Solvency Standard for Life Insurance Business

Prudential Supervision Department

Issued: December 2014
1. Introduction

1.1. Authority

1. This solvency standard is made under section 55 of the Insurance (Prudential Supervision) Act 2010 ("the Act").

1.2. Previous Versions

2. A previous version of this solvency standard was issued in August 2011. This solvency standard was last consulted on in 2014.

1.3. Commencement

3. This solvency standard comes into force on 1 January 2015, except for the following paragraphs that come into force on 1 January 2016: paragraphs 39(c), 40, 41, 42, 43(d)(iii), 44 and 50.

1.4. Application

4. This solvency standard applies (in accordance with this Section) to every licensed insurer that carries on life insurance business in New Zealand subject to:

(a) an overseas insurer is not required to comply with this solvency standard or a part of this solvency standard to the extent it has been granted an exemption under section 59(1) of the Act; and

(b) for all other licensed insurers carrying on life insurance business in New Zealand, this solvency standard applies only if the licensed insurer is required by a condition of licence to maintain a Solvency Margin in accordance with this solvency standard.

5. Subject to paragraph 6, to the extent that a licensed insurer subject to this solvency standard carries on life insurance business all of the provisions of this solvency standard will apply to that licensed insurer in respect of its life insurance business, consistent with the licensed insurer’s conditions of licence.

6. To the extent that a licensed insurer subject to this solvency standard carries on business that is subject to the requirements of another solvency standard, as specified in its conditions of licence or in that other solvency standard, that business will not be subject to the requirements of this solvency standard.

7. Where a licensed insurer subject to this solvency standard carries on health insurance business that is accounted for as life insurance business in the financial statements or group financial statements of the licensed insurer, such health insurance business must also be dealt with in accordance with this solvency standard.

1 For example, consistent with the requirements of NZ IFRS 4 Appendix C.
standard as part of the Life Fund outside of the statutory funds of the licensed insurer.

8. Where a licensed insurer is required to maintain a Solvency Margin under its conditions of licence in respect of more than one solvency standard, and/or is required to calculate and report solvency under more than one solvency standard, the calculations and reporting must be done separately in respect of the business subject to each solvency standard.

1.5. General Provisions

General

9. Any Solvency Margin required to be calculated in accordance with this solvency standard must be prepared on the basis of any appropriate NZ GAAP financial statements that are available to the licensed insurer unless this solvency standard specifies otherwise. If no appropriate NZ GAAP financial statements are available for this purpose, then the Alternative Financial Information used in order to calculate any required Solvency Margin must be prepared in accordance with NZ GAAP.

10. The appointed actuary of the licensed insurer must be responsible to the board of the licensed insurer for performing or reviewing all aspects of the Solvency Margin calculations to ensure the calculations are complete and accurate. 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 the solvency standard.

11. All assets and liabilities of the licensed insurer must be considered in calculating the required Solvency Margin, except where a condition of licence limits the Solvency Margin requirements to a specified pool of assets and liabilities.

Life Funds

12. A licensed insurer that is subject to this solvency standard is required to undertake separate solvency calculations in respect of each of its Life Funds.

13. A Solvency Margin and all components of Actual Solvency Capital and Minimum Solvency Capital must be calculated separately for each Life Fund.

14. The Actual Solvency Capital required for a statutory fund to maintain a Solvency Margin in accordance with a condition of licence must be held within the statutory fund. Actual Solvency Capital in excess of this amount may be held outside of the statutory fund.

Minimum Amount of Capital: Fixed Capital Amount

15. Subject to paragraphs 16 and 17, a licensed insurer subject to this solvency standard must maintain a Fixed Capital Amount of 5 million New Zealand dollars.
16. Where a licensed insurer meets the requirements for the exemptions for small insurers set out in regulations 9 to 13 of the Insurance (Prudential Supervision) Regulations 2010, the Fixed Capital Amount is zero New Zealand dollars.

17. Where a licensed insurer is subject to more than one solvency standard the Fixed Capital Amount is the largest of the Fixed Capital Amounts applying to the licensed insurer.

18. The Aggregate Minimum Solvency Capital is subject to a minimum of the Fixed Capital Amount that the licensed insurer must maintain.

19. Actual Solvency Capital to cover the Fixed Capital Amount may be held within or outside of the statutory fund of the life insurer provided that at all times the requirements of paragraph 14 are met.

