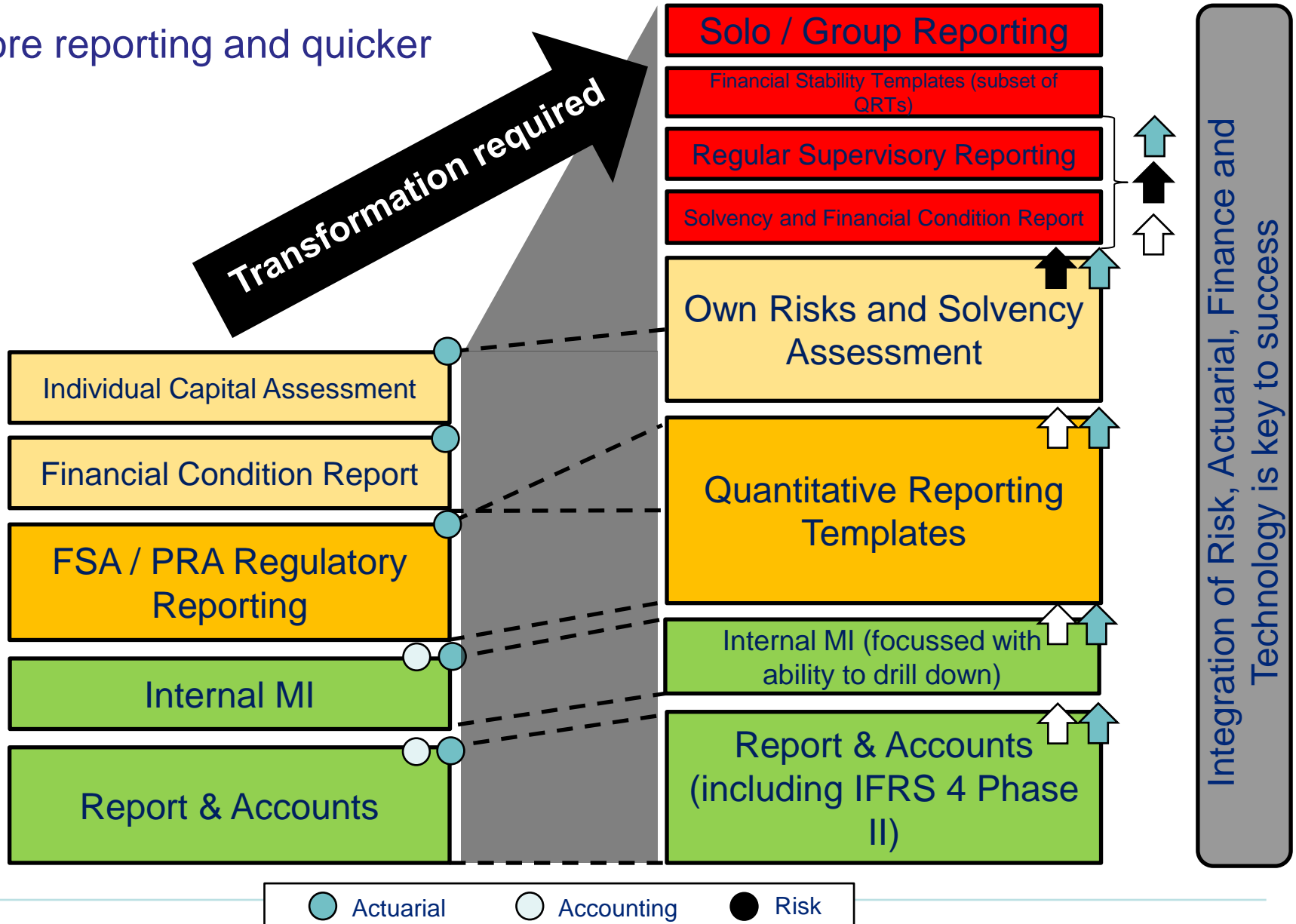


SII Readiness – Risk Appetite Framework

| Dimension | Leading practice and early adopters | Followers and Laggards |
|--|---|---|
| Breadth <ul style="list-style-type: none"> Does it cover all material risks? Or just the ones that are easy to measure? | <ul style="list-style-type: none"> The framework will cover financial and non-financial risks. | <ul style="list-style-type: none"> The framework will be weighted towards the risks that lend themselves to straightforward quantification but will remain silent on harder to measure risks. |
| Depth <ul style="list-style-type: none"> Does it integrate top-down direction with bottom-up insight? | <ul style="list-style-type: none"> The Board's risk appetite statement cascades down the firm and is translated into further risk statements around the risk drivers that make it easier to relate the overall appetite to the day jobs of people lower down the firm. | <ul style="list-style-type: none"> There may be a bland risk appetite statement but it is so generic that it can hardly be said to shape, guide or constrain behaviour. |
| Language and Culture <ul style="list-style-type: none"> Do staff use risk appetite concepts in their day jobs? Can they answer questions on how these concepts relate to them? | <ul style="list-style-type: none"> If you take front office / first line employees and ask them what they think of the firm's risk appetite and how it applies to them, you will receive cogent responses. | <ul style="list-style-type: none"> Nobody outside the risk function will be able to tell you what risk appetite means. |
| Sponsorship <ul style="list-style-type: none"> Are the CEO, CFO or CRO active champions of risk appetite? | <ul style="list-style-type: none"> Senior Executives can explain how and why they have gone about trying to embed risk appetite. | <ul style="list-style-type: none"> Senior executives pay lip service to the concepts, but fail to push them through. |
| Decision Making <ul style="list-style-type: none"> Can the Board or Executive give an example of the last time that risk appetite informed a business decision? | <ul style="list-style-type: none"> The Board and Executive can give examples of decisions that have been influenced by risk appetite; business risk owners can explain what risk objective they were supporting when they set particular bottom-up limits. | <ul style="list-style-type: none"> The Board and Executive will struggle to give a coherent answer; business owners will not be able to link their calibration of limits and triggers to specific risk or business objectives. |
| Remuneration <ul style="list-style-type: none"> Is the firm using risk appetite within its reward and remuneration plans? | <ul style="list-style-type: none"> Employees will be incentivised to help deliver a strong risk appetite culture and to remain within agreed risk appetite limits. | <ul style="list-style-type: none"> Some employees may be incentivised to remain within specific risk appetite limits, but coverage is patchy and in any case, the limits in question have weak linkages to firm-wide objectives. |

