



Institute  
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## Solvency II update

Nick Ford



02 June 2014

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## Agenda

- Intro and brief recap
- Pillar 1
  - Main issues
  - Impacts on products
- Pillar 2
  - Main issues
  - Internal Model Approval
- Pillar 3
  - Actuarial forms and concerns
  - Timelines



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## Recap: Solvency II three pillar approach

Governance		
<b>Pillar 1:</b> Quantitative capital requirements <ul style="list-style-type: none"> <li>• Market-consistent valuation</li> <li>• Own funds <ul style="list-style-type: none"> <li>- Assets</li> <li>- Technical Provisions</li> </ul> </li> <li>• Capital requirements <ul style="list-style-type: none"> <li>- minimum (MCR)</li> <li>- solvency (SCR)</li> </ul> </li> <li>• Tiering</li> </ul>	<b>Pillar 2:</b> Qualitative supervisory review <ul style="list-style-type: none"> <li>• Internal controls and risk management</li> <li>• Required functions</li> <li>• Own risk and solvency assessment (ORSA)</li> <li>• Supervisory review</li> <li>• Capital add-ons</li> </ul>	<b>Pillar 3:</b> Market discipline <ul style="list-style-type: none"> <li>• Transparency</li> <li>• Disclosure (QRT / RSR)</li> <li>• Solvency and financial condition report (SFCR) <ul style="list-style-type: none"> <li>- solo</li> <li>- group</li> </ul> </li> </ul>
Compliance and Audit		



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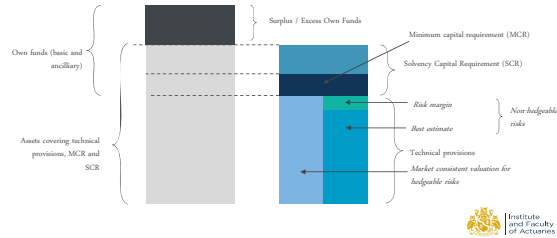
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## Recap: Pillar 1 – Building blocks of the new regime



## Timeline – “best estimate”

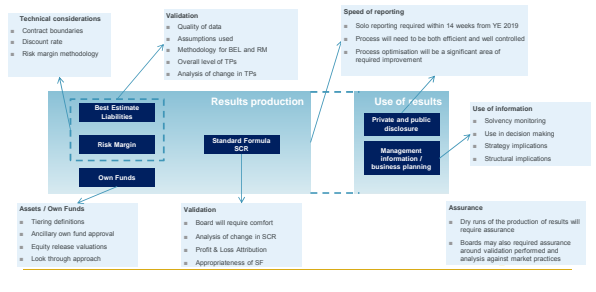
November 2013	Omnibus 2 - political agreement achieved
March 2014	Omnibus 2 - European Parliament plenary vote and publication
May 2014	Omnibus 2 - published in Official Journal
April 2014	Draft text on implementation of the Directive (“Delegated Acts” or “Level 2”) / Technical Specification for use in the Preparatory Phase
From Q2 2014	Consultation on draft Implementing Technical Standards (ITS) issued from EIOPA (in various waves)
Q2 2015	Commission endorses ITS (“Level 2.5”)
Q2/3 2015	Guidelines from EIOPA to ensure consistent implementation between member states finalised (“Level 3 Guidelines”)
1 Jan 2016	Solvency II implementation date



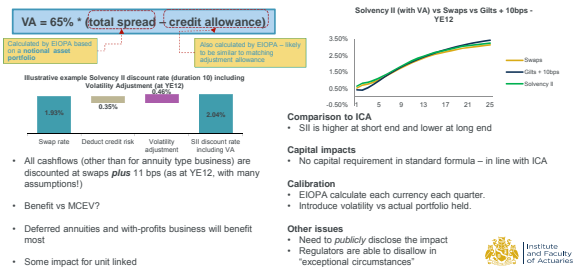
## Pillar 1

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

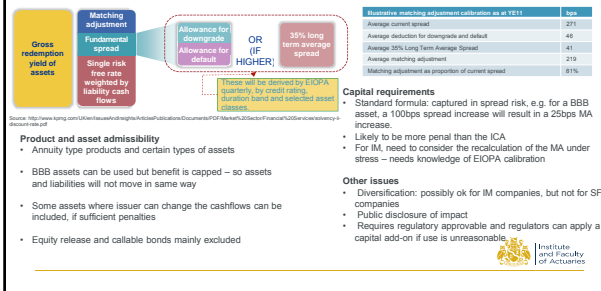
## Solvency II Pillar 1 – main issues



## Pillar 1 – Discount rate: Volatility Adjustment



## Pillar 1 – Discount rate: Matching Adjustment



## Pillar 1 – Risk margin

### Calculation

1. Project forward certain components of the SCR
2. Multiply this at each period by 6%
3. Discount this back at the *basic* risk free rate (i.e. without VA and MA)