Related Party Exposures

20. A related party is defined in section 6 of the Act. An asset or contingent liability that represents an exposure to a related party may be treated as if it were not a related party exposure for the purpose of paragraph 28(c), Table 1 or paragraph 70(b) if:

(a) the obligation arises as the result of an exposure to a bank that is a related party of the licensed insurer and that bank is subject to prudential regulation and supervision by the Reserve Bank or its international equivalents; or

(b) the asset is a related party trade credit, that does not in substance represent permanent funding, that is provided on not more than 90 day terms in the ordinary course of business on an arm’s length commercial basis and where payment is not overdue.

Solo and Group Solvency Reporting Requirements

21. Where a licensed insurer has a subsidiary or subsidiaries that are themselves licensed insurers, then the solvency standard must firstly be applied to, and reported on a solo basis, for each licensed insurer.

22. In addition, where a licensed insurer has a subsidiary that is a licensed insurer, such subsidiary must be consolidated with the licensed insurer for the purpose of calculating and reporting group solvency in accordance with the requirements of this solvency standard.

23. Where a licensed insurer has subsidiaries that are not insurance subsidiaries then, for the purposes of calculating group solvency only, such subsidiaries should be treated as related party equity investments, subordinated loans or other obligations in accordance with the provisions of this solvency standard.
1.6. Simplifying Assumptions or Methodologies contained in Solvency Calculations

24. This **solvency standard** represents minimum requirements for calculating a **licensed insurer’s** Solvency Margin. Accordingly, if any simplifying assumptions are made or simplifying methodologies are used in calculating the **licensed insurer’s** Solvency Margin, the **appointed actuary** must:

(a) ensure that such simplifying assumptions or methodologies result in a more conservative assessment of the **licensed insurer’s** Solvency Margin, or do not Materially alter the result, compared to the case without the simplification; and

(b) within the Financial Condition Report, disclose such simplifying assumptions or methodologies and justify them on the grounds of Materiality or on the grounds that they provide a more conservative outcome than would be the case without the simplification.

1.7. Definitions

25. Unless stated otherwise, terms defined in the Act have the same meaning in this **solvency standard**. Terms defined below are capitalised when used in this **solvency standard**.


**Actual Solvency Capital** means Capital minus Deductions from Capital.

**Acquisition costs** mean the fixed and variable costs of acquiring new business, including commissions and similar distribution costs, and costs of accepting, issuing and initially recording policies. Acquisition costs do not include general growth and development costs.

**Aggregate Actual Solvency Capital** means the sum of the Actual Solvency Capital determined for each individual Solvency Margin required to be maintained by the **licensed insurer**.

**Aggregate Minimum Solvency Capital** means the sum of the Minimum Solvency Capital determined for each individual Solvency Margin required to be maintained by the **licensed insurer**.

**Alternative Financial Information** means any financial information other than NZ GAAP financial statements used to calculate a Solvency Margin.

**Annual Solvency Return** means a report in a form prescribed by the Reserve Bank and required under paragraph 127.

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2 Terms defined in the Act are generally indicated in bold, a failure to indicate a term in bold does not imply the definition differs from the Act.
Asset Concentration Risk Charge is the amount calculated in accordance with Subsection 3.3(b).

Asset Risk Capital Charge is the amount calculated in accordance with Section 3.3.

Best Estimate Assumptions means assumptions about future experience that are made using professional judgement, training and experience and are neither deliberately overstated nor deliberately understated. The Best Estimate Assumptions must be identical to those used in the calculation of Policy Liabilities as if a calculation in accordance with the New Zealand Society of Actuaries' Professional Standard No. 3 (Determination of Life Insurance Policy Liabilities) is being made as at the same date.

Best Estimate Liability means the liability calculated using the Best Estimate Assumptions. The Best Estimate Liability reflects the liability for guaranteed benefits only. Best Estimate Liability should be calculated according to the method outlined in the New Zealand Society of Actuaries Professional Standard No. 3 (Determination of Life Insurance Policy Liabilities). For the purposes of this solvency standard, notwithstanding any different presentation in the financial statements or Alternative Financial Information of the licensed insurer, the Best Estimate Liability must be calculated net of reinsurance and with tax treatment as set out in Section 4.3 of this solvency standard. In addition, any other assets or liabilities that in substance form part of the Best Estimate Liability (including but not limited to deferred acquisition costs) are considered to be an integral part of the Best Estimate Liability for the purposes of this solvency standard, whether or not these assets or liabilities are separately presented in the financial statements or Alternative Financial Information of the licensed insurer.

