Guide to the Interim Solvency Standard 2023.

15 February 2024

Reserve Bank of New Zealand
Te Pūtea Matua

Contents

This Guide is for licensed insurers subject to the Interim Solvency Standard 2023 and their appointed actuaries. It explains our expectations as a regulator and provides background information on the Standard. The Guide is not legal advice, and we encourage licensed insurers to seek their own professional advice.

Use and Status of the Guide

The purpose of this Guide is to assist *licensed insurers* and *appointed actuaries* to interpret and comply with the Interim Solvency Standard 2023 (the Standard). This recognises the Standard is a technical instrument that incorporates accounting, actuarial and insurance concepts that are not always straightforward to interpret and there may be no case law or other external reference points to assist. Guidance will assist individual insurers with their own compliance and a more consistent approach across the industry.

The Guide assists by:

- Outlining the *Reserve Bank*'s motivations and intentions of the Standard. Technical content can often be better understood with awareness of the policy intent at the time it was drafted.
- Outlining the *Reserve Bank*'s preferred interpretation in relation to some clauses, where the RBNZ has been made aware of differing interpretations by insurers.
- Where the Standard relies on judgement by *licensed insurers* or their *appointed actuaries*, outlining the *Reserve Bank*'s views on how that judgement can be prudently exercised.

The Guide incorporates text that was previously included as demarcated guidance in the Standard. Under changes introduced by the Interim Solvency Standard Amendment Standard 2024, there is no longer any guidance in the Standard itself. It will be easier and more efficient to update any guidance if it is moved out of the Standard itself and into a separate document.

To assist in using the Guide:

- Terms that are defined in the Standard, in *IPSA* or in *NZ IFRS* are italicised in this Guide and have the same meaning.
- Sections of this Guide have the same headings as sections of the Standard. Paragraph and clause numbers are those from the Standard. The term 'paragraph' is used when referring to text from the main body of the Standard, while 'clause' is used when referring to text from an appendix to the Standard.
- In event of any conflict between the text of the Standard and this Guide, the Standard prevails. The Standard is the formal legislative instrument made under the *IPSA*, while the Guide does not have formal status. The Guide represents the *Reserve Bank*'s view and is therefore an authoritative indicator of that view. However, ultimately, the correct interpretation of the Standard is by a Court.
- The *Reserve Bank* will keep under constant review and update the Guide. The *Reserve Bank* may change its guidance or its interpretation of the Standard if it considers this appropriate. The *Reserve Bank* does not do this lightly and will endeavour to notify *licensed insurers* and *appointed actuaries* in advance if it is considering amending the content of the Guide.
- This Guide is not legal advice. We encourage *licensed insurers* seek their own professional advice, as it is their responsibility to determine their obligations and ensure that they comply with the requirements of the Standard.

- Some items and treatments may differ between the Standard and other reporting requirements on *licensed insurers* set by the Reserve Bank.
- The guide relates to the version of the Standard as at 1 June 2024.
- Feedback on the Guide is welcomed by the *Reserve Bank* at any time.

Line By Line Guidance

Introduction

Initial Provisions

Title, Effect and Commencement

1. The Standard is qualified as 'Interim' because the *Reserve Bank* plans to conduct a second stage of the Solvency Standards Review that will result in a 'Final' standard. In this second stage we will take a deeper look at methods and parameters used to determine components of the *solvency margin*, as well as re-visit diversification and the *minimum capital requirement*.

2. Section 55 of *IPSA* gives the *Reserve Bank* the power to "issue solvency standards for the purposes of this Act". Solvency standards can apply to all *licensed insurers*, a class of *licensed insurers* or an individual *licensed insurer*.

   Subsection 55(4) of *IPSA* requires the *Reserve Bank* to, before issuing a solvency standard, have regard to relevant overseas standards for the purpose of ensuring that the proposed standard does not result in unfair treatment of insurers as a function of their jurisdiction of domicile.

3. The Standard came into force on 1 January 2023, and has been applied to individual *licensed insurers* by condition of licence. From the date of application, *licensed insurers* are required to maintain the *solvency margin* specified in the condition (or any applicable direction subsequently issued) and determined according to the Standard.

   The implementation of Appendix 4 was delayed until 1 January 2024 for non-life insurance, as this is a new requirement for that type of insurance and insurers may need time to revise existing treaties.

   The Interim Solvency Standard Amendment Standard 2023 came into effect on 1 August 2023. This amendment standard addressed some minor or technical issues identified in the Standard and has been in force since 1 August 2023.

   The Interim Solvency Standard Amendment Standard 2024 will address more significant errors identified in the standard and be effective from 1 June 2024.

   Insurers have a responsibility to continuously maintain solvency margins in accordance with whatever conditions of licence and whichever solvency standards are currently applicable.

Application

4. Section 59 of *IPSA* allows the *Reserve Bank* to exempt an *overseas insurer* from compliance with a solvency standard if solvency arrangements in the home jurisdiction cover the New Zealand business and are "at least as satisfactory" as those for insurers incorporated in New Zealand.

5. Sections 21(2)(b) and 21(2)(c) of IPSA allow licence conditions that require maintenance of solvency margins in respect of licensed insurers and life insurance statutory funds respectively. These *solvency entities* have a strong legal perimeter around their assets and liabilities.

6. The Standard is applied on both solo and consolidated bases because a prudentially regulated subsidiary may be managed as either an equity investment or as an integral part of the parent, and because the approach to the subsidiary's management may change. Non-insurance subsidiaries are assumed to be managed separately as the risks involved are different; these are always treated as an equity investment.

Purpose

7. The 1-in-200 failure criterion is standard internationally, with Solvency II Pillar I, Australia's LAGIC and the International Association of Insurance Supervisors' Insurance Capital Standard all being calibrated to it. Setting the same criterion helps us to comply with Section 55(4), mentioned in paragraph 2. This level is thought to provide a good cost / benefit trade-off between the cost of the capital insurers must maintain and the benefit of protecting policyholders in a wide range of adverse circumstances. Note that this criterion is somewhat different to that used in assessing bank capital (a 1-in-200 chance of financial system failure).

   A stronger criterion (1-in-1000) applies to seismic risk, because failure of the insurance industry following a major New Zealand earthquake could cause serious damage to New Zealand's financial system and economy.

8. The Standard forms part of a suite of tools the *Reserve Bank* uses to promote the purposes of *IPSA*, working together with other tools. It is important to note the limitations of what a solvency standard can do, as well as what it is able to achieve.

9. Insurance acts as a catalyst for economic activity by modifying the risk/return trade-off of business projects. Required returns can be lower for insured projects because of the diminished risks attaching to projected cash-flows. Insurance also increases wellbeing by absorbing risks that might be financially ruinous to individuals.

10. The *Reserve Bank* does not operate a zero-failure regime, nor does it seek to offer absolute protection to policyholders. Instead, we allow failure within the 1-in-200 risk criterion and we expect policyholders to accept responsibility for their own decisions.

General Provisions

11. [No comment]

12. The phrase 'on the basis of' implies that financial statements are the starting point for solvency calculations. It in no way restricts the Standard from taking information contained in the financial statements and adjusting it for the purposes of the Standard.

NZ GAAP is defined to incorporate *NZ IFRS*, so essentially, we are preferring *NZ IFRS* accounts as the basis for solvency determination.

13. Under the *Act*, the *licensed insurer* is responsible for compliance with all *conditions of licence*, including a condition to maintain a *solvency margin*, and is responsible for compliance with the reporting and disclosure requirements of any applicable solvency standard (see, for example, sections 23 and 24 of the *Act*).

14. Compliance with this standard in respect of a *statutory fund* does not infer compliance with the requirements of subpart 3 of Part 2 of the *Act* with respect to the value of assets to be held in the fund. Under these requirements, certain income items are required to be credited to a fund while only certain types of outgo are permitted. Taken in concert, these result in an implied minimum accumulated asset requirement which will be different from the assets covering the fund's liabilities, its *prescribed capital requirement* and any non-zero *minimum solvency margin*.

15. [No comment]

16. While allowing simplifying assumptions or methodologies reduces insurers' compliance burden, it may also allow errors to creep into the *solvency capital* and *prescribed capital requirement* measures, and hence into *solvency ratios* and *solvency margins*. The *Reserve Bank's* preference is that simplifications that result in a *materially* conservative assessment of the *licensed insurer's solvency margin* are avoided, as these will distort solvency measures.

17. Comments on some individual definitions are provided in the table below. Definitions that are unchanged from previous standards are generally not commented on.

Definition	Comment
Acquisition costs	While the definition used is similar to that for *NZ IFRS 17*, note that costs must be attributable to the *product class*, rather than *NZ IFRS 17* portfolios or groups.
AMCR and APCR	Adjusted measures are elevated in importance by this Standard. *Solvency licence conditions* that require specified positive minimum *solvency margins* or specified minimum *solvency ratios* greater than 100% reflect, in the opinion of the Reserve Bank, either (i) that *solvency capital* is overstated due to weaknesses in the *standardised balance sheet*, or (ii) that the *prescribed capital requirement* is understated due to risks that are not (fully) hypothesised in the *stressed balance sheet*. It is appropriate that published measures of financial strength reflect these weaknesses and risks.
Balance sheet	While this definition refers to *NZ IAS 1*, the terms 'standardised balance sheet' and 'stressed balance sheet' should be taken to refer to the balance sheets used to determine *solvency capital* and the *prescribed capital requirement* respectively.

