

# THE EUROPEAN ACTUARY

- 1\_ Between theory and practice
- 4\_ Raising the bar on insurance technical expertise
- 6\_ The Solvency II actuarial function
- 7\_ Where is the actuarial function heading to under Solvency II?
- 8\_ European agenda

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## Between theory and practice

By Mark Heijster



**He calls it a mutual enrichment. Thomas Behar (43) likes to manage and to teach. His teaching skills brought him to Morocco and even to China. The French Chief Actuary of CNP Assurances wears two hats, that of a manager and that of a teacher. A two-folded profile that makes it possible to further develop the actuarial profession. Recently Behar was elected again as Chairman of the French Institut des Actuaire.**

### *What are your main objectives as Chairman?*

'One of the biggest challenges we face is organizing the Colloquium of the International Association of Actuaries that will take place between the 24th and the 26th of June 2013 in Lyon. The conference covers three areas, namely: AFIR-ERM, PBSS and Life. It is very useful for actuaries who are looking for scientific and professional knowledge, and also to expand their existing network.

'We also work with the Groupe Consultatif to develop the European profession. We try to give a European answer to Solvency II issues. Europe is important and we do not focus only on mutual agreements. So we emphasize that we are part of Europe. The Groupe Consultatif made a lot of progress. It is now officially an association with a board. I hope that together with the other actuarial associations, we will continue to grow as a European profession.'

'Within France, we are very much involved in Solvency II, and risk management. We give advice and we are a discussion partner of the Ministry of Finance. We also give advice to the ACP, the French supervisor, about Solvency II. This topic also comes back in education



Thomas Behar

programs: we want to support French actuaries during their training. They now have to register their CPD credits and to respect a minimum CPD obligation.'

***Do you consider that - independent of your own future role - the actuarial function is already undergoing changes, if so, could you specify these, and comment upon them?***

'As we move from Solvency I to II we find ourselves, since 2008, in a period of crisis. The world has become very complex and the questions asked require more complex models and solutions. In France, for example, we have to deal with several standards: we have accounting and prudential standards: IFRS, French GAAP, Solvency 1, Solvency 2 and rating agency standards. At any moment, we need to look at and explain the consequences of any decisions according to these standards. When you want to say something about the complexity, you need to simplify, but that's not easy. This complexity also calls for standardization, so that you can evaluate different situations.

We have entered plainly the Risk Management field. We are proud that we have received the CERA designation award. We will develop initiatives on that subject.'

***Do you feel that it is important to work together with other fellow European actuarial organisations?***

'Yes! I am one of the actuarial members of the insurance and reinsurance stakeholder group EIOPA. We have been recommended by the Groupe Consultatif. We try to contribute whenever possible. Our goal for the Groupe Consultatif is to provide more resources and to develop a strategic business plan. Now that Groupe Consultatif has become an association, we are satisfied seeing that activities develop. The actuarial

profession is moving forward, which is good. We are also working on bilateral contacts, we meet other associations. Recently, the first European Congress of actuaries was held in Brussels. This is important because Solvency II has given us a unique financial exposure in Europe. In many companies, especially in large groups, actuaries increasingly cooperate with other countries. We forget where the actuaries come from. It is important that we expand the European profession of actuary.'

***You also give lectures at Universities (Paris VI, Paris Dauphine, e.a.) Do you think that it is useful to continue these activities alongside with responsibilities in the financial community?***

'The practice of the profession is always part of the actuarial education in France. Students do not only learn about the theoretical side of a subject, since there are always professionals involved, experts from certain fields. Ever since I have been teaching, I am aware of my two-folded profile. I try to use it in my classes; on the one hand I'm a teacher and on the other I'm a manager and chief actuarial officer of a major European insurer: CNP Assurances. I am in close contact with my students. I think it's important that we develop the community together, to try to enrich each other.'

***The Institut des Actuaire has its own 'glossy', l'actuariel. Do you consider this magazine a useful way to communicate with the actuarial profession?***

'We focus on a very wide audience. It actually consists of all people who matter in the financial and insurance world. The glossy is very much appreciated, made by journalists and it gives a good idea of the different fields. And yes, it is also a very convenient way to communicate with our members.'



