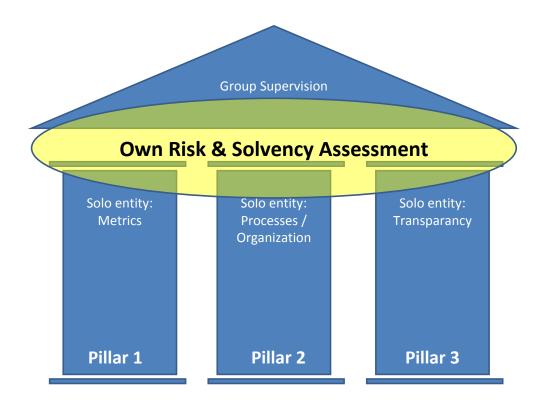


Vision on Own Risk and Solvency Assessment (ORSA)

Good Practice

by

ORSA Working Group of the Dutch Association of Insurers ("Verbond van Verzekeraars")



The ORSA process covers all pillars of Solvency II

February 2012 Release 2.0



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Management Summary

In performing an *Own Risk & Solvency Assessment (ORSA)* management takes responsibility for considering risk, capital and return coherently within the context of its own business strategy, forward looking from the current situation.

In order for an ORSA process to be effective both the right environment (as described below) and an integrated risk management system should be present. The ORSA process should be **proportionate** to the (re)insurers' size and complexity. Essential elements are:

- The (re)insurers **Governance** Framework: a sound Three Lines-of-Defence model and risk committees in which those Lines-of-Defence are represented. The Directive recognizes this importance through its articles 41, 46-48 and 44, paragraphs 4 and 5.
- A risk culture in which senior management sets the appropriate tone-atthe-top
- A well-thought out **risk appetite** framework: this sets the boundaries for (acceptable) risk taking in regular business operations.
- An integrated risk management framework constitutes the context in which ORSA is performed. That framework must contain **risk identification** processes. At a minimum, processes must be in place for determining business scenarios and specific risks. Scenario analysis and planning can be a powerful tool for helping a management board in assessing the resilience of the (re)insurer and their objectives to internal and external changes.
- The qualitative results of risk identification and scenario planning must be translated into quantitative results: measuring (likelihood / impact) and calculation models (accumulation / diversification) will result in a (re)insurers risk/capital profile.

The ORSA process itself, which is in essence **forward looking**, should take into account at least the following elements:

- A **preparation** stage is needed as starting point for an ORSA process.
- A Base Case which is the outcome of the Medium Term Planning (MTP) process covering a period of 3-5 years. Business scenarios should be defined and directed at major potential threats to the MTP objectives.
 Stress testing is an essential part of the ORSA process and helps to understand the impact of scenario's and more specifically which circumstances can lead to a violation of internal or external capital ratios.
- Comparison of the insurer specific risk profile to the assumptions underlying the SCR/internal model in order to assess whether these assumptions are (still) appropriate for the organization-specific risk profile. In addition, a reconciliation of the risk profile to available capital, and an analysis of the quality of capital (classification in tiers) is needed.
- The ORSA process is a trigger for management actions. Risks beyond a
 (re)insurers appetite should be brought to within acceptable levels.
 Additional capital will not reduce the risk, it will only provide a financial
 buffer for the period until the risk is brought to within acceptable levels,
 preferably through the use of proactive management actions. Such actions
 can include transferring the risk (reinsurance, co-insurance), terminating
 the risk generating activity (divestments) or treating (mitigating) the risk
 (implementing controls to decrease the likelihood and/or impact of the risk)

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• The ORSA process includes an analysis of all relevant information and performed calculations, as well as important management considerations. The outcomes of these analyses and any considerations must be documented in an **ORSA Internal Report**. Level 3 guidance suggests that an ORSA Internal Report with an appropriate level of detail may be equivalent to the regulatory ORSA report required by Pillar III. If so, it will be filed with the supervisor. In writing the report, it is important to realise that ORSA is basically part of the strategic management process, not a mathematical exercise.

ORSA is a regular process, but significant changes in a (re)insurers risk profile may also result in an ad-hoc process out of the regular cycle. A (re)insurer should define for itself when the ORSA process should be executed:

- Regular: the Directive only states that the assessment shall be performed "regularly". In our view this means that the main processes should have a **frequency** of at least annually.
- Ad-hoc: the Directive states that (re)insurers shall perform the assessment without any delay following any significant change in the risk profile. A (re)insurer will want to define external and internal triggers for considering the performance of the assessment.

Last but not least: **monitoring** the ORSA process and outcomes should ensure the effectiveness of the ORSA. Monitoring the ORSA process can be done through an independent **review**. Monitoring the outcomes can be done with periodic **Integrated Risk Reports** which document developments in the risk profile against the risk appetite. In order to be effective, this report should be accessible, concise, address management concerns and action driven.

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1. Introduction

1.1 The EC Directive Solvency II

The EC Directive Solvency II is based on three pillars:

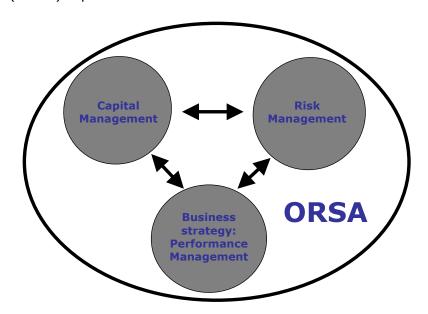
- Pillar I deals with the quantitative requirements for (re)insurers. These
 requirements contain the valuation principles for the balance sheet as well
 as the assessment of required and actual capital. Basic principles are
 market value and risk sensitivity.
- Pillar II deals with the qualitative requirements for (re)insurers: the System of Governance and the risk management system. These requirements are principle based.
- Pillar III deals with the reporting requirements, both to the regulator and to the general public.

The Directive (Pillar II) brings many existing risk and capital management activities together by requiring that (re)insurers should, as part of their risk management system, perform an **Own Risk & Solvency Assessment**: see Article 45 of the Directive (appendix 1).

1.2 The purpose of the Own Risk & Solvency Assessment (ORSA)

In performing an ORSA management takes responsibility for considering risk, capital and return coherently within the context of its own business strategy, forward looking from the current situation.

