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Governance under Solvency II

a description of the regulatory approach
and an introduction to a governance system checklist
for the use of small insurance undertakings

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Abstract

In the early stages of their internal Solvency II projects many European insurance undertakings chose to focus on the revised capital adequacy requirements. More recently, however, insurers have identified the governance requirements as a major challenge. Small insurers in particular may face difficulties of limited financial resources and a shortage of internal expertise required to prepare for the new Solvency II requirements.

This paper discusses the major elements of an effective governance system as defined by Solvency II and the challenges faced by small insurers in implementing these new requirements. It also describes, in section 4, a governance system checklist currently being developed by the University of Applied Sciences bfi Vienna to aid smaller companies in their implementation of the governance system requirements.

1 Solvency II¹

1.1 A risk-based approach

The Solvency II Directive, adopted by the Council of the European Union and the European Parliament in November 2009, is currently planned to come into force on 1 January 2014. The directive not only establishes a revised set of capital adequacy rules for insurance and reinsurance undertakings but also specifies requirements for governance and public disclosure. The main aims of Solvency II are to provide greater protection for policyholders against failure of insurance and reinsurance undertakings and to ensure greater consistency in supervisory requirements across the European Economic Area (EEA²).

The risk-based capital adequacy rules under Solvency II are stronger and more comprehensive than the factor-based solvency rules currently in force. Under the new rules, the minimum level of capital to be held by an insurance undertaking³ is determined on the basis of the undertaking's risk profile and the way in which its risks are managed.

Solvency II recognises and stresses that reducing the risk of insurer failure requires much more than holding a minimum amount of capital. Financial crises in individual insurers are generally not only the result of holding inadequate capital. They also stem from ineffective or misaligned strategies and activities in the undertaking, for instance, with regard to risk management, investment, pricing, reserving or business growth. Holding adequate capital is ultimately just a cushion against losses arising from poor management of the business (see Rief/Bender 2011 and FMA - Österreichische Finanzmarktaufsicht 2012: 57). Therefore, in addition to the capital adequacy requirements, Solvency II specifies the requirements for an effective system of governance. For the first time, regulations require insurers to focus on and devote significant resources to the identification, measurement and proactive management of risks (see European Commission 2007: 2). This focus on the requirements for sound governance and risk management, together with the new minimum capital requirements, is intended to reduce the likelihood of undertaking failures, thereby strengthening the stability of the European insurance markets.

¹ Some passages of text describing Solvency II in this paper are based on Weindorfer 2012.

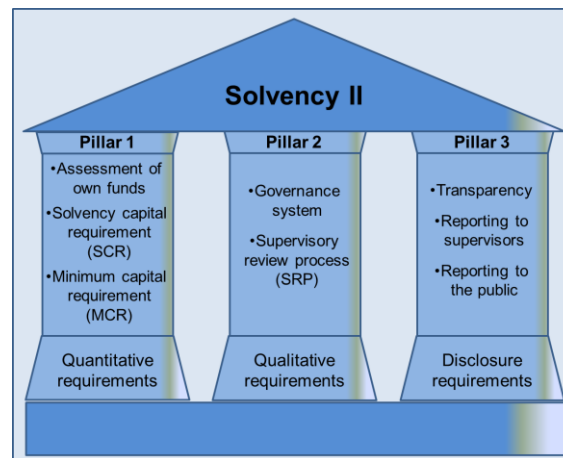
² The EEA consists of the 27 European Union Member States plus Iceland, Liechtenstein and Norway.

³ In this paper, unless stated otherwise, the terms "insurance undertaking" and "insurer" are assumed to include both insurance and reinsurance undertakings.

1.2 The three pillars

EIOPA⁴ defines three pillars as a way of grouping the Solvency II requirements.

Figure 1: The three pillars of Solvency II



Pillar 1 addresses the quantitative requirements for insurance and reinsurance undertakings. It sets the rules for determining the minimum amount of capital to be held and for assessing an undertaking's own funds that are eligible to cover the minimum capital requirement. Solvency II specifies two minimum target levels of capital. This allows for an escalating ladder of supervisory intervention (see European Parliament and the Council of the EU 2009: 6, 7, 62-64). The first trigger for supervisory intervention is the solvency capital requirement (SCR). Should an insurance undertaking fail to demonstrate that it holds enough eligible own funds to cover the SCR, the supervisory authority will require the undertaking to take the steps necessary to comply with the SCR within six months. The second capital requirement is that an insurance undertaking holds enough eligible basic own funds to cover its minimum capital requirement (MCR), which is lower than the SCR⁵. Failure to comply with the MCR will result in more serious intervention by supervisory authorities, including possible withdrawal of the authorisation to pursue insurance activities.

Pillar 2 deals with the qualitative requirements for the effective risk-oriented management of an insurance undertaking and the approach to supervisory review:

- Internal governance: Insurers must have in place an effective internal control system and an effective risk management system. They must also provide for the necessary key functions to be performed (including at least risk management, compliance, internal audit and actuarial functions). The directive further requires undertakings to define rules for outsourcing any activities or functions and to ensure that their management is "fit and proper". The governance requirements are described in more detail in section 2.

⁴ The European Insurance and Occupational Pensions Authority (EIOPA), based in Frankfurt am Main, Germany, is part of the European System of Financial Supervision. It is an independent advisory body for the European Parliament and the Council of the European Union. EIOPA's core responsibilities are to support the stability of the financial system, transparency of markets and financial products as well as the protection of insurance policyholders, pension scheme members and beneficiaries. (EIOPA's website: <https://eiopa.europa.eu/>.)

