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# Executive summary

This paper explains the rationale for Solvency II and how it has developed. It describes the key features of the “three pillars” that form the structure for the detailed Solvency II requirements around technical provisions and capital, governance issues and reporting. It also explains how the UK government and UK regulators have sought to transcribe the Solvency II requirements into UK law and regulation.

In addition, the paper outlines the IFoA’s responses to consultations on the development of Solvency II. The IFoA has responded to Solvency II consultations from both European and UK regulators and has also consulted with its own members on these issues. Referring to these consultations not only brings widely dispersed information into a single document, but, more importantly, highlights the principles we have advocated and continue to advocate during this process. These include:

- Articulating specific features of the UK market which may not be adequately integrated into the Solvency II requirements, for example the needs of the UK with-profits market
- Highlighting practical issues in implementing the requirements of Solvency II. One example is the challenges faced by Actuarial Function Holders in the life industry in the transitional period leading to the implementation of Solvency II
- Identifying and cautioning against “gold plating” in which UK regulators might go beyond the demands of the Solvency II rules - for example, previous concerns that the introduction of early warning indicators could amount to additional capital requirements in their own right.

Assessing, measuring and monitoring insurers’ capital requirements and ability to continue business operations in normal operating and extreme event conditions are key skill sets for which actuaries are trained. Solvency II also includes qualitative requirements in respect of governance, product management, reinsurance arrangements, hedging and securitisation transactions, as well as the overall optimisation of business value. Actuaries are particularly well placed to play a key role in risk, financial and “Big Data” management, which embrace all of the above.<sup>1</sup>

We will review and update this paper to reflect existing and emerging issues as the Solvency II regime develops over time. Appendix 1 provides links to key sources of information on Solvency II from EIOPA, the PRA and elsewhere.

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<sup>1</sup> See IFoA Working Party “The Role of Actuaries in the Life Offices” (O’Brien et al)

# What is Solvency II and why does it matter?

Solvency II, which is set to take effect on 1 January 2016, will lead to common regulatory standards in insurance services, thereby supporting an EU-wide “single market”.

The Solvency I Directive was formulated in 2002 and set minimum standards for insurers, but many member states added their own rules on top of these basic requirements. As well as harmonisation, other key aims of Solvency II are to make solvency requirements reflect firms’ risk exposures more appropriately, to protect policyholders and to ensure that regulations are informed by modern risk management practices.

Although public awareness and understanding of Solvency II is limited, its impact will be felt by individual consumers of insurance products through:

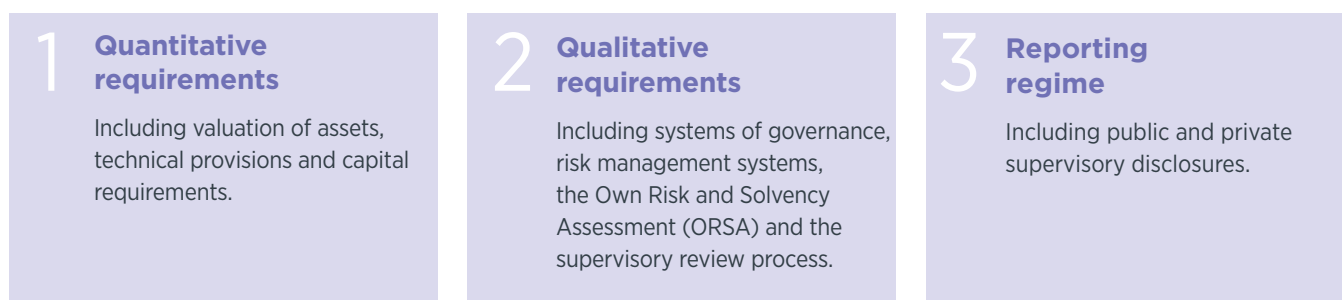
- Significant changes to the insurance market. Providers may be able to create innovative products based on greater awareness of their risk exposures, which could lead to increased competition between insurance companies. However, the capital requirements and costs of Solvency II could result in mergers and acquisitions as well as some insurers ceasing to write new business, which would lead to fewer insurers and, therefore, potentially less consumer choice
- Increased policyholder confidence that insurers are able to pay claims when they arise. The new rules seek to ensure no more than a 0.5% chance over one year of an insurer being unable to cover its liabilities as they fall due in the future
- Potential increase in premiums if the Solvency II requirements reduce the profitability of certain products.