***In a previous issue this magazine held an extensive interview with Mrs. Christine Lagarde, the head of the IMF. Would you agree that as a national organisation you benefit from having fellow-country(wo)men in influential international organisations?***

'People who accept such an international job do not think of their own country. They think more global, they ignore more or less where they come from. In this case, Christine Lagarde was not yet the head of the IMF but Minister of Economics and Finance in France and it was a great honour to have an interview with her.'

***In other European countries, the way the French are generally able to successfully bring forward issues dear to the French community in a number of areas (political/economical) is often seen as an example to other nations. Do you agree and could you illustrate this with an example relating to the actuarial profession?***

'I am a member of the executive committee of the International Actuarial Association. We are twelve. Four members come from Europe. We do not hesitate to express our opinion, in a constructive way. That's what I try to do. We try to explain our views on different issues. And our views may be quite different. I also try to encourage other associations to express themselves, to have an independent opinion. The aim should always be to develop the actuarial profession in Europe and in the international arena in support of public interest. We therefore look at others, to immediately perceive good ideas, to learn from each other.'

***On June 20th you held your annual 'Congrès des Actuaire's' dedicated to: 'Managing risks in times of crisis'. What ideas dear to your role as Chairman have been developed there, and do you see a growing consensus in France on the ways to steer out of the current financial crisis?***

'For several years now we have to deal with various crises. We must remain vigilant to help make better decisions. We should expect actuaries to say what's going on. And that if they notice something, the risk should be well reflected. We should not only look at the short term, but also the long term. In France, people use savings contracts for the long term. Long-term savings are typical of France making it more difficult to correctly calculate the risk. At the date we are speaking together, another thing is that we do not have an impact assessment. For Solvency II it is very important to not bury our heads in the sand and to measure what we want to have in order to avoid that we do artificial measurements. At this moment we see several yield curves in Germany, France, Spain and Italy. We realize that there are differences between SWAP and national curves. It seems useful to know where we stand before we move forward in the direction of Solvency II.'

***Are you satisfied with the way the 'Supervision' of financial organisations is currently undertaken?***

'Again, there is no impact assessment and we really need that. Secondly we move more and more away from of the whole idea of Solvency II. It had to be a text based on principles. Now when I see all the patches in level I, II and III, I can't yet see the outline of a principle-based text. I do not think that with so many details people will understand something of the regulation. And if someone does not understand the regulation we cannot know what is right or wrong, so it will be impossible to take an appropriate decision.'

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**Thomas Behar** is Chief Actuary Officer of CNP Assurances and Chairman of the French Institut des Actuaire's



# RAISING THE BAR ON INSURANCE

By Karel Goossens, David Hare and Ad Kok

**Everyone involved with the management and oversight of insurance companies knows that the risks those undertakings run are complex and subject to considerable uncertainty. Much of how this uncertainty impacts the individual insurer's balance sheets has until now remained hidden to outside observers; the prudent approach to calculating reported solvency has insulated the published results from the full extent of market volatility.**

**This will change with the implementation of Solvency II. It introduces a more rigorous supervisory regime that seeks to recognise more of the complexity of insurance companies and the risks that they run on the regulatory balance sheet and in the reporting to supervisors and other stakeholders. In so doing, it aims to increase both policyholder protection and capital efficiency. It introduces a more risk-sensitive, more market-consistent, approach to insurance technical provisions and capital requirements.**

Karel Goossens



## **Solvency Capital Requirement**

Solvency II requires that all but the smallest insurers across Europe hold sufficient Own Funds (the insurer's reported capital base) to cover an appropriate Solvency Capital Requirement (SCR) that reflects more of that insurer's particular profile of risks than under many current regimes. It is expected that many insurers will choose to use the 'Standard Formula' of prescribed stresses and calculation parameters for their SCR calculation. However, Solvency II also provides for the possibility that, subject to supervisory approval, insurers will use their own models for calculating their SCR.

For those insurers choosing to go down the internal model (for all or part of their SCR calculations), the identification of risks and appropriate stresses is an extremely complex task, particularly in the selection of consistent 1 in 200 stresses (the check that there is less than a 1 in 200 chance during a year) for those risks where there is very little relevant historical data on which to base modelling, or where modelling is based on risk drivers and their interactions and many complex factors are modelled.

