



The work of the European Commission and CEIOPS¹ on the Solvency II project is proceeding according to plan. Activities are currently focused on completing the proposed Framework Directive for the future supervisory system by the middle of July. One of the main goals of the EU Directive is to harmonise the quality and transparency of supervisory processes within Europe, thus enhancing policyholder protection. It is envisaged that the new supervisory requirements will be introduced for insurance companies at national level by 2011. Another ongoing activity – taking place between April and the end of June 2007 – is the third quantitative impact study (QIS3), designed to provide information on the actual risk situation of European insurers.

Current developments

European Commission

Publication of a Framework Directive

The publication of a proposed Framework Directive and its introduction into the political consultation process is still planned for 10 July. An important aim of the Directive is to create a level playing field in the European market. Therefore, besides quantitative criteria, the new supervisory requirements contain uniform rules for the supervisory review of insurers in Europe. Also, in order to increase market transparency, disclosure requirements will play an even more important part than hitherto. In future, all market participants are to receive more precise and comparable information on insurance companies. From the policyholders' point of view, Solvency II will thus also offer better consumer protection.

Various bodies have already had the opportunity to view and comment on the first sections of the proposal. The 14 European Insurance Directives currently in existence will be combined into a single new Directive. But the most significant innovation will be the risk-based approach of Solvency II: the higher the assessment of an insurance company's overall risk, the higher the solvency capital requirement will be.

Some of the most important new provisions:

The proposal will contain principles relating to the already familiar "three pillars". Pillar 1 involves quantitative measurement based on market values to determine capital requirements; Pillar 2 stipulates qualitative risk-management



¹ CEIOPS – Committee of European Insurance and Occupational Pension Supervisors.

requirements, with corresponding supervisory review processes; and Pillar 3 concerns disclosure requirements and market transparency. The proposal also includes principles for the supervision of insurance groups.

Under the first pillar, risk assessments are envisaged for the following items (among others):

- Underwriting risks (non-life, life and health)
- Risks from investments
- Technical provisions (valuation principally independent of the reserves posted in the balance sheet): Sum of best estimate² and risk margin
- Capital items eligible to cover capital requirements

A few concrete specifications have already been published:³

- Risk categories: underwriting risk (non-life, life and health), market risk, credit risk and operational risk
- Risk measures for calculating the solvency capital requirement (SCR) and the minimum capital requirement (MCR): Value at Risk (VaR) with a risk tolerance of 99.5% (for the SCR) and 90% (for the MCR) over a one year time horizon
- Methodology for calculating the risk margin in valuing the technical provisions: Cost-of-Capital method

As far as the second pillar is concerned, the proposal will contain principles on the following:

- Powers of supervisory authorities
- Review processes
- Additional capital requirements ("capital add-ons")
- Risk management
- Internal controls (compliance and review)
- Actuarial functions (ensuring the appropriateness of the various calculation methods, e.g. in measuring technical provisions or calculating capital requirements)

With regard to the third pillar, the proposal will include principles on the following items:

- Reporting to supervisory authorities
- Disclosure of company information (market discipline, solvency report, annual report)

It currently appears to be unclear, and certainly politically controversial, whether there will also be a proposal for supervising insurance groups in Europe.

Since 2005, with a view to ensuring that "sound rules are drawn up", new legal proposals by the European Commission have had to include "impact assessments".⁴ These are intended to permit potential changes resulting from a new Framework Directive to be assessed in advance. They also serve the Commission as an additional basis for decision-making and, where relevant, for selecting the most appropriate option. Impact assessments include the preparation of an extensive cost-benefit analysis. In July 2007, the proposed Framework Directive will consequently be supplemented by a report on the effects of the proposal for Solvency II as examined in connection with the impact assessment.



² Expected value of future obligations from insurance contracts.

³ Cf. Letter of the European Commission to CEIOPS Chair regarding the design of QIS 3 at <http://www.ceiops.org/content/view/5/5/>.

⁴ Cf. White Paper Financial Services Policy 2005–2010, available online at http://ec.europa.eu/internal_market/finances/policy/index_de.htm.

New Chairman of CEIOPS

CEIOPS

In March 2007, Dr. Thomas Steffen – Chief Executive Director of the German Federal Supervisory Authority, BaFin – was elected as the new Chairman of CEIOPS. He announced his readiness to tackle the growing challenges of financial market supervision and to resolutely continue the work of his predecessor, Henrik Bjerre-Nielsen.

Consultation papers

Also in March 2007, CEIOPS presented the Commission with numerous answers to a range of items on which CEIOPS had invited comments in a public consultation process.⁵

Quantitative impact studies

Companies are to be given the option of using either an internal risk model or a European standard formula to assess their risk situation and determine solvency capital. Internal risk models have the advantage of reflecting a company's individual risk situation and allowing this to be evaluated. But the standard formula is also being geared to assessing a company's risk situation as accurately as possible on the basis of general indicators. Given the smaller amount of calculation work involved, a standard formula is particularly suited to medium-sized and small insurance companies.