Solvency II has already begun to have a major impact on the work of EU actuaries in the life and general insurance industry, as well as other practice areas. The impact can broadly be described in terms of the requirements under the “three pillars” outlined in the following section:

- Building the infrastructure and expertise to carry out types of solvency calculation that are more reflective of the individual insurer’s risks, taking account of both liabilities and assets
- Embedding Solvency II principles into the company’s governance structure, including revised “fit and proper” criteria that must be met by anyone taking up a senior management position with the company
- Increased transparency, with insurers reporting more information about their businesses (for example how they are structured, their financial health, etc.) to the general public.

# Requirements for Solvency II

Solvency II is structured around three ‘pillars’:



## Pillar 1

Under Pillar 1, in addition to the assets and technical provisions (which include a best estimate of the future liability and an explicit risk margin), insurers must hold a Solvency Capital Requirement (SCR) to provide cover for all quantifiable risk areas, including underwriting, market, counterparty and operational risk. They have a choice of two methods for calculating the SCR:

- **Standard formula.** Prescribed rules set out how to carry out “stress tests” for each risk area. The SCR component for each risk is then based on comparing the difference between assets and liabilities for the stressed and unstressed balance sheets. The components allow for management actions in the individual stress scenarios to mitigate the effect of the particular stress, such as the ability of with-profit funds to reduce discretionary benefits under difficult market conditions. The combined SCR takes account of the individual risk components as well as assumed interactions between the risks to create an overall picture of a firm’s financial position under stress. The combined value in turn is adjusted to add an allowance for operational risk.
- **Internal model.** Companies carry out their own assessment of the capital that they deem appropriate to hold to cover the risks that they are running. Capital requirements under the internal model route could be more or less than under the standard formula. Firms have flexibility to determine the model’s structure, but it must fit the firm’s risk profile, and it must be approved by the national regulator (the PRA in the UK) under the Internal Model Approval Process (IMAP). Although the PRA was unable to make formal decisions until Solvency II was adopted into UK law on 31 March 2015, it has been helping insurers to prepare for the application process submissions since 2012. The PRA is required to inform firms

within six months if their submission meets the requirements (subject to any final changes), if more work is needed, or if the requirements are unlikely to be met. The Internal Model that needs to be approved is more than just the calculation engine (the computer model itself) as it covers the quality of statistical analysis, validation, the governance processes, the data used and the documentation, and it must be widely used by the company in risk management and decision making – the so-called “Use Test”.

The PRA emphasises the need for firms to have contingency plans to use the standard formula if their internal model is not approved. On the other hand, companies using the standard formula must also document why the standard formula is appropriate for their business. In some cases, the PRA could require the use of an internal or partial internal model if it believes that the standard formula would not take proper account of the company’s risk profile.<sup>2</sup>

Under Solvency II, the national regulator would begin to intervene if an insurer was holding capital below the SCR level. Pillar 1 also requires firms to calculate a Minimum Capital Requirement (MCR) (by definition, less than the SCR). Holding less than the MCR could lead to the company losing its authorisation altogether.

<sup>2</sup> Information on the IMAP submissions process comes from this page with its attachments: [www.bankofengland.co.uk/pr/Pages/solvency2/submissions.aspx](http://www.bankofengland.co.uk/pr/Pages/solvency2/submissions.aspx)

## Pillar 2

Pillar 2 is concerned with insurers' ability to take a forward-looking and comprehensive view on the risks to which they are exposed. This process is known as Own Risk and Solvency Assessment (ORSA). Supervisory authorities expect insurers to have adequate and robust business models that enable them to embed capital and risk management assessments in the running of their business, including decision-making processes. Any perceived deficiencies in the effectiveness and execution of the ORSA process could result in additional scrutiny from the regulator.

The ORSA must include a projection of insurers' anticipated solvency capital requirements in addition to the own risk assessment. There are also requirements to link these assessments to the risk profile and appetite, the business model and the strategic decision-making process. The ORSA requires insurers to consider the impact of stresses to the balance sheet, adverse scenarios that could impact the business model and "reverse stress testing", which assesses what it would take for the business model to fail; but some of these requirements already existed in the UK before Solvency II.