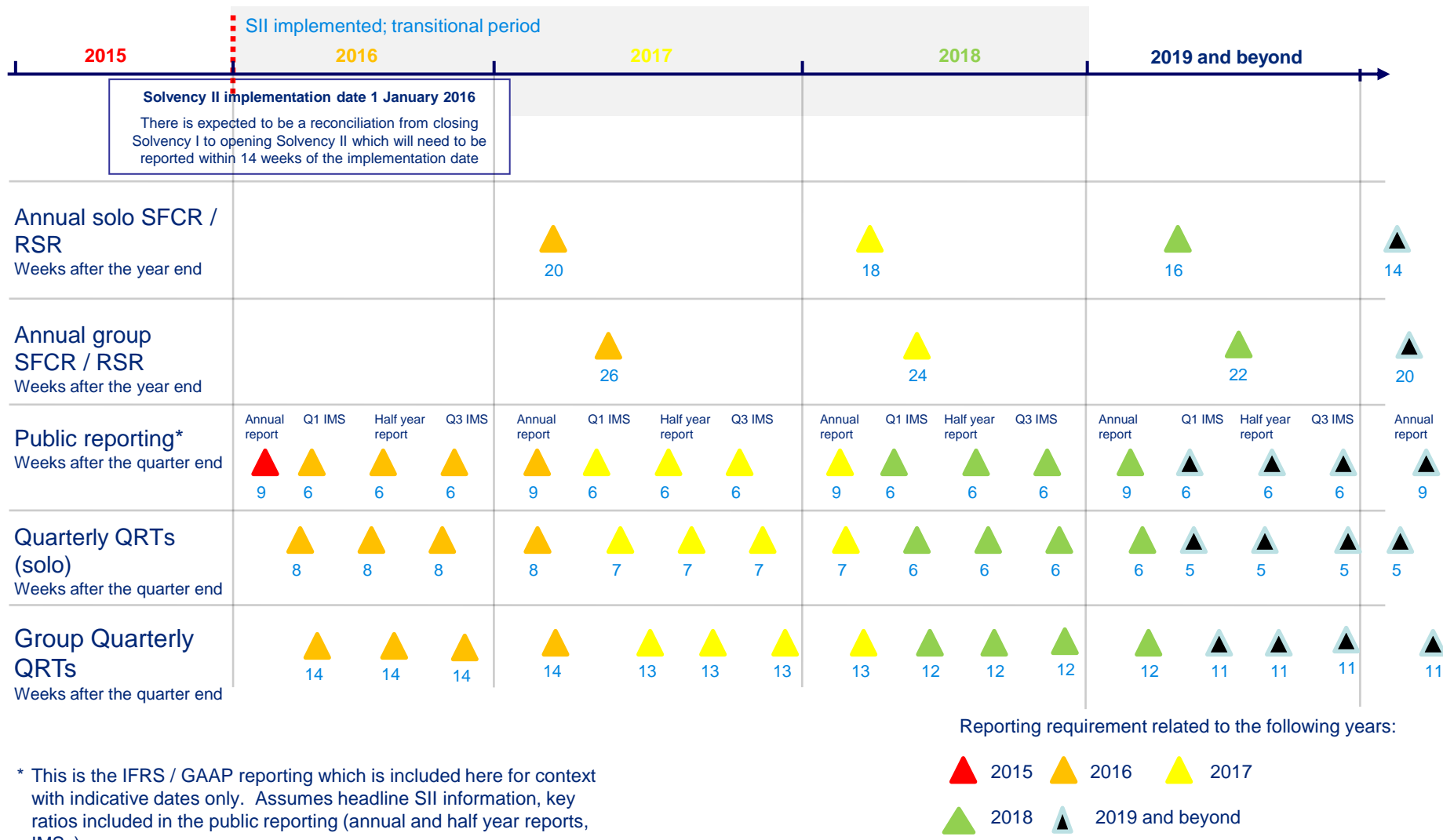
SII Readiness – Reporting

More reporting and quicker



SII Readiness – Reporting

More detail, more often and quicker



SII Readiness – MA or VA and/or Transitional Measures

When deciding on which adjustment to use for the in-force business, companies need to consider a number of factors, most of which are likely to be company dependent. Key considerations include:

Assets

- MA: Do the rules on qualifying assets mean that the portfolio needs to be rearranged, and if so, what is the impact on yields versus the potential benefit?
- MA: The operational implications require to be assessed.
- VA: The mismatch between reference portfolio and the actual assets requires to be assessed?

Duration of the business

- The transitional measures can be applied for a period of 16 years. However, the transition period merges into full compliance with Solvency II regulations, meaning that the benefits will decrease over time.
- Firms need to consider the duration of their liabilities in assessing the benefits to be gained from potentially adding complexities to their model structures.

Practical implications

- It is likely that regulatory approval will be required; firms need to consider the information required in applications for approval.
- The transitional measures will require changes to models, systems and data in order to implement the shift from current to SII discount rates and technical provisions, since for the 16 year period calculations will be required under both current and SII bases.

SII Readiness – Risk Culture

What is organisational culture?

‘At its simplest, an organisation’s culture answers two very basic questions faced by its employees. What must I do to get a ahead in this place? How do I need to behave?’

Culture for sceptics: the catalyst for strategy, Deloitte 2013

Information about how to behave when adapting to particular environments. This information is rich and varied, and we pick it up both consciously and sub-consciously. It covers all the vital bases:



SII Readiness – Risk Culture

What needs to be done to deliver Solvency II change successfully?

- Build awareness and engagement throughout SII programme; ensure senior stakeholders are involved
 - Weave SII story into wider vision and ambition of the organisation; build into leadership and brand communications
 - Execute specific leadership communication promoting SII changes and behaviours
-
- Advise, provide organisation design and enable the implementation to BAU organisation and roles
 - Build Risk processes into roles
 - Facilitate resources into the programme, recruit to end-state roles and retain existing skilled resource needed to deliver a successful programme