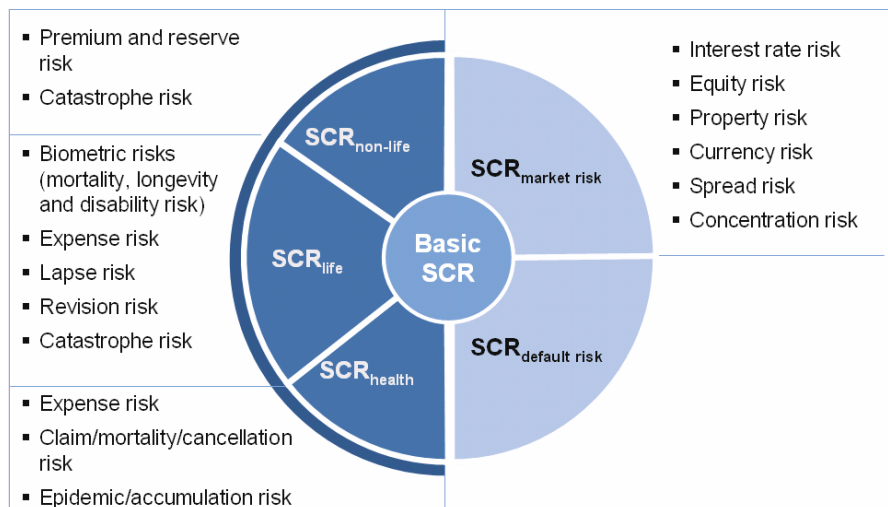
However, as the standard formula also involves a certain degree of complexity, practical tests in the form of "quantitative impact studies" (QISs) are being carried out to ensure the approach is viable. The first study was conducted at the end of 2005, followed by a second study in the summer of 2006. The third quantitative impact study, analysing the solvency positions of companies according to the new rules, is taking place from April to June 2007. Whilst QIS1 and QIS2 mainly looked at the feasibility of the methods used, QIS3 is focusing on the future calibration of the standard formula.

QIS3

The valuation methods, formulae and parameters for calculating capital requirements have been adjusted and refined in QIS3 compared with the last study, QIS2.

In QIS3 – as in QIS2 – technical provisions have to be (re)valued (independently of values that may be posted in the balance sheet), investments have to be calculated at market value, and all eligible capital has to be determined. This enables the Solvency II balance sheet to be prepared, which is closely based on a economic balance sheet. At the same time, the ongoing underwriting risk has to be determined using the given standard formula, which ultimately results in the SCR and the MCR. These are then compared with the available capital in the Solvency II balance sheet.

The diagram below shows the main individual risks that generate the solvency capital requirement in QIS3:



⁵ Cf. Newsletter No. 8: Section on CEIOPS consultation papers.

In contrast to QIS2, the operational risk is no longer regarded as one of the main risk categories within the basic SCR. Rather, the capital requirement calculated for this risk category is *added* to the basic SCR. Diversification effects, which usually result in lower capital requirements, are now considered only *within* the main risk categories. In addition, the following modifications have been made:

- The credit risk has been split between two modules: counterparty default risk SCR_{def} and spread risk (within the module SCR_{mkt}).
- Market concentration risks are measured in the standard approach for the first time.
- Expected profits or losses in non-life insurance are not taken into account.

QIS3 is also testing a new classification of eligible capital⁶, in which capital is divided into three tiers. Capital in the first category must be permanently and fully available to absorb losses. This includes the paid up equity, net asset and liability valuation and retained earnings. Capital which can only be used to a limited extent to absorb losses but which does not require the approval of the supervisory authority is subsumed under the second tier. This includes portions (but usually not 100%) of subordinated liabilities, letters of credit, and contingent capital such as members' calls by way of supplementary contribution. The third tier covers the other capital, which requires the approval of the supervisory authority.

QIS3 envisages that capital from all three tiers may be used to cover the SCR, albeit only to a limited extent in the case of tiers 2 and 3. Even more restrictions apply with regard to covering the MCR, with tier 3 capital not being eligible at all. A consequence of this restriction is that the capital eligible for solvency purposes may be lower than the available capital according to the Solvency II balance sheet.

In QIS3, the insurance industry is called upon for the first time to make these calculations for whole insurance groups as well as for individual companies, thus allowing CEIOPS to gather experience on the practicability of applying the standard formula to groups. On the one hand, the group assessment focuses on obtaining informative data, e.g. the diversification effects within an insurance group from application of the standard formula at group level (determined by contrasting the sum of the individual entities' capital requirements with those of the group). On the other hand, CEIOPS wants to make various comparisons: for example, the group results from QIS3 are to be compared with the group results from the company's own internal risk model (if available).

The results of QIS3 are scheduled to be published in autumn 2007. QIS3 is likely to have a significant influence on the development of the European standard formula. But CEIOPS has already announced that further studies will be conducted as from 2008.