Internal Model	A	B	C	D	E	Average
Risk margin / SCR	39%	25%	41%	61%	35%	<b>40%</b>

Standard Formula	A	B	C	D	E	F	G	Average
Risk margin / SCR	24%	52%	38%	56%	46%	35%	40%	<b>42%</b>

### Can it be mitigated?

- Longevity risk: ICA = SCR + RM?
- Management actions within risk margin
- Longevity swaps?



## Pillar 1 – Lines of business: Health classification

The specification that came with the Long Term Guarantees Assessment and recently released for the preparatory phase includes some example classifications:

Product	Classification
PHI / Income Protection	SLT Health
Critical Illness	Health (SLT or non SLT depending on type)
Accelerated CI	Life
Private medical insurance	Non SLT Health
Funeral cost insurance	Life
Long Term Care	Health (most likely SLT)
Annuities related to IP	SLT Health
Annuities related to non life products (that are not health)	Life



## Pillar 1 – Contract boundaries

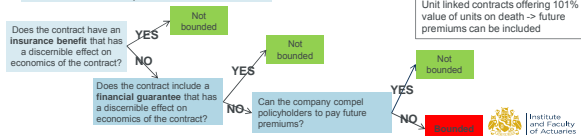
### Issue

May not be able to capture the value of profits in future premiums for certain product types

### Why?

The rules on what future premiums belong to a contract are restrictive:

- If company can terminate contract → **Excluded**
- If company can reject premiums → **Excluded**
- If company can amend premiums such that there are no scenarios where the amounts of benefit/expenses payable exceed the premium received → **Excluded**



**Other considerations**

- Portfolio vs contract level
- No underwriting at renewal

**Implications**

- Pure investment contracts → future premiums not included
- Unit linked contracts offering 101% value of units on death → future premiums can be included



## Pillar 1 – Transitional measures

### Transitional measures on technical provisions

- Transition over 16 years
- Based on difference between ICA(maybe?) and Solvency II technical provisions



- Will be capped such that a company cannot be in a better position compared to Solvency I
- PRA could require a "recalibration" of the difference every 2 years or when risk profile changes
- The benefit can be applied at the homogeneous risk group level.
- Must be approved by the regulator and the impact of using it must be *publicly* disclosed.
- If not using it would result in a breach of SCR, an annual report must be sent to the regulator outlining what action has been taken and future action to ensure compliance at the end of the transition period.

### Industry thoughts

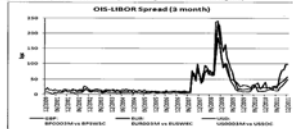
- Concern that the PRA will limit the benefit of these
- Does the floor against Solvency I and/or the risk of recalibrating gap every 2 years mean Solvency I can't be switched off for another 16 years?
- How will analysts react to this?
- If can get by without, then worth doing so?
- Having to capture data for pre 2016 business and post 2016 business potentially troublesome



## Pillar 1 main issues - still to come?

Issue	Description	Where discussions are heading
■ Yield curve extrapolation	■ Mechanism for determining the discount curve between the market data and the fixed ultimate long-term rate	■ Last liquid point will be 50 years for GBP and 20 years for EUR ■ Ultimate Forward Rate is 4.2% ■ Convergence period will be 40 years for all currencies
■ Deduction for credit risk	■ EIOPA make a deduction from the swap curve to allow for credit risk.	■ The deduction was 10bps was YE2009 (QIS5) and 35bps for YE2011 (LTGA) ■ Latest is that will be equal to 50% of one year average difference between LIBOR and overnight index swap rate. ■ But bounded between 10bps and 35bps

Figure 1: OIS spread historic data (Bloomberg tickers shown in legend)



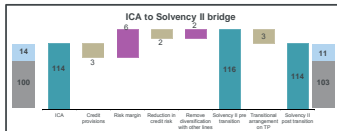
## Pillar 1 – Validation of Technical Provisions

- List of validation requirements for technical provisions including:
  - assumptions (including management actions and discretionary benefits)
  - adequacy, applicability and relevance of methodology, including approximations used
  - appropriateness, completeness and accuracy of data and remedies to limitations
  - Appropriateness of the level of the technical provisions
- Needs to be carried out:
  - at HRG level,
  - separately for gross BEL, net BEL and risk margin
  - Separately for technical provisions where a matching adjustment is applied
- Data
- Requirements around data (even for non IM firms) are onerous. How far do you go?