Definition	Comment
Best estimate	This term has been defined without inclusion of an object (e.g., liabilities, assumptions etc.). When applied to an object it should have the effect of causing the reader to consider the 'range of possible outcomes' for that object, and how the expected value (i.e., the probability-weighted mean) of that range might be determined. Note that the definition allows for asymmetry of the distribution of outcomes.
Capital charge	A *balance sheet* charge is an economic liability for an expense that is expected to arise. A *capital charge* is similar; however, the additional expense only arises under a solvency stress event; it's included in *the stressed balance sheet*, but not in the *standardised balance sheet*.
Expected inflation	This is a 'general purpose' definition that refers to the Consumers Price Index. Other measures of inflation are also used in the Standard, for example in relation to medical expenses.
Fixed capital amount	The FCA now performs two functions: 1. By referring to the FCA as a 'minimum amount of capital', we are specifically linking to the provisions of *IPSA* that refer to this term. 2. It is an input to the *Prescribed Capital Requirement*.
Freely available	This definition's purpose is to help NZ insurers with overseas branches determine how much of the capital of the branch should be deducted in determining *solvency capital*.
Future insurability	'Pre-defined terms' may allow for re-pricing by a *licensed insurer* within constraints defined at the outset of the insurance contract.
General measurement model	This refers to *NZ IFRS 17's* 'building block approach', that is (a) fulfilment cash-flows, plus (b) risk adjustments, plus (c) time-value of money.
Individual claim	An individual claim could be the sum of claims under multiple policies held by the same policyholder.
Insurance contract	The definition of insurance contract has been aligned with the *Act* (rather than *NZ IFRS 17*). The *NZ IFRS 17* and *IPSA* definitions do not perfectly align, so *licensed insurers* will need to exercise care in treating business correctly.
Insurance revenue	The requirement to complete two reporting periods under *NZ IFRS 17* before using *NZ IFRS 17* insurance revenue is designed to ensure that comparable bases are used in different components of the operational risk charge. Until such time, insurers will need to use *premium revenue* under *NZ IFRS 4*.
Insured event	The exclusion of 'continuation in a certain state' is designed to make it clear that income benefits in payment are to be considered as part of the *liability for incurred claims*.

Definition	Comment
Interim solvency return	This replaces the half-yearly solvency return under the 2014 solvency standards, allowing for more frequent solvency reporting.
Inwards reinsurance	Note that the ceding insurer in this definition does not necessarily need to be licensed in New Zealand.
Long-term forward rate	The purpose of employing the moving average is to ensure that the rate transitions smoothly from one valuation date to the next (even if a new bond is issued that introduces some discontinuity) whilst being responsive to market movements.
Non-insurance activity	This includes, for example, insurance broking, premium funding, claims management services and risk management or any other consultancy activities.
NZ GAAP	Our expectation is that, by and large, *NZ GAAP* will consist of applicable accounting standards issued by the External Reporting Board. In most cases *NZ GAAP* incorporates *International Financial Reporting Standards*.
Portfolio reinsurance	This definition is designed to capture certain reinsurances that cannot be mapped to individual direct insurance policies, for example stop-loss and catastrophe covers.
Premium revenue	Appendix D of *NZ IFRS 4* does not contain a concise definition of premium revenue; however, we believe that the contextual usage of the term provides sufficient guidance for the purposes of the Interim Solvency Standard.
Product class	*Product classes* are considered to be the 'minimum saleable blocks' of insurance business (see earlier guidance on the facilitation of resolution). It is unlikely that parts of the business smaller than a *product class* could or would be transferred to another insurer. Assets backing a long-term *product class* need to be sufficient to facilitate its transfer to another *licensed insurer* after a solvency shock. Assets backing short-term *product classes* need to be sufficient to run-off all *short-term insurance contracts* with a 75% probability of sufficiency. *Product classes* are defined in a similar manner to those used in insurer return surveys since 2015.
Inwards (life, general, health) reinsurance	Note that the *solvency entity* ceding the *reinsurance* must be an *insurer* but does not necessarily have to be a *licensed insurer*.
Reinsurance, reinsurer	These definitions require the parties to be *insurers*, but not necessarily *licensed insurers*.
Reinsurance balance	This term replaces the former 'solvency reinsurance balance' as financial *reinsurance* is considered by this standard as a component of *solvency capital* rather than an additional *capital charge*. It is evaluated on the '*standardised*' basis rather than the 'stressed' basis.

Definition	Comment
Risk-adjusted best estimate liability	The *risk-adjusted best estimate liability* should reflect the best estimate of the value of the fulfilment cash-flows, but also include adjustments for non-financial risk. Items such as policy assets and future tax assets are considered to be integral parts of the best estimate liability for the purposes of this solvency standard, whether or not these assets or liabilities are presented separately in the financial statements of the *licensed insurer*.
Short-term insurance contract	This definition is critical to determining how *insurance contracts* are valued for the purposes of determining *solvency capital* and how *capital charges* are applied in determining the *prescribed capital requirement*. The definition has been designed to encompass all business that does not involve significant risk over the medium or long-term. The treatment of travel insurance recognises that cover for the main benefit may not commence at the commencement date of the policy. A claim is incurred at the time of the insured event if it engages the *licensed insurer's* liability under the policy.
Solvency entity	In the draft version of this standard, the term 'entity' was used. This term, however, has other meanings in other contexts, and so it was decided to use the term 'solvency entity' in the Standard.
Wind-up	The wind-up of an insurer can take many forms. To promote consistency of approaches, we have standardised the definition of *wind-up* for the purposes of this Standard. This does not imply that any actual wind-up will follow the process specified.

Solvency Capital

18. There are some cases in which the use of *alternative financial information* must be allowed, however this should be avoided if possible due to the inconsistencies that may be generated relative to the valuations of insurers applying *NZ GAAP*. The *Reserve Bank's* strong preference is that *licensed insurers* use an *NZ GAAP* accounting basis.

19. This paragraph is a summary of the following sections. The purpose of the adjustments is to move *capital* from a performance-reporting basis closer to a going-concern economic valuation (as mandated by ICP 14.4 – "The valuation of assets and liabilities is an economic valuation") and to ensure that sources of funds are appropriately categorised as *capital* or debt.

Capital

20. *Capital* is now as reported in financial statements; there are now specific deductions for perpetual and disallowed instruments.

    It bears noting that retained earnings functions as a balancing item, equating *capital* with net assets on an *NZ IFRS* basis.

21. [No comment]

Adjustments to Insurance Items

22. This paragraph is designed to ensure that all future cash-flows required to fulfil i*nsurance contracts* are included in insurance items.

    Sub-paragraph (ii) is intended to capture *insurance items* valued using accumulation approaches (but still relating to an obligation to be fulfilled in future) such as investment-linked life insurance account balances or *premium allocation approach* reserves. It is not intended to capture cash and investments built up as a result of historical *insurance contract* cash-flows.

    The definition of insurance items includes policy liabilities, policy assets, unearned premium liabilities, outstanding claims liabilities, deferred acquisition cost assets, premium receivables etc. and the *reinsurance* equivalents of those quantities. It also captures goodwill, value of business acquired and customer relationship assets, to the extent that those assets represent the value of future cash-flows under existing *insurance contracts*.

23. This paragraph uses the phrase '*taxation items* that are a function of future cash-flows'. This phrase may be taken to mean marginal income tax flows that are consequent to the other cash-flows projected under the *insurance contract*, i.e. *taxation* cash-flows that would not otherwise exist.

    Failure to include *taxation* items may result in *insurance items* being adjusted while linked *tax items* remain unadjusted.

24. Paragraph 24 imposes some standardisation on terminology used in the standardised and stressed balance sheets, to overcome, for example, the situation where some life insurers refer to an item as a policy asset and others as a negative policy liability.

25. This treatment effectively replaces the existing *NZ GAAP* (or alternative) *insurance items* with their *standardised* equivalents.

26. By default, the valuation principles in this section apply to the individual *insurance contract* (as per *NZ IFRS 17*). For pragmatism, any unbundling under *NZ IFRS 17* is allowed to flow through to the *standardised balance sheet*. Note, however that *insurance contract* is defined with reference to *IPSA* rather than *NZ IFRS 17*, so slightly different groups of contracts may be captured.

27. The intention of this paragraph is to ensure that inwards *reinsurance* and portfolio *reinsurance* are captured by the valuation provisions of the remainder of this section.

28. Comments on sub-paragraphs are provided in the table below. Note that the terms *general measurement model* and *variable fee approach* have been defined in the Standard and are in widespread usage, even if they do not appear in *NZ IFRS 17* itself. Note also that this paragraph imposes modifications on these *NZ IFRS 17* methods in order to both impose consistency and produce an economic valuation of the items.