The main elements of ORSA include the business strategy, an assessment of the risks and an assessment of the solvency needs (according to the internal model and/or standard model). The ORSA should form an integral part of the strategic management process by regularly taking a holistic view on all relevant risks that threaten the achievement of strategic objectives in relation to (future) capital needs.



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The ORSA process should provide reasonable assurance to a (re)insurers' Management Board, that their objectives will be met given the (re)insurers' risk appetite. More specifically, it should deliver the insight that available capital, based on the risk appetite, meets the required risk capacity of the (re)insurer under a wide range of relevant scenarios.

1.3 Purpose of this document / Guidance for reading

ORSA is seen as a process rather than a reporting requirement. This document is neither a guideline nor a template, but includes examples and possible ways to implement ORSA.

This document is designed as a 'Good Practice' document by (risk and capital management specialists) members of the Dutch Association of Insurers (Verbond van Verzekeraars). Compared to release 1.0, renewed insights and experiences from a Supervisor (De Nederlandsche Bank) pilot on ORSA have been included. This typically concerns:

- The element of Forward Looking
- Reporting in the ORSA context
- ORSA in (re)insurance groups
- The proportionality principle

As regulations are still evolving, this version of the document will not be the final one. New relevant information will be published as separate additions to this version 2.0 of the good practice document in the form of capita selecta as soon as material new insights have been gained.

Request: readers and users of the document are invited to share their comments and suggestions for improvement with the ORSA working group.

Comments and suggestions can be send to **d.van.es@verzekeraars.nl**

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2. High Level Principles

A Most ORSA elements already exist

Most of the ORSA elements and preconditions (see appendix 1 for "building blocks") already exist in some form or another at all (re)insurers. Integration of these elements and the transition towards a formal ORSA process should start from a gap analysis. This Good Practice document gives a high level overview of required elements and can thus be a starting point for a gap analysis

B. ORSA is primarily a management process supporting strategy realisation

An ORSA process will be more effective when executed along the business lines/ managerial structure. Especially in larger (re)insurers, the legal (license holding) structure of the Group may differ from the managerial structure of the Group. However, in the ORSA report, the (complete) link between the information from a managerial perspective and the information from a license holding perspective should be identifiable.

C. The ORSA process must continuously trigger management decisions and actions

It is important to realise that ORSA is basically part of the Medium Term Planning (MTP) process, *not a mathematical exercise*.

Further, the spirit of ORSA does not stop at the finalization of the MTP process. Therefore, the (developments in the) (re)insurers' risk profile must be monitored continuously against the risk appetite and periodically reported through a concise (we recommend a maximum of 10 pages), action driven **Integrated Risk Report**. We propose this to be a quarterly report.

D. The ORSA should look beyond developments in the next year (Forward Looking)

The time horizon of the ORSA must be identical to the (re)insurers' MTP horizon, with a minimum of 3 years.

The forward looking aspect allows the (re)insurer to assess and address its changing risk profile and hence determine capital needs.

E. The ORSA should encompass all material risks

The (re)insurers' ORSA should consider all risks that may lead to a material reduction in the current level of own funds or the protection offered to policyholders. The (re)insurer needs to give due consideration to the risks included in the calculation of the SCR, as well as the risks which are not or not fully captured in the SCR calculation. Areas considered should at least cover: insurance, market, counterparty and operational risks, as well as liquidity, strategic and reputational risk.

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F. The ORSA process and outcome should be appropriately evidenced The level of available documentation should be sufficient to enable a third party review. An audit trail should be available for all executed process steps and outcomes. This should also be the case for the decision making process. As such, it is very important to document the most relevant considerations, decisions and, when decided upon, actions of Management meetings.

It will most likely be necessary to distinguish between **stable ORSA documentation** and a **dynamic ORSA Internal Report**. The stable part would contain information that does not change frequently.

The dynamic part must be part of a (re)insurers annual MTP cycle. See chapter 4.5, 6.2 and Appendix 3.

- as **O**RSA is management's **O**wn assessment, enforced templates are not preferred.
- EIOPA Level 3 guidance suggests that an ORSA Internal Report with enough body can be submitted as the regulatory ORSA Report required by Pillar III. In such a case the ORSA Internal Report should not be too concise (otherwise it will not be accepted by Supervisors), neither too voluminous (otherwise it will not be read by Management). Depending on size and complexity of a (re)insurer, we would expect such a Pillar III qualifying ORSA Internal Report to be in the range of 25 to 50 pages.

Elements to be documented can be found in Appendix 3.

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3. ORSA – considerations and preconditions for effective performance

3.1 Governance

We stress again the ultimate objective of ORSA: by performing an ORSA management takes responsibility to give risk, capital and return coherence within the context of her own business strategy, forward looking from the current situation.

The governance of ORSA encompasses all involved in the process and the creation and approval of the ORSA Internal Report.

Three Lines of Defence

Most (re)insurers adopt the Three Lines-of-Defence model for its risk governance. In this model in general,

- The First Line is the Business Unit, with accountability and responsibility for performance, operations and daily risk management, including management control and first line monitoring activities
- The Second Line consists of central Staff Units who are responsible for encouraging and challenging sound risk management throughout the organisation, providing guidelines, methods and techniques, and supporting the first line in making proper risk-return trade-offs
- Internal Audit are the Third Line and responsible for providing additional assurance by independently monitoring the effectiveness of control measures as well as monitoring the effectiveness of financial, operational, compliance and risk management

In this model, the First Line of Defence is responsible for performing an ORSA, and accountable for its results. The Second Line of Defence facilitates the ORSA process and may draft the ORSA report. The Third Line performs a review of the ORSA process. Especially for smaller (re)insurers, this can be outsourced. However the insurer remains responsible for any outsourced activities. Every (re)insurer will tailor this general model to the own specific circumstances in which the business is run.

The role of the supervisory board

In an organisation with a two-tier governance model, the management body should at all times inform the supervisory board of any changes in strategy and strategic capital allocation. The supervisory board should at all times be informed of the ORSA Internal Report before the regulatory ORSA report is presented to the Supervisor.

