

Preparing for the New ERM and Solvency Regulatory Requirements

A White Paper from
Willis Re Analytics

Insurance solvency regulation is moving into new territory. Insurer and reinsurer Management and Boards will now be called to issue their own judgment about the adequacy of their firm's capital. This is an abrupt shift from the longstanding practice of regulators specifying the exact requirements for assessing insurer solvency. The new judgment is expected to better reflect the risks, risk management capacity, capital as well as the future plans of each insurer.

This change comes from an agreement of the international insurance regulatory community for a set of Insurance Core Principles (ICPs) in October, 2010. The new requirement for solvency is recorded in ICP 16, titled Enterprise Risk Management. ICP 16 calls for an Own Risk and Solvency Assessment (ORSA) which is already embedded in Pillar 2 of Solvency II. In the US, ORSA is currently under discussion for adoption later in 2011. Further details of the ORSA expectations under Solvency II are expected in the second half of 2011 as well.

Why is ORSA needed?

In the past, solvency standards were always retrospective. They focused on past balance sheets to determine if an insurer had enough capital at the end of the last year for the risks that held then. But what regulators really need to know is if an insurer has enough capital for the risks ahead.

Past solvency standards also focused on capital determination based on the regulator's estimate of the firm's risk. But the more important question is if there is enough capital for the risks as they really are.

As mentioned above, existing solvency standards make the regulator responsible for certifying solvency. The standards imply that if an insurer 'passes', then the insurer has enough capital. But large US banks that had 'passed' the Basel II solvency standards succumbed to the economic crisis. Regulators have therefore decided to make the Management and Board responsible for certifying solvency, as they will do a better job of reflecting the actual risk position and capital needs of the insurer.

The new Own Risk and Solvency Assessment (ORSA) requires the Management and Board to decide on the adequacy of the firm's ERM system and capital, based on their own assessment of the firm's future plans, risks and risk capacity. The risk capacity is calculated from the funds available and the quality of risk management systems.

The schedule for the ORSA or IRMA is still uncertain. ORSA is expected to come into force at the end of 2012, while IRMA requirements should be finalized in 2011. Considering the enormity of requirements that both regulations will propose, the deadlines for compliance do not seem far away.

For a few insurers with large formal ERM programs already in place, the ORSA requirements will simply mean another large documentation project. But for most insurers, the new standards will require the establishment of more formal ERM processes and additional risk measurement capabilities. Boards and Management will also need to be prepared for the initial ORSA/IRMA report. They will need to stay updated at all times on ORSA developments, as well as the firm's risk management processes. This will help them confidently attest risk management reports that may be hundreds of pages in length and quite technical.

Main Aspects of ORSA

The ORSA is the responsibility of the undertaking and should be regularly reviewed and approved by the undertaking's administrative or management body. The ORSA should be based on adequate measurement and assessment processes and form an integral part of the management process and decision making framework of the undertaking. The ORSA should be forward-looking, taking into account the undertaking's business plans and projections. The ORSA process and outcome should be appropriately evidenced and internally documented as well as independently assessed. (excerpts from ICP 16)

Clearly, ORSA will take a lot of work. Although the implementation is still a few years away, insurance firms cannot afford to slack as regulatory scrutiny will be stringent and noncompliance penalties, high.

The ORSA will require a consistent and efficient measurement of solvency resources as well as a determination of capital quality. In addition, ICP 16 requires that five elements of a risk management system be reflected in the ORSA:

- Risk Identification
- Risk Measurement
- Risk Feedback Loop
- Risk Tolerance Statement
- Risk Policy.

Insurance firms will need to define a clear risk appetite and risk policy. They will also need to consistently monitor and analyze risk to determine its impact on the organization. This calls for a systematic, workflow-based risk management solution that eliminates gaps and inconsistencies, and establishes a smooth, streamlined process.

Managing risks through manual workflows, spreadsheets and paper-based processes will no longer be cost-effective or efficient. Instead, firms will find it much more beneficial to automate risk management workflows and save on time, resources and costs. Automation will also enable them to focus on broader strategic goals instead of worrying about data collection, documentation and other administrative elements of risk management.

It is also crucial that insurers centralize risk management across the enterprise. Managing risks in isolated departmental silos only results in operational redundancies, consuming more resources and costs than is actually required. On the other hand, a centralized risk library can provide a uniform definition of risks which, in turn, helps easily associate risks with controls, prevents controls from being duplicated across the enterprise and ensures accountability for risk and control management.

This is particularly beneficial for large insurance companies with operations extending across the globe. In each location, risks are bound to differ. The challenge, therefore, lies in harmonizing risk definitions across the enterprise to determine the true risk profile. An integrated risk management approach does this and more. It streamlines workflows, enhances transparency through effective information-sharing, and increases visibility into risk management processes for managers to make informed strategic decisions.