Capital means the amount calculated in accordance with paragraph 26 or the equivalent section of any other applicable solvency standard, as the context requires.

Catastrophe Risk Capital Charge is the amount calculated in accordance with Section 3.2.

Collective Investment Vehicle means a managed investment fund and includes, for example, unit trusts and group investment funds.

Counterparty Grade means the grade assigned to an asset or to the counterparty to an asset or obligation of the licensed insurer determined under Section 3.5.

Credit, Equity and Property Risk Capital Charge (CEP Capital Charge) is the amount calculated in accordance with Subsection 3.3(a)(i).

Current Termination Value means the termination value of a policy at the reporting date. The Current Termination Value must be determined as the amount that would be paid on the basis of current practice in the event of voluntary termination of the policy, or on wind-up. No policy can have a Current Termination Value of less than zero. If the amount payable on termination is deferred or is in the form of a series of payments over time then the Current Termination Value should be determined as the
present value of the future payments using assumptions consistent with Appendix A of this solvency standard. This will also apply where a termination value has not yet vested at the reporting date, but on wind-up, either legally or in the opinion of the appointed actuary, an accrued liability will exist that ought to be paid to the policyholder. The Current Termination Value must include allowance for unsettled lump sum insurance claims on a life policy, if applicable, (net of potential reinsurance recoveries) and claims settlement costs such as medical evidence or potential legal costs of disputed claims.

Deductions from Capital means the amount calculated in accordance with paragraph 28 or the equivalent section of any other applicable solvency standard, as the context requires.

Direct Credit Substitute means an off balance sheet exposure that has a risk of loss that is equivalent to a direct claim on a counterparty and includes, for example, letters of credit, guarantees and similar covenants.

Derivatives Capital Charge is the amount calculated in accordance with paragraph 71.

Downshock means the reduction in interest rates set out in column 3 of Table 2 for the purposes of determining the impact of interest rate risk.

Exposure Class is the class of exposure described in column 1 of Table 1 and defined in column 2 of Table 1.

Financial Condition Report means a report required under paragraph 132.

Financial Institution means a financial institution as defined in section 2(1) of the Reserve Bank of New Zealand Act 1989.

Fixed Capital Amount is the minimum amount of the Aggregate Minimum Solvency Capital that a licensed insurer must hold and maintain and is the amount referred to in sections 19(1)(f), 21(2)(b) and (c), and 56(a)(i) of the Act.

Foreign Currency Risk Capital Charge is the amount calculated in accordance with Subsection 3.3(a)(ii).

General Requirements for Capital Instruments are the requirements set out in Section 2.4 that a capital instrument must meet in order to be included within a licensed insurer's Capital.

Half-yearly Solvency Return means a report in a form prescribed by the Reserve Bank and required under paragraph 128.

Insurance Risk Capital Charge is the amount calculated in accordance with Section 3.1.
**Investment Management Costs** means the fixed and variable costs of managing the entity’s investment funds.

**Life Fund** means either a *statutory fund*, or the aggregation of any other assets and liabilities of a *life insurer*, within the life insurer’s legal entity but outside of the life insurer’s statutory fund, including the health insurance business of the life insurer in accordance with paragraph 7 (if any), but not including assets and liabilities that are subject to any other *solvency standard*.

**Local Authority** means a local authority as defined in section 5(1) of the Local Government Act 2002.

**Maintenance Costs** means the fixed and variable costs of administering policies subsequent to the sale and recording of the policies and the fixed and variable costs of administering the general operations of the entity. Maintenance Costs include all operating costs and expenses other than Acquisition Costs and Investment Management Costs.

**Material** and **materiality** have the meaning set out in Appendix B.

**Minimum Solvency Capital** means the amount calculated in accordance with Section 3 or the equivalent section of any other applicable *solvency standard*, as the context requires.

**Non-insurance Activity** means any business activity undertaken for third party customers that does not involve the bearing of risk under a *contract of insurance*. For example, Non-insurance Activity includes insurance broking, claims management services and risk management or any other consultancy activities.

**NZ GAAP** means New Zealand *generally accepted accounting practice*.


**Other Extreme Event Charge** is the amount calculated in accordance with paragraph 48.

**Other Liabilities** means liabilities, that are not Policy Liabilities, valued according to NZ GAAP except where otherwise provided in this *solvency standard*.