## **Technical Provisions**

Solvency II requires that technical provisions be calculated as the sum of the best estimate of the liability and a risk margin to cover the cost of the capital another insurer would need to hold to take on the liability. The best estimate approach requires the projection of all future cash flows, with a probability weighting attached, and any underlying options and

# TECHNICAL EXPERTISE

guarantees, along with an adequate evaluation of the corresponding present value.

The judgements involved in the calculation of technical provisions are particularly significant because of their impact on the size of an insurer's Own Funds and the risks inherent in the technical provisions, which affect the regulatory capital needed. The potential conflicts of interest need careful attention and this is reflected in the Solvency II Directive requirement that the calculation of an insurer's technical provisions be co-ordinated by an Actuarial Function that is, to quote from Article 48, *'carried out by persons who have knowledge of actuarial and financial mathematics, commensurate with the nature, scale and complexity of the risks inherent in the business of the insurance or reinsurance undertaking, and who are able to demonstrate their relevant experience with applicable professional and other standards.'*

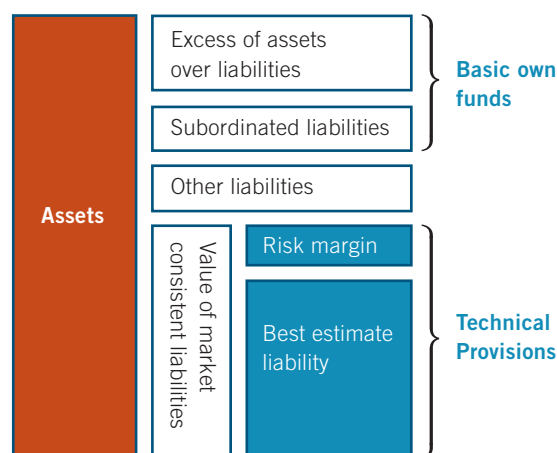


Figure 1: Typical Solvency II balance sheet

As a consequence, the reported solvency of insurance companies will depend like never before on the technical judgements around best estimate assumptions and on financial modeling significantly more complex than many will have used in the past.

This raises the bar in a number of areas on the technical expertise on which boards of directors will depend when taking decisions about and responsibility for the resulting public statements. Boards of directors will need to be comfortable, not just that past experience is understood appropriately, but that the resulting judgements around future best estimates and risk models are robust and reliable. Thus, they will be looking for experts whose knowledge and integrity are without question, but also whose communication skills are up to the task. People looking at the results of an insurance company will need to be able to understand the risk models so that they can compare the approaches adopted by different insurers.

## Review of models

It will be important that the models insurers use remain up-to-date and fit for purpose and are seen to be so. Management will want comfort that

the figures they are reporting remain appropriate and external stakeholders will want assurance that the figures published are robust and consistent.

Thus it is to be expected that there will be an ongoing need for internal, '2nd line' review of the continued appropriateness of the models being used. From time to time, management may also find it helpful to introduce an external element into the review in order to give them increased comfort over the comparability of the approaches followed and how consistent they are with emerging best practice across the industry. Solvency II will also change the role of external audit and in particular the role that actuaries are required to play in this.

## Communication

Solvency II will significantly change the amount of information many insurers put in the public domain about their risk profiles and the market-consistent valuation of the liabilities they hold. The new regime will also increase the amount and frequency of reporting to supervisors.

Particular audiences are likely to need particular communication approaches (e.g. Equity analysts; debt analysts; rating agencies) and it will be important that those insurers affected can draw upon the necessary skills and experience. It will not just be skilled technical experts that are required, but those that can translate the complexity into material that is understandable for a wider audience.

Solvency II will touch many other areas of decision-making within insurers and management will need to understand the implications for their firm of the new regime and what it might mean for their business model and strategy. For example, product design under Solvency II will require not just an understanding of risk, volatility, capital and commercial considerations, but how the reporting under the new regime will impact the emergence of profits and the release of capital and hence the external assessment of the attractiveness of the strategy

Actuaries can play a significant role in giving senior management and boards of directors the support that they need. In order to help insurance company senior management prepare for the challenges ahead, the Groupe Consultatif Actuariel Européen is in the process of producing a guide to highlight the range of roles where Boards will need to be comfortable that they have the necessary technical input. This will be followed up with more detailed consideration of a number of areas - in particular, the important role that actuaries could play in providing external assurance on the published financial and risk reporting that Solvency II envisages.