3.2 Involvement First Line in the ORSA

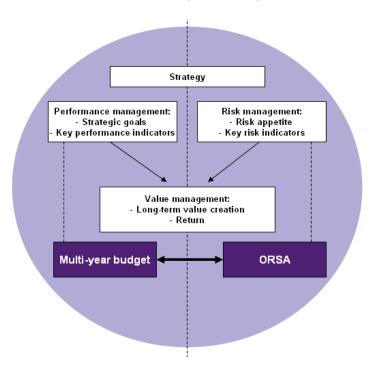
The ORSA process should be integrated into the overall strategic management process, as this also assures active involvement of First Line management. Performance management and risk management are both important drivers of strategic decision-making. The outcome of ORSA will help in assessing the feasibility of the strategy and multi-annual plans in view of risk and capital requirements.

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ORSA should be embedded within the organization:

- The organization should view the ORSA as an integral part of doing business.
- The ORSA should be part of (strategic) decision making and should not be a reporting exercise.
- It should be based on the same foundations (assumptions/parameters) as capital and pricing models
- Decision making should be evidenced to make the elements taken into account more explicit.
- Not only Solvency II elements need to be included in decision making, but also other elements, like IFRS, market share etc



3.3 Culture

The cultural element within ORSA is more intangible than other elements. Culture relates to the "state of mind" and "tone at the top" within an organization and can be addressed from different perspectives. Below some examples:

Tone at the top:

- Senior Management should consider ORSA as an important element in doing business. By acting this way, it will also become important for other management and staff within the company.
- Senior Management should acquire a good understanding of Solvency II and need to be educated and trained (fit & proper).
- Senior management should embed the activities of the ORSA in their business planning process as a "normal" part.

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3.4 Risk Appetite

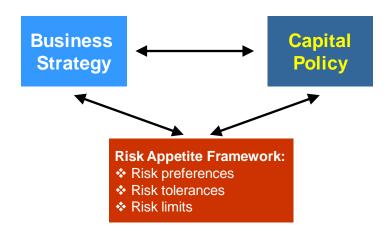
Risk appetite is an important, if not a crucial element of the Own Risk and Solvency Assessment as it is the benchmark against which all identified risks are assessed. One risk appetite statement does not do justice to the complexity of the environment in which a (re)insurer is operating. Hence, a (re)insurer should have a risk appetite framework in place.

Definition

A Risk Appetite Framework establishes the risks that the (re)insurer wishes to acquire, avoid, retain and/or remove, given its strategy and related objectives. A framework should ideally encompass:

- > *Preferences*: qualitative statements that guide the (re)insurer in the selection of risks
- > *Tolerances*: quantitative statements that guide the (re)insurer in the selection of risks
- > Limits: quantitative boundary (accumulation) that serves to constrain specific risk taking activities at the operational level within the business

The risk appetite framework should be aligned with business strategy (business objectives), capital (absorbing unexpected losses) and have the safeguarding of policyholders' rights in mind. As each risk type (business, financial or non financial) has a different impact on strategic and related objectives, specific frameworks can be set up for different risk types.



3.5 Risk profile

The summarised output of **risk identification** (structurally searching for risks and describing them like "the risk of *<uncertain future event>* due to *<one or more causes>*, possibly leading to *<the impairment of one or more business objectives>"*) and **risk assessment** (attributing to each identified risk probabilities and impacts if risks materialise) processes is usually described as a risk profile. Other terminology is *risk register*, *heat map*, *bubble map*, and *risk & control self assessment*.

This risk profiles also shows developments: risks becoming worse and risks becoming mitigated: the balance must be checked with the risk limits.

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Risk profiling and related governance and/or framework activities should not be confused with capital modelling. The latter process is primarily concerned with statistical and actuarial/econometrical methods and processes, whereas risk profiling starts with qualitative descriptions and afterwards quantifications whenever possible. The risk assessment process can be applied at the (re)insurer level, business unit, key business and management process level (e.g., underwriting, claims and strategy) or be applied in the management of projects.

Risk profiling involves an assessment of risks at both the nature of inherent risk and residual risk. Benefits of risk profiling are, or Risk profiling can contribute to:

- Consistency and understanding
- Transparency to the board
- Organizational efficiency
- Learning and continuous improvement
- A culture of proactive risk management

A risk profile includes the following information:

- A description of risks in enough detail for each risk to be understood in isolation
- The cause(s) or underlying conditions to a risk actually occurring or crystallizing
- The consequence(s) of the risk (financial and non-financial)
- Likelihood/frequency of risk occurrence and impact of the risk (both inherent and residual).
- An assessment of the operational effectiveness of key controls and/or risk mitigation strategies.
- A description of the action(s) related to Take, Treat, Transfer or Terminate

The resulting risk profile should be monitored continuously and compared to the risk appetite. This may in turn lead to management actions, possibly in combination with a reassessment of required capital. See also paragraph 4.4.

3.6 Proportionality

One of the key concepts within the Solvency II directive is the principle of proportionality. The concept of proportionality is defined a applying legislation which is appropriate according to the size, complexity and nature of the (re)insurer. In particular the Directive should not be too burdensome for small and medium-sized companies. The ORSA is not a goal but a tool for efficiently and effectively managing risks.

The process of the ORSA must be fit to the organization and integrated into daily operations. This means that for companies to which the principal of proportionality applies, focus could be more on qualitative ORSA techniques rather than quantitative techniques, even though a quantification of capital needs over the planning horizon will still be part of the total ORSA. Thus, the "risk modelling push" should not place too much modelling pressure on "proportional" companies, thereby distracting management from the essence of ORSA.

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Good practices for a qualitative risk measurements approach are:

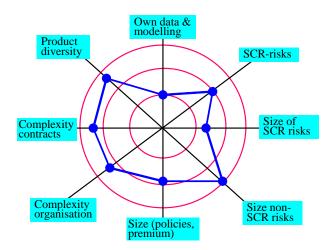
- Risk Assessment techniques
- Scenario analysis
- Expert judgment

The application of the principal of proportionality works both ways: for small and medium sized companies with complex risks, the assessment is expected to be performed with more complex/sophisticated methods and techniques.