Minimum Standards for ERM adequacy

ICP 16 has specified nine major risk categories: Claims; Expense; Reserving; Investment market; Counterparty credit; Investment Credit; Operational; Liquidity Group Risk. Insurers will need to be able to identify and track key indicators for each major risk.

For risk measurement, many requirements have been laid out. Insurers that have not yet developed significant risk measurement capabilities will find compliance with these requirements to quite challenging. They will be expected to regularly assess the frequency and severity of identified risks using risk modeling techniques, stress testing and/or scenario analysis. These methodologies should be able to consider a range of levels of adversity as well as distributions of future cash flows. They should also be able to look beyond accounting and regulatory views. If they contain limitations, Management and Boards should be informed. Concepts such as parameter risk modeling, and qualitative assessments of reputation risk and other non-quantifiable risks need to be considered. New stress tests should be performed, in addition to documentation of risk measurement approaches and assumptions.

Choosing the right technology is critical to addressing the above demands. Firms would do well to choose a system that, for instance, supports multi-scenario risk analysis or leverages methods such as Monte Carlo simulation to analyze and prioritize risks. This would enable managers to focus on those risks that have the greatest impact on profitability. It would also help them prioritize controls and audits for best results.

Apart from risk measurement, ORSA calls for a Risk Feedback Loop. This is a new risk concept, based on the idea that a new ORSA review process is required whenever there is a major change or potential change to the insurer's risk profile. This change could result from environmental factors, management actions, uneven growth or a decline in the risks of the insurer. In such circumstances, ORSA requires that insurers trigger a new ORSA, as well as a reassessment of risk tolerance and risk treatments.

In such circumstances, risk management systems need to readily adapt to external changes. As soon as a change occurs, the underlying system should have the ability to automatically assign risk assessments to multiple assessors, collate individual risk scores and provide an average total. This would enable the insurer to gain a clear picture of organizational risk profiles.

A Risk Tolerance Statement is known to stymie most insurers. However, insurers will need to overcome their reluctance to complete this step. Quantitative & qualitative risk tolerances and limits must be set and reflected in business strategy choices as well as day-to-day operations. It requires calculating financial the strength, size and

complexity of risks, resources needed to manage risks and transferability of businesses.

Once risk tolerances and limits have been set, the required risk policy statements will largely be a documentation of these practices. The policies will summarize how all relevant risks are identified, managed and monitored at the operational level. It will also report how risk information links to the company's strategy development processes, in addition to explaining the relationship between risk tolerance and capital held. Specifically, ICP 16 calls for policies regarding the underwriting of risk, Asset Liability Management and investment risks. It also requires a policy statement that documents the risk feedback loop.

Given that firms have numerous other compliance policies to consider, it would be wise to have an integrated framework that simplifies policy creation, distribution, approval and review. Automated mechanisms will help accelerate the process as it moves from one stage to the next.

Measurement of resources needed for solvency

Most firms will focus on the ORSA resource assessment or measurement requirement. ICP 16 specifies that the ORSA needs to plan ahead for up to five years to represent the business plan of the insurer. All foreseeable and material risks should be included in the assessment. Quantitative and qualitative risk assessments should be performed. Stochastic modeling is not specifically required; but a firm that is using a stochastic model for Solvency II will be required to reflect the findings in the ORSA.

Regulators expect that the parameters for the ORSA may be different from those of the internal model submission for Solvency II capital adequacy purposes. This is because the internal model submission is calibrated on the risk assumptions specified by the regulators, while the ORSA will be calibrated to reflect the risk assumptions of Management.

Currently, insurers' practices for solvency self-assessment fall into five categories:

1. Factor Models – including the Solvency II standard model, Rating Agency models and US RBC model
2. Stress Test Models
3. Partial Internal Models
4. Full Internal Models
5. Multi-year models

Why does ORSA require an ERM evaluation?

The historical approach to solvency assessment has an implicit assumption that if two firms retain the same amount of a risk, then they need to each hold the same capital. However, there are limitations to this approach. One firm might not conduct underwriting or any other risk management initiatives. Another might conduct careful underwriting but no other risk management initiatives. A third might conduct both underwriting and careful risk management. In all three cases, the actual risk and need for capital in an adverse environment could be very different. Thus, ORSA requires that insurers take their own risk management processes into account while assessing their solvency.

It is clear from ICP 16 that factor models, which are probably the most widely used methodology for solvency self-assessment, will not be adequate. Insurers using the factor model approach will need to develop processes to perform a self-assessment using at least one of the other four methodologies. And since the ORSA requires a multi-year view of future capital needs, even firms that have developed internal models, may want to enhance the scope of their models to provide multi-year projections. Otherwise, they will need to create alternative processes to look ahead over several years AND get the board and management to sign off on the resulting conclusions.

How often will insurers need to do an ORSA?