In addition to the ORSA, Pillar 2 details the systems of governance, which require certain key functions to be in place within the business. These include the risk management

function and the actuarial function. The roles and responsibilities of these functions are set out by the requirements and it is clear that actuaries could have a key role in the risk management as well as the actuarial function.

## Pillar 3

The final pillar of Solvency II consists of quantitative and qualitative requirements for public disclosure and private reporting to the regulator. These are aimed at increasing the range of risk information in the public domain and encouraging market discipline. The quantitative elements are specified within Quantitative Reporting Templates (QRTs). The qualitative elements include the Solvency and Financial Condition Report (SFCR - public disclosure), the Regular Supervisory Report (RSR - private reporting to the regulator), and further event-driven reporting requirements for the regulator.

This introduces public reporting of risk-based capital requirements to the UK.

In addition to the European-wide disclosure requirements, there are also national specific reporting templates. In the UK, this increases the level of private disclosure to the PRA.

# The IFoA's involvement in Solvency II

The IFoA operates a Solvency II Steering Group to coordinate and promote a joined-up response to Solvency II issues across different areas of actuarial practice.

Regulatory responsibility for implementing Solvency II requirements in the UK lies with the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA), which jointly succeeded the Financial Services Authority (FSA) in 2013. This responsibility is primarily the PRA's, since the PRA's remit focuses on prudential regulation rather than the conduct of business. In various consultation responses the IFoA has welcomed the UK regulators' efforts to promote greater clarity around key Solvency II issues.

Solvency II has generated a range of IFoA research activity, covering areas such as the internal model approval process, the quantification of illiquidity premiums, and the role of the Actuarial Function Holder.

Appendix 2 provides more detail on how the IFoA organises itself to monitor and respond to Solvency II developments, and key contacts.

# IFoA engagement

## Representing members on Solvency II issues

The IFoA has been and continues to be an active participant in discussions on the development of Solvency II, whether these are led by European or UK regulators and whether they are formal or informal consultations.

In this section we briefly touch on some of the key issues that the IFoA has commented on. Links to the IFoA's Solvency II consultation responses can be found in Appendix 3.

### “Gold plating”

The IFoA has highlighted to the UK regulators where “gold plating” may have arisen in implementing the Solvency II requirements under the EU Directive and related Delegated Acts. We have pointed out cases where additional reporting, governance or capital requirements have been imposed compared to those applying to insurers in other jurisdictions. We have also highlighted potential examples of this, such as a proposed rule requiring firms governed by Solvency II to manage their assets to match liabilities. In this case, we welcomed the proposed ruling in principle but argued that it may not always be appropriate in all of the large number of possible scenarios that can arise in a with-profits environment. The rule could therefore lead to inadvertent gold plating if it resulted in unnecessary transfer of risk from with-profits funds that were in fact well capitalised.

### With-profits issues

Solvency II, as European-wide legislation, has not been designed with UK-style with-profits products in mind. As such, there have been a number of issues interpreting the rules for UK with-profits products, and the IFoA has been proactive in using its members' expertise to promote solutions. We have made the general point that regulators should recognise that with-profits funds have a variety of rules and are at different stages of evolution. We have argued for a broad definition of “with-profits policy”, which includes some potential future defined contribution (DC) pension products, as well as other new innovative products. We have also made the case that Solvency II rules should not constrict with-profits fund managers' investment freedom.

### The Matching Adjustment

Solvency II is based on the use of market-based valuations for both assets and liabilities. However, it also recognises the potential attraction of certain adjustments when valuing insurance products that provide long-term guarantees, to reduce the scale of fluctuations based on volatile market values. The Matching Adjustment (MA) is an adjustment to the risk-free interest rate term structure used to calculate the best estimate valuation of a portfolio of “eligible” insurance obligations. It is similar to the existing UK concept of an illiquidity premium used in Solvency I and embedded value reporting, but the application of the MA is restricted to certain assets and liability types and the calculation is restricted by specific Solvency II requirements. The IFoA has commented on high-level aspects of the MA, such as the interpretation of the eligibility criteria and general uncertainty in interpretation of the rules. We have also welcomed PRA clarification on certain matters, but highlighted potential issues with its implementation, for example by raising concerns about the length of time needed for the PRA to provide feedback on the MA pre-application process.

