



Society of Actuaries in Ireland

Requirements for Reserving and Pricing for Non-Life Insurers and Reinsurers

Response to Central Bank of Ireland Consultation Paper (CP 73)

10th December 2013

Contents

| | | |
|-----------|---|-----------|
| 1 | Introduction | 2 |
| 2 | Summary of Key Comments | 4 |
| 3 | Signing Actuary | 8 |
| 4 | Statement of Actuarial Opinion (SAO) | 11 |
| 5 | Governance Requirements | 15 |
| 6 | Internal Audit Assessment | 17 |
| 7 | Peer Review | 18 |
| 8 | Reserving Committee | 21 |
| 9 | Other Comments | 22 |
| 10 | CP73 Appendix 3, Guidance on Best Estimate and Risk Margin | 25 |
| 11 | Queries | 26 |
| | Appendix A: Format of Opinion on Non-Life Technical Reserves | 27 |
| | Appendix B: Guidance on Best Estimate and Margin for Uncertainty | 28 |



1 Introduction

- 1.1 The Society of Actuaries in Ireland (“Society”) is the professional body representing the actuarial profession in Ireland. Many of our members hold responsible roles within, or as advisers to, financial services firms. They act as Board members, Appointed Actuaries (with statutory responsibilities), Signing Actuaries (also with statutory responsibilities), and senior managers carrying a range of responsibilities including financial and risk management.
- 1.2 In addition, the Society is an active member of the Groupe Consultatif Actuariel Européen and is fully engaged in the Groupe's ongoing work on governance systems and prudential regulatory standards, especially in relation to the development of Solvency II.
- 1.3 We welcome the opportunity to submit this response to the Central Bank of Ireland (“Central Bank”) Consultation Paper 73 (CP 73), “Requirements for Reserving and Pricing for Non-Life Insurers and Reinsurers”. We support many aspects of the proposals, such as the improved governance of the reserving process for non-life direct insurance business. We welcome the statement (in provision 2) of the respective roles and responsibilities of the Board of Directors of a company and the Signing Actuary. We also welcome the responsibility placed on Boards (in provision 3) to ensure that information and analysis provided by the Signing Actuary is actively reviewed and challenged – this is appropriate, given the central role of the Signing Actuary in the regulatory framework and the fact that, often, his or her work is complex and involves a degree of judgement.
- 1.4 We provide an overview of our key comments in Section 2. We elaborate on these and provide further comments in the remaining sections. We provide responses to the specific points on which comments were invited in the CP 73 as follows:
 - a. The proposal to designate the role of Signing Actuary as a PCF role:
 - Paragraph 3.1
 - b. The proposed Requirements:
 - Sections 2 to 10 and Appendix A
 - c. The guidance on Best Estimate and Risk Margin:
 - Section 10 and Appendix B

- d. Issues which should be considered by Boards when setting risk margins:
 - Section 10 and Appendix B
 - e. The circumstances in which a company may request an exemption from the requirement to produce an SAO:
 - Paragraph 4.5
- 1.5 We understand from the Central Bank that many of the requirements set out in CP 73 will not apply to life reinsurance business. Furthermore, we feel that some (in particular, requirements relating to verifying the integrity of data) would need to be modified, or at least amplified through explanatory guidance, before they could be applied in a meaningful way in a life reinsurance or non-life reinsurance context. Much of this response focuses on the application of the requirements in the context of non-life direct business. We comment specifically on reinsurance business in paragraphs 2.3 – 2.5 and 9.2 – 9.4.
- 1.6 We would welcome the opportunity to engage further with the Central Bank on the topics raised in this response.

2 Summary of Key Comments

General comments

- 2.1 References to “non-life insurers and reinsurers” and similar references are ambiguous – it is not clear whether these are references to non-life insurers and non-life reinsurers, or non-life insurers and all reinsurers. If¹ new requirements are introduced for (i) non-life insurers, (ii) non-life reinsurers and (iii) life reinsurers, they should be set out separately for each of the three categories, to avoid confusion and ambiguity.
- 2.2 We support proposals to improve the governance of the reserving process for non-life direct insurance business. We welcome the statements (in provisions 2 and 3) relating to the respective roles and responsibilities of the Board of Directors of a company and the Signing Actuary.

Reinsurance Business (See paragraphs 9.2 – 9.4)

- 2.3 The CP 73 proposals appear to have been drafted with non-life direct business in mind, and some (such as requirements relating to data checks, as set out) would need to be modified, or at least amplified through explanatory guidance, before they could be applied in a meaningful way in a reinsurance context.
- 2.4 We are mindful that implementation of the Central Bank Guidelines on Preparing for Solvency II will begin next year and will lead to strengthening of governance structures, and mindful also that new regulatory requirements for life reinsurance and non-life reinsurance business were introduced in 2012. We therefore question whether it is necessary to also introduce the CP 73 requirements for life reinsurance and non-life reinsurance business during the transition to Solvency II².
- 2.5 If it is decided that some of the proposed requirements should apply for life reinsurance and non-life reinsurance business, then we suggest that they should be introduced as guidelines rather than as statutory requirements, with reinsurers expected to apply them on a “comply or explain” basis. In this event, the requirements/guidelines should be set out separately for (i) non-life direct, (ii) non-life reinsurance and (iii) life reinsurance, to avoid confusion and ambiguity.

Definitions (See paragraphs 9.5 – 9.7)

- 2.6 We recommend changes to some of the definitions in the proposed requirements. Please see paragraphs 9.5 – 9.7 of this submission for details.

¹ Please see also paragraphs 2.3 – 2.5 and 9.2 – 9.4 of this submission.

² The matter identified at paragraphs 2.12/4.9 and Appendix A of this paper does, however, need to be addressed.

Signing Actuary (See Section 3)

- 2.7 We support the proposal to prescribe the Signing Actuary of a non-life insurer, non-life reinsurer or life reinsurer as a PCF. We consider this to be appropriate, given the Signing Actuary's important role in the reserving process. We caution, however, against an expectation that this will automatically mean that all Signing Actuaries will have deep knowledge of most aspects of the (re)insurer's affairs. It is important to distinguish between the Signing Actuary role *per se* and any additional positions a Signing Actuary may (but will not necessarily) hold, e.g. as a member of the senior management or executive team.
- 2.8 We recommend that the requirement for the Signing Actuary to be a Fellow of the Society and to hold a practising certificate issued by the Society should be retained at least until any review of requirements under the Solvency II framework. (See paragraphs 3.2.1 to 3.2.5).
- 2.8.1 Pre-requisites for practising certificates include minimum levels of actuarial education and relevant practical experience, as well as a clean record in respect of compliance with technical and ethical standards. A practising certificate is issued only after the application for same has been carefully considered by a committee of experienced actuaries. The holder is obliged to comply with professional ethical and technical standards and may be held accountable in this regard under the Society's Disciplinary Scheme. We believe that the process adds value and is an important element of the regulatory framework.
- 2.8.2 Retaining these requirements would strengthen the proposed regulatory framework and would allow the Society to develop and enforce guidance (/standards of practice) for the performance of work required under the CP 73 regime (e.g. data checks, peer review).
- 2.9 Where a company is a High Impact company, the Signing Actuary must be an employee. We concur with the Central Bank's view that a High Impact company should have an in-house actuarial function. However, in respect of the Signing Actuary role *per se*, we suggest that the CBI should permit alternative models that nevertheless achieve a significant level of engagement between the Signing Actuary and the High Impact company. The requirement could be amended such that it can be waived by the Central Bank on foot of an application from the insurer that sets out reasonable justification. Such justification might include the maintenance of an in-house actuarial function.