Subparagraph	Comment
i	As our concern is that the assets backing the liabilities of each *product class* are sufficient, there is no need to require sufficiency (and hence valuation) at a lower level. We are comfortable with any offsetting that occurs within a *product class*. Given the economic valuation objective, it does not make sense to have different valuation methods for onerous and profitable contracts.
ii	a. *Contractual service margins* are an artificial liability introduced for the purposes of profit-smoothing and should not form part of an economic valuation. b. The purpose of this sub-paragraph is to remove any contract-spanning *deferred acquisition cost assets* for yearly renewable term insurances. *Acquisition costs* are included directly in the projection under sub-paragraph iii(d). c. *NZ IFRS 17* requires the valuation of *reinsurance* in respect of underlying primary contracts that have not yet been written and have not themselves been valued. This approach is internally consistent. In the Interim Solvency Standard 2023 we value only business already in-force. d. The purpose of (d) is to ensure that there are no elements of *capital* included in *insurance items*. A prime example is shareholder surplus in a participating life fund. e. Any deferred *tax items* are removed as tax is projected directly under sub-paragraph iii(c). *NZ IFRS 17 insurance items* are determined gross of *tax*, and there is likely to be a separate deferred *taxation item* that relates to future cash-flows under *insurance contracts*. *Insurance items* determined under this paragraph incorporate *taxation*, so there will be no *standardised deferred taxation* item corresponding to the equivalent item under *NZ IFRS 17*.
iii	f. Our view is that the economic valuation principle requires outwards *reinsurance* to be directly offset against primary insurance cash-flows (within the same contract boundaries etc.), rather than handled separately as per *NZ IFRS 17*. g. [No comment] h. The corresponding provision to sub-paragraph ii(e). i. *NZ IFRS 17* only requires directly attributable expenses to be incorporated in *insurance items*. Our view is that non-attributable or indirectly attributable expenses are also required for the fulfilment of *insurance contracts* and hence should be taken into *insurance items* derived on an economic valuation basis. j. For the avoidance of doubt, unvested policyholder entitlements are considered an obligation of the *licensed insurer* on an economic valuation basis, notwithstanding the fact that they may provide a degree of loss-absorption on the *stressed balance sheet*.

Subparagraph	Comment
iv	Financial risk is assumed to be priced into other components of the valuation, so does not need to be allowed for here. *Licensed insurers* in *run-off* are required to have larger *adjustments for non-financial risk* because they have fewer risk mitigants available. For example, they may not be generating profit and may not be able to rely on future capital injections from owners. Calculations are performed at a level no higher than the *product class* because we want the assets backing the *product class* to be sufficient to facilitate its transfer to another *licensed insurer*. Inclusion of compensation for risk makes the *product class* marketable. Theoretically the market should establish the level of compensation required for risk. In the absence of an observable market for insurance liabilities, we have chosen to use 75% and 90% probabilities of sufficiency as proxies for market value.
v	This sub-paragraph, and the definition of *benefit term*, have been written with the aim of encompassing the vast majority of possible cash-flows under the *insurance contract*. Force majeure, litigation etc. may curtail the *contract boundary*. It should be noted that there is no direct relationship between the definitions of *contract boundary* (which governs cash-flows to be valued under the *general measurement model*) and *short-term insurance contract* (which is based on the concept of a coverage period).
vi	Allowing undiscounted cash-flows out to two years may result in minor overstatement of positive insurance liabilities, reducing *solvency capital* (but making solvency determination easier for a number of non-life insurers).
vii	Valuation of *participating* business using *NZ IFRS 17* discount rates rather than risk-free rates is not expected to have a major effect on the overall liability for *participating* business, which includes future bonuses and unvested policyholder surplus, and which is ultimately determined by the size of the associated asset pool. It will, however, simplify calculation processes as only a single valuation will be required for both financial reporting and solvency purposes.
viii	Licensed insurers should apply discount rates appropriate to the terms of their cash-flows. In general, it is appropriate to use risk-free rates to determine *insurance items*, as from the perspective of the insurer, such items represent guaranteed obligations to policyholders. Insurers should not be able to take credit for employing a risky investment mix, as this would lead to inconsistencies among insurers and a recognition of gains that may not eventuate. While swap yields may have some theoretical advantages over bond yields as discounting assumptions, the latter have been preferred as they are easier and cheaper for insurers to obtain. Observed bond yields can be obtained directly from market information sources, or from the downloadable file that the *Reserve* Bank publishes regularly on its website.

Subparagraph	Comment
ix	There are no receivable assets under *NZ IFRS 17*. This sub-paragraph re-establishes receivable assets for the purposes of the solvency calculation, in particular so receivables can attract an appropriate *credit risk capital charge*.
x	Under *NZ IFRS 17*, income benefits in the course of payment can be treated either as *liabilities for remaining coverage* or *liabilities for incurred claims*. For the purposes of the standard, we require consistency and hence have determined that these liabilities should form part of the *liability for incurred claims*.

29. Expenses should be allocated to policies based on relevant carriers, e.g., per claim, per dollar of claim, per policy, per dollar of premium or per dollar of sum insured.

NZ IFRS 17 only includes 'directly allocable' expenses in *insurance items* and does not define 'directly allocable'. Non-allocable expenses are to be recognised in the year in which they are incurred. We do not believe this treatment is appropriate to an economic valuation basis, and hence require all expenses related to the insurance business to be included in fulfilment cash-flows.

For avoidance of doubt, we also require economies or diseconomies of scale to be taken into account. This is particularly important with respect to closed books of business, where unit costs are expected to rise as the book runs off. With respect to growing businesses, an economic valuation requires the use of *best-estimate* growth projections.

30. Insurers may use the modified PAA method for short-term insurance contracts. The purpose of the method is to ensure that the item's value is a good approximation to its economic value (and in line with the modified GMM calculation of paragraph 28). Our view is that valuations under the un-modified PAA approach are likely to be mis-aligned with economic value and hence we require several modifications to be made.

Subparagraph	Comment
i	Here we re-establish a premium receivable asset so that an appropriate *credit risk capital charge* can be levied. This asset is offset by an increase in the PAA liability to ensure no increase in *solvency capital*. This adjustment is required to both adjust the liability to its economic value where no premium has been received but the policyholder is obliged to pay it, and to allow for the credit risk charging of the receivable. Where premiums are payable more frequently than annually, the increase in *standardised liability for remaining coverage* should be limited to any modal premiums due but not received.
ii	The Standard removes the *NZ IFRS 17* optionality relating to the treatment of *acquisition costs*. Our view is that expensing *acquisition costs* up-front is inconsistent with an economic valuation approach and hence we require the use of the implicit DAC assets established under NZ IFRS 17 55(a)(ii), with paragraph 59(a) not applying.

Subparagraph	Comment
iii	As the PAA liability is based on premium rather than expected claims cost, we remove any profit margin implicit in the premium charged. For consistency with the paragraph 28 modified GMM method, we require the resulting modified PAA liability to be net of *tax*. This treatment assumes there is no related non-insurance *deferred tax item* elsewhere on the balance sheet. We also require the liability to include an implicit risk adjustment, although as this is short-term business we assume it will be run-off in resolution rather than sold class-by-class. This means that the risk adjustment can be determined allowing for diversification among product classes rather than on a class-by-class basis. Profit margins can be determined using approximate methods, for example based on pricing assumptions.

31. Surrender penalties, buy/sell spreads and other features may cause the economic value of investment-linked life insurance policies to differ from the value of the units. Where such differences are material, the modified GMM method of paragraph 28 should be applied.

    While the resulting value is gross of *tax*, any related non-insurance *deferred tax item* elsewhere on the balance sheet is preserved, such that the overall impact on *solvency capital* should be net of *tax*.

Adjustments to Non-Insurance Items

32. While a change in accounting basis does not in itself modify the *tax* that will eventually be paid by the insurer, it does modify expectations about the *tax* that will be paid. It is important that these changed expectations are reflected in the balance sheet alongside the re-valued underlying items.

33. This section has been introduced to prevent any insurer increasing its *solvency capital* simply by choosing to prepare its accounts on a *wind-up* basis. Such optionality would generate inconsistency with other insurers.

34. The reduction is intended to remove any *capital* benefit the insurer may gain by choosing to account on a *wind-up* basis. (Note that the *ICPs* promote application of a going-concern paradigm.)

35. Where the insurer is reporting on a *wind-up* basis and *capital* is lower than on a going concern basis, we assume that there was no option available to the insurer and the *wind-up* basis is suitable for generating the economic value of *capital*.

36. [No comment]

37. For the avoidance of doubt, if an asset backing *insurance items* is held at a value other than fair value, the difference between fair value and book value should be added to *capital*, whether positive or negative. A positive difference should increase *capital* while a negative difference should reduce it.

38. Deductions from *capital* are limited to *items* that move the valuation of *solvency capital* closer to an economic valuation.

In previous standards, deductions from *capital* have been used to remove intangible assets that may have limited or no value in a *wind-up* under stress. In this Standard, deductions that may be required in adversity are addressed through the *prescribed capital requirement (PCR)* calculation, and in particular the Distressed Wind-up Capital Charge.

With respect to the surviving deductions:

- The Standard views obligations to policyholders as guaranteed by the insurer; it would be inappropriate to reduce the value of such obligations by assuming a risk of non-payment.
- Gains relative to previous valuations must be based on firm evidence.
- Declared dividends are not available to support policyholder obligations in the future.

