



## Solvency II: Gaining maximum benefit from the new legislation



*“Solvency II is not just about capital.  
It is a change of behaviour.”*

Thomas Steffen, Chairman, CEIOPS



Solvency II introduces new legislation across Europe to improve insurance capital adequacy. Taking effect in 2012 the regime aims to raise the standard of company management utilising Enterprise Risk Management principles. This is not simply about capital calculations, but about organisational change.

Some insurers will view Solvency II as merely another regulatory diktat from Brussels. More enlightened companies, however, will see an opportunity to introduce improvements into their business which will deliver genuine competitive advantage.

Solvency II regulates companies according to the risk inherent in the business. Each company must define its own risk profile and demonstrate that it has in place both sufficient capital and the appropriate governance and risk management processes to meet this risk.

Preparing for Solvency II may seem a daunting prospect. An effective and integrated solution will encompass all aspects of your business and demands a systematic, structured and practical approach. Successful delivery of your Solvency II programme needs the right partner. With unrivalled knowledge of the insurance industry and a broad range of services, EMB is the ideal partner to ensure that you realise the potential business value, as well as meet the regulatory timetable.

# The implications of Solvency II

**Solvency II aims to raise standards of insurance company management and the transparency of this management through disclosure, within an ERM framework. In essence Solvency II is about managing your business better and demonstrating that you are doing so. This is the change in behaviour required.**

Analysis of business failures in the insurance industry across Europe demonstrates that the most common cause is not a lack of capital per se, but the interaction of decisions, behaviour and processes within a company. This is why Solvency II puts such a focus upon a wide-ranging and holistic risk and capital management framework, with each company defining a risk profile appropriate for the business that it conducts. Each company is different and their capital management should reflect this.

By considering not only the requirement to quantify the risks and calculate the capital requirements, but also the general model of risk governance and the whole approach to management information and reporting, firms can build a more effective business operation that serves their long-term strategy.

## **Strategy setting**

Based on our extensive experience in working with companies around the world, we have developed a framework for ensuring a successful implementation. Although the regulatory regime is not due to come into force until 2012, companies need to start defining their strategy and approach now, and the key actions are:

- Ensure that the terms of Solvency II and the wider implications for the company are understood by the key stakeholders
- Build the team who will be responsible
- Undertake a gap analysis of what is in place and how the firm believes it should change to address the new requirements
- Define the high level approach to risk and capital management and the calculation of solvency capital
- Decide how each of the key work-streams will be implemented in a coherent and co-ordinated approach

## **Risk and capital modelling**

Under Solvency II quantification of the capital required to meet potential risk can be calculated using either the standard formula laid out by the EU, or an internal model. In our experience, an internal model is more beneficial, since it allows a much more bespoke assessment of a particular business and its potential risks than any formula. Moreover it has the potential to be a really useful management tool, particularly in its sophisticated modelling of ongoing risk interactions - critical in today's marketplace.

Internal models take time to be defined, structured, implemented and refined to be ready for supervisory processes, and they also need to be demonstrably used as part of the company's decision-making processes. But insurers find that investment is worthwhile.

## **Risk Framework**

Solvency II places as much stress on the evolution of a company's risk management and governance framework as it does on the quantitative calculation of the capital. Companies need to establish a risk management function, an actuarial function, a compliance function and an internal audit function.

They must also demonstrate that they have an adequate and transparent organisational structure with clear allocation and segregation of responsibilities, an effective system for ensuring the transmission of information, and documented roles and responsibilities.