In determining the level of application of the principal of proportionality to a (re)insurer the specific characteristics of the (re)insurer can be assessed. Elements that can be used for this analysis are (non exhaustive):

- Customer diversity: captive, individual, collective, mutuals
- Product diversity: mono-line, multi-line, multi-branch
- Data & modelling (method used in order to calculate the SCR): regular standard, standard with own data (USP), partial internal, full internal
- (Size of) SCR risks: small, large / relative to best estimate, more complex assets portfolio
- Size non-SCR risks: small, large / relative to SCR
- Size: premium, number of policies
- Complexity of organization: legal structure, national / international, group
- Complexity of contracts: nominal, indexed, with profits

The web diagram below shows how a (re)insurer can "score" the elements. The analysis can be used to determine the degree of complexity of methods and techniques for (parts of) the ORSA process.



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4. ORSA - process minimum level

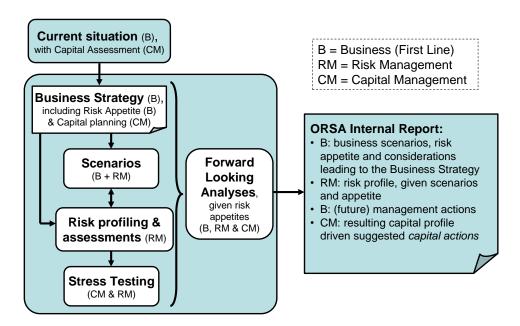
4.1 Preparing an ORSA

As ORSA aims at bringing together business strategy, risk management, and capital management, the first step in ORSA should be to determine whether or not the information used in the last ORSA is still up to date:

- What material changes have been made in the business strategy and target setting?
- What changes in the risk appetite have been made?
- What material risks are identified? Has the risk profile changed?
- A qualitative assessment on the continual appropriateness of the model used (either the Standard or an Internal Model) for representing the risk profile based on the parameters and assumptions used in SCR calculations.
- Consider internal and external developments?
- Analyse the capital position and the quality of capital (tier classification).

All relevant data must be collected, amongst others; the most recent (investment) portfolio positions, the latest cash flow projections, appropriate yield curves and other parameters etc. Together, this forms the basis for the risk assessment in terms of likelihood/probability, input for calculations and, if necessary, for an adjusted 3-5 year projection.

The ORSA process as part of the Medium Term Planning (MTP) process can be summarized as follows:



4.2 Forward Looking

The forward looking perspective is one of the key elements of ORSA.

Where the quantitative requirements for (re)insurers are based on one year shocks, the forward looking perspective within ORSA reflects the necessity for an (re)insurer to look beyond this one year horizon in its assessment of how the MTP influences the overall solvency needs. The goal of the forward looking perspective is to demonstrate that the (re)insurer remains a going concern and has sufficient funds for the planned business scenario as well as in adverse scenarios.

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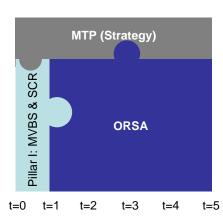
As mentioned in the 'High Level Principles'-paragraph, the time horizon of the ORSA must be at least identical to the time horizon used in the MTP process. In general the expected scope of the forward looking perspective is between 3 to 5 years. The length chosen also depends on the funding characteristics of the (re)insurer and the average duration of the insurance contracts.

As part of the regular planning & control cycle, the MTP process culminates into a "Base Case MTP Plan", with a forecasted (accounting) P&L and Balance Sheet for the next 3-5 years.

(Re)insurers can have multiple steering variables, like IFRS return (investors), SCR ratio (supervisors), and Economic Capital (rating agencies). In such a case, those steering variables should be internally linked. Calculations should ideally be based on the same assumptions and parameters.

Forward looking solvency projections in ORSA should not necessarily follow an overly complex approach as that could create a false sense of assurance. After all, no one can predict the future! Use should be made of the:

- Best estimate (accounting) projections from MTP process
- Market Value Balance Sheet and SCR (using the MTP assumptions and parameters) from Pillar I calculations as starting point



The MTP figures can easily be used for a projection of Technical Provisions (Market Value Liabilities) and, adjusted for costs and technical payments, cash surplus projections that are supposed to be invested according to an (re)insurers' Strategic Asset Allocation plan. Using the same parameters again as used in the MTP, what follows is a projection of Market Value Assets, with Own Funds as a balance.

The SCR can then be projected using scaling techniques or using a waterfall approach. We expect to publish capita selecta on these methods

The final result is the "Base Case" solvency projections and hence insight into the expected capital needs/surpluses.

Besides this best estimate, the (re)insurer should also analyse the effects of adverse developments on it solvency position. This can be done with the help of scenario analysis, including stress testing. We define scenario analysis as assessing the impact of a combination of factors, whereas stress testing is an extreme form of scenario analysis. Stress tests should be severe enough in order to cross the boundaries of the SCR/ MCR. An analysis should make clear how the stress scenario's differ from business-as-usual situations.

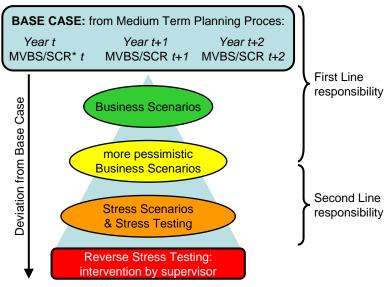
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4.2.1 Scenario development & analysis

The insurer should undertake (stress) scenario analysis. Scenarios should be (i) dynamic and forward looking and (ii) incorporate the simultaneous occurrence of events across the insurer.

A range of scenarios should be considered encompassing different events and degrees of severity:



* MVBS = Market Value Balance Sheet / SCR = Solvency Capital Requirement

Scenarios should:

- Address the main risk factors the insurer may be exposed to.
- Address insurer-specific vulnerabilities. These should take the regional and sectoral characteristics of the insurer into account as well as considering specific product or business line exposures and funding policies. Therefore, concentration risk, both intra- and inter-risk types, should be identified beforehand.
- Contain a narrative scenario which should include various trigger events, such as monetary policy, financial sector developments, commodity prices, political events and natural disasters, change of strategy.
- Be forward looking and include severe outcomes. The time horizon should reflect the characteristics of the business.
- Explicitly identify interdependencies e.g. among economic regions and among economic sectors.

