Solvency II Risk Management Systems

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1. Introduction

Article 43(1) of the Solvency II Framework Directive states:

> *"Insurance and reinsurance undertakings shall have in place an effective risk management system comprising strategies, processes and reporting procedures necessary to identify, measure, monitor, manage and report, on a continuous basis the risks, on an individual and aggregated level, to which they are or could be exposed, and their interdependencies.*
>
> *That risk management system shall be effective and well integrated into the organisational structure and in the decision making processes of the insurance or reinsurance undertaking with proper consideration of the persons who effectively run the undertaking or have other key functions."*

The Board is responsible for ensuring that the implemented risk management system is suitable, effective and proportionate to the nature, scale and complexity of the risks inherent in the business.

CEIOPS has been asked to provide detailed advice on how companies will be expected to comply with the Directive text. This advice (so called "implementing measures", or "Level 2 guidance") is now available in draft form. While this gives a good insight into the shape of Solvency II, it is worth remembering that the EU will make the final decision on what Level 2 text to accept, and could potentially amend some aspects of the current proposals. In reality most experts think this is unlikely and the CEIOPS advice will broadly become the final advice.

To give a flavour of the type of feedback given to CEIOPS on the draft implementing measures, we have attached as an appendix to this document a copy of feedback from a representative body of Irish practitioners to CEIOPS on CP33 "System of Governance". All feedback is available on the CEIOPS website which may be accessed via the Solvency II area on our website at www.lifestrategies.ie

2. What about current "policies"

Life companies operating in Ireland will already have written polices for asset management, reinsurance, use of derivatives and will have a named Compliance Officer. Each director on the Board also signs an annual directors' compliance certificate which effectively brings any additional guidance from the Regulator into force on a similar footing to legislation and regulations.

Reinsurance companies operating in Ireland currently comply with the Corporate Governance guidance issued by the Regulator which includes sections on the role of the Board, the audit function, internal controls and the compliance function.

These structures will provide a starting point for Solvency II, but as you will see from the detail outlined in the Directive and the advice from CEIOPS, companies will be expected to put considerable additional effort and resource into the development of a risk management system.

3. What is a Risk Management System?

Solvency II requires all undertakings to have an effective risk management system. This shall include strategies, processes and reporting procedures.

According to CEIOPS advice (CP33), an effective risk management system requires at least the following;

a) A clearly defined and well documented risk management strategy that includes **objectives**, **key principles**, **risk appetite** and **assignment of responsibilities** across all of the activities of the undertaking.

b) **Adequate written policies** that include a definition and categorisation of the risks faced by the undertaking, by type, and levels of acceptable risk limits for each risk type, implementing the undertaking's risk strategy and facilitating control mechanisms.

c) Appropriate **processes** and **procedures** which enable the undertaking to identify, assess, manage, monitor and report the risks it is or might be exposed to.

d) Appropriate reporting procedures and **feedback loops**.

e) **Reports** that are submitted to the Board by the risk management function.

f) An appropriate own risk and solvency assessment (**ORSA**).

In terms of what a risk management system should cover, Article 43(2) of the Directive states:

> *"The risk management system shall cover the risks to be included in the calculation of the Solvency Capital Requirement as set out in Article 101(4) as well as the risks which are not or not fully included in the calculation thereof.*
>
> *It shall cover at least the following areas:*
>
> *(a) underwriting and reserving;*
>
> *(b) asset – liability management;*
>
> *(c) investment, in particular derivatives and similar commitments;*
>
> *(d) liquidity and concentration risk management;*
> *(da) operational risk management;*
>
> (e) *reinsurance and other risk mitigation techniques."*

The creation of a risk appetite, and the assignment of responsibilities form an overarching principle in the creation of a risk management system. The company must then have a written policy in relation to all of the above areas, which should be reviewed annually. The policies should set out the relevant **responsibilities**, **goals**, **processes** and **reporting procedures** to be applied.

CP33 also sets out CEIOPS views on what should be covered in the written policies for the asset liability management and investment policies "as these are of crucial importance for an effective risk management" and the Directive specifically requires implementing measures for these risks. CEIOPS plans to expand on written policies for the other risks in Level 3 guidance.

CEIOPS also considers **credit risk**, **strategic risk** and **reputational risk** in CP33 and also plans to cover these further in Level 3 guidance.

4. Underwriting and Reserving Strategy

According to CEIOPS advice, **underwriting risk** refers to the risk of loss, or of change in the value of insurance liabilities, due to inadequate pricing and reserving assumptions. **Underwriting and reserving risk** includes the fluctuations in the timing, frequency and severity of insured events, relative to the expectations of the undertaking at the time of underwriting. This risk can also refer to fluctuations in the timing and amount of claims settlements.