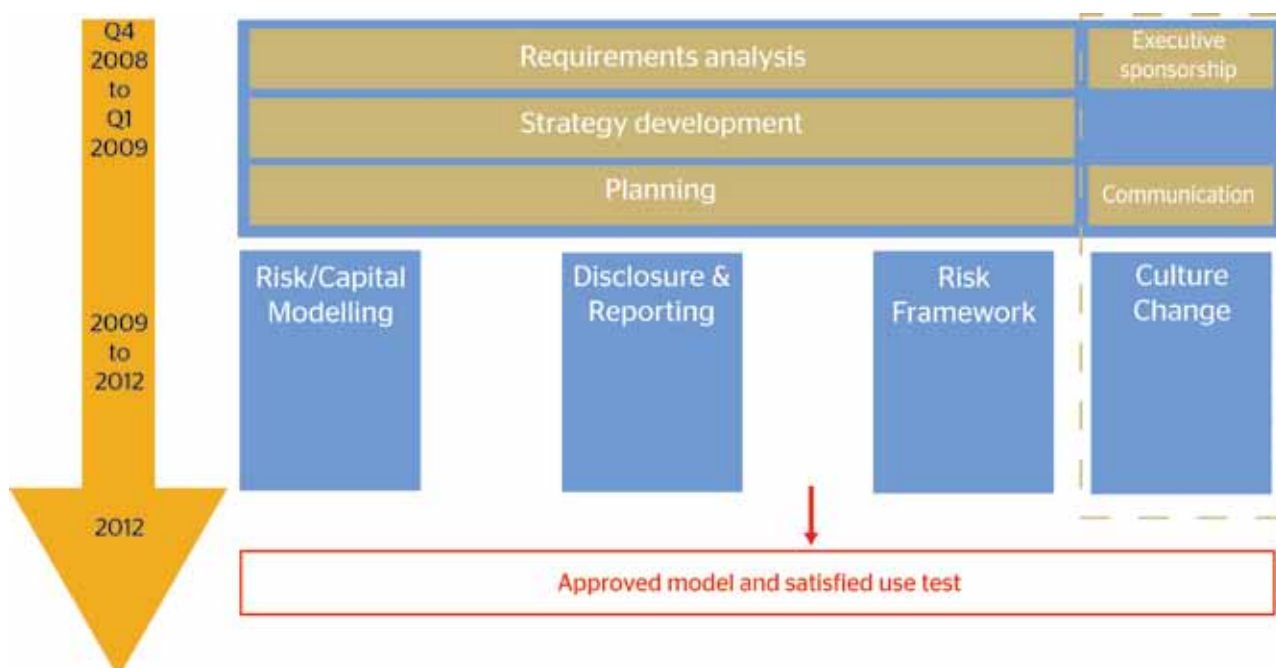
### Disclosure and reporting

In addition to the annual reports stipulated by the regulations, there is also a need to consider management information requirements across the company as part of the risk management framework. Typically, risk information is spread widely across the organisation and is not always held electronically. Data integrity is crucial, and yet, not only integrating, but also identifying the required data in the first place can be a challenging and complicated process.

### Cultural change

Perhaps the biggest and most endemic change is the likely impact on culture. Solvency II necessitates the whole organisation to understand its roles, its interdependencies and its responsibilities towards risk. All employees must share the responsibility for risk, and the board needs to demonstrate that the awareness is across the whole organisation - top to bottom, front line to back office.

## EMB framework for Solvency II



# How to get started

It is evident that meeting the requirements of Solvency II demands a far-reaching programme. Whilst 2012 may seem a long way off, the Directive is about to be ratified and now is the time to drive the programme forward. The challenge is how to implement such extensive change whilst maintaining ongoing business operations.

EMB has developed a range of specific services to assist our clients during the current phase of their Solvency II development programmes, including those below.

## **Briefings and board education**

Solvency II will impose new responsibilities on senior executives for risk management, governance and strategic decision-making. Our board and senior management briefings will assist you to understand the implications for your business, your own responsibilities and how to maximise value and improve business performance from the inevitable expenditure. We consider the key differences from existing regulatory regimes and what the business may look like after 2012.

The briefings can be expanded to cover specific educational sessions and workshops to cover board-level views of related issues such as risk management and ERM, pricing and underwriting, and claims and reserving.