Statement of Actuarial Opinion (SAO) (See Section 4)

- 2.10 We welcome the fact that current regulatory objectives in respect of the scope and purpose of the SAO and accompanying report are now specified in CP 73. This will support Signing Actuaries in improving the effectiveness of their dialogue with Boards on the adequacy of reserving.
- 2.11 The scope of the data checks that the Signing Actuary should perform under the proposed requirements is not clear.

- 2.11.1 It is important to ensure that the requirements are not based on unrealistic expectations regarding Signing Actuaries' areas of expertise. The Signing Actuary (including the Signing Actuary of a High Impact firm) will need to rely on other experts, in particular the Head of Claims. The responsibilities of other parties in relation to data, and the extent to which the Signing Actuary may reasonably rely on them, should be clearly set out. Otherwise, we believe that the requirements will place a disproportionate and unrealistic reliance on the Signing Actuary and will not adequately address known reserving-related risks. We suggest that the Head of Claims should have formal responsibility for signing off on claims estimates provided to the Signing Actuary. We also suggest that consideration be given to making Head of Claims a Pre-Approval Controlled Function, rather than a Controlled Function.
- 2.11.2 Guidance / explanatory text should be developed regarding the data checks that Signing Actuaries are expected to perform, so that Signing Actuaries will know what is expected and so that users of their work have clarity as to what it encompasses. This could also be a mechanism for ensuring that certain basic checks are performed consistently and routinely across all firms. We would be happy to discuss with the Central Bank how such guidance / explanatory text might be developed and introduced (including whether this should be done by the Central Bank or by the Society).
- 2.11.3 Benchmarking against industry data should also be considered as a supplement to reasonableness checks and an alternative to very granular data checks. We urge the Central Bank to collate and publish relevant data for this purpose.
- 2.12 For non-life (re)insurance business, the wording of the SAO needs to be amended as the current wording is inconsistent with the requirement for the SAO to certify "that the booked reserves of the company are greater than the Signing Actuary's best estimate of the company's liabilities, as at the year-end". Please see Appendix A for this and other recommendations relating to the SAO.

Governance Requirements (See Section 5)

- 2.13 We support the principle that a company should document its pricing policy. However, more information is needed on what is expected. Alternatively, provision 25 on pricing policy could be excluded pending further consideration of this subject, leaving the requirements to focus on the key issue of reserving. Given that the transition to Solvency II will in any event involve some strengthening of governance in pricing and related areas (e.g. the actuarial function will be required to opine on underwriting policy), this may be sensible.

Peer Review (See Section 7)

- 2.14 Given the nature and scale of the Reviewing Actuary's responsibilities, we recommend that the Reviewing Actuary be required to be a Fellow of the Society of Actuaries in Ireland and to hold (or have recently held) a relevant practising certificate issued by the Society.

- 2.15 We support the concept of peer review and that the Reviewing Actuary should provide an independent view of the SAO and the report underlying the SAO. However, we consider that companies should be afforded some flexibility in relation to the appointment of the Reviewing Actuary. We suggest that provision 42 be amended such that the requirements therein may be varied by the Central Bank subject to reasonable justification being provided by the (re)insurer.
- 2.16 Alternative timeframes and approaches for conducting the peer review should be considered. For example, it may be effective to perform a peer review on Q3 figures, so that the review can inform decisions on booking year-end reserves.
- 2.17 For High Impact and Medium High Impact companies, the Reviewing Actuary must independently calculate a best estimate, under the proposed requirements. We suggest that the Reviewing Actuary should instead be required to provide an opinion on whether the Signing Actuary's conclusions were reasonable, and should use his or her knowledge, experience and expert judgement to determine the most appropriate approach (note that this does not preclude independent calculation of the best estimate, where appropriate).

Guidance on Best Estimate and Risk Margin (See Section 10 and Appendix B)

- 2.18 We recommend that the text of CP 73 Appendix 3 be reviewed and refined. We include proposed text in Appendix B of this document.
- 2.19 Included in the text in Appendix B is a proposal that the term 'risk margin' should be changed to 'margin for uncertainty', as 'risk margin' is defined in a specific way under proposed Solvency II requirements.
- 2.20 In considering the margin for uncertainty, we suggest that it would be reasonable for firms to take into account the implicit margin in undiscounted technical provisions.

Transition to Solvency II (See Section 9)

- 2.21 We consider it would be helpful to indicate for each category of business what, if any, requirements will fall away under Solvency II. For example, how will the various roles and functions envisaged under CP 73 relate to those envisaged under Solvency II? What flexibility will the Central Bank allow such that firms can efficiently and effectively transition from the current regime to the CP 73 regime and on to Solvency II? Will the implementation of Solvency II impact on the peer review requirements? Notwithstanding some remaining uncertainty about some of the implementation details of Solvency II, insights into the Central Bank's thinking on these and related questions would help firms to manage the transition to Solvency II well, while engaging with the CP 73 requirements in the meantime.

3 Signing Actuary

3.1 We support the proposal to prescribe the Signing Actuary of a non-life insurer, non-life reinsurer or life reinsurer as a PCF. We consider this to be appropriate, given the Signing Actuary's important role in the reserving process.

3.1.1 We caution, however, against an expectation that prescribing the Signing Actuary as a PCF will automatically mean that all Signing Actuaries will have deep knowledge of most aspects of the (re)insurer's affairs. It is important to distinguish between the Signing Actuary role *per se* and any additional positions a Signing Actuary may hold, e.g. as a member of the senior management or executive team – and recognise that an insurer's organisational structure may be such that the Signing Actuary (who may be an external appointee) does not hold wider roles within the firm.

Provisions 9 to 11

3.2 CP 73 is silent on whether the Signing Actuary must be a Fellow of the Society of Actuaries in Ireland and on whether he/she must hold a practising certificate issued by the Society.