**Pandemic Risk Charge** is the amount calculated in accordance with paragraph 47.

**Policy Liability** means a liability that arises under a *life policy* and includes any asset or liability that arises under a management services element of an *investment account contract* or an *investment-linked contract*. The Policy Liability must be calculated according to the method outlined in the New Zealand Society of Actuaries Professional Standard No. 3 (Determination of Life Insurance Policy Liabilities). For the purposes of this *solvency standard*, notwithstanding any different presentation in the *financial statements* or Alternative Financial Information of the licensed
insurer, Policy Liability must be calculated net of reinsurance and with tax treatment as set out in Section 4.3 of this solvency standard. In addition, any other assets or liabilities that in substance form part of the Policy Liability (including but not limited to deferred acquisition costs and deferred fee revenue) are to be included within the assessment of Policy Liability for the purposes of this solvency standard, whether or not these assets or liabilities are separately presented in the financial statements or Alternative Financial Information of the licensed insurer.

Preliminary Solvency Margin is the Solvency Margin determined prior to the Deduction from Capital specified under subparagraph 28(j) for the purposes of Section 2.6.

Prescribed Solvency Assumptions are the assumptions required for the purposes of calculating the Solvency Liability set out in Appendix A.

Reinsurance Recovery Risk Capital Charge is the amount calculated in accordance with Section 3.4.

Related Product Group means a grouping of contracts of insurance each of which have substantially the same contractual terms and were priced on the basis of substantially the same assumptions as the others in the group. The contracts of insurance must be considered by the appointed actuary to exhibit benefit characteristics and pricing structures sufficiently similar as to justify grouping for the purposes of profit margin calculation, loss recognition and reporting within the financial statements or Alternative Financial Information of the licensed insurer.

Repayable Amount has the meaning and value given in paragraph 4 of Appendix E.

Repayable Amount Adjustment means the amount calculated in accordance with paragraph 44.

Residual means assets and liabilities within a Life Fund that are not hypothecated.

Resilience Capital Factor means the factor specified in column 3 of Table 1 in relation to an Exposure Class.

Resilience Risk Capital Charge is the amount calculated in accordance with Subsection 3.3(a).

Risk Weighted Exposure is the amount calculated in accordance with paragraph 66(b).

Risk Weighted Exposures Charge is the amount calculated in accordance with paragraph 66.

Servicing Costs means the combination of Maintenance and Investment Management Costs.

Solvency Liability means the amount calculated in accordance with paragraph 39.
**Solvency Liability Resilience Impact** is the consequential change in Solvency Liability arising from exposure shocks as set out in paragraphs 58(c) and 59(b).

**Solvency Margin** is the excess of Actual Solvency Capital over Minimum Solvency Capital expressed in New Zealand dollars.

**Solvency Ratio** is the Actual Solvency Capital divided by the Minimum Solvency Capital, expressed as a decimal or a percentage.

**Solvency Reinsurance Balance** is the present value of the licensed insurer’s net contractual rights and obligations under a reinsurance agreement calculated using the Prescribed Solvency Assumptions. The balance should be calculated as the present value of expected payments to the reinsurer minus expected receipts from the reinsurer (hence the balance will be more than 0 where there is an expected net outflow of resources from the licensed insurer to the reinsurer).

**State-Owned Enterprise** means an organisation named in Schedule 1 or Schedule 2 of the State-Owned Enterprises Act 1986.

**Total Solvency Requirement** is the amount calculated under paragraph 35.

**Upshock** means the increase in interest rates set out in column 2 of Table 2 for the purposes of determining the impact of interest rate risk.
2. Actual Solvency Capital

2.1. Capital

26. Capital is the total value of the following items:

(a) issued and fully or partly paid-up ordinary shares, that meet the General Requirements for Capital Instruments (Section 2.4) and the qualifying criteria for ordinary shares set out in Appendix D (Subsection D.1);

(b) issued and fully or partly paid-up perpetual non-cumulative preference shares that meet the General Requirements for Capital Instruments (Section 2.4) and the qualifying criteria for perpetual non-cumulative preference shares set out in Appendix D (Subsection D.2). Perpetual non-cumulative preference shares may not constitute more than 50% of Capital for a licensed insurer that is a mutual insurer and 25% for all other licensed insurers;

(c) Credit Union Securities that meet the General Requirements for Capital Instruments (Section 2.4) and the qualifying criteria for Credit Union Securities set out in Appendix D (Subsection D.3);

(d) revenue and other reserves, including the following, but not including reserves that are held aside or otherwise committed on account of any assessed likelihood of loss:

   i. reserves arising from a revaluation of tangible fixed assets, including owner occupied property;

   ii. foreign currency translation reserves;

   iii. reserves arising from the revaluation of investments; and

   iv. other reserves that are created or increased by appropriations of retained earnings net of tax and dividends payable;

(e) retained earnings; and

(f) non-controlling interests.