To be noted:

- Business and more pessimistic scenarios are, of course, business specific. However, some parts of these scenarios should be made uniform for a group of businesses, e.g. the macro economic outlook and the regulatory outlook.
- Uniformity of stress scenarios across a group of business units should be achieved
- First Line management must be able to understand the impact of stress scenarios on the overall risk profile of the (re)insurer.

Each (re)insurer should develop its own **policy** for scenario analysis. The level of detail and complexity is determined by the proportionality principle. The following elements could be addressed by the policy:

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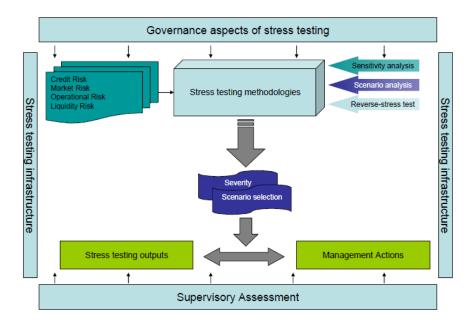


- Which parties/departments are involved in determining, maintaining and approving scenarios (governance)?
- What elements constitute a scenario?
- When should scenarios be determined: relevant changes in strategic planning, material business initiatives, internal or external triggers?
- Who administers and maintains the scenarios?
- Who validates the scenarios?
- Monitoring of mitigating management actions and capital requirement consequences of scenarios

As Solvency II has at its core the protection of policyholders' rights, a specific policy for stress scenario analysis may be useful. As stress situations may impair policyholders' rights, the next paragraph is devoted to stress scenarios and stress testing.

4.2.2 Stress testing

Stress testing is a key risk management tool within financial institutions and one of the key validation tools of internal models.



The presented structure should be embedded in the governance structure and risk management system of an (re)insurer. Each (re)insurer should develop its own guidance for stress testing.

The following elements could be addressed by the guidance:

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- Governance within stress testing and engagement of management The (re)insurer should regularly review its stress testing program and assess its effectiveness and fitness for purpose.
- The stress testing program should be supported by an effective infrastructure. Challenge is essential for a sound and robust stress testing program (e.g. design, scenarios, use of judgment and results).
- The stress testing program should be used as a risk management tool supporting different business decisions and processes. Such decisions should take into consideration the shortfalls of stress testing and the limitations of the assumptions used.
- The (re)insurer should perform sensitivity analyses for specific risks or portfolios. **Sensitivity analysis** is the simple stressing of one risk driver to assess the sensitivity of the (re)insurer to that risk driver.
- The (re)insurer should develop reverse stress tests to complement the
 range of stress tests the (re)insurer will undertake. Reverse stress
 testing consists of identifying a scenario or combination of scenarios
 that threaten the vialibility of the (re)insurer, as well as assessing the
 probability of realization of such scenarios.

4.3 Capital Management

A part of the ORSA is the determination of the overall capital needed to manage the business, given the risk appetite and short and long term risks identified from the business strategy. Criteria to determine adequate levels of capital originate from:

- Internal/Economic capital requirement (Solvency Capital Requirement)
- Regulatory capital requirements (Minimum Capital Requirement)
- Rating agencies capital targets

Besides risk management and strategic business planning, capital management (considered second line of defence) forms the third corner stone of the ORSA. Capital Management's primary tasks are:

- Aligning internal capital supply and internal capital demand.
- Yearly evaluation, together with risk management, of the risk appetite framework in relation to the capital position and business strategy, and propose changes to the business strategy or the risk appetite framework.
- Start the strategic business planning with a capital adequacy assessment of the most recent period, which should provide input for determination of the necessary overall capital. The assessment should include both regulatory (and rating targets) and internal/economic capital.
- Monitoring capital position / adequacy from three angles
 - Regulatory capital requirements (regulatory capital), taking into account the metrics / ratios and requirements of regulators (Own Funds / SCR ratio, Tier-1, limits for hybrid capital),
 - Rating agencies capital targets, taking into account Financial Leverage ratio, Adjusted Equity, within the target rating level
 - Internal capital needs (Medium Term Plans of business units, shareholder dividend pay-out, SCR), taking into account internal models such as the economic capital and Market Value Balance Sheet approach.
- An assessment of the capital management methodology and target ratios, in light of the analysis of the previous bullets. The target ratios should be in line with the desired rating from the rating agencies and are usually significantly greater than the minimum regulatory requirements.

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- Execution of the necessary capital market transactions,
- Term (capital) funding; and
- Risk management transactions.

Specifically, in terms of the ORSA, Capital Management has the following functions:

- An analysis, based on the ORSA risk identification and scenarios, of the impact on the capital position. This is an iterative process during ORSA.
- A forecast for the current planning horizon. Eventual funding requirements for the current planning horizon should be discussed and determined.

4.4 Management actions

Based on the results of ORSA, management has to consider its responses, both risk response and capital response. Management need to have in depth knowledge of the effect of possible management actions to restore the capital adequacy within adequate timelines when unexpectedly adverse circumstances occur.

Reversed, the outcomes of the ORSA report could result in the conclusion that the risk appetite is not sustainable and that the management board should make adjustments to either the objectives and/or the risk it is willing to take to achieve them. In itself, this results in a change of the risk profile and again should trigger an ORSA process, based upon the adjusted objectives and/or risk appetite.

Finally the risk appetite is dynamic and may change over time depending on changes in strategy based on ORSA outcomes.

Based on the results of the ORSA report, management can take the following actions:

Take the risks

The results are still within the preset limits. Although a (risk appetite) parameter is nearly hit, the management body decides not to take action. Note that this action is not permitted if the available equity is below the SCR.

Treat - mitigating the risks

This will be the most common action management will undertake. Management can decide for (qualitative) measures, possibly including (temporary) additional capital as long as risks are still too high in order to create a (temporary) extra buffer.

Transfer the risks

The risk profile can be changed by transferring or sharing (part of) the risks. This could be achieved by for instance extending reinsurance contracts or the merger of legal entities to a new entity (within groups), or less encroaching: engage in co-insurance.