## **Gap analysis**

Solvency II should be seen as assisting the development and improvement of an ongoing ERM programme. Our gap analysis framework and approach combines sound ERM principles with the regulatory requirements to help organisations define their 'target' implementation position, plot their current position, and identify the 'gaps' to be filled. This takes a business-orientated approach that can then be prioritised and developed into an overall implementation plan.

## **Decision framework**

Solvency II will require firms to make strategic implementation decisions, in particular:

- Internal model, standard formula or partial internal model
- Group supervision

Our decision framework is designed to guide firms through the decision-making process, defining the key issues, advantages and disadvantages, and also outlining the business case.

While we believe that best practice is a full internal model, we recognise that this is not necessarily appropriate for everyone, particularly in the short term. In some cases, use of the standard formula or a partial internal model may be the best initial approach for 2012.

## **Developing and embedding internal models**

EMB's methodology for developing internal models has been proven with clients of all shapes and sizes, and is underpinned by our unique project planning and management mechanisms. We recognise how crucial it is to involve the business in defining requirements to ensure overall buy-in and successfully embed the model into the organisation.


Working with Solvency II organisations such as the UK Financial Services Authority and CEIOPS means that we are in tune with today's thinking on the most effective use of internal models for business and strategic decision-making.


### Actuarial outsourcing

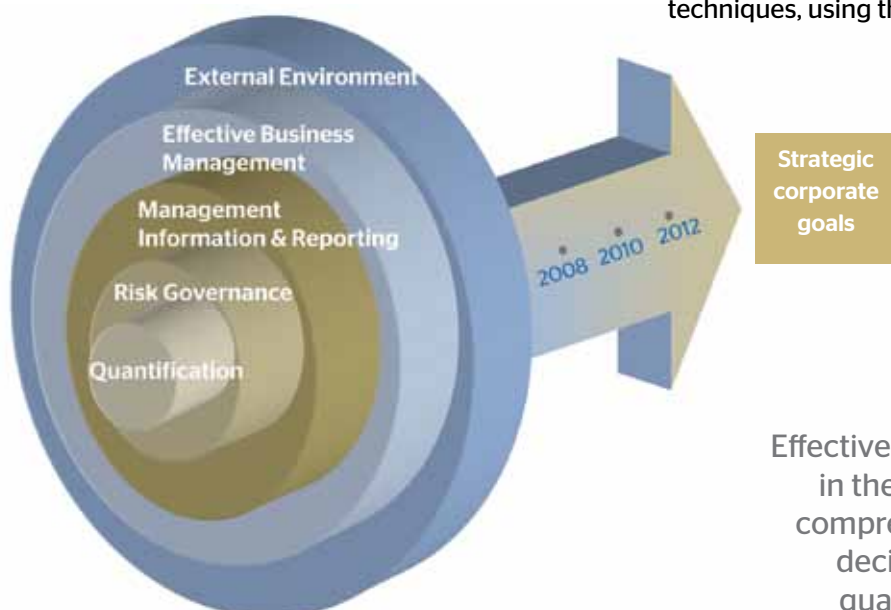
We have been providing full or partial outsourced actuarial services to a broad range of insurance clients for a number of years, covering pricing, reserving and capital modelling. Solvency II will place a new requirement on all insurers to formally implement an actuarial function, and in many cases to extend the existing capability.

EMB has the experience, track record and leading edge expertise to support any company's actuarial requirements, wherever they are located. With our global business and, in particular the proven capability in our Indian office, we can provide quality, cost-effective outsourcing solutions for all actuarial needs.

### Solvency II enabling software

 **EMB Igloo** is the insurance industry's leading financial modelling platform. Many companies, both large and small, have chosen Igloo as the platform to develop their internal models for capital management because of its flexibility and performance. Companies can begin simply and develop the model as they increase their knowledge and experience. Most importantly they can be confident that Igloo can be tailored to build a model reflecting their own business and can be updated regularly to keep step as the company evolves.