Regulators will specify a minimum schedule for ORSA. But ICP 16 already specifies a number of situations that would trigger the need for a new ORSA. These include:

- Occurrence of a major change – actual or likely
- Startup of new lines of business
- Major changes in risk tolerance limits and / or reinsurance arrangements
- Aggressive acquisition strategy to win new markets shares
- Acquisition of other insurers and / or portfolios
- Aggressive strategy to improve the risk profile of existing portfolios
- Major changes to premium levels (increase or decrease)
- Disposal of existing portfolios
- Major changes to capital distribution (e.g. payment of dividend / bonus or repurchase of own shares) or injection of new capital

- Major changes in asset-mix
- Major external changes in risk factors such as insurance risks or markets risks
- Major changes in business conditions such as in the competitive, regulatory or legal environments

Clearly, ORSAs may not always be predictable. Therefore risk management technology needs to be agile and dynamic, ever-ready to respond to changes and flexible enough to trigger risk assessments as per the firm's requirements.

Is ORSA a process or a report?

ORSA is essentially a process that requires a huge report to be prepared and presented to regulators. The ORSA report needs to include:

- Review of the processes for systematic identification, analysis, evaluation and treatment of risks
- Description of the risk profile, risk register, heat map and/or risk control self-assessment
- Evaluation of risk with respect to the main product lines, the overall underwriting policy applied to the product
- Evaluation of risk mitigation techniques
- Evaluation of operational risks
- Evaluation of risks not covered by local regulatory capital regime
- Evaluation of the assumptions of risk assessment systems
- Analysis of the statistical methods used.
- Evaluation of assets, risk concentrations and off-the-balance-sheet risks

Preparing these reports through manual or stand-alone processes is both inefficient and prone to errors. Insurance firms need to establish a robust reporting system with risk heat maps, risk calculators and risk dashboards – all of which automatically enforce the flow of information, gather data from across the enterprise and consolidate it into meaningful business intelligence.

Conclusion

ORSA requirements present a tremendous challenge to insurers. While the consequences of noncompliance have not yet been specified, they could range from additional capital requirements to public reports declaring the inadequacy of the firm's risk management practices.

Firms that want to minimize their compliance costs may wait to see how the regulation pans out. However, according to early indications, the ICP 16 standard will not deviate too much. Firms that have been planning to implement an ERM program can use these standards as a guide to an early list of priorities.

Willis Re Analytics can help with ORSA with eNGAGE™ ERM advisory services

Willis Re can help your company with the ORSA

- Starting an ERM program
- Improving a fully developed ERM program
- Transitioning from traditional risk management to ERM
- Presenting your ERM program to boards and rating agencies
- Identifying next steps for an existing ERM program

Our eNGAGE™ advisory services offer ERM expertise to facilitate productive and cost-effective ERM development.

ERM articles and Webinars

Willis Re team members have written almost 100 articles and papers, featured in many prominent publications. These articles touch on topics such as risk measurement, value at risk, roles and responsibilities, risk tolerance, getting the staff involved in ERM, strategic risk, multi-risk measures, risk and reward, uncertainty, acquisitions, risk environment, economic capital modeling, and capital allocation. We will provide a selection of these articles to match your interests and concerns. In addition, Willis Re provides webinars on hot ERM topics, most recently Stress Testing and S&P Level III ECM reviews.

eNGAGE risk and control workshop

In this one-day workshop, we walk your business leaders through the process of identifying key risks. We help you assess the significance of these risks, evaluate control quality, and create a priority list for next steps. At each point, we focus on how *you* look at your business.

Clarifying risk appetite

We can facilitate or help you to prepare for discussions with your top management, risk committee, board or rating agency about risk appetite and risk tolerance. This can include consideration of peer comparisons, RBC, rating agency views, historical and future loss scenarios, economic capital, franchise value, effective risk appetite, risk preferences, earnings volatility and stress testing.

eNGAGE ERM Gap Assessment

This one or two day workshop looks at 10 key ERM practices considered important by regulators, rating agencies and practitioners. The workshop produces a detailed story of the most developed practices of the firm that can be used with the board, rating agencies or other audiences – as well as a list of specific steps to develop other important areas. Clients have used this workshop as a full “physical” of their ERM health, or as a fast-track way to develop an ERM plan for presentation to their board. The decisions from this workshop can become the ERM Framework that is adopted by management and the board.

eSENCE™ Risk Attitude Survey

Using our unique risk attitude survey, Willis Re can provide management with insights into the risk attitudes of key individuals and the firm as a whole. The risk attitude survey instrument is a set of 40 statements, adapted to the insurance sector from surveys that have been widely used to assess risk perception in numerous countries. Respondents indicate level of agreement with each statement.

Results include:

- Identification of risk attitudes of each individual
- Development of group risk attitude
- Comparisons of individual and group attitudes to other insurance management groups
- Identification of areas of high and low agreement
- Discussion of ramifications of the findings upon the issues that are commonly addressed by the group

Economic capital modeling

Willis Re can advise you in dealing with economic capital (EC) issues such as: software, data, design choices risk aggregation, coordination with catastrophe modeling, allocating capital, presenting EC models for review to rating agencies or regulators.

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