⁵ For details regarding the definitions and assessment of the elements of the capital adequacy requirements see European Parliament and the Council of the EU 2009: 48 (for definitions of own funds and basic own funds) and European Parliament and the Council of the EU 2009: 51–60 and European Commission 2010 (for the approach to be used for assessing the SCR and the MCR).

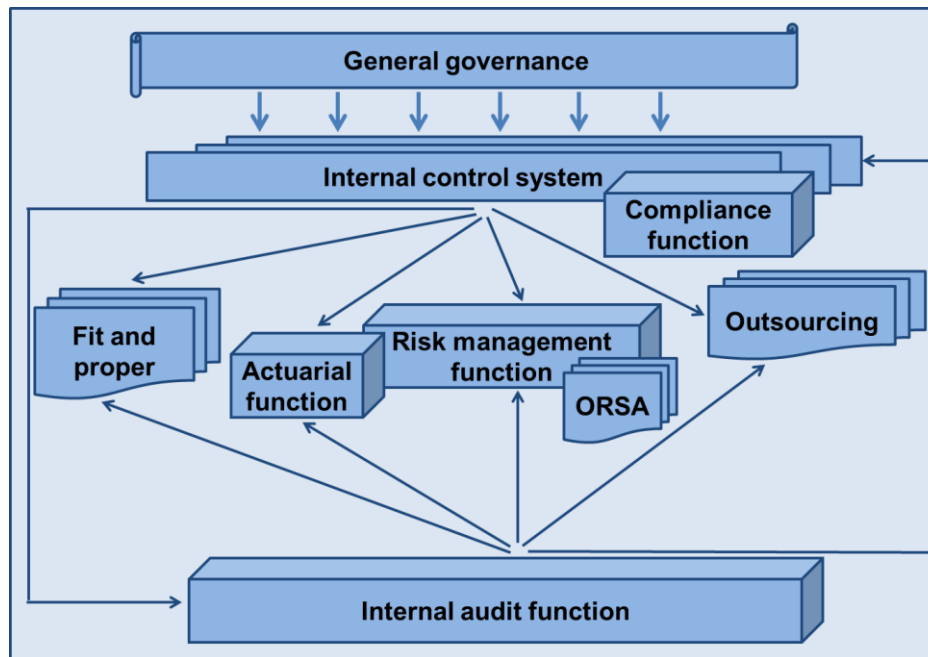
- Supervisory review process (SRP): Supervisory authorities are required to review and evaluate undertakings' compliance with the quantitative and qualitative requirements of Solvency II. The directive describes the powers and duties of the supervisors with regard to these functions.

Finally, Pillar 3 covers the requirements for supervisory reporting and public disclosure. Transparency with regard to solvency is achieved through insurance undertakings regularly submitting two sets of reports to the supervisory authorities. The Solvency and Financial Condition Report (SFCR) discloses to the public and supervisory authorities information required to analyse an insurance undertaking's solvency and financial condition. The Report to Supervisors (RTS), seen only by the supervisory authorities, aids the supervisors in carrying out the SRP and forms the basis for dialogue between the undertaking and the supervisor (see CEIOPS 2009b: 17, 19).

2 The elements of an effective governance system

In December 2002 the London Working Group, under the chairmanship of Paul Sharma, submitted a report based on case studies of 21 insurance undertakings that had either breached their solvency requirement or had come close to doing so. This "Sharma Report" highlighted that the supervisory regime should focus not only on the financial resilience of insurance undertakings but also on their governance and risk management systems (see Sharma 2002: 70-73). This view is reflected in the Solvency II Directive, which states that "Some risks may only be properly addressed through governance requirements rather than through the quantitative requirements An effective system of governance is therefore essential for the adequate management of the insurance undertaking and for the regulatory system." The directive goes on to specify the minimum requirements for a governance system to provide for sound and prudent management of an insurance undertaking (see European Parliament and the Council of the EU 2009: 4, 33-36). The Solvency II framework for governance can be represented as in Figure 2.

Figure 2: The Governance System⁶



The best-practice requirements for governance, as specified in the directive, cover general governance issues, the performance of four necessary key functions and the establishment and maintenance of two organisational systems. In an effectively managed insurance undertaking these organisational systems, key functions and general governance activities will be well integrated into all levels of the organisation.

2.1 Internal control and risk management systems

Solvency II requires that an insurance undertaking has in place effective systems for internal control and risk management (see European Parliament and the Council of the EU 2009: 34-35).

2.1.1 Internal control system

The internal control system covers at least administrative and accounting procedures, an internal control framework, appropriate reporting arrangements at all levels of the undertaking and a compliance function. The undertaking must have an internal control policy that clearly sets out the relevant responsibilities, goals, processes and reporting procedures to be applied, all of which must support the overall business strategy.

Apart from the compliance responsibilities (see section 2.2.1), the internal control system must ensure that operations are effective and efficient in supporting the undertaking's objectives, and that information used in the undertaking, both financial and non-financial, is available and reliable (see CEIOPS 2009c: 50).

⁶ Adapted and translated from FMA - Österreichische Finanzmarktaufsicht 2012: 58

2.1.2 Risk management system

The risk-management system should cover at least the following areas:

- a) Underwriting and reserving.
- b) Asset-liability management (ALM).
- c) Investment, in particular derivatives and similar commitments.
- d) Liquidity and concentration risk management.
- e) Operational risk management.
- f) Reinsurance and other risk-mitigation techniques.

The directive specifies that the risk management system must be both effective and well integrated into the organisational structure and in the decision-making processes of the insurance undertaking.