 **EMB ResQ** is the industry-leading loss reserving system for insurance and reinsurance, combining powerful modelling and reserving methods with flexible mechanisms to structure, access and manage data sets. Built on more than a decade of development and innovation, ResQ can assist companies with Solvency II because it can calculate the variability associated with reserve estimates based on leading-edge stochastic techniques, using the ResQ Bootstrap feature set.



Effective management of the business in the Solvency II world demands a comprehensive risk governance and decision framework with a robust quantification of risk at its centre.

# Additional support from EMB

With offices around the world and our unrivalled expertise in insurance, EMB can assist in many ways and at many levels from broad strategic planning to detailed technical modelling. Our approach is rooted in practical considerations, rather than theoretical thinking and we believe firmly that each company's approach to Solvency II will be individual and holistic.

We have the flexibility to work in the way that best supports the individual organisation - from advice, education and reviews of their own work through to undertaking planning, design and development work ourselves, as appropriate.

Particularly relevant is our commitment to knowledge transfer. Rather than trying to protect our expertise, we actively help clients in acquiring their own analytical and business skills, believing that this is in the best interests of productive long-term working relationships. Many clients like to think of us as 'enabling experts'.

## Other services

### EMB Business Consultancy

We advise on strategic issues that demand analysis of marketing and corporate capability as well as key financial drivers. Specific services include risk and financial management, implementation, change management and business improvement.

### EMB Actuarial Consultancy

EMB has established a first-rate reputation for technical excellence in actuarial engagements, covering all aspects of reserving, financial modelling and pricing.

### EMB Software

Originally designed to support our own projects, our range of analytical software is unrivalled, making it feasible to perform tasks that would otherwise be impossible, impractical or hugely time-consuming.

### EMB Professional Development

We have distilled our breadth and depth of knowledge into structured education programmes to enhance skills within companies, across all disciplines and for all levels.



# Ask the Experts



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# EMB's Software Portfolio

EMB is the world's leading provider of non-life actuarial software. Most of our software can be used to assist commercial risk management activities.



**EMB Emblem** builds robust predictive models of claims, retention, conversion and other customer behaviour. Its powerful and flexible analytical capabilities allow the most sophisticated models to be fitted to large datasets rapidly.



**EMB Classifier** analyses the effect of geographical area on risk through a range of sophisticated spatial analysis methods.



**EMB Rate Assessor** combines technical and customer behavioural models, competitor, distribution and customer information to support the rate selection process. By comparing price levels, rating structures and emerging experience trends, users can identify and validate pricing options through interactive scenario testing.



**EMB Optimiser** extends the capabilities of Rate Assessor using state-of-the-art mathematical algorithms to derive optimised premiums at the individual or ratebook level.



**EMB ResQ** is the UK's most successful non-life reserving package. ResQ Professional and ResQ Enterprise are the latest generation products, building on more than a decade of development and innovation. They both combine powerful modelling and reserving methods with flexible, high-integrity data management capabilities. The optional 'Bootstrap' feature is for estimating reserve variability based on leading-edge stochastic techniques.



**EMB Igloo** is the insurance industry's leading financial modelling platform, allowing companies to model multiple business scenarios. Igloo is known for its power, flexibility and transparency and comes with an extensive library of components. This includes economic scenario generation, claims generation, reserving, reinsurance, financial reporting and capital calculations. The software also enhances the accuracy and efficiency of model parameterisation within the same framework.



**EMB Prism** is a pricing application that allows information to be shared between reserving actuaries and planning and forecasting professionals. It maintains a record of all quotes and signed contracts, as well as the assumptions and reasoning behind pricing decisions.



**EMB Repro** is an application for graphically analysing reinsurance data. Users can quickly identify where they are covered, where they are exposed, and any gaps in coverage. It can be used for multiple purposes including audits of insurance and reinsurance data.



**EMB Media Optimiser™** is a web-based solution that enables companies to maximise the return on investment from marketing budgets.



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