A proper **strategy for underwriting and reserving risk** should include at least:

a) The classes and characteristics of the insurance business the undertaking is willing to accept.

b) The undertaking's exposure to specific risk concentrations.

c) Internal underwriting limits.

d) The adequacy of premium income to cover expected claims and expenses.

e) The investment policy.

f) Reinsurance and other risk mitigation techniques.

g) The identification of risks arising from all its insurance obligations, including embedded options and guaranteed surrender values, and the resulting capital requirements.

Other points to note:

- Suitable processes and procedures should be in place to ensure the reliability of the data.
- All policies and procedures should be applied to all distribution channels.
- The undertaking should have in place adequate claims management procedures.

5. Asset-Liability Management

According to CEIOPS advice, asset liability management ("ALM") is the management of a business in such a way that decisions on assets and liabilities are coordinated in order to manage the exposure to the risk associated with the variation of their economic values.

An ALM strategy should describe how financial and insurance risks will be managed in an asset-liability framework in the short, medium and long term. The ALM should be linked to market risk and liquidity management.

The **ALM strategy** should have regard to at least:

a) The structure of the asset-liability approach, including time horizon.

b) The portfolio of assets and liabilities.

c) The stress tests to be performed.

d) A validation of parameters and hypotheses by comparison with earlier observations.

e) The interaction between ALM policy and investment policy.

Undertakings should have effective procedures for monitoring and managing the asset-liability positions and to ensure that investment activities are appropriate to the risk profile of the liabilities.

The ALM policy shall take into account the interrelation with other types of risks, such as liquidity and underwriting risks, and establish ways to manage the possible effects of options embedded in the insurance products.

The policy shall provide for:

a) A structuring of the assets that ensures that the undertaking holds sufficient cash and diversified marketable securities of an appropriate nature, term and liquidity to meet its obligations as they fall due.

b) A plan to deal with unexpected cash flows.

c) The identification of risk mitigation techniques.

6. Investment Strategy and Policy

Investments are subject to market risk. Market risk is the risk of loss resulting from fluctuations in the level and the volatility of market prices of assets, liabilities and financial instruments.

Undertakings shall only invest in assets and instruments which they can properly monitor, manage and control. This requires them to identify assets and investments that are appropriate for them to fulfil the 'prudent person' principle[1]. Supervisors would expect to find investment policies in place, including limits, both on volume and on types of assets with the aim of managing risks in an appropriate manner.

The undertaking should develop a detailed **investment strategy** that should have regard to:

a) The financial market environment.

b) Its solvency position.

c) Liquidity risk.

d) Concentration risk.

e) Credit risk.

[1] This is defined in Article 130 of the Directive. The definition is not a short one – it requires assets to be capable of being monitored, managed and controlled in a prudent way. The Directive also sets out considerations for assets held in internal funds linked to policyholder benefits.

f) Asset and liability considerations.

g) Asset classes and strategic asset allocation.

h) Conditions under which the undertaking can pledge or lend assets.

i) Delegated limits by management level.

j) The use of derivatives, ABS, CDOs, hedge funds or other similar investments.

k) The link between market risk and other risks in highly adverse scenarios.

l) The independent and appropriate valuation of its investment assets.

m) Procedures to monitor the performance and review the strategy.

n) Additional constraints to the investment strategy, e.g. Profit & Loss targets.

The **Investment Policy** shall be defined based on the rules and procedures that a competent, prudent and expert manager would apply in order to pursue the investment strategy. The policy shall ensure that the undertaking holds assets with sufficient values and enough liquidity to meet all liabilities and enable payments as they fall due.

The policy shall take into account the undertaking's business, its risk tolerance levels, the solvency position, the long-term risk-return requirements and its underlying exposure. The policy shall also consider how to prudently manage liquidity risk. The policy shall include internal quantitative limits on assets.

CEIOPS advice on this area includes a call for **quantitative limits** on assets. This is expected to be covered in later advice.

7. Liquidity Risk Management

Liquidity risk refers to the risk that undertakings are unable to realise investments and other assets in order to settle their financial obligations when they fall due.

The undertaking shall have in place a **liquidity contingency plan** that includes:

a) The continuous monitoring of the undertaking's debt position.

b) The identification of the available financing options, including reinsurance, the negotiation of credit lines, committed borrowing facilities and intra-group financing.

c) A regular review and testing of these options, both in normal and adverse situations.