The effectiveness requirements encompass at least the following elements (see CEIOPS 2009c: 21-22):

- a) A well-documented risk management strategy that clearly defines the risk management objectives, key risk management principles, general risk appetite and assignment of risk management responsibilities across all the activities of the undertaking. This policy must be consistent with the undertaking's overall business strategy.
- b) Written policies that support the risk management strategy. These policies must define and categorise the material risks faced by the undertaking as well as the acceptable risk limits, for each risk type. The policies must be implemented in the undertaking.
- c) Appropriate processes and procedures to identify, assess, manage, monitor and report the risks to which the undertaking is, or might be, exposed.
- d) Appropriate reporting procedures and feedback loops that ensure that information regarding current and future risks is actively monitored and managed.
- e) A suitable own-risk-and-solvency-assessment (ORSA) process which considers at least the following:
 - i. The insurance undertaking's overall solvency needs, taking into account its specific risk profile, approved risk tolerance limits and business strategy.
 - ii. The on-going compliance with the SCR and MCR requirements and the requirements regarding technical provisions.
 - iii. The significance with which the undertaking's risk profile deviates from the assumptions underlying its own calculation of the SCR (using the standard approach or partial or full internal models).

The undertaking's ORSA process should fit into its organisational structure and risk management system. The techniques for assessing the undertaking's overall solvency needs must be appropriate and adequate while taking into account the nature, scale and complexity of the risks inherent to the business, i.e. the principle of proportionality must be applied (see EIOPA 2011a: 8).

2.2 Key functions

Solvency II requires every insurance undertaking to establish and maintain adequate risk management, compliance, internal audit and actuarial functions (see European Parliament and the Council of the EU 2009: 34-36). Insurers must be able to demonstrate that they have the expertise to perform these key functions, either internally or through outsourcing. The four functions must have an appropriate standing in the undertaking's organisational structure and the personnel responsible for their performance must have direct access to the management body (see CEIOPS 2009c: 15).

In the context of a system of governance, a 'function' is an administrative capacity to undertake particular tasks. An insurer has the freedom to decide how to organise any function, unless otherwise specified in the directive (see European Parliament and the Council of the EU 2009: 4). This means that it is not necessary that the persons responsible for key functions are employed in specific departments.

2.2.1 Compliance function

As mentioned in section 2.1.1, the internal control system must include a compliance function. This key function must ensure that the undertaking remains compliant with applicable laws and regulations. The undertaking's compliance risk exposure must be identified, assessed, monitored and reported on. In fulfilling these responsibilities the compliance function must track changes in the environment that could affect the undertaking's compliance risk and assess the possible impact of any changes in the legal environment on the undertaking's operations. The compliance function must also report to the management board regarding the undertaking's compliance or non-compliance with existing and potential future laws and regulations.

The responsibilities of the compliance function, along with its competencies and reporting duties, must be set out in the internal control policy or another formal document (e.g. a compliance policy). The intended compliance activities must be set out in a compliance plan that ensures that all relevant areas of the undertaking are appropriately covered, taking into account their susceptibility to compliance risk.

2.2.2 Actuarial function

The main responsibilities of the actuarial function (see CEIOPS 2009c: 60-63) are co-ordinating the calculation of technical provisions and the assessment of insurance premiums charged.

With regard to the calculation of technical provisions, the actuarial function is responsible for:

- assessing the appropriateness of methodologies, assumptions and underlying models used,
- assessing the sufficiency and quality of the data used,
- assessing whether IT systems provide adequate support for the actuarial and statistical procedures used, and
- comparing the calculated best estimates with actual experience.

The actuarial function must ultimately inform the management or supervisory body of the reliability and adequacy of the calculation of technical provisions.

Regarding the assessment of insurance premiums the actuarial function must consider:

- the sufficiency of the premiums to cover claims (including the impact of embedded options and guarantees) and expenses, and
- the appropriateness of assumptions regarding inflation, legal risk, potential changes of mix, anti-selection and the adequacy of *bonus-malus* system(s) implemented in specific line(s) of business.

The actuarial function must also express an opinion on:

- the overall underwriting policy including the whole claims management cycle (receipt, assessment, processing and settlement, complaints and dispute settlement and reinsurance recoverables), and
- the adequacy of reinsurance arrangements.

In order to be effective, the persons carrying out the actuarial function must have the appropriate knowledge and experience. They must also have access to the appropriate resources and information systems that provide all necessary information relevant for the performance of their duties.

2.2.3 Risk management function

The risk management function (see CEIOPS 2009c: 45) supports the management body and other management in the undertaking in managing and monitoring the risk management system.

The tasks of the risk management function include:

- Identifying and assessing all existing and emerging risks to which the entire undertaking is exposed.
- Reporting on risk exposures and advising the management body on risk management issues connected with strategic activities such as corporate strategy, mergers and acquisitions, and major projects and investments.
- Managing internal models (designing, implementing and integrating, testing, validating, documenting and assessing performance), if the insurance undertaking makes use of partial or full internal models.

It is important that the risk management function is well embedded in the organisational structure and that the reporting lines allow the function to operate free from the influence of other functions and from the management body.

2.2.4 Internal audit function

The internal audit function is responsible for assessing the adequacy and effectiveness of the internal control system and other elements of the system of governance. Independence from the influence of any operational functions is an important requirement for this function. The internal audit function must be able to take its own initiative on which elements of the undertaking are to be assessed and be able to report its findings and opinions objectively to the management body. The persons carrying out the function must not be responsible for any other function in the undertaking in order to facilitate objectivity and avoid any conflicts of interest.

2.3 General governance

The general requirements for an effective governance system include the elements described in the following sections.