27. In the case of a licensed insurer that is a mutual insurer constituted in New Zealand, Capital may be referred to as 'Reserves' or 'Members Funds' or such other term by which it is described in the financial statements or Alternative Financial Information of the mutual insurer.
2.2. Deductions from Capital

28. Deductions from Capital is the total value of the following items:

(a) intangible assets, including goodwill, as determined in accordance with Section 2.5;

(b) deferred tax assets calculated in accordance with paragraph 125 assuming the licensed insurer is wound-up and the net taxation position upon wind-up is a deferred tax asset;

(c) equity investments in, and subordinated loans to, related parties;

(d) equity investments in, and subordinated loans to, other Financial Institutions or holding companies of other Financial Institutions (whether held directly or indirectly) that are classified as Counterparty Grade 1, 2 or 3, to the extent that the total of such equity investments or subordinated loans exceeds 15% of Actual Solvency Capital, calculated excluding this subparagraph;

(e) equity investments in, and subordinated loans to, other Financial Institutions or holding companies of other Financial Institutions (whether held directly or indirectly) that are classified as Counterparty Grade 4 or 5;

(f) unrealised gains and losses on liabilities designated at fair value through profit and loss that arise from changes in the licensed insurer's own credit risk;

(g) any fair value gain that relates to a financial instrument for which:

   i. fair value is determined in whole or in part using a valuation technique based on assumptions that are not supported by processes from observable current market transactions in the same instrument; or

   ii. fair value is not based on observable market data; or

   iii. fair value is based on prices in a market that is not active;

(h) any surplus, net of any associated deferred tax liabilities, in any defined benefit superannuation fund sponsored by the licensed insurer (or another group entity) as employer;

(i) allowance for any dividend that has been declared or repayment of Capital made prior to finalisation of the Solvency Margin calculations, but which has not been reflected in the financial statements or Alternative Financial Information, and

(j) any portion of the licensed insurer's Preliminary Solvency Margin relating to its overseas branches, not freely available to meet losses of the licensed insurer outside those branches. Refer to Section 2.6 for how this amount is to be determined.
29. To the extent that an asset is a Deduction from Capital, it is not included in the Asset Risk Capital Charge.

2.3. Overall Characteristics of Capital Instruments

30. To ensure every capital instrument included within a licensed insurer’s Capital is of high quality, each capital instrument must meet the following overall characteristics. The capital instrument must:

(a) provide a permanent and unrestricted commitment of funds (“Permanence”);

(b) be freely available to absorb losses (“Loss absorption”);

(c) not impose any unavoidable servicing charge against earnings (“Servicing charge”);

(d) rank behind the claims of policyholders and other creditors in the event of a winding-up of the licensed insurer (“Ranking on winding-up”); and

(e) have other features or treatments appropriate to the capital instrument (“Other appropriate features”).

The above overall characteristics of high quality capital instruments are further articulated into relevant qualifying criteria that each type of capital instrument must meet as set out in Appendix D.

2.4. General Requirements for Capital Instruments

31. Each capital instrument included within a licensed insurer’s Capital must meet the following General Requirements for Capital Instruments:

(a) it must, in its entirety, meet the qualifying criteria for the appropriate constituent of Capital as set out in Appendix D. Any capital instrument that is part of another capital instrument or other arrangement may not be included within a licensed insurer’s Capital;

(b) it must, irrespective of its name, satisfy the substance as well as the legal form of the qualifying criteria for the appropriate capital instrument;

(c) it must not contain any terms, covenants or restrictions that could:

i. hinder the recapitalisation of the licensed insurer; or

ii. inhibit the sound and prudent management of the licensed insurer; or

iii. restrict the Reserve Bank’s or a statutory manager’s ability to use its powers under the Act in respect of the resolution of any actual or potential issues relating to the solvency or any other prudential matter experienced by the licensed insurer; and
(d) if a capital instrument does not meet the qualifying criteria for the appropriate capital instrument set out in Appendix D, then it cannot be included within Capital. If the appointed actuary considers that any ordinary share, preference share or Credit Union Security does not meet the qualifying criteria, the appointed actuary must give advice to this effect to the licensed insurer and also in the Financial Condition Report. If the appointed actuary recommends that a capital instrument issued by a licensed insurer should be excluded from the licensed insurer’s Capital, then the licensed insurer must follow that advice.