**Karel Goossens** is Director at Towers Watson and incoming Chairman of the Groupe Consultatif Actuariel Européen. **David Hare** is a partner at Deloitte and President-Elect of the Institute and Faculty of Actuaries. **Ad Kok** is a former Chairman of the Groupe Consultatif Actuariel Européen.

# THE SOLVENCY II ACTUARIAL FUNCTION

By Peter Tompkins

**As actuaries we naturally have an interest in the extent to which the actuarial function should – or actually will – be carried out by actuaries. In this piece we look at the place the actuary is taking in these developments.**

One difference between banking and insurance regulation is that the Solvency II Directive acknowledges the contribution of actuaries to the sound management of insurers. Article 48 of the Directive sets out the requirements that must be fulfilled by insurers, and the fit and proper requirements make sure that these are done by suitably qualified people. However, there is no pan-European requirement for the actuarial function to be fulfilled by a qualified or certified actuary. Some, but not all, Member States are planning to implement such a requirement.

The bulk of the requirements for the actuarial function relate to technical provisions, and making sure that these are calculated appropriately and in accordance with the Solvency II basis. There is an emphasis on the actuarial function taking responsibility for the quality of data used, for monitoring actual experience against expected and, most importantly, communicating to the administrative, management or supervisory body about the reliability and adequacy of the calculation.

Having said all that, the actuarial function is not responsible for setting the technical provisions – this responsibility belongs to the administrative, management or supervisory body. In addition, the actuarial function has to provide opinions on the overall underwriting policy and on

the adequacy of reinsurance arrangements. It is expected that these opinions will provide better information from which to manage risks in an insurer, and give the administrative, management or supervisory body a valuable, additional perspective.

Alongside these requirements, the actuarial function should contribute to the risk management system, which will involve working closely with the risk management function. This will include working on at least the quantitative parts of the Own Risk and Solvency Assessment and, if an insurer has applied to use an internal model to calculate the SCR, working on that to support the risk management function.

## **What actuaries should be doing now**

If we as actuaries believe to be responsible for some or all of the actuarial function requirements, we will need to make sure that:

- They have the appropriate skills and experience, as the fit and proper requirements will apply to them.
- They have access to the administrative, management or supervisory body and so can provide their reports to them, and make sure that resources are available for approved improvements to data and systems.
- They have a good working relationship with the risk management function, and that

the split of responsibilities is clear

- They have appropriately independent validation in place for the reviews that take place
- They are clear on what professional guidance applies to them for each part of the task

Even if in a particular country the actuarial function is not required to be a certified actuary role, actuaries should be preparing – as a profession we have a history of adding value to insurers and should not expect a drift to non-actuaries.

Another consideration is making sure that actuarial tasks not covered by the actuarial function requirements are still performed – it can be easy to prioritise regulatory jobs to the potential detriment of other things that add value.

## **What the actuarial profession is doing to support its members**

The actuarial professions across Europe have been working on technical issues such as the risk margin calculation and topics such as binary events and contract boundaries. There are many papers and presentations on their websites that are a useful resource for actuaries setting up new systems and databases, as well as new reporting for the administrative, management or supervisory body. In addition, the Groupe Consultatif is developing standards to support actuaries in this work.



**Peter Tompkins** is a Member of Council of the Institute and Faculty of Actuaries and a former Chairman of its Pensions Board. As a consulting actuary he has specialised in pensions and investment.



# WHERE IS THE ACTUARIAL PROFESSION HEADING TO UNDER SOLVENCY II?

By Dr. Dieter Köhnlein

**Solvency II will open new communication channels for European actuaries to the Management Boards of insurance companies. This will change the role of leading actuaries across Europe and will induce related changes and threads.**

## ***Are there new roles for actuaries under S II?***

Technical provisions, pricing and reinsurance belong to the working fields within insurance companies in which actuaries had their main role to fulfill up to now. Very often this role has been rather technically oriented. Actuaries perform basic calculations while often the final decisions are made by other individuals for example by product managers, accountants or reinsurance managers.