2.3.1 The principle of proportionality

One of the aims of the Solvency II requirements is that they should not be too burdensome for small and medium-sized insurers or for insurers that specialise in providing specific types of insurance or services to specific customer segments. Solvency II aims to achieve this by requiring that the system of governance must be proportionate to the nature, scale and complexity of the operations of the insurance undertaking (see European Parliament and the Council of the EU 2009: 33). This principle applies in general to all governance requirements unless stated otherwise.

2.3.2 Responsibilities and reporting lines

Insurance undertakings must have written policies on risk management, internal control, internal audit and, where relevant, outsourcing. These policies must clearly set out the relevant responsibilities, goals, processes and reporting procedures to be applied, all of which must be consistent with the undertaking's overall business strategy (see CEIOPS 2009c: 15).

The undertaking's system of governance must establish, implement and maintain effective cooperation, internal reporting and communication of information at all relevant levels within the undertaking. Effective communication is aided by introducing clear reporting lines in the undertaking.

2.3.3 The 'fit and proper' requirements

All key function holders and all persons who effectively run the undertaking must be fit and proper (see CEIOPS 2009c: 17-19). Key functions include at least the compliance, actuarial, risk management and internal audit functions but, in this context, should also cover those functions considered important or critical in the system of governance.

The criteria used to assess a person's fitness criteria should cover his or her management competence and technical competence (related to the requirements for the specific area of business activities). The assessment of both of these competences must be based on the person's previous experience, knowledge and professional qualifications. The fitness assessment of a person should consider the nature, scale and complexity of the business.

When assessing a person's propriety, the undertaking must consider whether the person is of good reputation and integrity. This requires, for example, an assessment of whether the person has a criminal record (honesty) or has ever been declared bankrupt (financial soundness). The propriety requirements must always be assessed at the same adequate level, i.e. the proportionality principle does not apply when assessing a person's propriety.

2.3.4 Remuneration

The undertaking must have a written overall remuneration policy which supports its long-term entity-wide interests and performance. The remuneration policy must apply to the entire undertaking and must contain specific arrangements for the roles of the management body, key functions, senior management and any personnel performing duties that involve significant risk-taking (see CEIOPS 2009a: 14).

Remuneration schemes which include both fixed and variable components must be appropriately balanced so that personnel are not overly dependent on the variable components. Such schemes should allow the undertaking to operate a fully flexible bonus policy. The variable component of remuneration must be based on assessments of the individual's performance as well as the collective performance of, for example, the business area and the overall results of the undertaking or group. When assessing an individual's performance, both financial and non-financial performance must be considered. Payments of significant bonuses, regardless of the form of the payment (e.g. cash, stock-options, shares) must allow for a deferred component based on the nature and time horizon of the undertaking's business.

2.3.5 The prudent person principle

Solvency II does not explicitly limit the investment decisions of insurance undertakings. The rules do not specify a list of allowable asset types or any eligibility limits. Insurance undertakings must manage their own investment and capital management activities through documented and implemented rules and processes which are consistent with the prudent person principle (see FMA 2012: 63).

The important elements of the prudent person principle are (see European Parliament and the Council of the EU 2009: 61):

- Insurance undertakings invest only in assets for which they can properly identify, measure, monitor, manage, control and report on the associated risks.
- Insurance undertakings invest only in assets for which they can appropriately take into account the associated risks when assessing their overall solvency needs.
- Insurance undertakings invest only in assets for which they can ensure the security, quality, liquidity and profitability of the portfolio as a whole (particularly for those assets covering the MCR and SCR).
- For the purpose of covering technical provisions insurance undertakings invest only in assets which are appropriate to the nature and duration of the insurance liabilities. These assets must be invested in the best interests of all policy holders and beneficiaries taking into account any disclosed policy objectives.
- Where conflicts of interest exist, investments must be made in the best interests of policy holders and beneficiaries.

2.3.6 Outsourcing

When an insurance undertaking outsources any functions, processes or activities to a service provider, the undertaking remains fully responsible for adhering to the Solvency II requirements (see European Parliament

and the Council of the EU 2009: 36), even if the service provider is an entity within the group or another regulated entity. Insurance undertakings must ensure that outsourcing does not result in any of the following:

- Materially impairing the quality of the system of governance of the undertaking.
- Unduly increasing the operational risk of the undertaking.
- Impairing the ability of the supervisory authorities to monitor the compliance of the undertaking with its obligations.
- Undermining continuous and satisfactory service to policy holders. An insurer must ensure that its service providers have the financial and operational capacity to deliver the required functions or activities satisfactorily and that no potential conflicts of interest exist between it and the providers.

Any insurance undertaking which outsources any activities, or plans to do so, must have a written outsourcing policy which clearly describes the relevant responsibilities, goals and processes to be applied. The policy must also address the impact of outsourcing on the business and the reporting and monitoring arrangements that must be implemented.

The insurer must also ensure that its service providers have authorisation by law to provide the relevant services. In particular, outsourcing must not represent a breach of any data protection regulations. The confidentiality of information related to the undertaking's clients must meet the same requirements as those applying to the undertaking itself.

3 A challenge for small insurance undertakings

A side effect of a major overhaul of a regulatory regime is the expenditure required to prepare for and implement the new rules. This issue affects particularly smaller undertakings. Larger insurers enjoy greater economies of scale, greater scope to diversify their business and, generally, more resources to meet regulatory requirements. Smaller undertakings often have small budgets allocated to their Solvency II implementation projects and lack the internal knowledge required to prepare for the new requirements. These insurers may need to buy external expertise to obtain the necessary knowledge and experience (see Simon Gallagher quoted in POSTonline.co.uk, 27.09.2007).