39. Formerly, financial reinsurance *repayable amounts* triggered an increase in the *insurance risk capital charge*. However, the Standard views financial *reinsurance* as a potential form of *capital* or debt funding and so it becomes an input to the *solvency capital* calculation.

40. *Repayable amounts* only need to be deducted from *solvency capital* to the extent they are not already recognised under *NZ IFRS*. For solvency purposes, *repayable amounts* are the equivalent of debt; however, they are not accounted for as such under *NZ IFRS*.

41. *NZ IAS 37* paragraph 10 says that an asset is contingent if its existence is dependent on events outside the control of the insurer.

42. *NZ IAS 37* paragraph 13(b)(i) says that liabilities are contingent if either they may not represent a present obligation, they may not result in an outflow of resources, or they cannot be reliably estimated. *Contingent liabilities* are not recognised in *NZ IFRS* accounts.

    Note that the requirement to recognise and the requirement to disclose are different. *Contingent items* that meet the definitions in *NZ IAS 37* are required to be disclosed in notes to the financial statements but not recognised on the balance sheet. Disclosure of *contingent assets* is required if the inflow of economic benefits is possible (*NZ IAS 37* paragraph 34), while disclosure of *contingent liabilities* is required unless the outflow of economic benefits is a remote possibility (*NZ IAS 37* paragraph 28).

    As *solvency capital* is an economic measure, it should reflect the value of *contingent items* disclosed, together with the value of any undisclosed items that have the potential to pose a *material* risk to the ability of the *licensed insurer* to maintain the required *solvency margin* now or in the future. If there is no *material* risk, a contingent liability that does not meet the test for disclosure under *NZ IAS 37* is not required to be included in *solvency capital*.

43. If a fair value (determined in accordance with *NZ IAS 37* paragraphs 36-52) is available, it should be used (as *solvency capital* aims to reflect economic value).

44. Where an economic value has not been determined, we reluctantly revert to conservatism. The phrase "likely maximum exposure" is left to the judgment of the insurer and its *appointed actuary*. As the maximum exposure for a contingent liability cannot usually be determined with certainty, the word 'likely' is used to qualify it. For an estimate of maximum exposure to be likely, there must be at least a 50% chance that the true maximum exposure

is less than the estimate. Likely maximum exposure is usually higher (sometimes much higher) than the likely exposure.

45. If an instrument doesn't meet the requirements of Appendix 1, it is not considered to be fully available to meet the claims of policyholders. For this reason, it is excluded from *capital*.

46. Similarly, concentrations of perpetual instruments are considered to not be fully available to meet policyholder obligations and are deducted in part.

Capital Requirements

47. Of these four *capital requirements*, only the *PCR* contributes to the determination of the *solvency margin* as defined and used by *IPSA*. The *APCR* incorporates any solvency licence condition and is required to be disclosed. Usage of the two 'minimum' measures – the *MCR* and the *AMCR* – is likely to be limited to supervisory intensity & response until an *IPSA* amendment is promulgated.

Prescribed Capital Requirement

48. *Licensed insurers* with *solvency capital* greater than the *PCR* will generally not be subject to heightened supervision on account of *capital* levels or be exposed to the *Reserve Bank's* distress-management powers.

    Licensed insurers with *capital* greater than the *PCR* may still be subject to heighted supervision and distress management (non-exclusively) when: (1) solvency licence conditions require the maintenance of *solvency margins* greater than NZ$0; (2) solvency licence conditions require the maintenance of *solvency ratios* greater than 100 percent; (3) the *licensed insurers* have a deteriorating solvency trend; or (4) the *licensed insurers* are being managed imprudently. Note that this list is non-exclusive and there may be other circumstances in which heightened supervision or distress management may be appropriate.

    'Normal circumstances' mean that the insurer is expected to continue operating as a going concern and is not in one of the circumstances outlined above. Such an insurer should be able to pay claims following a 1-in-200 solvency shock.

49. The *PCR* formula is both simple and simplistic as it does not allow for any diversification benefits where an insurer is exposed to multiple risks which may or may not crystallise over the coming year, and which are somewhat independent of each other. The *capital charges* for individual risk categories contain an implicit allowance for a certain level of diversification.

    In a change from the previous standards, the *FCA* now feeds directly into the *PCR* and the *solvency margin*. There are some consequences:

    - The *PCR* can never be less than the *FCA*. Insurers with an *FCA* that exceeds the total capital charges will determine their *solvency margin* as *solvency capital* less *FCA*, giving users of solvency information a clearer picture of the *licensed insurer's* unencumbered *capital*.

    - Each *solvency entity* is subject to the *FCA*, so a life insurer with two statutory funds will effectively be subject to a double *FCA* requirement.

Risk categories have been established to broadly align with those used by international comparator regimes.

50. Previous standards indicated that some *capital charges* were calibrated gross of *tax*, but were silent about others. All charges are stated to be gross under this Standard and need to be adjusted for *tax* effects.

51. We encourage insurers to use precise methods to allow for *tax* if possible, or to move towards precision over time if not.

52. *Fixed capital amounts* are largely unchanged from previous standards, although now apply to long-term and short-term business rather than life and non-life.

53. The 'other' category is made up of disparate components with no unifying principle. The contingent items charge provides for valuation shocks triggered by, for example, judicial rulings. The distressed *wind-up charge* is a mechanism for proofing the standard against a change to a *wind-up* paradigm. The asset concentration and business run-off charges don't address risk directly – the former attempts to compensate for the impact of other risks on insufficiently diversified portfolios, while the latter seeks to retain *capital* in the business to cover future expenses.

Insurance Risk

54. *Captive insurers* are not subject to standard insurance risk charges, a treatment carried over from the previous standard for non-life captives.

55. We acknowledge the theoretical shortcomings of the formula set out in this paragraph in not allowing for diversification and interactions between the risks involved. This is a continuation of the approach under the previous standards on an interim basis.

Underwriting Risk

56. The *underwriting risk capital charge* reflects the risk to the *licensed insurer* of writing unprofitable *short-term insurance contracts* and has been largely carried over from the previous non-life standard. Changes include that:

- short-term life insurance *product classes* have been added. For *clarity*, inwards life *reinsurance* classifies as *inwards reinsurance* rather than other life classes.
- The *standardised liability* has been used in place of *premium liabilities* in the previous standards.

The base for the UWRCC has been changed to the expected claims and expenses within the coverage period, as the standardised liability was too small in the case of modal premium business to fully reflect the pricing risk.

Factors are designed to allow for the level of risk each *product class* is subject to. For example, liability has the highest factor because of the variability of claims and the length of the claims tail.

Claims Run-Off Risk (Short-Term Business)

57. The *claims run-off risk capital charge* reflects the risk to the *licensed insurer* of inadequate provision being made for claim liabilities under *short-term insurance contracts* and has been largely carried over from the previous life and non-life run-off standards. The main change is that short-term life insurance *product classes* have been added.

    Factors are designed to allow for the level of risk each *product class* is subject to. For example, *liability* has the highest factor because of the variability of claims and the length of the claims tail. Run-off factors are four times those for insurers open to new business, reflecting both reduced risk diversification and the difficulties run-off insurers would have with generating fresh *capital* to cover an adverse variation in claims.

Long-Term Insurance Risk

The *long-term insurance risk capital charge* takes into account the risks pertaining to each element in respect of which an assumption is required to set a value on the *risk-adjusted best estimate liability*. The risks pertaining to each element include the risk of mis-estimation of the mean, the risk of deterioration of the assumed mean, the risk of adverse statistical fluctuations about the mean and the risk of unexpected changes in the underlying distribution of experience. The *long-term insurance risk capital charge* should be applied to *long-term insurance contracts* and is largely carried over from the previous life solvency standard.

58. Note from the definitions in paragraph 17 that the *risk-adjusted best estimate liability* is equivalent to *standardised insurance items* and includes components relating to incurred claims and remaining coverage.

59. The zero minimum on this charge is intended to apply at the *product class* level. This is because we see each *product class* as a 'minimum saleable block' and we want to be able to resolve insurers by transfer of liabilities. Were the post-shock liability to be less than the *risk-adjusted best estimate liability*, it may be difficult or impossible to sell the block of business to a new insurer.

    The imposition of the *current termination value* as a minimum on the *solvency liability* allows for adverse lapse experience and distressed *wind-up* (although the amount paid to the policyholder in the latter case may differ from the *current termination value*). The *current termination value* should not be risk adjusted, as it implies a claim event rather than a sale to a new insurer demanding compensation for accepting risk.

60. [No comment]

Catastrophe Risk Capital Charge

61. Our catastrophe charge focuses on seismic risk and pandemic mortality risk, although we recognise that other risks could also be addressed, for example, volcanic, pandemic health, terrorism, cyber etc.

62. Exposure to catastrophes other than under *insurance contracts* is addressed by the *operational risk capital charge*. Secondary event exposures (e.g., an earthquake aftershock) should only be combined with primary event exposures if that is how they would be treated for *reinsurance* purposes.