## Pillar 1 – impact on products

### Annuities with MA (an illustrative example)



#### Credit provisions

Under the latest Solvency II rules, a company could expect to take the benefit of around 80% of the spread over swaps as a matching adjustment during markets where spreads are wide.

The graph shows that the Solvency II discount rate may be higher than the ICA discount rate.

Assumes average spread of 150bps and all assets are capitalizable



#### Risk margin

The risk margin is not held under ICA and can be particularly large for annuity business due to the long tailed nature of the risk.

#### Reduction in credit risk

In a stress event, the default allowance and long term average spread would not change materially as they are long term measures. The downgrade allowance may change a little. Therefore, this is likely to be a less onerous calculation than currently used for ICA.

#### Removal of diversification

The matching adjustment rules do not allow the assigned portfolio of assets to be used to cover losses arising from other activities of the company. Therefore, diversification outside of the portfolio is not allowed. However, a company can apply to allow for this diversification

#### Transitional arrangement on technical provisions

At day 1, the transitional arrangement allows the Solvency II technical provisions to be reduced to the level of the ICA best estimate liabilities.



## Pillar 1 – impact on products

### Protection (an illustrative example)

Breakdown of Peak 1 position	€m	Breakdown of ICA position	€m	Breakdown of Solvency II position	€m
Best estimate (no default allowance)	92	Best estimate (no default allowance)	92	Best estimate (no default allowance)	92
Allowance for defaults at 100% of spread	8	Allowance for defaults at 100% of spread	8	25 bps credit risk adjustment	2
Mortality, expense and lapse prudence margin	8	ICA best estimate liability	100	Allowance for defaults of 104bps (104x46)	5
Peak 1 mathematical reserve	108	Mortality stress (20%)	9	Risk margin	3
RCR & LTICR	2	Lapse stress (50%)	9	Solvency II technical provisions	102
Peak 1 reserves and capital requirement	110	Other risks (interest rate, expenses)	4	Mortality stress (20%)	9
		Diversification at portfolio level (30%)	(7)	Lapse stress (50%)	9
		Diversification with other lines (10%)	(2)	Other risks (interest rate, expenses)	4
		ICA liability plus required capital	114	Diversification at portfolio level (30%)	(7)
				Diversification with other lines (10%)	(2)
				Solvency II technical provisions and SCR	116
				Transitional deduction	(3)
				Solvency II TPA and SCR with transition	114



## Pillar 1 – impact on products

### Unit linked (an illustrative example)

Breakdown of Peak 1 position	€m	Breakdown of ICA position	€m	Breakdown of Solvency II position	€m
Best estimate (no default allowance)	92	Best estimate (no default allowance)	92	Best estimate (no default allowance)	92
Allowance for defaults at 100% of spread	8	Allowance for defaults at 100% of spread	8	25 bps credit risk adjustment	2
Mortality, expense and lapse prudence margin	8	ICA best estimate liability	100	Allowance for defaults of 104bps (104x46)	5
Peak 1 mathematical reserve	108	Expense stress (10%)	4	Contract boundaries	5
RCR & LTICR	2	Equity stress (40%)	5	Risk margin	3
Peak 1 reserves and capital requirement	110	Other risks (interest rate, operational)	2	Solvency II technical provisions	106
		Diversification at portfolio level (30%)	(3)	Expense stress (10%)	3
		Diversification with other lines (5%)	(1)	Equity stress (40%)	4
		ICA liability plus required capital	107	Other risks (interest rate, operational)	2
				Diversification at portfolio level (30%)	(3)
				Diversification with other lines (5%)	(1)
				Solvency II technical provisions and SCR	112
				Transitional deduction	(6)
				Solvency II TPA and SCR with transition	106
				Impact of cap	110



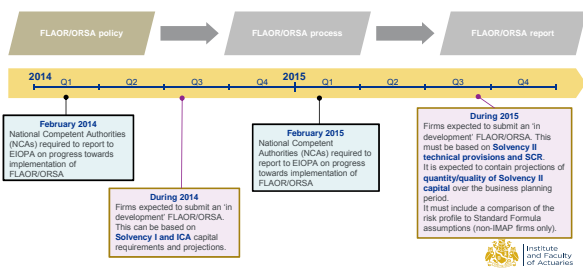


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## Pillar 2

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

## ORSA/forward looking assessment– timeline



## ORSA/forward looking assessment - challenges

Linking everything together – planning, RST, Business model analysis, ORSA etc  
Getting the ORSA process working throughout the year – not just a one off  
Making sure the ORSA is sufficiently forward looking  
Making sure the ORSA picks up all the risks  
Enhancing systems to do stressed financial projections  
Embedding in decision making  
Getting board/senior mgt understanding and buy in



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### Systems of Governance

Most companies have worked on risk management frameworks even in the "down period"

But still work required in some places to ensure all rules are complied with – e.g.