2.5. Intangible Asset Deductions

32. The Deduction from Capital for intangible assets comprises the value of the following to the extent that they form part of the assets of a licensed insurer as measured under NZ GAAP and are recognised in the financial statements or Alternative Financial Information of the licensed insurer:

(a) goodwill;

(b) capitalised computer software costs to the extent that they exceed the known resale value of that software (if the resale value is not known then it should be taken as nil); and

(c) any other asset defined as an intangible asset under NZ GAAP.

2.6. Overseas Branch Deductions

33. Where a licensed insurer has one or more overseas branches it must calculate a Preliminary Solvency Margin for the entity as a whole, incorporating any branch assets and liabilities into the calculation. If any portion of this Preliminary Solvency Margin is not freely available to meet losses of the licensed insurer outside its branches, then this amount must be treated as a Deduction from Capital under subparagraph 28(j). Such an amount may arise due to restrictions on the use of branch assets in the jurisdiction in which the branch operates, or because of local capital requirements relating to the branch, or for some other reason.
3. Minimum Solvency Capital

34. The Minimum Solvency Capital, which must be calculated for each Life Fund, is calculated as the excess (if any) of the Total Solvency Requirement over the sum of the Policy Liability plus Other Liabilities at the balance date.

35. The Total Solvency Requirement is the sum of the:

- Insurance Risk Capital Charge (Section 3.1);
- Catastrophe Risk Capital Charge (Section 3.2);
- Asset Risk Capital Charge (Section 3.3), being the sum of the:
  - Resilience Risk Capital Charge (Subsection 3.3(a)) which incorporates the:
    - Credit, Equity and Property Risk Capital Charge (Subsection 3.3(a)(i));
    - Foreign Currency Risk Capital Charge (Subsection 3.3(b)(ii));
    - the impact of interest rate risk (Subsection 3.3(c)(iii)); and
    - the Solvency Liability Resilience Impact (paragraph 59(b)); and
  - Asset Concentration Risk Charge (Subsection 3.3(b)); and
- Reinsurance Recovery Risk Capital Charge (Section 3.4)

Capital Charge for Liabilities

36. Capital charges that cover the inherent risks in the determination of Policy Liabilities are the Insurance Risk Capital Charge and Catastrophe Risk Capital Charge as set out below.

3.1. Insurance Risk Capital Charge

Concept

37. The 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 Policy Liabilities. 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.
38. The Insurance Risk Capital Charge is also designed to give a reasonable expectation that the licensed insurer will be able to meet its obligations to policyholders and creditors should all policies discontinue and current surrender values be payable.

**Calculation**

39. The Insurance Risk Capital Charge requires a calculation of the Solvency Liability. The Solvency Liability is determined using the methods used to determine the Best Estimate Liability, but:

   (a) allowing for current and future bonuses, subject to the appropriate application of discretions (refer Section 4.2); and

   (b) adopting the Prescribed Solvency Assumptions; and

   (c) is not calculated net of reinsurance if and to the extent that paragraph 41 applies.

40. In applying requirements in relation to reinsurance, attention should be directed to the economic substance of the reinsurance agreement rather than the legal form. The term “reinsurance agreement” (or where relevant “agreement”) is to be interpreted to include any side letters, correspondence or other agreements that alter the obligations of the parties under the reinsurance agreement or that are so interconnected that in substance they form part of the agreement.