3.2.1 Currently, it is a statutory requirement for the Signing Actuary of a life reinsurance company to be a Fellow of the Society (SI No. 23 of 1996, European Communities (Insurance Undertakings: Accounts) Regulations 1996). Similarly for Appointed Actuaries of life companies (SI No. 360 of 1994, European Communities (Life Assurance) Framework Regulations 1994).

3.2.2 It is currently a regulatory requirement for the Signing Actuary of a non-life (re)insurance company to be a Fellow of the Society.

3.2.3 This makes it possible for the Society to require those of its members who discharge these roles to hold a practising certificate issued by the Society, and this is included in the current regulatory requirements. Pre-requisites for practising certificates include minimum levels of actuarial education and relevant practical experience. A practising certificate is issued only after the application for same has been carefully considered by a committee of experienced actuaries. The holder is obliged to comply with ethical and technical standards issued by the Society. This can serve as both a support and a control. Allegations of wrong-doing in this regard may be investigated, and sanctions may be applied, under the Society's Disciplinary Scheme. While practising certificates are not a substitute for the normal processes by which firms assess a person's competence in the context of the particular types of business written by the firm, we believe that the scrutiny carried out by the Society is of considerable value and an important element of the regulatory framework.

3.2.4 The current statutory and regulatory requirements make it feasible for the Society to implement a Code of Professional Conduct and Actuarial Standards of Practice relating to the performance of statutory and regulatory work, and, as noted, to hold Signing Actuaries accountable under the Society's Disciplinary Scheme for their compliance with the Code and Standards.

- 3.2.5 We are conscious that, under Solvency II, it may not be feasible to require persons discharging the responsibilities of the actuarial function, for example, to be Fellows of the Society. However, we do not believe there is an imperative to depart from this requirement in respect of Signing Actuaries in advance of Solvency II. We believe that doing so would weaken the regulatory framework in respect of (re)insurance companies operating in Ireland. We recommend that this requirement be retained, along with the requirement to hold a practising certificate. This would strengthen the proposed regulatory framework and it would allow the Society to develop and enforce guidance (/standards of practice) for the performance of work required under the CP 73 regime - we believe that guidance will be needed for certain tasks, e.g. data checks and peer review, to foster high quality of work and, where appropriate, consistency of approach.
- 3.3 Where a company is a High Impact company, the Signing Actuary must be an employee of the company (provision 9).
- 3.3.1 We concur with the Central Bank's view that a High Impact company should have an in-house actuarial function.
- 3.3.2 However, requiring that the Signing Actuary be an employee might not always be optimal. For example, a Signing Actuary who has only joined the company recently might not be as effective as an external Signing Actuary who has a track record of working extensively with the company (whether in that role or otherwise); an external Signing Actuary might more easily maintain the independence that is required for the role; also, mandating that the Signing Actuary must be directly employed could limit the pool of talent and experience from which the company may draw for the role.
- 3.3.3 There are, of course, advantages to having a directly employed Signing Actuary too. However, we suggest that the CBI should permit alternative models that nevertheless achieve a significant level of engagement between the Signing Actuary and the High Impact company.
- 3.3.4 The requirement could be amended such that it can be waived by the Central Bank on foot of an application from the insurer that sets out reasonable justification. Such justification might include the maintenance of an in-house actuarial function.
- 3.3.5 In addition, clarification of what constitutes "employee" for this purpose should be provided – e.g. may an employee of another company within the same group act as Signing Actuary?
- 3.4 The definition of Chief Risk Officer states that "The CRO shall have sufficient seniority and independence to challenge or influence decisions which affect an institution's exposure to risk". We consider that similar requirements should apply in respect of the Signing Actuary, given the nature and scale of his/her responsibilities.
- 3.5 Where the Signing Actuary role is outsourced, the appointment must be reviewed "when she/he has been in the position for nine years or more" and the rationale for any continuance must be documented and notified to the Central Bank. Some clarifications are needed:

- (a) Does the first period of nine years start from the date on which the Signing Actuary first took up the role?
- (b) If the appointment is reviewed after nine years and extended, when should it be reviewed again?

4 Statement of Actuarial Opinion (SAO)

Provisions 12 – 20

We understand, based on correspondence with the Central Bank, that paragraphs 12 – 20 of CP 73 will not apply in respect of life reinsurance business (rather, existing requirements with some minor changes will apply). The following comments are made in that context.

- 4.1 The proposed scope and purpose of the SAO and the accompanying report are somewhat broader than is the case under the current regulatory requirements. This reflects an evolution that has been occurring in practice under the supervisory approach adopted over recent years. We welcome the fact that current regulatory objectives in respect of the scope and purpose of the SAO and accompanying report are now specified in CP 73. This will support Signing Actuaries in improving the effectiveness of their dialogue with Boards on the adequacy of reserving.
- 4.2 We recommend that provision 19 apply to “The Board” rather than “Companies”.

Key issues

Data checks

- 4.3 In relation to data:
- (a) The Signing Actuary will be required to “perform reasonable checks on the data to test its accuracy and completeness” (provision 17.b.).
 - (b) He or she must disclose to the Central Bank “any material concerns that he/she has in respect of data accuracy, integrity and sufficiency in the context of the work undertaken” (provision 17.c.).
 - (c) The report underlying the SAO “should address . . . in a comprehensive manner . . . How the Signing Actuary assessed the consistency and quality of the data used to produce the best estimate . . . [and] The nature of any reliance placed or not placed on information or reports provided by the company, or any other source, and any testing of the data or other information by the company’s internal or external auditor” (provisions 20.a. and 20.e.).
 - (d) “The Board shall ensure that . . . The data provided to the Signing Actuary and underlying the reserves are accurate and complete” (provision 29.b.).
 - (e) The internal audit function shall review “the processes around the preparation and submission of the data provided to the Signing Actuary . . . to provide reasonable assurance that the data is accurate and complete” (provision 30).
- 4.4 The scope of the data checks that the Signing Actuary should perform is not clear.
- 4.4.1 What level of granularity is expected?

4.4.2 Should provision 17.b. refer to “reasonableness” rather than “reasonable” checks?

4.4.3 It is important to ensure that the requirements are not based on unrealistic expectations regarding Signing Actuaries’ areas of expertise. It is a reality that a Signing Actuary cannot have expertise in, or control over, all areas of the business. Whether through the requirements or through supporting guidance /explanatory text, the responsibilities of other parties in relation to data accuracy and integrity, and the extent to which the Signing Actuary may reasonably rely on them, should be clearly set out. Without this, we believe that the requirements will place a disproportionate and unrealistic reliance on the Signing Actuary and will not adequately address known reserving-related risks.

“Other parties” includes in particular the Head of Claims. We suggest that the Head of Claims should have formal responsibility for signing off on claims estimates provided to the Signing Actuary. We also suggest that consideration be given to making Head of Claims a Pre-Approval Controlled Function rather than a Controlled Function.