The undertaking should develop a **liquidity strategy** covering:

a) The level of mismatch between cash inflows and cash outflows of both assets and liabilities.

b) The level of mismatch of the expected cash flows of direct insurance and reinsurance.

c) The total liquidity needs in the short and medium term including an appropriate buffer for liquidity shortfall.

d) The level and monitoring of liquid assets, including a quantification of potential costs arising from an enforced realisation.

e) The cost of financing and the identification of other financing tools.

f) Projections of cash outflows arising from the insurance activity and evaluation of the uncertainty of timing and amount of the insurance liabilities.

8. Concentration Risk Management

Concentration risk refers to all risk exposures with a loss potential which is large enough to threaten the solvency or the financial position of the undertaking.

The undertaking should develop a **strategy** that takes account of:

a) Policies on underwriting.

b) Investments.

c) Reinsurance and other risk mitigation techniques.

In order to properly manage concentration risk undertakings shall define relevant sources of risk concentration like the relevant sectors and geographical areas to be taken into account. Undertakings shall make use of internal limits, thresholds or similar concepts that are appropriate with regard to their overall risk management.

Undertakings need to have in place adequate procedures and processes for the active monitoring and management of concentration risk to ensure that it stays within established policies and limits and mitigating actions can be taken as necessary. The monitoring of concentration risk shall include an analysis of possible contagion lines.

Concentration risk is not the risk that your mind will wander midway through a long briefing note on risk management systems!

9. Operational Risk Management

Operational risk refers to the risk of loss arising from inadequate or failed internal processes, from personnel and systems, or from external events.

The undertaking should have a well-documented assessment and management system for operational risk, with clear responsibilities assigned.

The Board should approve, implement and periodically review the undertaking's **operational risk management framework**. This should include:

a) A definition of operational risk. Undertakings shall articulate what constitutes operational risk for the purpose of their policies and procedures.

b) Effective processes to identify, assess, mitigate, manage, monitor and report the operational risks the undertaking is, or might be, exposed to and adequate internal control mechanisms;

c) The arrangements, processes and mechanisms detailed above should be comprehensive and proportionate to the nature, scale and complexity of the undertaking's activities.

In order to ensure a proper risk management of operational risk, the undertaking should develop a **detailed strategy** that should usefully take into account:

a) The entire activities and internal processes in place in the undertaking, including any IT system supporting them;

b) The operational risk events it is or might be exposed to and the way to mitigate them;

c) The need for an early warning system that allows for an effective intervention.

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 and interrelation between risks.

CEIOPS would (subject to the principle of proportionality) expect undertakings to systematically collect operational risk data in an internal database. The advice also requires the categorisation of past operational risk "events" that could allow an analysis and projection of possible future occurrence.

10. Reinsurance and other risk mitigation techniques

A reinsurance management **strategy** shall be defined and properly documented.

Undertakings should identify who is responsible for monitoring the reinsurance arrangements, which control mechanisms are in place and what reporting lines are established.

As part of their reinsurance management strategy, undertakings should have adequate **procedures and processes** for placing appropriate reinsurance programs. The level of sophistication for these processes and procedures should be proportionate to the nature, scale and complexity of the undertaking's portfolio.

The undertaking's reinsurance management **strategy** should usefully have regard to the following considerations:

a) Identification of the level of risk transfer appropriate to the undertaking's approach to risk;

b) What types of reinsurance arrangements are most appropriate to limit risks to the undertaking's insurance risk profile;

c) Principles for the selection of reinsurance counterparties;

d) Procedures for assessing the creditworthiness and diversification of reinsurance counterparties;

e) Concentration limits for credit risk exposure to reinsurance counterparties and appropriate systems for monitoring these exposures; and

f) Provision for adequate liquidity management to deal with any timing mismatch between claims' payments and reinsurance recoveries.

The reinsurance management strategy should include provisions to regularly review the procedures and processes established in order to ensure that they remain efficient and effective and take into account relevant changes in the risk profile of the undertaking.

11. Credit risk management (further details expected in later advice)

Credit risk refers to the risk of loss or of adverse change in the financial position resulting, directly or indirectly, from fluctuations in the credit standing of issuers of securities, counterparties and any debtors to which undertakings are exposed, in the form of counterparty default risk, or spread risk, or market risk concentrations.

Credit risk is a function of exposure at default and probability of default. A credit risk management strategy should focus on these elements both in isolation and on the correlations between them.

The undertaking should ensure that the credit risk exposure is sufficiently diversified. It should have a process of credit risk management to ensure that exposure to any counterparty is limited so that no single exposure would threaten the undertaking's solvency position.

The undertaking should be alert to changes in credit ratings through regular monitoring processes, and capable of evaluating probabilities of default even where exposures are unrated. Exposure to speculative grade assets should be prudent and undertakings facing larger credit risk exposures should be capable of hedging credit risk via derivatives to protect against a protracted fall in credit quality or turn in the credit cycle.