63. Non-life insurers were given until 1 January 2024 to comply with Appendix 4's *reinsurance* quality requirements. This is because this was a new requirement for them, and *reinsurance* treaties needed to be re-written accordingly.

Seismic Risk Capital Charge

64. For the avoidance of doubt 'risks arising from earthquakes' should be interpreted broadly, e.g., including earthquake-generated tsunamis, landslides and fires caused by earthquakes.

65. To align with other *capital charges*, the *seismic risk capital charge* should be based on aggregate annual losses from earthquakes rather than on those from a single event. As such a treatment would have increased the charge, we have not considered a change at this stage.

    In most cases the primary peril for non-life *product classes* will be shaking and the other perils will be secondary. Distant-source tsunamis may also be primary perils.

    Non-life losses are calibrated to 99.9% rather than 99.5% as the implications for the New Zealand financial system and broader economy are more significant for non-life insurers than for life insurers.

    Where *licensed insurers* hold significant portfolios of seismic risk, the *Reserve Bank* recommends the use of a stochastic model. Small or new carriers of earthquake risk may use other approaches provided these are not expected to produce results that are less conservative than a full stochastic model.

    As the charge focuses on the *net insurance losses*, insurers can meet their obligations under the standard by either providing *capital*, securing *reinsurance* or a combination of the two.

66. Paragraph 66(ii) aims to give licensed insurers time to organise the reinstatement of their reinsurance programmes while still recognising the cover provided by their existing catastrophe programmes. The provision of 168 hours of post-event relief is a weakening of the seismic risk capital charge relative to the previous non-life standard.

67. This is a new provision, broadly aligned with Australian requirements and providing for the first time a valuation method for reinstatement cost. It aims to give *licensed insurers* time to organise the reinstatement of their *reinsurance* programmes while still recognising the cover provided by their existing catastrophe programmes.

Pandemic Risk Capital Charge

68. This new formulation has been introduced with the aim of providing consistency among insurers. The wording of the previous life insurance standard[1] left some room for interpretation, with the result that different insurers approached the pandemic charge in different ways.

69. The *net mortality strain* is the impact of deaths on the before-tax profit for the year. By differencing between stressed and expected *net mortality strains* we obtain the cost of the additional pandemic mortality. The *items* mentioned in (iii) include all *items* released, whether they relate to mortality or other risks.

1 Solvency Standard for Life Insurance Business 2014 (incorporating amendments to November 2018)

70. [No comment]

Other Event Risk

71. While we understand the need to limit the number of catastrophe events considered, we would nonetheless encourage insurers to think laterally about the potential events that could have a significant impact on their *capital*. We also appreciate that a loss return period of 200 years is well into the tail and may be difficult to estimate with precision.

72. [No comment]

73. [No comment]

Default Risk Capital Charge

74. The *default catastrophe risk charge* is designed to provide a minimal charge for situations in which an insurer is not liable to seismic, pandemic, or other event risks.

75. [No comment]

Aggregation and Actuarial Review

76. We accept that it is theoretically incorrect for the charge to simply be the maximum of the individual components, as more than one component could crystallise in a year. This approach continues that in previous standards.

77. [No comment]

Asset Classification

Collective Investment Vehicles

78. [No comment]

79. [No comment]

Hypothecated Portfolios

80. [No comment]

Market Risk

81. The *market risk capital charge* brings together several elements from the previous standards under a single heading. It allows for adverse movements in *solvency capital* resulting from changes in market variables such as interest rates, exchange rates, share prices and property values.

Interest Rates

82. While this charge is a development of that in the previous standards, it now considers 'other interest-sensitive items' alongside *investment* assets and insurance *items*. This is in keeping with a move towards a 'total *balance sheet*' approach.

The base for the stress on insurance *items* is now the standardised value of insurance *items* rather than the stressed forms of the liability (as the probability of an interest rate stress following an insurance stress is less than 1 in 200). *Negative standardised liabilities for remaining coverage* have been excluded from the base for this charge. This is because in most of these cases the *insurance risk capital charge* effectively assumes that the relevant policies have been terminated and the liabilities extinguished.

83. This charge has been modified to make it functional at low interest rates, and to introduce a relationship with the level of interest rates.

84. Where a single rate is used to discount all an instrument's cash-flows, the current interest rate is that rate. Where different, term-dependent interest rates are used to discount the cash-flows under an instrument, the current interest rate will differ for each cash-flow.

85. [No comment]

Equity

86. 'Listed trusts' exclude listed and unlisted property trusts. These are addressed by the *property risk capital charge* described in paragraph 87. 'Consequent increases and decreases' means changes in the standardised value of insurance items that would be consequent to the shocks to equity values set out in the table.

Property

87. 'Consequent increases and decreases' means changes in the standardised value of insurance *items* that would be consequent to the shocks to property values.

88. [Repealed]

Foreign Currency

89. The net open foreign exchange position in each currency should obviously be valued in NZ dollars. 'Consequent increases and decreases' means changes in the standardised value of insurance *items* that would be consequent to the shocks to the values of currency exposures.

90. [No comment]

91. [No comment]

92. Guarantees denominated in a foreign currency that do not limit the New Zealand dollar amount guaranteed, either because the amount of the guarantee is unlimited or because the guarantee is hedged, do not need to be included in the net open foreign exchange position.

Derivative Instruments

93. [No comment]

94. [No comment]

Credit Risk

95. Capital charges for credit risk allow for adverse movements in solvency capital resulting from reductions in asset values due to credit downgrades and defaults.

96. [No comment]

Counterparty Grades

97. [No comment]

98. Because rating agencies do not always agree, it is necessary to have a consistent method of determining the *counterparty grade* to use.

99. Rows 8-10 are the three rows at the bottom of the table marked 'Reinsurers and issuers'.

Reinsurance Recovery

100. [No comment]

101. '*Deferred reinsurance expense* may include amounts excluded from "insurance *items*" under paragraph 22.

Allowances for non-fulfilment of obligations (likely introduced by *NZ IFRS 17*) are to be removed from *reinsurance* assets so that a standard *capital charge* can be applied to the gross asset value. This ensures consistency among insurers, an appropriate calibration of the charge and that no impairments included in the *standardised balance sheet* are double counted.

102. Non-reinsurance recovery assets are treated by the *other credit risk capital charge*.

Where a liability of greater value is offset against a *reinsurance recovery asset*, the net exposure should be taken as zero for the purposes of the *reinsurance recovery risk capital charge*.

Reinsurance Disputes

103. While paragraph 101 defines the *reinsurance recovery asset* as being the sum of several components, the conditions in paragraph 103 should be applied to each component separately, to determine if that component is in dispute.

104. The *Reserve Bank* and the Standard are not able to place a value on *reinsurance* assets in dispute, hence equal credibility is given to insurer and reinsurer valuations.

Reinsurance Credit Risk

105. [No comment]

Other Credit Risk

106. Paragraph 30(iii) DAC assets do not contribute to credit risk charges as they are seen as being an intrinsic part of *insurance items*.

107. 'Consequent increases and decreases' means changes in the standardised value of *insurance items* that would be consequent to the credit shocks set out in the table.

'Positive tax balances' is a new entry in the '2%' row of the table, designed to recognise some fungibility risks attaching to these amounts.

108. [No comment]

Operational Risk

109. The *operational risk capital charge* has been broadly aligned with similar formulae in international solvency regimes. The first component is based on business volumes (*insurance revenue* or liabilities) while the second component recognises the additional risk attached to *rapid insurance* revenue growth.

Where a continuing *solvency entity* and an absorbed *solvency entity* have different financial years, only *insurance revenue* earned by the absorbed *solvency entity* during the continuing *solvency entity's* financial year should be taken into account. This is not intended to only count the *insurance revenue* of the absorbed *solvency entity*; it is a given that the *insurance revenue* of the continuing *solvency entity* remains in the measures.

Other Capital Charges

110. [No comment]

Contingent Items

111. [No comment]

112. We accept that estimating the 99.5th percentile of an outcome distribution for *contingent items* is very difficult given the heterogeneous nature of such *items*, the relative lack of historic data and difficulties in estimation of tail risk. Insurers should use their best efforts. The outcome distributions in question should represent values one year after the *solvency determination date*.

The *capital charge* is the difference between the stressed value determined under this paragraph and whatever value was determined as part of *solvency capital* in paragraphs 43-44.

Distressed Wind-Up

113. *Solvency capital* is determined assuming that the insurer is a going concern. The *PCR* is also determined assuming that the insurer is a going concern, albeit one under stress. The purpose of the *distressed wind-up capital charge* is to allow for the possibility that, because of solvency shocks exceeding those prescribed, the insurer may be in a *wind-up* process. In a *wind-up*, values of certain assets may change, due either to the change of status itself or to the need to liquidate assets in a short timeframe.