One challenge for insurance undertakings with more limited resources and a shortage of accurate data is the limited capability to develop appropriate internal models for calculating the SCR. In most cases building these models requires a large investment of resources. This problem may be particularly acute for small companies, depending on their complexity (see Gillespie/Clark/Verheugen/Wells 2008: 1). Not being able to develop appropriate internal models could mean an insurer has to hold more capital. This has associated costs which place an additional burden on limited financial resources.

The use of the proportionality principle is intended to mitigate the burden for smaller insurers (see European Commission 2007: 9). However, the results of QIS5 (the fifth quantitative impact study conducted during the EU Solvency II project) show that under Solvency II small insurance groups are expected to experience a relatively greater negative impact on their solvency surpluses than large groups.

Table 1: Solvency surplus for EEA insurance groups under Solvency I and QIS5⁷

Solvency surplus (€bn)	Solvency 1	QIS5	% change under QIS5	Sample size
Assuming the standard formula and the accounting consolidation method were used.				
Large	109,4	54,6	-50%	17
Medium	26,7	15,5	-42%	21
Small	64,2	43,6	-32%	108
All	200,3	113,7	-43%	146
Assuming internal models were approved and local rules under the deduction and aggregation for third countries were used.				
Large	109,4	129,5	18%	17
Medium	26,7	18,3	-31%	21
Small	64,3	49,5	-23%	109
All	200,4	197,4	-1%	147

Table 1 demonstrates that under the QIS5 approach insurance groups in the EEA reported reduced solvency margins when using the standard SCR formula and the accounting consolidation method. Large groups experienced the greatest negative impact on their solvency surplus. However, through the use of internal models (which had yet to be approved at the time of reporting) and the application of local rules for non-EEA entities, large insurers were able to reverse the effect and increase their surplus by 18%. Small and medium insurers demonstrated reductions in their solvency surpluses of 23% and 31% respectively. This squeeze on free capital may force some small and medium insurers to limit their new volumes, relocate their head offices outside the EEA or even to close down.

The EIOPA report on the QIS5 results shows that 15% of participating EU insurers failed to meet the SCR requirement, with a further 8% reporting a solvency buffer of less than 20% of the SCR. The report does not mention explicitly how small insurers fared. It does state that the undertakings that had a solvency position significantly lower than the SCR (about 10% of undertakings in most countries) includes a number of small undertakings, but then softens the message by stating this is unsurprising given the high proportion of small undertakings among the QIS5 participants (see EIOPA 2011b: 26).

The EIOPA QIS5 report also mentions the following issues experienced by smaller insurance undertakings in determining and reporting their solvency positions:

- Difficulties in valuing assets and liabilities where the local rules differ significantly from IFRS (see EIOPA 2011b: 8).
- Concentration risk (in the market risk module) was more material in the market risk SCR for small and medium undertakings (see *ibid.*: 11, 75-76).
- Failure to calculate the adjustment for the loss-absorbency of technical provisions and deferred taxes using the single equivalent scenario (see *ibid.*: 68).
- Difficulties in assessing the costs of collisions specified in the marine shock scenario (see *ibid.*: 91).

⁷ Adapted from EIOPA Report on the fifth Quantitative Impact Study (QIS5) for Solvency II (2011): 136

- Total insured value (TIV) required for the catastrophe shock scenarios was not available for all CRESTA⁸ zones, especially for small undertakings. In some cases the TIV was available only in total and not by CRESTA zone as required (see *ibid.*: 93).
- Inability to generate statistical data required for developing undertaking-specific parameters, which are a potential approach for reducing capital requirements (see *ibid.*: 95).
- For those undertakings that used internal models, smaller insurers appear to have benefitted less than larger insurers. The medians for the ratio *internal model SCR/standard formula SCR* were 93% and 101% for medium to large and small undertakings respectively (see *ibid.*: 114).
- Smaller groups benefited less than large groups from the diversification effect when aggregating the SCR across all entities (see *ibid.*: 138).
- While some countries identified no trends in the preparedness of undertakings, others did find that larger undertakings were generally better prepared than small undertakings. Smaller undertakings were identified as being particularly reliant on external consultants for actuarial and risk management expertise (see *ibid.*: 143).

It is clear from QIS5 that small insurers face challenges that limit their ability to manage their capital requirements. This could place them at a competitive disadvantage to their larger counterparts. However, it is not only the quantitative requirements that are a challenge for smaller insurers.

Many European insurance undertakings chose, in their internal Solvency II projects, to focus first on the Pillar 1 rules dealing with the assessment of their SCR, MCR and eligible own funds. In 2008 one analysis report on the Solvency II framework stated that “for Solvency II most of the progress so far has been made in the area of Pillar I, whereas next steps can be achieved in Pillars II and III” (Doff 2008: 196). In 2010 one author observed that “most attention on Solvency II so far has focused upon the capital requirements” and cautioned that “risk managers ignore the so-called softer corporate governance requirements of the Directive at their peril” (Groves 2010). A French study of the state of progress of Solvency II projects conducted in mid-2011 among insurers and other financial market participants revealed that 70% of the experts surveyed cited organisational and cultural issues, in line with the Pillar 2 requirements, as the main challenges they faced (see Optimind 2011).

With respect to governance structures, smaller insurers often have more catching up to do than their larger counterparts. Larger organisations are generally already familiar with governance issues and have already implemented some of the requirements voluntarily. The result of this situation is that smaller insurers face a potential competitive disadvantage (see *Versicherungswirtschaft* 01.09.2011).

Although the Solvency II challenges for small insurers observed thus far are largely related to the required calculation approaches it can be expected that the governance and reporting requirements will also represent resource challenges for them.