### The Volatility Adjustment

The Volatility Adjustment (VA) can apply to insurance products which are not eligible for the MA. It is a mechanism that allows liabilities to be reduced (prudently) when asset values are particularly low – e.g. when credit spreads widen. The UK Government has decided that firms should have to seek regulatory approval before using the VA, since automatic approval might encourage firms to take excessive risks during economic upturns that could turn into losses during downturns (“procyclical” behaviour). While not opposing this, the IFoA has made the point that not permitting insurers to use the VA could also lead to procyclical behaviour, in which such firms would become forced sellers if spreads widened in an economic downturn.

## Regulation of actuaries

The IFoA has commented on the impact of Solvency II arrangements on actuaries working in different practice areas. For example, we noted that for life companies, Actuarial Function Holders (AFH) will face the challenge of maintaining their current responsibilities while their role becomes more tightly defined, whereas for general insurers Solvency II will create a requirement for an AFH role. The IFoA has also carried out two consultations with members and users of actuarial advice on the regulation of actuaries' roles in the actuarial, risk management, internal audit and Chief Actuary (AFH in Solvency II terms) functions under Solvency II, with the aim of updating the Practising Certificate regime in time for the inception of Solvency II on 1 January 2016.

## National Specific Templates (NSTs)

The PRA has proposed a set of national reporting templates covering specific national requirements which are not included in harmonised templates at the EU level. The IFoA questioned whether all of these National Specific Templates listed by the PRA are needed for effective supervision of the UK market, and we have also expressed concern that some of the requested data may not be easily available for companies.

## Deferred tax

The IFoA broadly welcomed guidance from the PRA on the treatment of deferred tax under Solvency II, since this addressed the potential confusion between Solvency II's overall principles of market consistency, and the different approach it takes to the recognition of deferred tax. The approach to deferred tax is based on the IAS 12 accounting standard, which is more flexible than the approach elsewhere in Solvency II in its treatment of issues such as offsetting losses, future profits and investment returns.

## Early Warning Indicators (EWIs)

The PRA proposed Early Warning Indicators (EWIs) for UK insurers that are following the internal model route to compliance with Solvency II. The intention was to monitor whether internal models, following approval, continued to meet evolving Solvency II standards. The IFoA has argued for key principles that should govern EWIs, including tailoring them to reflect firms' specific risk profiles, ensuring those who follow appropriate risk mitigation are not penalised, and avoiding "gold plating". We believe there is scope for increasing EWIs' sensitivity to firms' risk profiles within the PRA's general principles, and have presented a range of suggestions to the PRA.

# Conclusion

Solvency II is a fast-approaching reality, coming into force on 1 January 2016. It is the biggest current issue for the insurance industry.

The IFoA has taken a proactive approach to influencing Solvency II's development and to ensuring that it will be implemented efficiently and effectively.

This paper presents a basic overview of Solvency II. We will keep it updated for key developments. Please contact the relevant life or cross-practice committee (see Appendix 2) if you have questions or concerns you would like to raise within the actuarial community or more widely.



# Appendix 1

## Key sources for further information

### European

Level	Author	Document	Date	Status
1	EP	Consolidated Solvency II & Omnibus II Directive	n/a	Final
1	EP	Solvency II Directive	25-Nov-09	Final
1	EP	Omnibus II Directive	16-Apr-14	Final
2	EC	Delegated Acts	10-Oct-14	Adopted by the EC and approved by European Parliament on 12-Jan-15.
2.5	EIOPA	Implementing Technical Standards (Set 1)	31-Oct-14	Draft (EIOPA sent to Commission)
2.5	EIOPA	Implementing Technical Standards (Set 2)	02-Dec-14	Consultation
3	EIOPA	Guidelines for Solvency II (Set 1)	27-Nov-14	Final
3	EIOPA	Guidelines for Solvency II (Set 2)	02-Dec-14	Consultation

### UK specific

The PRA has launched numerous consultations relating to Solvency II. The majority of these consultations can be found on the PRA's Solvency II update page.