Most of the assets listed in paragraph 113 were formerly deducted from *capital*, however they are now added to the *PCR* because the change in value arises due to a solvency stress. Comments on individual items are as follows:

Sub-paragraph	Comment
i	Any *deferred tax liability* relating to a goodwill asset can now be offset against it. By 'relating to' we mean that the *DTL* would not exist if the goodwill asset did not exist.
iv	By referring to the 'shareholder portion', we are recognising that in a participating life sub-fund, policyholders may legitimately bear some of the impact of any nullification of deferred *tax* assets on *wind-up*. Where *participating insurance contracts* would share in the write-off of a deferred *tax* asset on the *wind-up* of a company, only the remaining shareholder proportion should contribute to the charge.
ix	'Freely available' is defined in paragraph 17. The aim of this sub-paragraph is to establish a *capital charge* for any *capital* that may be trapped or become trapped in an overseas branch, as in this case, it cannot be used to provide security for all the policyholders of the insurer.

114. Assets that generate *distressed wind-up capital charge* components are effectively charged at 100%. It would be inappropriate to charge these assets beyond the amount of their value, and hence charges under other headings are disallowed.

Asset Concentration

The *market and credit risk capital charges* in the Standard assume that insurers have a reasonably well diversified asset portfolio and hence are only subject to systematic risk. Insurers that have highly concentrated asset portfolios are subject to additional diversifiable risk and their investment outcome probability density functions will have thicker tails.

An *asset concentration capital charge* is required in order to put aside funds against the possibility that returns will be worse than those assuming only systematic risk.

115. Right-of-use assets have been excluded from concentration consideration because they are assumed to be largely offset by lease liabilities.

116. Small entities often have simplified investment management functions and may run bank balances that are proportionately high. This provision aims to avoid incentivising them into riskier (but diverse) assets.

117. The assumption here is that it is the guarantor that is ultimately responsible for fulfilling obligations under guaranteed debt.

118. [No comment]

119. As the risks associated with *captive insurers* are largely borne by members of the same group, we are less concerned about concentrated exposures to group companies.

    Dollar limits have been established for categories 3, 4 and 5 to give more flexibility to insurers that are smaller and have less impact on financial stability.

120. Exposures should be allocated to the subcategory to which they naturally relate. For example, for insurers other than captives, an intercompany balance would classify as 'short-

term related party debt' in the table in paragraph 107 (with a 6% capital factor). An office building owned by the insurer would classify as property under paragraph 87 (with a 25% capital factor). Where an exposure can be allocated to multiple subcategories, the one with the highest capital factor should be employed.

121. [No comment]

122. [No comment]

123. It would be illogical for the *capital charges* under the Standard to exceed the value of the *item*, as in most cases this value should be the limit of the insurer's exposure.

124. [No comment]

Business Run-Off

125. The *business run-off capital charge* is designed to lock in some *capital* to fund expenses in the tail of a *run-off* when there is no economic motivation for shareholders to provide support. For particular business models this charge may be insufficient, however, and the *Reserve Bank* may impose a stronger requirement through a *condition of licence*.

    Some *items* of expense related to the future management of *insurance contracts* may not be captured under the modified *GMM* and *PAA* methods of paragraphs 28 and 30 respectively. $100,000 per year of *run-off* is an approximate allowance for this uncaptured expense.

    Insurers continuing to offer new business have a zero *capital charge* as they are assumed to both:

    - remain attractive targets for shareholder investment; and
    - be able to maintain scale due to future new business.

126. This paragraph assumes that an insurer becomes unable to cover its expenses from its in-force business when premium loadings for annual maintenance expenses first fall below $1m per year. The uncovered expenses are assumed to grow from zero, with $100,000 representing an average over the *run-off* term.

    The *Reserve Bank's* supervisory experience indicates that it can take a couple of years to fully wind up an insurer after the last contract has terminated, and *capital* must be available to cover the costs in this period in order to fully meet the insurance obligations.

Other Capital Requirements

127. The Standard introduces adjusted solvency measures. We believe that such measures are a more appropriate tool for insurer management and for publication because the minimum margin and/or ratio requirements stipulated in *licence conditions* generally relate (non-exclusively) to either:

    - areas where the *standardised balance sheet* overvalues the *capital* of the insurer; or
    - areas where the insurer is subject to *material* risk that is not hypothecated by the Standard.

128. [No comment]

129. [No comment]

130. [No comment]

131. [No comment]

132. 80% of the *PCR* is an initial level for the *MCR*.

133. The *AMCR* is a function of the *APCR*; it is not the *MCR* modified for the *solvency licence condition*.

Reporting and Accountability

Obligations of the Licensed Insurer

Reporting to the Reserve Bank

134. [No comment]

Solvency Returns

135. [No comment]

136. Our preference is that audited *financial statements* for the *licensed insurer* are provided under subparagraph (ii), as group *financial statements* are difficult to reconcile with other documents.

137. This paragraph and paragraph 138 refer to individual *licence conditions*, whereas the requirements for the *annual solvency return* are set out in paragraph 136.

138. [No comment]

139. Our intention is to include solvency reporting with other reporting on financial position, financial performance, and business metrics. This will reduce inconsistencies while increasing the frequency with which we obtain solvency information.

Audit of Annual Solvency Return

140. The *catastrophe risk capital charge* and solvency projections have continued to be excluded from the audit requirement. In the former case, this relates to difficulties with signing off on third-party models, while in the latter, assurance is difficult to provide for figures relating to the future and based on company business plans.

141. [No comment]

142. [No comment}

Financial Condition Report

143. Here and in several other places, the direct obligation has been placed on the *licensed insurer* as they are the regulated entity. The *appointed actuary* continues to have an indirect obligation to produce the *financial condition report*.

Disclosure of Solvency Measures

144. 'Comparative information for the immediately preceding financial year' means solvency information as at the balance date immediately prior to the balance date for the *financial statements* or the group *financial statements*, if they exist.

145. [No comment]

146. The requirement to disclose annual solvency return information on the insurer's website has been removed, as it will quickly be superseded by interim return information for the first quarter of the next financial year.

147. Insurers should make sure that solvency information is easy to find and prominently displayed on their websites. All necessary information should be provided, and care should be taken to ensure that any accompanying commentary does not mislead readers.

Advice to the Reserve Bank on a Likely Failure to Maintain a Solvency Margin

148. Under section 24 of the *IPSA*, a *licensed insurer* must report to the *Reserve Bank* as soon as is reasonably practicable, if it has reasonable grounds to believe that a failure to maintain a solvency margin is likely to occur at any time within the next 3 years. We expect and encourage insurers to discuss with us informally at an earlier stage, when a solvency breach over the next three years is just a 'significant possibility' (say, a 25% chance of breach sometime in the next three years).

149. *Capital* movements encompass all *capital* transactions between the *licensed insurer* and its shareholders, including share issues, rights issues, direct *capital* injections and dividend payments. This list should not be seen as exclusive.

Activities of the Appointed Actuary

Financial Statements

150. It is not within the remit of the *Reserve Bank* to regulate the preparation of *financial statements*, although *IPSA* and its regulations do require insertion of certain information in the statements (e.g., allocation of profit and capital for statutory funds). The report to be prepared by the appointed actuary under sections 77 and 78 of the *IPSA* is in respect of a review of, and is additional, to the *financial statements*.

    For clarity, this Standard does not and cannot give the *appointed actuary* the authority to modify *financial statements*. The *appointed actuary* can only review and comment on them.

151. [No comment]

152. [No comment]

153. [No comment]

154. [No comment]

155. [No comment]

156. While the *Reserve Bank* does not regulate *financial statements*, it does regulate the *solvency capital* and *capital* requirements determined under the Standard, and these measures must take account of any adjustments made by the *appointed actuary*.

157. A full assessment would include comparisons of:

i. the relevant accounting provisions (for example, the *liability for remaining coverage*, *DAC*, deferred *reinsurance* expense and deferred *reinsurance* commissions); and

ii. the actuarial estimate of the *liability for remaining coverage*, comprising:

- determination of the appropriate assessment period.
- central estimate of expected claims and recoveries.
- discounting at a risk-free rate.
- allowance for policy administration and claim-handling expenses.
- allowance for the cost of any future (not yet purchased) *reinsurance* required to cover unexpired risks.
- a risk margin intended to provide a 75 percent probability of sufficiency.

158. For the avoidance of doubt, paragraph 158 refers to the tests of onerousness mentioned in sub-paragraph 151(vii) and paragraph 157, not to the *appointed actuary's* entire review under ss77-78.

Solvency Calculations and Reporting

159. The *appointed actuary* must 'own' the solvency calculations, and it is not acceptable for them to be uninvolved.

160. The derivation of *tax* effects and the catastrophe charge can be quite idiosyncratic, and hence we ask for specific comment to gain a better understanding of the methods and parameters used.

Financial Condition Report

161. The *Reserve Bank* understands, in relation to sub-paragraphs (xi) and (xii) that *appointed actuaries* are not professionally trained to comment on outsourcing and conduct. Our expectation is that they could rely on others in forming their commentary (be they staff or external consultants).

The commentary on outsourcing arrangements and conduct risks under sub-paragraphs (xi) and (xii) can be sourced from and rely upon other staff of the *licensed insurer*.

Sub-paragraph (xiii) is new but important and is designed to help the board of *the licensed insurer* and the *Reserve Bank* in understanding the viability of the *licensed insurer's* business model. In this version of the Standard, we have left the form of the commentary up to the *appointed actuary* to determine.

Sub-paragraph (xiv) is designed to ensure that readers of the *financial condition report* understand the ability of the business to generate *capital*, and in particular to generate *capital* in excess of regulatory solvency requirements.