⁸ Catastrophe Risk Evaluating and Standardizing Target Accumulations. The CRESTA organisation was established by the insurance and reinsurance industry in 1977 as an independent body for the technical management of natural hazard coverage.

4 A governance system checklist

Many insurers are probably well underway in their preparations for implementing the governance requirements. However, it is likely that there are a number of insurers, particularly smaller undertakings, which face the challenge of identifying what their main areas of focus should be for setting up an effective governance system and preparing for the SRP. It is with such undertakings in mind that the University of Applied Sciences bfi Vienna undertook to develop a checklist of governance requirements.

4.1 Aims of the checklist

The governance system checklist is a tool that can be used by smaller undertakings as an aid, for the management body and general management, in managing the implementation of their internal governance system. The ultimate aims of the checklist are:

- a) To provide an exhaustive list of all the governance requirements defined in the various source documents (the directive, the level 2 implementing measures and consultation papers).
- b) To be structured in such a way as to enable the user to quickly find the items related to specific requirements or groups of related requirements.
- c) To translate the requirements defined in the source documents into concrete tasks to be performed or goals to be achieved.
- d) To aid in the evaluation of the undertaking's current status with respect to the implementation of an effective governance system.
- e) To aid in the planning of the undertaking's implementation of an effective governance system.
- f) To aid in developing the undertaking's governance capabilities.

The current version of checklist meets the first two of the above aims.

4.2 The process of creating the checklist

The first step in producing an exhaustive list of governance requirements was to compile the "reading list" of source documents. This included the Solvency II Directive and other relevant documents produced by EIOPA and its predecessor, CEIOPS⁹, during the Solvency II project (level 2 implementing measures and consultation papers). The website of the UK's Financial Services Authority was also referenced.

Discussions were held with external partners (risk experts of insurance undertakings and the regulator) to share ideas on the potential structure of a checklist tool and the grouping of individual requirements and general focus areas in an effective governance system.

The compilation of the "raw" requirements from the source literature was performed by a group of students at the University of Applied Sciences bfi Vienna. The exercise was part of the project work required in the course of their bachelor's program. The students were set the following goals:

⁹ Committee of European Insurers and Occupational Pensions Supervisors

- a) A list of at least 500 governance requirements (in a spread sheet format).
- b) The relevant “system” to be specified for at least 50% of the requirements.
- c) The relevant “key function” to be specified for at least 80% of the requirements.
- d) The relevant “activity” to be specified for at least 70% of the requirements.
- e) The relevant “department” to be specified for at least 80% of the requirements.
- f) The relevant “source document” to be specified for 100% of the requirements.

The document was compiled in English. The options for the classification of system, key function, department and activity were predefined for the students.

The above targets were all achieved. The students compiled a list of 645 governance requirements which was refined by the author. Identified duplications of content or meaning were deleted. Slight changes were made to wordings to simplify the meaning of the requirements or to combine the meanings of similar requirements from different source documents into one requirement. Finally, some requirements were added to the list; these were either not considered in the original selection by the students or they were obtained from source documents not included in their reading list.

The checklist currently includes 351 requirements. A few of these are clearly aimed at the supervisory authorities rather than at the insurance undertaking. They were, however, kept in the checklist as they contain obvious implications for efforts required of the undertakings.

4.3 The current version of the checklist

4.3.1 Classification system

The governance system checklist currently includes 351 governance requirements for insurance undertakings. Each of these requirements has been classified by:

- System – consistent with the two internal systems required for effective governance, as specified under Solvency II, i.e. the internal control system and risk management system.
- Key function – consistent with the four functions required to be covered as a minimum under Solvency II, i.e. the compliance, actuarial, risk management and internal audit functions. For the checklist, ‘function’ is defined as the responsibility for ensuring that governance requirements are fulfilled and sounding the alarm if this is not the case. The function does not necessarily carry out the activities to fulfil the governance requirement. For example, the person(s) responsible for the actuarial function must check that the calculated technical provisions are sufficient (i.e. the methodologies, assumptions and data used are appropriate) and highlight to the management board if this is not the case. The actual calculation of the technical provisions is performed by persons (probably employed in the undertaking’s actuarial department) who need not necessarily report to the actuarial function.
- Activity – activities that are generally performed in an insurance undertaking.
- Department – departments that are generally found in an insurance undertaking. These are the operational areas in the undertaking that do the actual work of fulfilling the requirement.

The options for each of these classification groups appear in Appendix B.

Over and above the classifications described above, the author identified 24 topics or focus areas which served as a further grouping method of the list of requirements. The topic categories and the numbers of requirements falling into each appear in Appendix C.

4.3.2 Format and information included

The checklist is in a Microsoft Excel format and contains the following worksheets:

- a) General – a list of the classification options for system, key function, activity and department (similar to that in Appendix B) as well as a key for the abbreviations used in the worksheet.
- b) Sources – a list of the source documents from which the checklist is derived (see Appendix A). The information in the list covers the author(s), the document title, the publication date, the web address and the designation of the source document in the remainder of the checklist workbook.
- c) Navigation – a list of the groupings of the requirements classified by system, key function and topic (see Appendix C). The various components of the list are connected by hyperlinks to the relevant sections of the Excel workbook to allow for quick navigation.
- d) Requirements-ICCo – the checklist of the requirements that are part of the internal control system and the compliance function.
- e) Requirements-ICIA – the checklist of the requirements that are part of the internal control system and the internal audit function.
- f) Requirements-ICRM – the checklist of the requirements that are part of the internal control system and the risk management function.
- g) Requirements-RMRM – the checklist of the requirements that are part of the risk management system and the risk management function.
- h) Requirements-RMAc – the checklist of the requirements that are part of the risk management system and the actuarial function.