Also relevant are:

- The head of the IT department, for the integrity of the IT systems;
- The external auditor - provision 23 charges the Board to ensure that the external auditor has the requisite experience and knowledge to adequately assess key areas of focus in a data review, thus implying that the external auditor is required to review the data (we suggest that this requirement should be explicit, rather than implied); provision 20.e. refers to disclosures about reliance on the external auditor;
- The internal audit function – provision 30 requires the internal audit function to review the processes around the preparation and submission of the data provided to the Signing Actuary with a view to providing reasonable assurance that the data is accurate and complete; provision 20.e. refers to disclosures about reliance on the internal auditor;
- A Pre-Approval Controlled Function holder who signs a Data Accuracy Statement (CP 73 Appendix 2, footnote 2);
- The Reserving Committee of a High Impact firm could also have a role, e.g. a responsibility to formally review large claims outstanding on a regular basis.

4.4.4 Provision 14 prevents the Signing Actuary of a High Impact company from relying on “data and information prepared by the responsible employees of the Company”. We understand that the thinking here is that the Signing Actuary of a High Impact company should have a high level of engagement with the business and should play a part in ensuring the integrity of data. However, the Signing Actuary might not have sole or even primary responsibility for data integrity within the organisation. We recommend that he or she should not be precluded from relying on other experts.

- 4.4.5 Guidance / explanatory text should be developed regarding the data checks that Signing Actuaries are expected to perform, so that Signing Actuaries will know what is expected and so that users of their work have clarity as to what it encompasses. This could also be a mechanism for ensuring that certain basic checks are performed consistently and routinely across all firms. We would be happy to discuss with the Central Bank how best such guidance / explanatory text might be developed and introduced (including whether this should be done by the Central Bank or by the Society).
- 4.4.6 Benchmarking against industry data should also be considered as a supplement to reasonableness checks and an alternative to very granular data checks. We urge the Central Bank to collate and publish relevant data for this purpose.
- 4.4.7 Similar questions arise in respect of the data checks that the Reviewing Actuary is required to perform.
- 4.4.8 Reinsurers' data is quite different to direct writers' data. It is not clear what the Central Bank expects / requires in terms of data checks for non-life reinsurance business. We would be happy to discuss this with the Central Bank.

Other points

- 4.5 We note that provision 13 does not permit any derogations for life reinsurance business. We suggest that provision 13 be expanded such that the Central Bank may grant derogations in other (unspecified) circumstances, if the Bank considers that there is no prudential imperative for an SAO to be prepared in those circumstances.
- 4.6 As there is no directly equivalent "expected development" for claims experience from the current year, we suggest that 19(b)(iv) be re-worded as "How actual *prior year* claims experience during the year compared to expected development...".
- 4.7 There is, we think, a typographical error at 19(b)(iv) – "This analysis . . ." should be part of 19(b)(iv), rather than part of 19(b).
- 4.8 Presumably provision 20.(e). addresses "The nature of any reliance placed or not placed . . . on any testing of the data . . . by the company's internal or external auditor" rather than "The nature of . . . any testing of the data . . . by the company's internal or external auditor . . . ", but it is not absolutely clear.

Format of Opinion on Non-life Technical Reserves (CP 73 Appendix 2)

- 4.9 For non-life (re)insurance business, the wording of the SAO needs to be amended as the current wording is inconsistent with the requirement for the SAO to certify "that the booked reserves of the company are greater than the Signing Actuary's best estimate of the company's liabilities, as at the year-end". Please see Appendix A for this and other recommendations relating to the SAO.

4.10 The inclusion of the Total Required Solvency Margin together with the corresponding opinion that it *“has been calculated based on the applicable data in the Company’s returns to the Central Bank of Ireland and is in accordance with Irish legislation...”* is a new requirement in respect of the SAO on non-life direct business. We do not have an objection in principle to Signing Actuaries verifying the calculation of the Solvency Margin. However we consider that clarification should be provided that the Signing Actuary can rely on data from the statutory returns, used in the calculation of the Solvency Margin. That is, the Actuary is verifying how the Required Solvency Margin has been calculated and not the underlying data.

5 Governance Requirements

Data checks (provision 22)

- 5.1 Provision 22 indicates that both the claims function and the actuarial function will be required to periodically reconcile claims data. It is not clear why the work of the claims function should be repeated in the actuarial function – this would appear to be an inefficient use of resources. Moreover, it would dilute responsibility and accountability in relation to claims data maintenance and reporting – from a risk management perspective, clear delineation of responsibilities would be more effective. Note our suggestion (paragraph 4.4.3) that the Head of Claims should have formal responsibility for signing off on claims estimates provided to the Signing Actuary.

Pricing Policy (provision 25)

- 5.2 We support the principle that a company should document its pricing policy. Presumably what is required under provision 25 is a policy that sets down pricing principles and key controls, but does not necessarily cover, for example, pricing assumptions or criteria for departing from technical prices at the level of individual products. More information is needed on what is expected. Alternatively, provision 25 on pricing policy could be excluded pending further consideration of this subject, leaving the requirements to focus on the key issue of reserving. Given that the transition to Solvency II will in any event involve some strengthening of governance in pricing and related areas (e.g. the actuarial function will be required to opine on underwriting policy), this may be sensible.

Reserving Policy (provision 26)

- 5.3 We support the requirement that a company should have a clearly documented Reserving Policy.

Risk Margin (provision 27)

- 5.4 In considering the risk margin over the best estimate booked by the company, the Board is required to consider *inter alia* “the main risks and uncertainties as outlined in the Risk Margin report”. Note that only High Impact firms are obliged to have a Risk Margin report prepared. We suggest that Boards should be explicitly required to consider the risks and uncertainties discussed in the Signing Actuary’s report.

Risk Margin Report (provision 28)

- 5.5 A Risk Margin Report is required only for High Impact companies. For other companies (and for High Impact companies, as an extra layer of governance), is it intended that periodic peer reviews will include an assessment of the adequacy of the margin for uncertainty? Provision 34 seems to suggest this. Provision 34 says that “This [peer review] report shall advise the Board with an independent view of the Company’s reserving” – does this relate to total reserves, i.e. best estimate of liabilities plus margin for uncertainty?

- 5.6 Provision 28 requires that the Risk Margin Report is produced within 4 months of the financial year end. As statutory returns are required by April 30th, and a company may make changes up to this date, we suggest that this provision should be implemented on a “comply or explain” basis. Note that, under provision 28(d), the Risk Margin Report must include “a discussion of how the risk margin is sufficient to address the risks and uncertainties identified by the Signing Actuary”. The Signing Actuary’s conclusions are set out in the report on the SAO, not in the SAO itself, and, in accordance with provisions 14 and 16, that report might not be available within 4 months of the financial year end

Provision 28(a)

- 5.7 With respect to the Risk Margin Report, CP 73 requires that “Where appropriate, the distribution of reserves, and the percentile at which reserves are booked, should be included”. What dictates or influences the appropriateness, or otherwise, of including the distribution of reserves, and the percentile at which reserves are booked?