162. [No comment]

163. Under sub-paragraph (vi), *reinsurance* arrangements are tested at inception, and again on major change to the arrangement. In the latter case, the arrangement is treated as a new treaty and modelled from the time of the change.

164. The *appointed actuary* is not expected to have the competence to provide *financial condition report* commentary and analysis beyond their professional skill base and may call on and rely on other individuals to provide the necessary expertise.

New Zealand Society of Actuaries' Professional Standards

165. The Standard does not provide full instruction to *appointed actuaries* when exercising the judgements required. The New Zealand Society of Actuaries issues professional standards. Note that the Society's standards must be adhered to by *appointed actuaries* producing or reviewing work under the Standard, regardless of whether they are a member of the Society.

Appendices

1. Capital instruments

1. [No comment]

2. [No comment]

3. [No comment]

4. [No comment]

5. [No comment]

6. [No comment]

7. [No comment]

8. Sub-paragraph (iii): Waived distributions cannot be required to be made up by the *licensed insurer* later, and bonus payments to compensate for unpaid distributions are prohibited.

   Sub-paragraph (v): "Legal and contractual obligations" could, for example, include payment obligations on more senior *capital* instruments and debt. This means that the ordinary shares must not have any preferential or predetermined rights to distributions of *capital* or income.

9. [No comment]

10. The claim of ordinary shareholders is variable, unlimited, and not fixed or capped.

11. [No comment]

12. [No comment]

13. [No comment]

14. [No comment]

15. [No comment]

16. [No comment]

17. [No comment]

18. [No comment]

19. [No comment]

20. [No comment]

21. [No comment]

22. Sub-paragraph (i): waived distributions cannot be required to be made up by the licensed insurer later and bonus payments to compensate for unpaid distributions are prohibited.

    Sub-paragraph (v): A distribution that is reset periodically based in whole or in part on the credit standing of the *licensed insurer* or any *related party of* the *licensed insurer* may be considered a credit-sensitive distribution feature. Perpetuals may utilise a broad index as a reference rate for the calculation of distributions, provided that the index does not exhibit any significant correlation with the *licensed insurer's* credit rating.

    Sub-paragraph (vi)(b)(B): It would be acceptable to specify the distribution rate as a fixed margin above a recognised market benchmark such as the bank bill rate.

    Sub-paragraph (vi)(b)(C): Conversion from a fixed rate to a floating rate that is determined as a benchmark rate plus a margin will be considered an incentive to redeem if there is an increase in the margin relative to that implied for the fixed rate.

23. [No comment]

24. [No comment]

25. [No comment]

26. [No comment]

27. [No comment]

28. [No comment]

29. See section 58A(2) of the Friendly Societies and Credit Unions Act 1982, which provides that such securities are transferable only between members and confer no voting rights on holders.

30. [No comment]

31. [No comment]

32. [No comment]

33. [No comment]

34. Sub-paragraph (iii): Waived distributions cannot be required to be made up by the *licensed insurer* at a later date and bonus payments to compensate for unpaid distributions are prohibited.

    Sub-paragraph (v): This includes, for example, payment obligations on more senior *capital* instruments and debt having been made. This means that the Securities must not have any preferential or predetermined rights to distributions of *capital* or income.

35. [No comment]

36. [No comment]

37. [No comment]

38. [No comment]

39. [No comment]

40. [No comment]

2. Financial reinsurance

We expect that many future *reinsurance* cash-flows will be incorporated in *standardised insurance items* under *NZ IFRS 17* and hence under this solvency standard, and we draw attention to clause 28 of this appendix, which allows the offsetting of such values in the determination of *repayable amounts*.

There have been some changes relative to prior standards and clause-by-clause guidance is provided below.

Overview

1. The term *repayable amount* is used to quantify features of a *reinsurance* arrangement that represent 'hidden' debt and should therefore not form part of *solvency capital*.

2. Under paragraph 39, only *reinsurance* arrangements in respect of *long-term insurance contracts* need to be inspected and can give rise to *repayable amounts*.

3. [No comment]

4. Premium receivables may still be referred to in this appendix, notwithstanding their elimination from accounting treatments under *NZ IFRS 17*. The fact that accounting treatments are included does not mean that other treatments are excluded.

Testing of Reinsurance Arrangements

5. Only new or modified *reinsurance* arrangements need to be tested; there is no requirement to test treaties annually. We are not expecting existing treaties to be re-tested when this standard first becomes applicable to a *licensed insurer*.

6. While testing does not have to be repeated, *repayable amounts* do need to be revalued at each *solvency determination date*, however.

7. [No comment]

8. This clause addresses possible double counting (inclusion in other liabilities), and rules out increases to *solvency capital* where an arrangement is an asset to the *licensed insurer*.

Likelihood Test

The purpose of the likelihood test is to assess whether there is an effective transfer of risk under the *reinsurance agreement* as a whole.

9. The *likelihood test* is focussed on the *net reinsurance liability* as it is a component of *capital* for both the *licensed insurer* and the *reinsurer*. Significant volatility in the *net reinsurance*

liability under possible different futures indicates that the *reinsurer* is bearing risk under the arrangement.

10. We would prefer that insurers take a constructive rather than a contractual approach to 'the point where the *reinsurer* can unilaterally terminate or reprice'. If the contract allows for termination or repricing, but it is highly unlikely in practice that the *reinsurer* would put them in effect, no break point should be assumed.

    Outgoes and incomes should be on a cash basis.

11. While future new business is not valued as part of *insurance items* under the Standard, it is appropriate that it is taken into account for the purposes of testing risk transfer, especially for new treaties where no business has yet been written but a *repayable amount* may already exist.

12. An equity risk premium is added to the discount rates so that the *net reinsurance liability* approximates its value (and hence its risk) to the shareholders of the *licensed insurer*.

13. Ideally probability density functions for lapses and claims should be developed, based on experience but adjusted with judgement to be appropriate for the projection period. These should then be modelled stochastically if possible.

14. [No comment]

15. The *reinsurer* profit multiple is designed to provide a benchmark for the arrangement's profitability, which is established at outset, but used later in the arrangement to determine whether remaining insurer outgo is greater than would be justified by *reinsurer* profit margins alone.

16. For the purposes of valuing the *repayable amount*, risk-free discount rates are used. The purpose of this calculation is to determine an offset to *solvency capital*, not to determine whether the shareholder is bearing risk (as in clauses 9-14).

    The *reinsurance* contract boundary is used, as repayment obligations can exist beyond the boundary of the underlying *insurance contract*.

17. The function of the *reinsurer* profit multiple is to determine whether the remaining cash-flows to the *reinsurer* create profitability in excess of that expected at the outset, and hence the presence of a financing element.

    As per clause 8, the Standard currently makes no allowance for 'hidden *reinsurance* assets' and hence there is a zero floor on the *repayable amount*.

Specified Event Test

The purpose of the specified event test is to ensure that potential obligations for the *licensed insurer* to pay amounts to the *reinsurer* from outside the cash-flows generated by the reinsured portfolio are recognised in solvency calculations.

18. The phrase 'out of the future profits arising from the reinsured portfolio' is used in this clause to place an upper bound on payments to the *reinsurer* that could be funded by the reinsured business. Any payments that can't be funded by the portfolio's cash-flows are assumed to be debt-like and give rise to a *repayable amount*.

19. As the Standard does not allow for 'gone concern' or 'tier 2' *capital*, any financial *reinsurance* that is akin to subordinated debt is not allowed to generate a *capital* benefit for the *licensed insurer*.

20. The sub-clauses of this clause are designed to ensure that the test is not triggered by certain specific payments that do not represent a financing arrangement – commission clawbacks, calculation errors, court-directed payments, insurance premium increases, recapture of the portfolio and forced termination.

21. The *repayable amount* is set equal to the maximum value of the entire obligation.

Embedded Obligations Test

22. [No comment]

23. Unlike the specified event test, this test looks for amounts received (for example, *reinsurance* commissions) that will need to be repaid, and which have nothing to do with insurance risk transfer under the arrangement.

24. As with the specified event test, there are certain cash-flows that are excluded from consideration because they do not represent a financing arrangement.

25. [No comment]

26. This clause defines *reinsurance* commissions by their substance, in case they are not described as such in the financial records of the *licensed insurer*.

27. Sub-clause (i) has the effect of placing a ceiling on the *repayable amount* equal to the *reinsurance* balance. The terms 'broadly equivalent' and 'included in the *repayable amount*' require a connection between the *licensed insurer's* obligation to the *reinsurer* and the offsetting recoveries.

    In sub-clause (ii), 'the amount received' refers to the original payment made by the *reinsurer* and mentioned in sub-clause 23, while 'any amount that has been repaid' refers to any partial repayment of 'the amount received' that has already been made by the *licensed insurer*.

Repayable Amount to be Deducted

28. The three tests may identify different debt-like features in the *reinsurance* arrangement, hence the starting point for the overall *repayable amount* calculation is the sum of the *repayable amounts* arising under the three tests.