Under Solvency II insurance undertakings have to establish an Actuarial Function as part of their governance system, which has to coordinate the calculation of technical provisions, to express an opinion on the overall underwriting policy and the adequacy of reinsurance arrangements. There is much flexibility left for the insurance undertakings to implement this function.

On an annual basis, the actuarial function should report issues and findings related to the tasks they are responsible for to the administrative, management or supervisory body of the undertaking. The actuarial function report must clearly identify any deficiencies and give recommendations as to how such deficiencies should be remedied, which needs a business oriented view.

**“Solvency II will not change the bearing of the actuarial profession, but the wind will not be always supportive.”**

**Dr. Dieter Köhnlein** is Chief Actuary of axis Consulting Group and Chairman of the GCASP2 Drafting Team of the Groupe Consultatif

## ***Will there be any guidance for the actuaries in charge of the actuarial function reporting?***

EIOPA has intensely consulted with the main stakeholder groups on its future ‘Actuarial Guidelines on the calculation of Technical Provisions’ since last year. The resulting amendments are expected to be issued soon. There is no indication yet that EIOPA will issue similarly detailed guidance related to underwriting and reinsurance. The Groupe Consultatif has decided to develop a model standard (GCASP2) fitting into the space between the high level axioms of the Groupe’s code of conduct and the detailed guidance being developed by EIOPA. A draft version of the standard will be discussed at the Groupe’s meetings in Rome in October 2012. After local implementation by the member associations of the Groupe Consultatif it will help to ensure consistent, efficient and effective practices across insurance and reinsurance undertakings in the European Union in regard to reporting by the actuarial function-holder(s).

## ***Which chances and threats will result from the new role?***

The issues to be dealt with relate to traditional working fields and should be familiar to the reporting actuaries, but the risk management perspective is new. The actuarial function reporting required under Solvency II will open a direct communication at regular intervals to the board of the undertaking, which can be used to raise any concern the reporting actuary might have.

This new opportunity needs to be used wisely. But one thing is clear: If the reporting actuary opts for producing a traditional fact and figures driven technical report without giving business focused views the new chance is missed. In any case the reporting actuary will have to leave the traditional comfort zone of actuaries and has to be prepared to face potential different views of other function within the undertaking.



Photography: dross@drossmedia.info

# European agenda

1 October 2012	Final EIOPA draft technical specifications expected (EIOPA advises EU Commission on IORP II QIS (conclusions of consultation and feedback))
1–15 October	Commission issues final technical specifications for IORP II QIS
15 October	Start of Omnibus II technical assessment on the long term guarantee package (subject to change)
15 October	Start of IORP II QIS
18 October	EIOPA Insurance & Reinsurance Stakeholder Group meeting, Frankfurt
18–19 October	Groupe Consultatif annual conference, Rome
20 November	Vote Economic and Monetary Affairs Committee, European Parliament on Omnibus II amendments ( subject to change)
20 November	7th EFRP European Pension Funds Congress, Frankfurt
21 November	2nd annual EIOPA Conference, Frankfurt
27 November	EIOPC meeting
28 November	Joint meeting of EIOPA Insurance & Reinsurance Stakeholder Group, EIOPA Occupational Pensions Stakeholder Group and EIOPA Board of Supervisors, Frankfurt
29–30 November	EIOPA Board of Supervisors meeting, Frankfurt
Mid-December	End of Omnibus II technical assessment on the long term guarantee package (subject to change)
December	End of IORP II QIS
2013	
1 January	Start of Irish presidency
January	Preliminary results IORP II QIS
31 March	Omnibus II technical assessment long term guarantee package: final report (subject to change)
31 March	IORP II QIS: final report
Summer (June–July)	Proposal IORP II
1 July	Start of Lithuanian presidency
2014	
1 January	Application date SII (according to the recently adopted "Quick fix" directive)



## colophon

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It will be released as e-mail newsletter, as well as in print. The Editorial Board welcomes comments and reactions on this edition under [contact@the-european-actuary.org](mailto:contact@the-european-actuary.org). Please also feel free to direct them to one of the members of the Editorial Board.

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