6 Internal Audit Assessment

Provisions 30 to 33

- 6.1 The Internal Audit Assessment under provision 30 includes a “review of the processes around the . . . production of the booked reserves”. Further information on what is expected would be useful. It is not clear to what extent actuarial expertise will be required.

Provision 30(c)

- 6.2 We suggest that the wording here be reviewed as it is not clear whether the Internal Audit Assessment of governance and control framework refers to the governance and control framework of the company’s reserving process only or of all the company’s activities.

7 Peer Review

General comments

- 7.1 Given the nature and scale of the Reviewing Actuary's responsibilities, we recommend that the Reviewing Actuary be required to be a Fellow of the Society of Actuaries in Ireland and to hold (or have recently held) a relevant practising certificate issued by the Society.
- 7.2 It is not clear whether it will be permissible to perform a peer review on Quarter 3 figures and roll the results forward, so that the peer review can inform decisions on booking year-end reserves. Experience of such an approach indicates that it can be very useful to Boards of Directors. We recommend that flexibility be allowed in terms of how and when the peer review is conducted.

Provision 34

- 7.3 See paragraph 5.5.

Provision 36(a)

- 7.4 For High Impact and Medium High Impact companies, the Reviewing Actuary must independently calculate a best estimate.
- 7.4.1 While this is one possible approach to peer review, we consider that other approaches should also be permitted. Multiple calculations of the best estimate can create confusion and spurious debate on differences.
- 7.4.2 A review of methodologies and assumptions can be as effective and in some cases more effective. This should be a risk-based review that focuses on judgements, sensitivities and key assumptions.
- 7.4.3 Rather than mandating that the Reviewing Actuary must independently calculate the best estimate, we suggest that the Reviewing Actuary should be required to provide an opinion on whether the Signing Actuary's conclusions were reasonable, and should use his or her knowledge, experience and expert judgement to determine the most appropriate approach (note that this does not preclude independent calculation of the best estimate, where appropriate).

Provision 37 / Appendix 4

- 7.5 We recommend that the Guidance on Peer Review at Appendix 4 be removed as it is to a large extent a repetition of the requirements in provisions 35 and 36 but uses slightly different language and therefore is potentially confusing. Also, the Guidance is inconsistent with the requirements in that, under the requirements (provision 36), the items listed at e, f, a (*sic*) and h of the Guidance are required only for High Impact and Medium High Impact companies.

Provision 38

- 7.6 For High Impact companies, and in the context of an approach that does not necessarily involve full recalculation of the best estimate (see paragraph 7.4), we consider that there may be merit in increasing the frequency of peer review to annually, unless it is intended that the Central Bank will scrutinise reserves in years in which a peer review is not performed.

Provisions 39 & 40

- 7.7 The frequency of peer review for Medium High and Medium Low Impact companies should perhaps be greater than proposed also.

Provision 42

- 7.8 Under provision 42, the Reviewing Actuary must be external to the company and its parent group³ and may not be from the same firm as the Signing Actuary or the External Auditor.

7.8.1 We support the concept of peer review and that the Reviewing Actuary should provide an independent view of the SAO and the report underlying the SAO. However, we consider that companies should be afforded some flexibility in relation to the appointment of the Reviewing Actuary.

7.8.2 The proposed separation of roles is presumably intended to address issues such as conflicts of interest, dominance (of an individual within the insurance entity or another group company, or within a firm that provides services to the insurer) and commercial capture. However, these risks can arise for a number of reasons –and both directly employed actuaries and those appointed on a consultancy basis can be affected by them. Therefore, the proposed separation of roles cannot be assumed to be either necessary or sufficient to address them.

7.8.3 The overarching issue of independence can also be addressed through comprehensive disclosure of roles and relationships (including audit, non-audit, actuarial and wider commercial relationships) between the relevant actuary's employer, the insurance entity and, where relevant, wider group companies and other companies providing services, along with clear reporting lines and an appropriate degree of role rotation.

7.8.4 Where the Signing Actuary is external, we suggest that the (re)insurer should be allowed to appoint a Reviewing Actuary from within the same group, provided that the Reviewing Actuary can demonstrate his/her independence and the process includes the discipline of presenting the Peer Review Report to the Audit Committee. Indeed, provided that appropriate reporting lines are in place to ensure independence, such arrangements can arguably be effective even where the Signing Actuary is internal, as the Reviewing Actuary may bring the benefit of a deep knowledge and understanding of the insured risks.

³ Note that the definition of Reviewing Actuary is ambiguous in this regard, as it uses the word "should" rather than "must".

- 7.8.5 We suggest that (particularly for firms that are not High Impact), the requirement that the Reviewing Actuary may not be from the same firm as the External Auditor is unduly restrictive. As indicated above, we consider that relationships and conflicts of interest may be managed appropriately by ensuring clear reporting lines, proper disclosure and a degree of role rotation. To ensure the independence of the peer review (and notwithstanding that it eliminates possible synergies between the peer review and the audit), the management of such relationships should be such that a Reviewing Actuary from the same firm as the External Auditor is neither involved in the audit nor in the same reporting line as colleagues who are involved in the audit.
- 7.8.6 In conclusion, we suggest that provision 42 be amended such that the requirements may be varied by the Central Bank subject to reasonable justification being provided by the (re)insurer. In addition to the reasons given above, this may relieve capacity issues that may arise if the Reviewing Actuary position must always be resourced in accordance with the requirements of CP 73.

8 Reserving Committee

- 8.1 Presumably it is intended that the Reserving Committee will provide periodic reports to, and will be accountable to, the Board of Directors. We suggest that this be stated explicitly.
- 8.2 As indicated at 4.4.3, we believe that the Reserving Committee could usefully have a role in formally reviewing large claims outstanding on a regular basis.

9 Other Comments

In this section we comment on the following:

- Proposed Scope and Implementation
- Reinsurance business
- Definitions
- Chief Actuary
- Transition to Solvency II

Proposed Scope and Implementation

9.1 References to “non-life insurers and reinsurers” and similar references are ambiguous – it is not clear whether these are references to non-life insurers and non-life reinsurers, or non-life insurers and all reinsurers. If new requirements are introduced for (i) non-life insurers, (ii) non-life reinsurers and (iii) life reinsurers, they should be set out separately for each of the three categories, to avoid confusion and ambiguity. *(See also paragraphs 9.2 – 9.4 below).*

Reinsurance business

9.2 The CP 73 proposals appear to have been drafted with non-life direct business in mind and some (such as requirements relating to data checks, as set out) would need modification before they could be implemented in a meaningful way in a reinsurance context.