    It is possible that the debt-like obligations identified in this appendix have already been taken into account in *solvency capital*, for example due to the *reinsurance* cash-flows taken into account in the derivation of standardised *insurance items*. Where this is the case, the *repayable amount* should be reduced or eliminated accordingly.

29. [No comment]

30. This clause eliminates any double-counting between the tests (e.g., where two or more tests have identified the same debt-like feature), while ensuring that an appropriate amount remains after elimination.

3. Materiality

There is no guidance on individual clauses for this appendix.

4. Quality of reinsurance

1. As these *reinsurance* quality requirements are new for the non-life sector, the requirements of Appendix 4 do not come into effect until 1 January 2024 for non-life business. This is to give non-life insurers time to make any necessary rectification to treaties, or to take the requirements into account when concluding new treaties.
2. Whilst the focus of the appendix is on the economic substance of *reinsurance* arrangements, there are elements that relate to the legal form (such as the requirement that treaties are signed by authorised persons).
3. [No comment]
4. Under sub-clause (i), a *reinsurance* arrangement that is a liability to the *licensed insurer* cannot be expected to offset the *licensed insurer's* risk. Neither, under sub-clause (ii) can an arrangement which is not properly contracted, or under which claim payments are uncertain, be relied upon to provide *reinsurance* benefits.
5. This clause is designed to allow the reinsurer to not continue the treaty or make claims payments in circumstances where either (a) the reinsurer is not at fault or (b) the reinsurer has made adequate provision for claims incurred prior to termination.

5. Prescribed solvency assumptions

1. The scope of Appendix 4 in the Standard differs from the scope in previous standards. As the Standard has changed the scope – from *life insurance* to *long-term insurance contracts* – some new categories of assumption have been added.
2. The *adjustment for non-financial risk* is designed to adjust an *insurance item* from its *best estimate* to its economic value, providing compensation to the holder for accepting uncertainty relating to the insurance cash-flows. One of the aims of the solvency regime is to ensure that business can be resolved after a solvency shock, and this requires *insurance items* to be risk-adjusted in a post-shock environment (i.e., an environment in which the characteristics of risks may have changed)

Discount Rates

3. The *prescribed solvency assumptions* are used in measuring insurance risk. They are not required to measure credit or market risk, which have their own *capital charges*. For this reason, best estimate risk-free yield and discount rates are employed.

Servicing Costs

4. [No comment]
5. [No comment]
6. Paragraph 28 requires expenses to be fully allocated to insurance contracts.
7. [No comment]

8. While a contractual fixing of servicing expenses obviates the need for prescribed solvency assumptions, it potentially creates outsourcing risks.

Inflation Rates

9. Prescribed solvency assumptions for inflation are independent of the definition of *expected inflation*, which is used for other purposes in the Standard.

Taxation

10. [No comment]

Insurance Claims

11. New rows have been inserted for underwriting and claims run-off risk relating *to long-term non-life insurance items*. For consistency, these rows employ the same factors used for measuring insurance risk for short-term contracts. The factors are, however, applied to the long-term *insurance items*. These rows do not apply to health insurance business.

    Similarly, a new row has been inserted to provide *prescribed solvency assumptions* for long-term health business. These build on the analogical solvency shocks for short-term health insurance contracts, but also allow for longer-term effects such as stressed claims inflation. Note that the factor based on incurred claims should be applied to the *standardised liability for incurred claims*, while the increase in best estimate assumptions should be applied to the *standardised liability for remaining coverage*.

12. Where *prescribed solvency assumptions* already allow appropriately for IBNR, IBNER and RBNA[2] claims, there is no need to develop additional assumptions under this clause.

13. This clause should not be overlooked, and *appointed actuaries* should be considering additional *insurance items* and *capital charges* for *material* areas of *specialised risk* that have not been allowed for under the Standard.

Voluntary Discontinuances

14. [No comment]

15. We suggest interpreting 'adverse change' in the following way, noting that a change that increases *solvency capital* cannot be considered 'adverse'.

Increase in discontinuances	Decrease in discontinuances	Adverse shock
Increases solvency capital	Increases solvency capital	Zero – no change to insurance items[3]
Increases solvency capital	Decreases solvency capital	Decrease in discontinuances
Decreases solvency capital	Increases solvency capital	Increase in discontinuances
Decreases solvency capital	Decreases solvency capital	The shock that produces the greatest decrease in solvency capital

2 ' Incurred but not reported', 'incurred but not enough reported' and 'reported but not admitted'.

3 Theoretically, as shock smaller than 40% could produce a decrease in solvency capital in certain condiitions.

Options **Provided** to **Policyholders**

16. [No comment]

17. [No comment]

Investment-Linked Policies

18. [No comment]

19. [No comment]

6. Guarantees

This appendix is carried over from previous standards. There are no comments on individual clauses.

7. Discretions

1. Discretions are actions that management could and would take in response to solvency shocks. In theory discretions could respond to all solvency shocks, however for this version of the Standard we have limited them to insurance, market and credit risks.

2. The Standard requires approaches to the determination of solvency shocks. In the case of long-term insurance risk, a revaluation using different assumptions is required. Market and credit risk shock are generally determined by applying a factor to standardised values. In all cases, however, there is an underlying shock that can be elicited, and discretions applied proportionately to that shock.

3. The purpose of this clause is to avoid the use of a set of assumptions and discretions that may not be implementable in reality (e.g., increased premium rates together with lower lapse rates).

4. The purpose of this clause is to ensure that solvency stresses generate losses and are not nullified by assumed future premium increases. While in the long-term losses may be recoverable, in the short-to-medium term they will reduce *solvency capital*.

5. Any change in the nature and scale of discretions applied between solvency determination dates should be justified by changes in the economic or operating environment, changes in business models etc.

   'Consistency within each calculation of the *PCR*' also requires the exclusion of double or triple-counting of discretions. As *capital charges* are additive and the Standard allows discretions to reduce insurance, market and credit risk *capital charges*, the possibility arises that the same discretion could be employed three times. Each discretion should only be employed once.

   The following clauses describe how the discretions are to be applied. Their application will always be a matter of professional judgement, and that judgement should be made in accordance with the principles underlying the calculations within this solvency standard.

Termination Value

6. [No comment]

7. The *current termination value* minimums perform a specific function in the Standard (charging off intangible policy assets) and hence it would be inappropriate to apply discretions.

Reduction in Discretionary Benefits

8. Management action to reduce bonus rates etc. should only be allowed where it is likely that such action would actually be taken in the event of a solvency shock. Where practical considerations would render action unlikely (e.g., due to the establishment of a benefit expectation by prior practice etc.), no discretion should be allowed for.

9. The unvested estate is a balancing item between the value of the asset pool for a block of business and the value of its liabilities (including vested and planned bonuses). Solvency shocks may impact on both assets and liabilities, and hence on the value of the unvested estate. To the extent that the policyholder will bear any loss in this value, it can be allowed as a discretion.

10. See comment on clause 8.

11. Any approximate methods employed should meet the requirements of paragraph 16.

Increases to Expense Charges – Inflation-Linked

12. [No comment]

13. 'Realistic in the circumstances' means, among other things, that the assumptions should take into account any practical difficulties in implementing increases in charges, including push-back from customers.

Quantum (One-Off) Increase to Expense Charges

14. [No comment]

Premium Rate Increase

15. Note that there is currently no discretion to increase premium rates for reasons other than insurance loss experience. See comment on clause 13 regarding the meaning of 'realistic in the circumstances'.

16. Hurdles to premium rate increases need to be allowed for in setting discretion assumptions.

17. Health insurance rate increases have been capped due to likely market pushback at higher levels (e.g., in the form of increased lapses and lower sales).

    It is intended that one-off and annual increases can be applied in combination.

Claw-Back of Acquisition Commission

18. [No comment]

19. As with clause 17, there are limits to changes that the health insurance market will realistically accept.

8. Taxation and the prescribed capital requirement

1. The 'appropriate adjustment for *taxation*' refers to the recognition of *tax* losses consequent to solvency shocks. Other *tax* effects and items are not governed by this appendix.

   As *tax* liabilities and assets can be moved around *taxation* groups, the *appointed actuary* should consider likely management actions in this respect when making *tax* adjustments.

2. Comments by sub-clause:

   i. The previous standards were silent on *tax* effects for some *capital charges* while requiring them for others. The Standard, however, requires allowances for *tax*.

      While approximations can be used where *tax* calculations are onerous, we would prefer accurate calculations where possible and would suggest that insurers develop systems over time to facilitate them.

   ii. As a general principle, solvency regimes should countenance different future operating paradigms. For the purposes of the Standard, *taxation* assets should be robust to the paradigm.

   iii. Advice may be sought from the licensed insurer's *tax* professionals with respect to the net *taxation* position.

   iv. At first glance it may seem redundant to determine *tax* benefits and then effectively write them off through a 100% *capital charge*. However, the process is meaningful if the net *taxation* position is a liability (before or after solvency stresses), or if there are floors and ceilings applied in the derivation of the net *taxation* position.

   v. In the previous standards it was unclear whether capital factors were net or gross of *tax*. In the Standard this is now clear.

   The *taxation* calculations to be performed are specific to the application of this solvency standard and should affect the capital charge calculations made. The results may differ from *taxation* calculations prepared for other purposes.