· Terminate the risk generating activity

Last possible management action is to terminate certain activities. The risk profile will change, with the result (if the right activities are terminated) a reduction in restricted assets.

(Re)insurers who are using an (partial) internal model for SCR calculations, also have to prove the use of the results of the model within their business. The principles of this use test are described in the EIOPA guidelines. We advise that companies define their forms of use as specifically as possible. Testing of the forms of use should be aligned with other testing processes in

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the company such as testing the Internal Control system. Appendix 4 gives an example of the forms of use you can apply.

4.5 Reporting

A (re)insurer is required to inform the supervisory authorities of the results of each ORSA as part of the information reported and some more general information regarding the context of ORSA as part of Pillar III. The current view of EIOPA ((EIOPA-CP-11/008: Consultation Paper On the Proposal for Guidelines on Own Risk and Solvency Assessment) is that when the own internal ORSA report has enough substance, it can serve as the supervisory ORSA report under Pillar III.

We consider it as good practice that a (re)insurer produces more **stable ORSA documentation** and an annual **ORSA Internal Report** as a deliverable of its MTP process.

The more **stable ORSA documentation** contains information that doesn't change too often: the organizational background, policies, procedures and process descriptions. The **ORSA Internal Report,** as a documentation of the ORSA process during the MTP process, can be clustered around three main topics (see also appendix 3):

- Business strategy (risk-return trade-off): description of business scenarios, (update of) risk strategy and risk appetite, forward looking risk profile and considerations, given the aforementioned, leading to the approved business strategy
- Capital Management: outcome of the (qualitative) assessment of the appropriateness of the Standard or Internal model, description of the MVBS and SCR projections techniques, (reverse) stress scenarios and resulting capital projections
- (Future) management actions to deal with potential difficulties proactively.

Again, the proportionality principle should be leading in the choice for elements to be taken into account when producing the report.

The ORSA Internal Report may be discussed at different levels:

 Where the governance system of a (re)insurer provides for this, the ORSA Internal Report is pre-discussed and approved in a committee that is responsible for discussing the risks. This can be the Risk & Capital

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Committee, Risk Committee or a committee with similar tasks, but named differently.

- The resulting ORSA Internal Report is in any case discussed and approved by the Management / Executive Board or similar committee.
- The ORSA Internal Report will finally be discussed within the Non Executive Board and/or Audit Committee

Last but not least, the signed off ORSA Internal Report will, when it qualifies for Pillar III requirements, be filed with the Supervisor.

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5. ORSA - Frequency and triggers

The frequency of ORSA is mentioned in article 45 (5) of the Directive. In the Directive the following is stated:

"Insurance and reinsurance undertakings shall perform the assessment referred to in paragraph 1 regularly and without any delay following any significant change in their risk profile."

Although no Level 2 guidance is provided EIOPA has interpreted "regulary" by the following draft guideline 15:

"The undertaking should perform the ORSA at least annually. Notwithstanding this, the undertaking has to establish the frequency of the assessment itself particularly taking into account its risk profile and the volatility of its overall solvency needs relative to its capital position. The undertaking should justify the adequacy of the frequency of the assessment"

Thus,

- The frequency is determined by every (re)insurer, taking into account (the volatility of) its risk profile.
- 'Regularly' means at least annually.
- If the risk and solvency profile changed significantly since the last ORSA, an (partial) update of the ORSA is necessary.

The third bullet reflects the necessity to update the ORSA after a significant event has taken place. These events are known as trigger events and can be categorized in different dimensions:

- 1. Internal or external triggers?
- 2. Will the event impact the company in the short term or in the long term?
- 3. Is it a quantitative or qualitative trigger event?

The Key Risk Monitoring system that a (re)insurer has in place can serve as a starting point for a trigger analysis. Based on this system "ORSA indicators" can be defined, including a prioritization. Indicators should be linked to an organizations medium term plans and stresses/ scenarios of that plan – which should link in to the capital projection of solvency for ORSA.

Finally management has to decide which ORSA indicators will lead to the consideration of performing an ad-hoc ORSA (e.g. the top five to ten

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indicators). A threshold needs to be developed for every ORSA-indicator, which is linked to the risk appetite. That indicator then becomes an **ORSA trigger**.

If a threshold is breached, depending on the severity, the full ORSA process or just part of the ORSA process should be re-run.

Examples of Trigger:

- An acquisition that significantly changes business, risk or solvency profile.
- A divesture that significantly changes business, risk or solvency profile.
- A significant change in the financial markets that has a big impact on the value of the asset-portfolio of the (re)insurer.
- A (significant) change in regulation.

Examples of Trigger indicators

- A significant change in the liability portfolio of the (re)insurer.
- A sudden reduction in solvency ratios.
- A reduction of solvency levels below critical values.

It is important to recognize that a (partial) ORSA process consumes a lot of time and resources. Therefore, a Management Board might have an incentive to perform an ad-hoc ORSA in the most critical circumstances. It is therefore advisable to give the Chief Risk Officer of the (re)insurer the mandate to decide upon whether or not to perform such an ad-hoc ORSA.

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6. ORSA - Monitoring aspects

6.1 Quality review on ORSA

Although it is not mentioned in the directive, it is important that a quality review of the ORSA takes place. The quality review can be conducted by the internal audit function. The quality review focuses on the question of whether or not all elements of the ORSA process are in place and are functioning adequately. The (re)insurer has at least documented evidence of:

- The ORSA policy of the (re)insurer,
- The outcome of each ORSA, with a minimum frequency of once a year,
- The ORSA process, including functions and responsibilities of the participants in the process,
- Methods used,
- Output and follow-up of management actions.

In addition, the quality of the ORSA has to be assessed. The (re)insurer may make this assessment by judging the following criteria:

- Training and experience of staff involved in the process,
- The cooperation between the actuaries, risk management and compliance function, marketing and finance department,
- Involvement of management.