No governance requirements related to the internal audit and compliance functions were identified in the checklist as being part of the risk management system. Similarly no requirements of the actuarial function were considered to be part of the internal control system.

The checklist item for requirement number RMAc40 is shown in Figure 3 as an example of the format of the checklist in each of the sheets d) to h) mentioned above. The requirement is a reserving requirement (the topic appears in the orange header row) and falls into the risk management system and the actuarial function. The relevant activity is reserving, which would typically be carried out in the actuarial department of an insurance undertaking. The requirement is found in article 77 (2) of the Solvency II Directive.

Figure 3: Example of a governance requirement in the checklist

ID	Governance requirement	System	Key function	Activity	Department	Source document	Article/Page
RMAc	Reserving	RM	Ac				
RMAc40	The calculation of the best estimate shall be based upon up-to-date and credible information and realistic assumptions and be performed using adequate, applicable and relevant Actuarial and statistical methods.	RM	Ac	Reserving	Actuarial	Solvency II Directive	Article 77 (2)

So each requirement in the checklist contains the following information:

- ID. A number which uniquely identifies the relevant governance requirement. The ID number consists of three components. The first two characters specify the system into which the requirement is classified (RM for risk management) and the following two characters specify the key function (e.g. Ac for actuarial). The remaining characters are numeric and simply indicate the order in which the requirements appear in the checklist document.
- Governance requirement. The governance requirement as it appears in the source document (sometimes with slight amendments).
- System. Identifies the relevant system for the governance requirement.
- Key function. Identifies the relevant key function for the governance requirement.
- Activity. Identifies the relevant activity for the governance requirement.
- Department. Identifies the department in an insurance undertaking which might typically carry out the work required for the governance requirement.
- Source document. Identifies the relevant source document from which the governance requirement is taken.
- Article/Page. Identifies the article or page number in the source document from which the governance requirement is taken. This allows the user to refer back to the original text in cases where the context of the listed requirement needs to be checked.

The navigation sheet serves as a guide to where in the document the requirements for the various Solvency II topics can be found. The structure of the document should allow the user to identify where in the checklist he or she will find the requirements related to the activity that he or she is interested in.

4.4 Further development of the checklist

In its current form the governance checklist provides a reference document for identifying the governance requirements defined in various Solvency II documents. The list is structured to enable the user to quickly find requirements related to the topic of interest. The aims of a checklist for smaller undertakings should, however, include more tangible benefits. The scope for further development of the current version of the governance checklist is described in the following sections.

4.4.1 Identifying specific tasks

The formulation of the requirements in the Solvency II documents is often expressed in general terms. Undertakings required to implement the requirements may need guidance on what concrete tasks must be performed in order to fulfil the specified requirement. For example, one of the requirements of Article 77 (2) of the directive is that “The calculation of the best estimate shall be based upon up-to-date and credible information and realistic assumptions and be performed using adequate, applicable and relevant actuarial and statistical methods.” This requirement could be translated into more specific terms. For example, for reserving for non-life outstanding reported claims, we could specify, among others, the following tasks or goals to be fulfilled:

- The undertaking has non-life claims data, for each line of business, for claims inception, claims reporting and claim settlement, by number and € amount, on a monthly basis for at least the last 5 years.
- The undertaking has data on allocated claims handling expenses on a monthly basis for at least the last 5 years and uses this data for estimating inflation of claims handling expenses.
- The undertaking has documented its process for calculating provisions for non-life claims including descriptions of excluded data and special adjustments made.
- etc.

The specific actions, tasks and outputs that are specified must reflect best practice. They must also reflect an expectation of what the supervisory authority will require of the undertaking to demonstrate compliance with Article 77 (2).

This is potentially the most challenging stage of developing the checklist and will require consultation and/or expert interviews with representatives of the insurance industry, consultants and/or supervisory authorities.

4.4.2 Evaluation, planning and reporting tool

It would be fairly easy to build into the checklist columns in which the user can capture the status of the relevant requirement with a simple (Y)es/(N)o logic. The status of the undertaking for each requirement would be entered:

- as at the beginning of the reporting period (BOP, e.g. 1.1.2012),
- as planned, at BOP, for the end of the reporting period (EOP, e.g. 31.12.2012), and then
- as achieved by EOP (once that date is reached)

The Y/N statuses can be enhanced by a colour code (Green/Red) to allow for an easy visual identification of the current status and the plans.

Reporting on the three different time periods allows the undertaking’s management to

- report on the current status and identify the gaps in the governance system,
- report on planned EOP status vs. BOP status (planned improvement),

- report on achieved EOP status vs. BOP status (achieved improvement),
- report on achieved EOP status vs. planned EOP status (actual vs. plan).

A hypothetical example of a summary report for operational risk management is shown in Figure 4.

Figure 4: Example of a report on existing status, planned status and achieved status*

RMRM	Operational risk management				
ID	Governance requirement	Specific task	Current status (beginning of period)	Planned status (end of period)	Achieved status (end of period)
RMRM72	The undertaking shall have a well-documented assessment and management system for operational risk, with clear responsibilities assigned.	Task 1	Y	Y	Y
		Task 2	Y	Y	N
RMRM73	The administrative, management or supervisory body shall be aware of the major aspects of the undertaking's operational risks as a distinct risk category that shall be managed, and shall approve, oversee implementation and regularly review the undertaking's operational Risk Management framework.	Task 1	Y	N	N
		Task 2	Y	N	Y
		Task 3	N	N	N
RMRM74	The undertaking shall implement an effective process to regularly identify, document and monitor exposure to operational risk and track relevant operational risk data, including near misses.	Task 1	N	N	Y
RMRM75	The operational Risk Management framework needs to be closely integrated into the Risk Management processes of the undertaking. Its output must be an integral part of the process of monitoring and controlling the undertaking's operational risk profile.	Task 1	N	Y	N
		Task 2	N	Y	Y

(* The content of the "Governance requirement" column is unimportant in this example. The purpose of the figure is to demonstrate the visual information regarding the status of the undertaking.)