Are all the relevant policies in place?

How is independence of validation achieved

Are the actuarial and risk functions appropriately resourced to deal with their responsibilities?

Validation work and report needs to be performed pre IMAP

How are the validation tools used?

Split of responsibilities between Line 1 and Line 2




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### Business use

Solvency monitoring tools may need to be updated and will need to be "backtested"

Begin to consider Solvency II metrics in pricing decisions

Strategic considerations – i.e.

Optimal asset mix

What transitionals to use

Use of derivatives

Risk adjusted performance metrics

How to switch to Solvency II in business planning




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### Internal Model Approval Process

A number of companies are well progressed and planning their final IMAP submission dates

Others are being asked to come back into IMAP by the PRA

Very challenging timelines

Lots of work to pick up where it was dropped previously

Possibly go into "Phase 2", meaning SF to start with

For IMAP, need standard formula and internal model results – plus potential reconciliation to ICA. On top of Solvency I and preparatory Solvency II at YE14.

Expert judgements are still getting heavily challenged by the PRA




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### Pillar 3

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

### EIOPA Preparatory Guidelines

- Which entities are in scope of reporting?

#### Annual reporting

	Threshold
<b>Life (solo)</b>	Firms accounting for 80% of local market share by technical provisions.
<b>Non-life (solo)</b>	Firms accounting for 80% of local market share by gross non-life premiums.
<b>Groups</b>	Total assets > €12 billion.

#### Quarterly reporting

	Threshold
<b>Life (solo)</b>	Firms accounting for 50% of local market share by technical provisions.
<b>Non-life (solo)</b>	Firms accounting for 50% of local market share by gross non-life premiums.
<b>Groups</b>	Total assets > €12 billion.

- Key considerations:

Local market  
driver

Inconsistency  
across group

Group reporting  
needs

Annual narrative  
reporting



### EIOPA Preparatory Guidelines

- What is covered?

#### Annual QRT:

- Balance sheet, assets, technical provisions.
- Own funds, SCR, MCR.
- Scope of the Group.

#### Annual Narrative Reporting:

- System of governance.
- Capital management (Own funds).
- Valuation for solvency purposes.
- Reporting policy.

#### Quarterly QRT:

- Same sections as annual (except SCR) but fewer supporting templates.

- Key considerations:

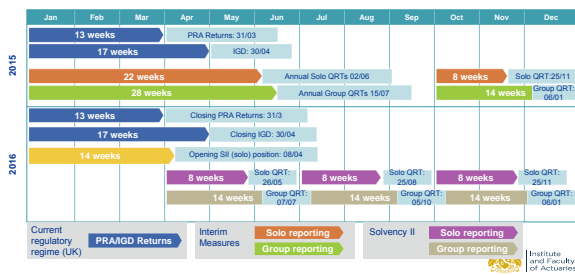
System and  
data needs

Internal dry-runs

Consistency of  
messages



### Pillar 3 timeframes - 2015 and 2016



### How many model runs?

Quarterly: need technical provisions  
Annually: need SCR

Do not need a SCR any more frequently than annually.

Crunch time: YE 2014

- YE14 Solvency I by 31 March
- YE14 preparatory Solvency II by June (including TPs and SCR)
- YE14 IM and SF Solvency II for IMAP (for "Phase 1" firms)
- YE14 ICA – if not aligned to internal model

Also: YE 2015

Opening SII position and comparison of Solvency I to Solvency II within 14 weeks

☐ Consider which is the primary balance sheet and how others can be derived from these

### Actuarial forms

A number of forms are very onerous or complex to complete

Decisions to be made around split of lines of business and unbundling (e.g. unit linked with riders)

Cash flows by line of business

Difficult splits of cashflows for with-profits business

Variation analyses are not standard for Life – geared towards Non-Life

Requirement for "global lapse rate" and "annualised guarantee rate" – not clear

Forms needed for each entity and each ring fenced fund



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 presenter.

**Presenters details:**  
**nicholas.ford@kpmg.co.uk**  
**020 7311 5913**



02 June 2014 31

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