9.3 We are mindful that implementation of the Central Bank Guidelines on Preparing for Solvency II will begin next year and will lead to strengthening of governance structures, and mindful also that new regulatory requirements for life reinsurance and non-life reinsurance business were introduced in 2012. We therefore question whether it is necessary to also introduce the CP 73 requirements for life reinsurance and non-life reinsurance business during the transition to Solvency II. We feel that doing so would add cost and reduce companies’ capacity to focus resources on preparations for Solvency II, and that whether there is a strong imperative for this further regulation in the near-term is not certain⁴.

9.4 If it is decided that some of the proposed requirements should apply for life reinsurance and non-life reinsurance business, then we suggest that they should be introduced as guidelines rather than as statutory requirements, with reinsurers expected to apply them on a “comply or explain” basis. This would permit some flexibility where particular insurers can, in some respects, reasonably justify an approach that is different to that set out in the guidelines (but which complies with the spirit of the guidelines and is, most likely, consistent with Solvency II principles or represents a reasonable transition to Solvency II). In this event, the requirements/guidelines should be set out separately for (i) non-life direct, (ii) non-life reinsurance and (iii) life reinsurance, to avoid confusion and ambiguity.

⁴ The matter identified at paragraphs 2.12/4.9 and Appendix A of this paper does, however, need to be addressed.

Definitions

9.5 Several of the definitions include a statement of requirements. For example (this is not an exhaustive list):

- (a) “The Risk Margin Report . . . The report shall contain an analysis of the material risks to reserve adequacy; an analysis of any implications which the variance between actual and expected claims experience during the year may have for pricing adequacy . . . “
- (b) “The Signing Actuary . . . is required to act independently of the company in providing the SAO . . . “.

We propose that such statements be moved to the relevant sections of the requirements – these sections should be complete, and requirements should not be added or restated within the definitions.

9.6 We recommend that the definitions be reviewed, and amended as required, for consistency with the requirements. For example (this list is not necessarily exhaustive):

- (a) “Statement of Actuarial Opinion (SAO)” is defined as “a statement provided by a signing actuary giving an independent view of the adequacy of a Company’s reserves.” For non-life business, the report accompanying the SAO provides information that should inform the Board’s decision on the margin for uncertainty (risk margin), but the SAO itself provides an opinion only on whether the company’s reserves are at least as great as the Signing Actuary’s best estimate of the liabilities. We suggest that that the definition of “Statement of Actuarial Opinion” for non-life business be amended to: “Statement of Actuarial Opinion (SAO) is a statement provided by a Signing Actuary giving an opinion on whether a Company’s reserves are at least as great as the Signing Actuary’s best estimate of the Company’s liabilities”.
- (b) The Report underlying the SAO” is defined as “a detailed report reviewing all relevant company data from which the signing actuary has come to a determination regarding the adequacy of a company’s reserves”. We consider that this definition does not properly reflect the content of the report underlying the SAO. We suggest that the definition be changed to: “The Report underlying the SAO is a report required under Requirement 16 that includes, at a minimum, the information set out in Requirement 19”.

9.7 To minimise ambiguity, there should be consistency in how roles are defined. For example, the Signing Actuary is defined as “the actuary” whereas the Chief Actuary is “an individual”. Is something to be inferred from the difference in these definitions? Similarly, the definition of the Chief Actuary refers to the role as a PCF (though “pre-approved control function” should read “pre-approval controlled function”), whereas the definition of the Signing Actuary does not.

Chief Actuary

- 9.8 “Chief Actuary” is defined but the requirements provide little information on the role and responsibilities of the Chief Actuary. It would be useful - particularly in the context of the Signing Actuary role being designated as a Pre-Approval Controlled Function, and in the context of the statement in the definitions that the Chief Actuary “is very likely to be relied upon . . . by the Board of Directors” - if the Central Bank could elaborate on its expectations, if any, as to what functions a Chief Actuary should normally take responsibility for.

Transition to Solvency II

- 9.9 We consider it would be helpful to indicate for each category of business what, if any, requirements will fall away under Solvency II. Notwithstanding some remaining uncertainty about some of the implementation details of Solvency II, insights into the Central Bank’s thinking in this regard would help firms to manage the transition to Solvency II well, while engaging with the CP 73 requirements in the meantime. For example:

- (a) How will the various roles and functions envisaged under CP 73 relate to those envisaged under Solvency II? What flexibility will the Central Bank allow such that firms can efficiently and effectively transition from the current regime to the CP 73 regime and then to Solvency II?
- (b) In relation to peer reviews, for firms other than High Impact firms, it now seems probable that Solvency II will come into effect before a peer review is first required. What are the likely implications of Solvency II implementation, in terms of continuation of the peer review requirements?

10 CP73 Appendix 3, Guidance on Best Estimate and Risk Margin

- 10.1 We recommend that the text of CP 73 Appendix 3 be reviewed and refined.
 - 10.1.1 In Appendix B of this document, we include suggested text for all sections of Appendix 3 of CP 73 except section 4, “Legal and Regulatory Framework”.
 - 10.1.2 We recommend that section 4 be excluded. It includes a number of subjective comments that are not appropriate to guidance. Also, there are ambiguities within and inconsistencies between the various legislative requirements and guidance quoted (there are also some inaccurate/incomplete references). If this section is to be retained, it would first need to be thoroughly reviewed by legal and accounting experts.
- 10.2 Included in the text in Appendix B is a proposal that the term ‘risk margin’ should be changed to ‘margin for uncertainty’, as ‘risk margin’ is defined in a specific way under proposed Solvency II requirements.
- 10.3 In considering the margin for uncertainty, we suggest that it would be reasonable for firms to take into account the implicit margin in undiscounted technical provisions.
- 10.4 It should be noted that, if margin for uncertainty is moved from capital to technical provisions, there may be implications in terms of ratings, accounting issues (fair reporting), etc.

11 Queries

We would be delighted to assist if clarification or elaboration is required on any of the points made in this submission. Please direct any queries to Ms Yvonne Lynch, Director of Professional Affairs, at the contact details at the end of this submission.

Appendix A: Format of Opinion on Non-Life Technical Reserves

A1 Life Reinsurance

A1.1 We understand from correspondence with the Central Bank that, for life reinsurance business, only minor changes will be made to the required format of the Statement of Actuarial Opinion (SAO). We would welcome clarification of what changes are proposed and an opportunity to comment on them.