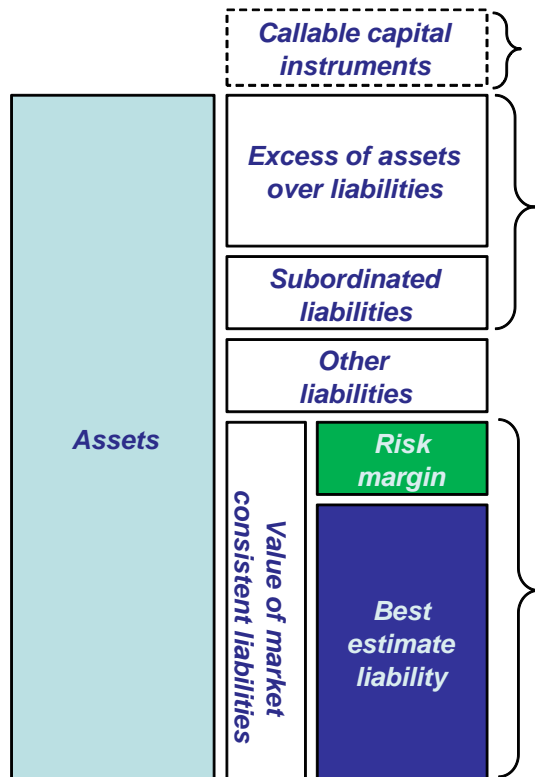


- Shaping and delivery of executive, manager and staff training to ensure new SII capabilities are developed and deployed
 - Manage performance and reward to embed a risk culture and to enable delivery of high business performance under SII
-
- Assess change impacts of policies, processes, enhanced capabilities and role changes on functions and teams
 - Establish risk culture objectives for each transition
 - Assess impacts of Programme on BAU resourcing and performance
 - Integrate with other change initiatives
 - Develop/manage transition plans for implementation and end-state

IFRS 4 Phase II vs Solvency II

Balance Sheet components

**Typical Solvency II
Balance Sheet**



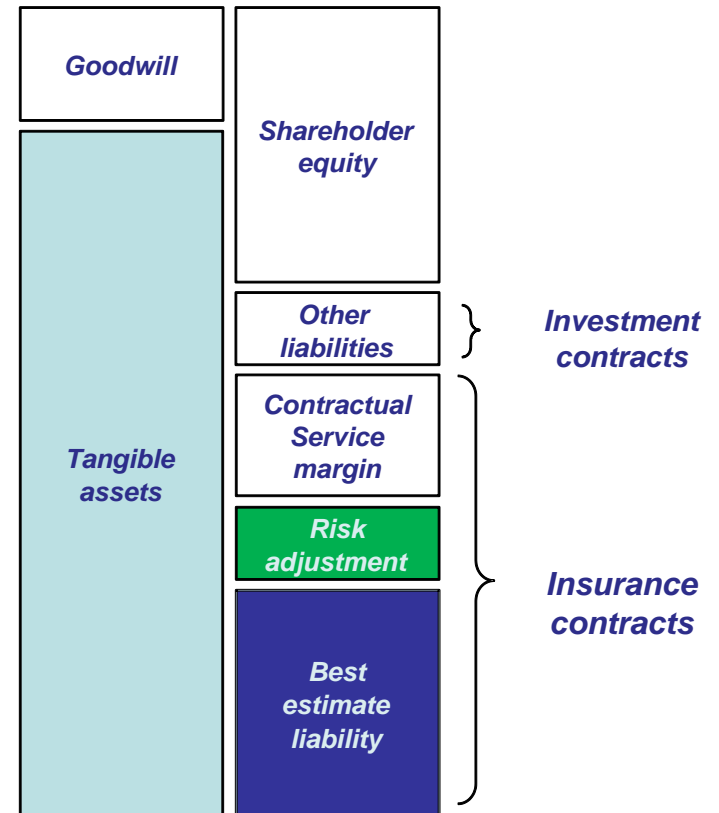
Ancillary own funds

Basic own funds

Technical Provisions



**Proposed IFRS
Balance Sheet**



IFRS 4 Phase II vs Solvency II

Key challenges

| Differing goals | Solvency II | IFRS 4 Phase II | |
|-----------------------------|--|-----------------|--|
| Component | Challenge | | Key Areas of Impact |
| Scope & unit of measurement | IFRS 4 “portfolio” level measurement for certain components may require different data segmentation. Investment contracts are measured under IFRS 9. | | Data and systems / Assumptions / Inputs to ICM / reporting |
| Best estimate cashflows | Some cash flows may differ, e.g. costs & contract boundaries. | | Assumptions / Methodology |
| Discounting | Unlike Solvency II, discounting under IFRS 4 Phase II is governed by principles rather than rules. | | Assumptions / Systems |
| Risk adjustment | The measurement of risk under IFRS 4 is governed by principles rather than rules. Required to disclose equivalent confidence interval. | | Data and systems / Methodology / Assumptions |
| Contractual service margin | There is no concept of contractual service margin under Solvency II. | | Data, systems / Reporting |
| Tax | Tax implications need to be fully understood. | | Assumptions / Methodology |
| Reporting | Income statement attribution process needs to be developed. Balance sheet reconciliation between IFRS and SII is required. | | Data and systems / Methodology / Reporting |

Target Operating Model



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Solvency II: The Roadmap to 2016

...is your firm ready for SII?

...key considerations will be firm-specific

Questions?

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