6.2 Monitoring between two ORSA's: Integrated Risk Reporting

The spirit of ORSA does not stop after signing off the annual ORSA Internal Report. For that reason, we foster periodic **Integrated Risk Reports**, which documents the monitoring of developments in the risk profile in relation to risk appetite, covering the complete risk spectrum. Such reports can be structured around the central questions on which integrated risk management / ORSA should provide an answer. This document is the primary reporting tool to a Management Board and must therefore be accessible, concise, address management needs and should be action driven.

We would advise around 10 pages as the maximum size for this integrated risk report. The questions to be answered are:

- How well does the (re)insurers risk management system function?
- What are, at any point in time, specific key risks a (re)insurer faces?
- What does the overall risk profile of the (re)insurer look like at any point in time?
- Are triggers for an ad-hoc ORSA likely to be hit within the short term, considering current capital positions and risk profile outlook?

This report should also be discussed with the Management Board and lead to actions when deemed necessary. See also appendix 3.

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7. ORSA - Specifics regarding reporting by a (re)insurance group

There are certain relevant aspects to think about in designing the ORSA framework and accompanying reporting for a (re)insurance group. A group may be defined in this respect as a combination of (re)insurers. They could, but need not necessarily be, separate legal entities. Level 3 guidelines provide a (re)insurance group with options to perform a (Single) Group-Wide ORSA or a Group ORSA in combination with 'regular' Solo ORSAs.

A Group-Wide (taking all Group Companies as object) or a Group ORSA (taking the Holding Company as object) are different from a solo ORSA in its scoping. A Group ORSA views the entire (re)insurer group from a consolidated perspective without specific identification of the individual components. Hence, from the group entity point of view, performing a Group ORSA (in combination with Solo ORSAs) provides the group entity efficiency advantages by not having to address all individual entities one by one (this requirement falls to each of the Solo entities in their ORSAs). A Group-Wide ORSA results ultimately in the same consolidated perspective as a Group ORSA. However, in performing a Group-Wide ORSA the (re)insurer under review is obliged to address entity and group specific issues and circumstances such that the group and individual entity components can be identified individually. Finally, a Solo ORSA reflects the position of a single (re)insurer.

Relevant aspects that influence the decision on how to report the ORSA are amongst others:

- the legal and managerial structure of the (re)insurance group (group or non group) and the specific role of the (re)insurer under review within the group ((sub)holding or subsidiary);
- the supervisory regime applicable to the group and to the individual (re)insurers (EU/non EU);
- the governance structure and the level of (de)centralisation (centre of decision taking).

There is no "one size fits all" approach to the choice of which ORSA reporting to perform by a (re) insurance group. Each (re)insurance group should identify each of the relevant aspects to their own unique situation.

As a guidance we however feel it unlikely that a (re)insurance group operating worldwide in both EU and non-EU jurisdictions¹ with highly decentralised centres of decision making, opts for a Group-Wide ORSA. On the contrary, we would suppose a (re)insurance group that mainly operates locally in the Netherlands, comprising a few (legal) entities and with highly centralised decision making to more likely opt for a Group-wide ORSA. This seems to be the most efficient.

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¹ The relevance of the difference lies in the fact that solo undertakings in non-EU jurisdictions do not fall under Solvency II regulations by itself but only from a group perspective.



Naturally regardless of the option chosen by the Group, local management need to be involved and responsible for the activities comprising of the ORSA. On all levels the "three lines of defence" model should be implemented.

Finally, the question arises whether or not and if so, to what extent a Group or Group-Wide ORSA report differs from a Solo ORSA report. We think that in general no matter which type of ORSA report an (re)insurer prepares it should adequately answer each of the 24 principles stated in EIOPA's Level 3 guidance given its specific circumstances.

However, we feel some of the 24 principles need more emphasis in the context of a Group or Group-Wide ORSA than in a Solo ORSA report. This mainly applies to involvement of senior management, alignment with capital management policies, allocation of SCR diversification effects, and finally attention for undertaking specific risks in modelling. These aspects are likely to play a bigger role, e.g. allocation of SCR diversification effects, or might be harder to accomplish, e.g. attention for specific risks in modelling, within a (re)insurer group as compared to a single local (re)insurer.

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Appendix 1: Article 45 of the Directive and building blocks of ORSA

Article 45 Own risk and solvency assessment

- 1. As part of its risk-management system every insurance undertaking and reinsurance undertaking shall conduct its own risk and solvency assessment. That assessment shall include at least the following:
- (a) the overall solvency needs taking into account the specific risk profile, approved risk tolerance limits and the business strategy of the undertaking;
- (b) the compliance, on a continuous basis, with the capital requirements, as laid down in Chapter VI, Sections 4 and 5 and with the requirements regarding technical provisions, as laid down in Chapter VI, Section 2;
- (c) the significance with which the risk profile of the undertaking concerned deviates from the assumptions underlying the Solvency Capital Requirement as laid down in Article 101(3), calculated with the standard formula in accordance with Chapter VI, Section 4, Subsection 2 or with its partial or full internal model in accordance with Chapter VI, Section 4, Subsection 3.
- 2. For the purposes of paragraph 1(a), the undertaking concerned shall have in place processes which are proportionate to the nature, scale and complexity of the risks inherent in its business and which enable it to properly identify and assess the risks it faces in the short and long term and to which it is or could be exposed. The undertaking shall demonstrate the methods used in that assessment.
- 3. In the case referred to in paragraph 1(c), when an internal model is used, the assessment shall be performed together with the recalibration that transforms the internal risk numbers into the Solvency Capital Requirement risk measure and calibration.
- 4. The own-risk and solvency assessment shall be an integral part of the business strategy and shall be taken into account on an ongoing basis in the strategic decisions of the undertaking.
- Insurance and reinsurance undertakings shall perform the assessment referred to in paragraph 1 regularly and without any delay following any significant change in their risk profile.
- The insurance and reinsurance undertakings shall inform the supervisory authorities of the results of each own-risk and solvency assessment as part
 of the information reported under Article 35.
- The own-risk and solvency assessment shall not serve to calculate a capital requirement. The Solvency Capital Requirement shall be adjusted only in accordance with Articles 37, 231 to 233 and 238.