[www.bankofengland.co.uk/pr/Pages/solvency2/updates.aspx](http://www.bankofengland.co.uk/pr/Pages/solvency2/updates.aspx)

### Links to relevant bodies/organisations

European regulator: European Insurance and Occupational Pensions Authority (EIOPA)

<https://eiopa.europa.eu/regulation-supervision/insurance/solvency-ii>

UK regulator: Prudential Regulation Authority (PRA)

[www.bankofengland.co.uk/pr/Pages/solvency2/default.aspx%20-%20http://actuary.eu/current-topics-solvency-ii/solvency-ii/](http://www.bankofengland.co.uk/pr/Pages/solvency2/default.aspx%20-%20http://actuary.eu/current-topics-solvency-ii/solvency-ii/)

European actuarial association: Actuarial Association of Europe (AAE)

<http://actuary.eu/current-topics-solvency-ii/solvency-ii/>

# Appendix 2

## The IFoA's strategy for responding to Solvency II developments, and key contacts

### **The Solvency II Steering Group**

The Steering Group provides input to Solvency II-related consultations, gives support to actuaries preparing for implementation, and represents different practice areas.

For more information please visit:

**[www.actuaries.org.uk/practice-areas/pages/solvency-ii-steering-group](http://www.actuaries.org.uk/practice-areas/pages/solvency-ii-steering-group)**

Contact: Richard Bulmer - **[richard.bulmer@towerswatson.com](mailto:richard.bulmer@towerswatson.com)**

### **The Solvency II Life Current Issues Committee**

This committee reports into the Steering Group and Life Board and is specifically focused on responding to Life Insurance related consultations and educating the profession on Life Insurance Solvency II issues.

For more information please visit:

**[www.actuaries.org.uk/practice-areas/pages/life-committees](http://www.actuaries.org.uk/practice-areas/pages/life-committees)**

Contact: Nick Ford - **[nick.ford@kpmg.co.uk](mailto:nick.ford@kpmg.co.uk)**

The IFoA's Education Actuaries have posted guides to Solvency II from the perspective of life insurance, general insurance and health insurance. These are updated regularly and can be found at:

**[www.actuaries.org.uk/practice-areas/pages/actuarial-papers-subjects-related-solvency-ii](http://www.actuaries.org.uk/practice-areas/pages/actuarial-papers-subjects-related-solvency-ii)**

# Appendix 3

## IFoA consultation responses on Solvency II

Date of response	Consulting body	Name of consultation
24.03.2015	PRA	CP5/15 Solvency II: applying EIOPA's Set 1 Guidelines to PRA authorised firms
20.02.2015	PRA	SII transitional measures and the treatment of participations
02.02.2015	PRA	CP26/14 Senior insurance managers regime: a new regulatory approach framework for individuals
02.02.2015	FCA	CP14/25 Changes to Approved Persons Regime for Solvency II firms
30.01.2015	PRA	CP 24/14 Solvency II - further measures for implementation
23.01.2015	PRA	CP25-14 PRA Rulebook
16.01.2015	PRA	CP22-14 Approach to with-profits insurance business
09.01.2015	PRA	CP23-14 Solvency II approvals
06.01.2015	PRA	CP21-14 Policyholder Protection
22.12.2014	FCA	FS14-1 FCA Feedback Statement
07.11.2014	PRA	CP 16/14 Transposition of Solvency II: Part 3
19.09.2014	HM Treasury	Solvency II: resolving the remaining policy issues for UK transposition
21.03.2014	PRA	CP3/14 Solvency II: recognition of deferred tax
15.11.2013	PRA	CP9/13 - Solvency II: Applying EIOPA's preparatory guidelines to PRA-authorised firms
15.10.2012	FSA	CP 12/13 Transposition of Solvency II - Part 2. Consultation response

# Appendix 4

## Abbreviations used in this paper

<b>AFH</b>	Actuarial Function Holder	<b>IMAP</b>	Internal Model Approval Process	<b>QRT</b>	Quantitative Reporting Templates
<b>DC</b>	Defined contribution	<b>MA</b>	Matching Adjustment	<b>RSR</b>	Regular Supervisory Report
<b>EIOPA</b>	European Insurance and Occupational Pensions Authority	<b>MCR</b>	Minimum Capital Requirement	<b>SCR</b>	Solvency Capital Requirement
<b>EWI</b>	Early Warning Indicator	<b>NST</b>	National Specific Template	<b>SFCR</b>	Solvency and Financial Condition Report
<b>FCA</b>	Financial Conduct Authority	<b>ORSA</b>	Own Risk and Solvency Assessment	<b>VA</b>	Volatility Adjustment
<b>FSA</b>	Financial Services Authority	<b>PRA</b>	Prudential Regulation Authority		
<b>HMT</b>	Her Majesty's Treasury				



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