Undertakings should be aware that intra group exposures give rise to credit risk as any other external exposure does. The undertaking should be able to demonstrate that it is not overly reliant on any counterparty, regardless of whether it lies within the same group.

12. Strategic risk (further details expected in later advice)

Strategic risk is defined as the risk of the current and prospective impact on earnings or capital arising from adverse business decisions, improper implementation of decisions, or lack of responsiveness to industry changes.

The overall strategy of the undertaking should incorporate its risk management practices. The undertaking should have a process for setting strategic high-level objectives and translating these into detailed shorter-term business and operation plans.

13. Reputational risk (further details expected in later advice)

Reputational risk is defined as the risk of potential loss to an undertaking through deterioration of its reputation or standing due to a negative perception of the undertaking's image among customers, counterparties, shareholders and/or supervisory authorities. To that extent it may be regarded as less of a separate risk, than one consequent on the overall conduct of an undertaking.

The administrative or management body of the undertaking should be aware of potential reputational risks it is exposed to and the correlation with all other material risks.

The undertaking should pay great attention to understanding and recognising key values affecting its reputation, considering expectations of the stakeholders and sensitivity of the marketplace.

14. Conclusion

The Solvency II project seeks to change the activities of management and Board of Directors for the better ongoing solvency of the industry. Initially organisations will have to decide how to implement a risk management system, which will most likely include the translation of current controls into the new language of Solvency II.

The principle of proportionality does not exempt small companies from the necessary risk management system. It does allow such organisations to have simpler framework, but these companies will still need to document, manage and monitor the framework over all the required headings.

Solvency II seeks to introduce a more formal, visible and flexible control framework, which includes the need for more documentation, oversight from internal experts, and ongoing review by the Board of Directors. This change cannot be completed quickly, therefore we recommend that companies plan for, and begin to implement, the new requirements now.

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Appendix

Feedback provided to CEIOPS on CP33 (System of Governance) by Ireland's Solvency 2 Group, excluding representatives from the Department of Finance and the Financial Regulator.

The Solvency 2 Group is a high-level group set up by the Irish government for the purpose of contributing to the development of Solvency 2 from an Irish perspective. It is made up of representatives from the insurance industry (life and non-life, direct writers and reinsurers), industry representative bodies, professionals (actuaries, accountants and solicitors) working with insurers, as well as representatives from the Department of Finance and the Financial Regulator. As noted above, the latter two representatives have not contributed to this submission.

1. Our Group welcomes and supports CP33. We particularly welcome CEIOPS' views on proportionality, and while we recognise that the application of proportionality cannot easily be prescribed in a principles-based system, it is of vital importance for smaller, less complex undertakings and we would appreciate further indications of how it might play out in practice in such organisations.

2. Ireland has a high concentration of (re)insurance undertakings that are subsidiaries of (re)insurance groups headquartered in member states and third countries. Many ancillary activities (e.g. investment activities) of these subsidiaries are outsourced to affiliated entities in member states or third countries. Implementing measures should not be so disproportionate as to render such arrangements impractical. Some of the comments below relate to this general point. Any implementing measures that relate to outsourcing that would, unintentionally or otherwise, be impractical to implement in the context of affiliate outsourcing business models would be particularly detrimental to Ireland and could serve to undermine the principle of freedom of capital movement in the internal market.

3. The CEIOPS draft advice fails to fully contemplate unit-linked business and could thereby be impractical to apply in conducting business of this type. Unit-linked business is significant in both UK and Ireland domestic markets and is also a growth segment under Freedoms of Establishment & Services. Implementing measures should fully contemplate unit-linked business. Any implementing measures that would unintentionally or otherwise be impractical to implement for unit-linked business would be particularly detrimental to undertakings in Ireland and could serve to undermine the consumer benefits of a single internal market for insurance.

4. Governance issues for undertakings that are part of larger groups can vary quite significantly from those for stand-alone undertakings. Those differences should be borne in mind when CEIOPS is finalising its advice for the Commission. It is quite common, for example, for one internal audit function to have responsibility for a number of different undertakings in a group.

See our comments under this heading under 3.231, 3.232, 3.240 and 3.242 below. Similar considerations apply to the role of the Chief Risk Officer and to outsourcing of functions to other group entities.

5. As a final general comment, CEIOPS states in 1.8 that, in drafting its advice, it has taken into consideration the lessons learnt from the financial crisis. This is of vital importance. It is also worth noting however that insurers have withstood the impact of the crisis reasonably well, considering its severity. This fact should also be borne in mind when drafting final advice to the Commission, so that we don't "throw out the baby with the bath-water".