The format of this report example allows the reader to quickly identify the following regarding the operational risk management element of the governance system:

- As at BOP the undertaking had fulfilled one out of four governance requirements. Four of eight required tasks had been completed.
- The undertaking had planned to achieve four out of eight tasks and fulfilling two of the four requirements by EOP. Interestingly, tasks 1 and 2 of requirement RMRM73 were planned to deteriorate – perhaps this was due to an expected change in the environment? Requirement RMRM75 was planned to be fully fulfilled by EOP while no progress was expected to be made on requirement RMRM74.
- As at EOP the undertaking's status was one out of four requirements fulfilled and four of eight tasks completed. For RMRM72, task 2 appears to have had some unexpected problems during the period. For RMRM73, the expected problems for task 2 appear to have been resolved. For RMRM74 there was unplanned improvement. For RMRM75, the plan was not achieved for task 1.

The report could be enhanced by adding numeric measurements, for example, one out of four requirements completed might be represented as 25% fulfilment for this element.

4.4.3 Development planning tool

For undertakings taking a long-term view on the implementation of best practice for a governance system, or groups with subsidiaries with varying capabilities and levels of readiness, it is useful to plan how the current capabilities should develop over time. An undertaking might plan, for example, that by the end of the next reporting period it will achieve a level of readiness which will satisfy the minimum requirements of the supervisory authority, and have the aim of developing its capabilities to meet more stringent internal goals in subsequent reporting periods.

As an example we consider the requirement that the “calculation of the best estimate shall be based upon up-to-date and credible information and realistic assumptions and be performed using adequate, applicable and relevant Actuarial and statistical methods” (requirement RMAc40 in the checklist).

Figure 5: Example of development of internal governance capabilities

ID	Governance requirement	Specific task Beginner	Specific task Intermediate	Specific task Expert
RMAc	Reserving			
RMAc40	The calculation of the best estimate shall be based upon up-to-date and credible information and realistic assumptions and be performed using adequate, applicable and relevant Actuarial and statistical methods.	... deterministic approach... at least 5 years of data deterministic approach... at least 8 years of data stochastic approach ...

The management of an insurance group may require for the least prepared subsidiaries (or those with the shortest history of data) that a deterministic approach with at least five years of data must be used for calculating the best estimate. The subsidiaries with intermediate capabilities must use at least eight years of data. The goal for all subsidiaries might be that they will eventually have the systems, data and modelling capabilities required for using a stochastic approach.

The statuses of each of the requirements would be evaluated for each development level and reported using the colour code system described in section 4.4.2. This would allow the management of the group to compare the development levels of various subsidiaries and aid in the planning for future improvements.

5 Conclusion

Solvency II presents challenges that are specific to smaller insurers that have more limited resources than their large counterparts. The new regulations are currently scheduled to come in force on 1 January 2014. Some local authorities are proceeding with the expectation that already during 2013 there will be requirements for insurance undertakings to report to supervisors and demonstrate their readiness for full Solvency II implementation (see Solvency II Wire 2012). In view of these timelines it is certainly not too soon for insurance undertakings to consider how they will implement the governance system requirements. The EU Solvency II project itself has already experienced delays, which gives hope that the doctrine of “better late than never” applies even for the implementation of regulatory requirements. It is hoped that in this context the governance checklist described in this document will, with further planned enhancements, aid

some insurers in identifying the tasks and deliverables required for implementing a governance system that is compliant with the Solvency II requirements¹⁰.

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Appendix A: The source literature referenced by the governance system checklist

Author(s)	Title	Publication date	Source	Referred to in the checklist as:
The European Parliament and the Council of the European Union	Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) (recast)	25.11.2009	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:335:0001:0155:EN:PDF	Solvency II Directive
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Appendix B: Classification of the governance requirements in the governance system checklist

System	Key Function	Activity	Department
Internal control	Compliance	Asset-liability management	All
Risk management	Internal Audit	Compliance	Actuarial
	Risk management	General governance	Asset-liability management
	Actuarial	Internal audit	Compliance
		Internal models	Human resources
		Investment management	Information technology
		Operations	Internal audit
		ORSA	Investment management
		Outsourcing	Management Board
		Personnel management	Operations
		Reinsurance	Risk management
		Reserving	Supervisory Board
		Risk management	
		Underwriting	

Appendix C: Solvency II governance topics addressed in the governance system checklist

System/Function	Topic	Number of requirements
Internal control/Compliance	General governance	23
	Internal control system	9
	Compliance function	10
	Fit and proper requirements	12
	Remuneration	11
	Outsourcing	17
		82
Internal control/Internal audit	Internal audit function	17
Internal control/Risk management	Internal control system and risk management in a group undertaking	2
Risk management /Risk management	Risk management system	16
	Risk management function	3
	Own risk and solvency assessment (ORSA)	31
	Asset-liability management	7
	Liquidity risk management	2
	Investment, including derivatives and similar commitments	10
	Concentration risk management	2
	Operational risk management	4
	Reinsurance and similar risk mitigation techniques	4
	Financial risk mitigation techniques	3
	Credit risk management	2
	Internal models	52
	Principles of Group Wide Risk Management	46
		182
Risk management/Actuarial	Actuarial function	10
	Reserving	55
	Underwriting	3
		68
		351

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