A2 Non-Life Insurance / Non-Life Reinsurance

A2.1 In the proposed SAO template set out in Appendix 2 of CP 73, the wording of the first paragraph under the heading “Opinion” is inconsistent with provision 1. That provision states that the SAO “certifies that the booked reserves of the company are greater than the Signing Actuary’s best estimate of the company’s liabilities, as at the year-end”. To improve clarity and avoid any misunderstandings about the scope of the SAO, we recommend that the first paragraph of the “Opinion” be amended as per the following mark-ups (with no change to the associated footnote in CP 73):

“In my opinion, subject to the above comments [~~include if applicable:~~ (and except for the qualifications stated below)], the total reserves identified above, gross and net of reinsurance, ~~comply with applicable Irish legislation (including legislation transposing relevant European Union insurance directives) and are greater than the sum of expected future liabilities plus the expected profit margin in the unearned premium reserves~~ are greater than my best estimate of claims liabilities plus the expected profit margin in the unearned premium reserve of [Name of Insurance Company] as at [end of current financial year], this best estimate having been calculated by me in accordance with add final title of “Guidance on Best Estimate””

A2.2 In the footnote relating to Data Accuracy Statements, the reference to “reserving actuary” should read “Signing Actuary”.

A2.3 In relation to the requirement that the SAO for High Impact firms should omit the paragraph beginning “I have relied upon data and information prepared by the responsible employees of the Company”:

A2.3.1 We believe that the Signing Actuary of a High Impact firm will need to place some reliance on other experts with regard to data and should not be precluded from doing so. Please see paragraph 4.4 of this response.

A2.3.2 It is not clear to us why the Signing Actuary of a High Impact firm should not provide the assurances set out in the last three sentences of this paragraph.

Appendix B: Guidance on Best Estimate and Margin for Uncertainty

B1.1 Appendix 3 of CP 73 sets out draft guidance on best estimate and risk margin. It is proposed that this guidance will be provided to Signing Actuaries for the purposes of:

- the Statement of Actuarial Opinion (SAO), in which the Signing Actuary opines on whether the company's reserves are at least as great as his or her best estimate of the company's liabilities; and
- the Report underlying the SAO, which includes *inter alia* a discussion of the main risks and uncertainties which should inform the Board's consideration of the risk margin.

B1.2 The text in Appendix 3 of CP 73 includes some material which we consider is not appropriate to formal guidance relating to statutory or regulatory requirements (such as subjective opinions).

B1.3 We recommend that Section 4 of Appendix 3 be excluded, for the reasons set out in paragraph 10.1.2 of this submission.

B1.4 We set out below text that we believe would be more appropriate for inclusion in the final version of the guidance. Note that in this text, we propose the term "margin for uncertainty" instead of "risk margin" – this is because "risk margin" is defined in a particular way under the proposed Solvency II regime.

Guidance on Best Estimate of Claims Liabilities (Outstanding Claims and IBNR⁵)

Except to the extent that it is varied by the bullet points listed below, the Best Estimate of claims liabilities is a probability-weighted average of future expected payments arising out of current incurred claims liabilities and claims handling expenses, both reported and unreported. The Best Estimate should be based on an analysis of appropriate and valid historical homogeneous claims experience obtained from specific company or market-based data, using reasonable and applicable statistical projection methodologies and subject to the following points:

The Best Estimate should:

- (i) Not take account of the time value of money (unless explicitly allowed by the Central Bank of Ireland)
- (ii) Not include precautionary margins, either explicit or implicit;
- (iii) Exclude unrepresentative or optimistic past development experience;
- (iv) Not include events that may occur in the future but cannot reasonably be foreseen and are not reflected in historical company or available market data;
- (v) Not include an allowance for possible but as yet not enacted legislation;
- (vi) Include an allowance for recently enacted legislation that is not yet reflected in historical data; and
- (vii) Be based on stochastic and/or deterministic methods (subject to any method adopted being appropriate having regard to the characteristics of the insured risks).

Subject to this Guidance, the Signing Actuary should apply his or her expert judgement when considering which claims patterns, events, legislative or operational changes etc should be included within the Best Estimate.

Explanatory Text

- 1.1 The Best Estimate is a point in time estimate and is likely to fluctuate as experience develops and progresses. The Best Estimate may both increase and decrease over the full development period of a portfolio of business.
- 1.2 Current legislation⁶ does not permit discounting of non-life insurance liabilities except in specific circumstances.
- 1.3 An insurer or reinsurer may be exposed to specific binary or contingent events that are not reflected in past experience. In addition to establishing Best Estimate provisions, it is important for the Board of Directors to consider whether the company should establish separate margins for uncertainty in the overall provisions in respect of such events.

⁵ Incurred But Not Reported

⁶ Article 60.1 (g) of the Insurance Accounts Directive (Council Directive 91/674/EEC), transcribed into Irish law via SI 23 of 1996 – Article 28

- 1.4 Note that the Guidance on Best Estimate of Claims Liabilities may not be consistent with every accounting convention. For example, point (v) above states that the Best Estimate should “Not include an allowance for possible but as yet not enacted legislation”. Financial Reporting Standard 12 (FRS12): Provisions, Contingent Liabilities and Contingent Assets⁷ established certain principles in relation to allowing for future legislation, as follows: “Future events that may affect the amount required to settle the entity’s obligation should be reflected in the amount of a provision where there is sufficient objective evidence that they will occur. The effect of possible new legislation is taken into consideration in measuring an existing obligation when sufficient objective evidence exists that the legislation is virtually certain to be enacted . . . In many cases sufficient evidence will not exist until the new legislation is enacted.” Thus, FRS12 leaves open the possibility that (in some cases) “sufficient evidence” of new legislation might exist before that legislation is enacted. However, for the purpose of calculating Best Estimate in accordance with this Guidance, point (v) above should be observed. The potential impacts of possible but as not yet enacted legislation should, however, be considered in the determination of the Margin for Uncertainty.

Guidance on Margin for Uncertainty

When booking reserves in an insurance company’s accounts, Boards of Directors need to consider the (possibly significant) proportion of possible outcomes that exceed the Best Estimate. Consequently, the booked reserves are typically greater than the Best Estimate. The amount by which the booked reserves exceed the Best Estimate is termed the Margin for Uncertainty.

Explanatory Text

- 2.1 In all but the simplest of cases, the Best Estimate (as defined above) will be the mean value of a range of possible outcomes.
- 2.2 Typically, the distribution of this range of possible outcomes will be right-skew (there is a limit on how much better the claims liability can get, but it can get very much worse).
- 2.3 Given the right-skewness of the distribution of possible outcomes, there will be a significant proportion of possible outcomes that will be worse than the Best Estimate. Some will be significantly worse than the Best Estimate.
- 2.4 On the basis of the definition of Best Estimate set out above, the distribution of possible outcomes considered may not include certain adverse scenarios, including:
- the emergence of a new type of claim
 - low probability, high impact events (so-called “binary events”)
 - effects from social and legislative change on liabilities in respect of events which have not yet occurred.

⁷ As issued by the Accounting Standards Board

Guidance on Determining the Margin for Uncertainty

When determining the reserves to be booked in an insurance company's accounts, Boards of Directors should explicitly quantify the constituents of the Margin for Uncertainty.