"Building Blocks" of ORSA

The following non-exhaustive list contains the most important building blocks that will probably exist already in some form or another within each (re)insurer:

- Strategic management process
- Medium Term Planning process
- Risk Appetite
- Capital plan
- Enterprise or Integrated Risk Management (see also next appendix)
- Scenario planning
- Stress tests
- Risk assessments
- Reporting procedures
- Control Statements
- Communication & training

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Appendix 2: Integrated Risk Management - the context of ORSA

Integrated risk management is no new concept. Several professional bodies in the world have already explored this concept, of which the interpretation of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) seems the one that is widely accepted throughout the world. Most regulators, rating agencies and auditing bodies use the ERM concept of COSO in their work.

COSO defines Enterprise Risk Management as:

Enterprise risk management is a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risks to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.

This definition reflects certain fundamental concepts. Enterprise risk management:

- Is a process it's a means to an end, not an end in itself.
- Is effected by people it's not merely policies, surveys and forms, but involves people at every level of an organization.
- Is applied in strategy setting.
- Is applied across the enterprise, at every level and unit, and includes taking an entity-level portfolio view of risks.
- Is designed to identify events potentially affecting the entity and manage risk within its *risk appetite*.
- Provides reasonable assurance to an entity's management and board.
- Is geared to the *achievement of objectives*, and as such implicitly to business continuity, in one or more separate but overlapping categories.

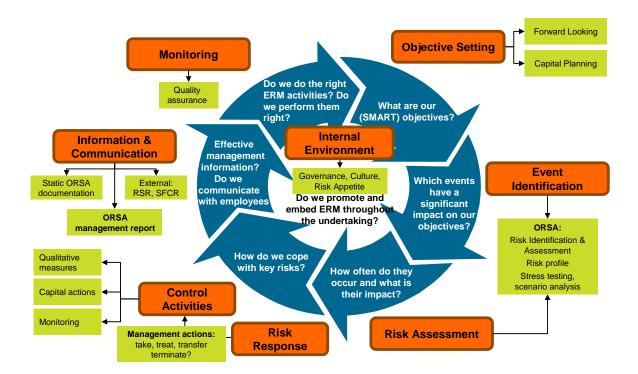
As ERM is geared to the achievement of objectives, it is implicitly also geared towards business (financial) continuity and therefore geared towards the protection of policyholders' rights.

ERM as COSO defines it, consists of eight interrelated components. These are derived from the way management runs a business, and are integrated with the management process. The high level definition of COSO ERM therefore fully reflects the principle based Pillar II of the Solvency II Directive. Pillar II sets some explicit requirements on the content of these components.

In order to foster effective communication between (re)insurers and parties like the regulator, external auditor and rating agencies, we considered it a good practice to depict the relationship between the discussed ORSA elements and the COSO ERM Framework. That relationship is envisaged here:

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Appendix 3: Example elements of ORSA reporting

In performing an ORSA management takes responsibility for considering risk, capital and return coherently within the context of its own business strategy, forward looking from the current situation.

Reporting makes this responsibility transparent. In this respect reference can be made to the annual report and /or elements thereof.

Stable ORSA documentation

1 DESCRIPTION OF THE UNDERTAKING

- 1.1 Position within the Group
- 1.2 Management structure and key personnel
- 1.3 Business structure
- 1.4 Significant lines of business
- 1.5 Strategic management process including Medium Term Planning

2 RISK MANAGEMENT FRAMEWORK

- 2.1 Risk universe
- 2.2 Risk methodology
- 2.3 Risk governance
- 2.4 Risk policies, among others the ORSA Policy including ORSA process description
- 2.5 Risk exposure reporting process
- 2.6 Quality assurance

3 CAPITAL MANAGEMENT FRAMEWORK

- 3.1 Capital management philosophy
- 3.2 Capital management policy

4 EMBEDDING

- 4.1 Product development and pricing
- 4.2 Performance metrics
- 4.3 Incentives

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(Annual) ORSA Internal Report

1 ORSA MANAGEMENT OVERVIEW

ORSA executive summary

2 BUSINESS STRATEGY: RISK-RETURN TRADE-OFF

- 2.1 Business scenarios, including stress scenarios
- 2.2 (Updated) Risk Strategy
- 2.3 (Updated) Risk Appetite Statements
- 2.4 (Expected) Risk Profile
- 2.5 Management considerations
- 2.6 Business Strategy

3 CAPITAL MANAGEMENT

- 4.1 Appropriateness assessment of Standard/Internal model
- 4.2 Analysis of current capital position and quality of capital
- 4.3 Used MVBS and SCR projection technique
- 4.4 Results of (reverse) stress testing
- 4.5 Capital projections

5 MANAGEMENT ACTIONS

- 5.1 Current needed management actions
- 5.2 Contingency management actions for worse scenarios
- 5.3 Contingency plans for solvency ratios below 100%

(Quarterly) Integrated Risk Report

1 OVERVIEW AND STATUS OF INTEGRATED RISK MANAGEMENT

- Effectiveness of risk management system
- Suggested management actions

2 BUSINESS, EMERGING AND STRATEGIC RISKS

- Generic high level risks from an insurance sector perspective (context)
- Specific high level risks from a (re)insurance own strategy perspective
- Suggested management actions

3 RISK PROFILE

- Financial Risk profile (based e.g. on portfolio compositions and changes, sensitivity analysis, stress testing and metrics like MVAR, EaR etc.)
- Non Financial Risk profile (based e.g. on Heatmaps)
- Suggested management actions

4 CAPITAL PROFILE

- Current capital positions and quality of available capital
- Assessment whether pre-defined ORSA triggers are to be hit
- Suggested capital actions

The target audience of this report is the Management / Executive Board of a (re)insurer). Therefore it should address managements' concerns, be concise as well as easily readable.

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Appendix 4: Example use of internal model

No	Form of Use
1	Business & Risk strategy
2	Annual planning cycle
3	Risk planning
4	Management reporting
5	Risk reporting
6	Capital Management
7	Asset & Liability Management & Reinsurance
8	Product development & pricing
9	Underwriting process
10	Deal support: M&A, corporate partners, outsourcing
11	Remuneration
12	Solvency II reporting
13	Adequacy of provisions
14	Reconciliations of information flows

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Appendix 5: Participants in Release 2.0

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