European actuaries – Groupe Consultatif

Conference

On 3 and 4 May 2007, a conference of European actuaries was held in Reykjavik. There were meetings of two of the Groupe's committees:

- Freedoms and General Purposes Committee
- Insurance Committee

Some 30 actuaries from all over Europe attended.

The discussions centred mainly on ongoing and forthcoming projects, and the further involvement of the Groupe Consultatif in Solvency II. Some of the topics the working groups will be dealing with in the next few months are:

- Development of supervisory rules in close coordination with accounting standards that are also undergoing major change



⁶ Capital items eligible to cover capital requirements.

- Development of a suitable process for certifying internal models
- Specification of appropriate disclosure rules, including the preparation of a sample future "solvency report"

The conference participants also discussed the future role of actuaries and the further development of the Solvency II glossary.

Role of actuaries

Actuaries are likely to play an important part in insurance companies' risk management in future. The conference considered the fact that the proposed Framework Directive planned for July 2007 is to contain reference to an "actuarial function" in the area of risk management. For the Groupe Consultatif, this means the following main areas of activity:

- Calculation of technical provisions
- Ensuring the appropriate determination of solvency capital
- Responsibility for risk modelling

Solvency II glossary

Spring 2007 saw the publication of the first version of the Solvency II glossary, which was compiled in a joint project by the Groupe Consultatif and the CEA⁷. The next step planned is the preparation of an international version. This will involve combining the Solvency II glossary with the existing glossaries of the International Actuarial Association IAA and the International Association of Insurance Supervisors IAIS to form a global glossary of solvency terms. The organisational framework is currently being established for cooperation between IAIS, IAA, CEA and Groupe Consultatif on this project.

IAIS/IAA

Valuation of future liabilities for insurance contracts

The adequate valuation of technical provisions will be an essential part of future supervisory rules, given that supervisory requirements are increasingly being geared to insurance companies' actual risks. In 2004, initial guiding principles for risk measurement were put together by the International Actuarial Association IAA in the report *Global Framework for Solvency Assessment*. Building on this, at the beginning of 2005, the IAIS prepared a proposal for valuing future obligations from existing insurance contracts and submitted this to the IASB. To begin with, however, the primary focus was on determining the expected value of future obligations from insurance contracts for supervisory purposes.

Already back then, the work was given substantial support by the IAA. According to what the IAIS envisages, the principal approach in valuing future liabilities under the new supervisory requirements should be as follows: annual fluctuations in technical provisions have to be analysed and modelled with a probability distribution. For supervisory purposes, two factors are to be used:

- Expected present value of the above-mentioned probability distribution – also known as "best estimate"⁸ – of the technical provisions
- Risk margin on top of the best estimate

The IAIS and the IAA are continuing to work on these topics together. The actuaries are currently preparing an extensive paper on a methodology for calculating the best estimate and measuring the risk margin. A report on this will probably be published by the IAA before the end of the year (*Measurement of liabilities for insurance contracts: current estimates and risk margins*). The publication will focus on the following aspects:

- Determining the best estimate
- Methodology for determining the risk margin
- Explaining the valuation standards (principles and methods)



⁷ Comité Européen des Assurances – umbrella association of European insurers.

⁸ Sometimes the term "central estimate" is used.

IAIS – Guidelines for the use of internal models

In addition, the report is to specify in more detail the role and the significance of obligations from insurance contracts in connection with future supervisory rules and reporting.

The use of internal risk models for quantitative risk measurement and their employment in internal corporate management are growing in importance. This development is to be promoted by solvency systems internationally as well as by Solvency II. Although a detailed description of the certification of internal models is still outstanding, one thing is already certain: to enable supervisory authorities to certify internal risk models for measuring insurance companies' solvency, such models must fulfil a number of key criteria. With this in mind, the IAIS has requested the IAA to prepare a fundamental paper on internal risk models for the IAIS Solvency and Actuarial Issues Subcommittee. On this basis, guidelines are then to be drawn up, specifying the main criteria that must be complied with by all companies that wish to use an internal risk model for calculating solvency for supervisory purposes. As things stand at present, these criteria include:

- Use of internal risk models both for risk measurement and as a tool for strategic and operational decisions
- Ensuring that internal models reflect the insurance business in its entirety (including its complexity, special circumstances and external parameters)
- Obligation for the company to document decisions taken, e.g. on model structures or risk measures
- Suitable structuring of the internal model so that connections between risk management and the capital management process can be identified
- Possibility for the supervisory authority to set an appropriate minimum confidence level and a time horizon
- Presence of an internal validation process for internal risk models, including statistical quality test of the model, the conducting of a calibration test, and the performance of use tests
- Assurance that the supervisory authority can view the data at any time in order to evaluate the models properly
- Determining disclosure requirements for both private supervisory use and public use.

If you would like more information on this subject, please contact us directly:

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