Factors to be considered in determining the appropriate level of the Margin for Uncertainty include:

- The level of uncertainty in the reserves
- Investment return on the assets backing the liabilities
- Changes in the claims environment
- Exposure to latent claims or new types of claim
- Exposure to binary events.

Stress and scenario testing are key techniques that should be used in determining the Margin for Uncertainty. Where appropriate, statistical methods (e.g. Bootstrap) for quantifying the uncertainty in the reserves should also be employed.

Subject to the above, quantification of uncertainty should have regard to forward-looking consideration of risks and should not simply be based on methods that examine historic variability of reserves.

Explanatory Text

- 3.1 Generally, the greater the uncertainty in the reserves, the greater the Margin for Uncertainty should be. In particular, where there is greater uncertainty than might normally be expected, due to factors such as
- Data quality issues
 - Mergers and acquisitions, making the historical claims profile less reliable
 - Changes in claims handling
 - Changes in the claims environment,
- then the Margin for Uncertainty should generally be higher.
- 3.2 Discounting of liabilities when booking reserves is not generally permitted. However, there can be a substantial investment return on the assets backing technical provisions which should be considered when setting the Margin for Uncertainty. This is the case for long-tailed liabilities in particular. The return on the assets backing the liabilities acts as a hedge against higher than expected inflation, although there is an element of basis risk.
- 3.3 Where there have been recent changes in the claims environment, this can add to the uncertainty in the reserves. This is due to the changes making the historic loss development less relevant to the future, and also because the impact of the changes may not be known for certain.

- 3.4 Expected future changes in the claims environment also add to the uncertainty in the reserves. Again, this is due to the changes making the historic loss development less relevant to the future, and because the impact of the changes may not be known for certain. Additionally, the timing and exact nature of the changes may not be known with certainty.
- 3.5 Examples of changes in the claims environment include the introduction of the Personal Injuries Assessment Board (PIAB), changes in the circuit and district court thresholds and the possible introduction of Periodic Payment Orders (PPOs). Internal changes could include changes in claims handling philosophy or changes in key personnel.
- 3.6 Where there is exposure to latent claims, new types of claims or binary events, the distribution of possible outcomes will be more skew than would otherwise be the case. Boards need to consider adverse scenarios when setting the Margin for Uncertainty. In such cases, the adverse scenarios may be considerably worse than the Best Estimate, and a substantial Margin for Uncertainty may be appropriate.
- 3.7 The Guidance on Best Estimate of Claims Liabilities, point (v), states that the Best Estimate should “Not include an allowance for possible but as yet not enacted legislation”. The potential impacts of possible but as not yet enacted legislation should, however, be considered in the determination of the Margin for Uncertainty. See explanatory text, paragraph 1.4.
- 3.8 Stress and scenario tests allow Boards to attempt to quantify the possible impact of adverse scenarios.
- 3.9 Boards should quantify the constituents of the Margin for Uncertainty when booking the reserves. This may include:
- Statistical buffer over best estimate
 - Allowance for investment return
 - Impact of various scenarios considered
 - Allowance for diversification effects (all scenarios are unlikely to occur at once).
- The extent of the statistical buffer over Best Estimate and the extent of the scenarios considered may be informed by the level of free reserves.
- 3.10 The Appendix gives examples of how a Board might use a Statistical Assessment and/or Stress and Scenario testing to determine an appropriate Margin for Uncertainty. The approaches outlined in the Appendix are relatively straightforward. In certain cases a statistical method is not appropriate, e.g. where the portfolio has significant high excess layer exposures, and thus past observed volatility may not represent adequately the true risks inherent in the portfolio. In these circumstances, stress and scenario tests should be employed as the main tool. Companies may consider more sophisticated approaches, such as full or partial internal models.
- 3.11 Boards should review the appropriateness of the sum of the Margin for Uncertainty and the free reserves by employing a forward-looking assessment process consistent with the Central Bank of Ireland Guidelines on Preparing for Solvency II.

Appendix to the Guidance on Best Estimate and Margin for Uncertainty

Using Statistical Methods and Stress and Scenario Testing to determine the Margin for Uncertainty

Example Company – XYZ Insurance Limited, a large domestic personal and commercial lines insurer

Statistical Assessment

Where appropriate (i.e. there is a sufficient volume of claims data to give credible results), a statistical quantification of the uncertainty in the reserves should be performed. The example company uses a bootstrap method.

XYZ Insurance is writing a set of portfolios that has experienced significant, but not unexpected, variability in reserve run-off patterns over the last 20 years. A typical multi-line general insurer may fall into this category, writing motor, household, commercial liability and property, marine etc. In these circumstances, it is appropriate to perform a statistical quantification such as a bootstrap.

The Board of XYZ Insurance has a stated policy of reserving at the 80th percentile of the bootstrap distribution. In this example, the actuarial best estimate reserves are set at €500m (the case reserves plus IBNR / IBNER plus the claims handling expense provision). The 80th percentile reserve margin from the bootstrap is €525m.

In situations such as this where these statistical methods are appropriate, it is also expected that Boards will use a combination of these methodologies and stress and scenario testing.

In some cases, a statistical method such as the above is not appropriate, e.g. where the portfolio has significant high excess layer exposures, and thus past observed volatility may not represent adequately the true risks inherent in the portfolio. In these circumstances, stress and scenario tests should be employed as the main tool.

Stress and Scenario Testing

Boards should perform stress and scenario tests which are appropriate to their portfolios.

The Board should consider using a series of stress tests covering the main sources of uncertainty that could impact the reserve run-off.

Examples of scenarios that such stress tests might address include (*this list is not exhaustive*):

- (a) A period of significant inflationary pressures impacting the claims environment (e.g. there might be a reasonable expectation of such a scenario following a period of full employment in the economy and significant increases in GDP);
- (b) Emergence of a new latent claim impacting on one or more specific lines of business, perhaps over a period of years (this possibility might, for example, be signalled by new scientific papers);

- (c) A realisation that changes in claims practice (e.g. to achieve efficiency) have had impacts on claims development that have not been fully recognised in the determination of reserves;
- (d) A change in the jurisdiction of the courts, leading to an increase in the adjudication of claims in the lower courts and an increase in claims inflation;
- (e) A period of significant growth in the property market, leading to significant increases in rebuilding costs for outstanding property claims.

The Board should include company-specific scenarios, and in addition should consider including any known scenarios that have been experienced in the wider market, in particular (to the extent that information is readily available in the public domain) any that have led to prior company failures.



Society of Actuaries in Ireland, Clanwilliam House, Clanwilliam Place, Dublin 2

tel: +353 1 634 0020 | fax: +353 1 634 0039 | web: www.actuaries.ie

Registered in Dublin as a Company Limited by Guarantee No.146024. Registered Office: Clanwilliam House, Clanwilliam Place, Dublin 2, Ireland