41. The benefits of a reinsurance agreement must not be netted from the Solvency Liability or used to reduce any Current Termination Value if:

   (a) the Solvency Reinsurance Balance in respect of that agreement is less than zero (net inflow); and

   (b) one or more of the following applies:

      i. the licensed insurer has reason to believe, having made reasonable enquiries, that the reinsurance agreement is not legally binding; or

      ii. the reinsurance agreement is not in writing or is not signed by authorised persons (in respect of each counterparty to the agreement); or

      iii. the licensed insurer is not a party that has a right to the receipt (whether directly or indirectly) of reinsurance payments under the agreement; or

      iv. unless paragraph 42 applies:

         A. the reinsurance agreement may be terminated or will on the occurrence of an event terminate, prior to a specified expiry date, in relation to existing reinsured business without the licensed insurer

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3 Including through withdrawal of the portfolio.
giving consent or agreeing to that termination at the time of the termination; or

B. the reinsurer may, without the consent of the licensed insurer at the time of release, be released from an obligation to pay amounts otherwise due under the reinsurance agreement in each case including in the event of insolvency of the licensed insurer.

42. Paragraph 41(b)(iv) does not apply where the contractual right to terminate or release from payment is substantially the result of any of the following events:

(a) fraud, misrepresentation or non-payment of monies due in relation to the agreement, in each case by a party other then the reinsurer;

(b) un-remediated material default of a party other than the reinsurer under the agreement, including a failure of the licensed insurer to abide by specified prudent underwriting practices or other policies stipulated in the reinsurance agreement;

(c) the agreement or performance of the agreement, or an important part thereof, is rendered illegal, prohibited or is otherwise impossible for reasons for which the reinsurer is not responsible;

(d) the reinsurer is prevented at law from making a payment;

(e) the licensed insurer transfers all or part of the portfolio reinsured without the consent of the reinsurer, including by way of change of ownership of the licensed insurer;

(f) war or civil unrest (or a similar event) that affects the performance of the obligations under the agreement by the licensed insurer or reinsurer; or

(g) all the insurance contracts to which the reinsurance relates have expired or been terminated and there is no outstanding insurance liability in respect of those contracts, provided that the licensed insurer confirms that this is the case.

43. The Insurance Risk Capital Charge is calculated as follows:

(a) for each Related Product Group, calculate the total of the Current Termination Values. Where applicable, the Current Termination Values are to be calculated using the Prescribed Solvency Assumptions;

(b) for each Related Product Group, determine the Solvency Liability at the balance date;

(c) the Insurance Risk Capital Charge for each Related Product Group is the greater of the Current Termination Values and Solvency Liability for that Related Product Group;
(d) the Insurance Risk Capital Charge for each Life Fund is the total of the following:

i. the total of the amounts determined in (c) for the Related Product Groups;

ii. the Other Liabilities within that Life Fund; and

iii. the Repayable Amount Adjustment for the Life Fund determined in accordance with paragraph 44.

44. The Repayable Amount Adjustment for a Life Fund, is the total value of the Repayable Amounts for that Life Fund, determined in accordance with Appendix E, less any portion of those amounts that the licensed insurer can demonstrate have otherwise been accounted for in the calculation of the licensed insurer's Solvency Margin in a manner that achieves a broadly equivalent outcome to that which would have been achieved had those amounts been included in Other Liabilities. The licensed insurer must take account of the principles in paragraph 21 of Appendix E in calculating the Repayable Amount Adjustment. In determining the Repayable Amount Adjustment, a sound and principled basis must be used to apportion any Repayable Amount to the appropriate Related Product Groups or each Life Fund, if such apportionment is necessary.

3.2. Catastrophe Risk Capital Charge

Concept

45. The Catastrophe Risk Capital Charge reflects the exposure of a licensed insurer to large claims or large numbers of claims arising from extreme events, for example a pandemic or natural disaster.

Calculation

46. The Catastrophe Risk Capital Charge is the greater of the Pandemic Risk Charge and the Other Extreme Event Charge. The Catastrophe Risk Capital Charge is subject to a minimum of zero.

47. For each Life Fund of a licensed insurer, the Pandemic Risk Charge is the anticipated claims cost, net of reinsurance recoveries (subject to paragraph 49) and after allowance for appropriate release of reserves justified as a direct result of the pandemic, arising from a one per thousand increase in the rate of lives insured dying over the following year.

48. Licensed insurers will also be exposed to potential losses arising from other extreme events including natural disasters and extreme events specific to a licensed insurer’s portfolio. The Other Extreme Event Charge for such events is the anticipated claims cost, net of reinsurance recoveries (subject to paragraph 49) and after allowance for appropriate release of reserves justified as a direct result of the extreme event, and must be quantified having considered the licensed
insurer’s exposure in respect of group risk business and any other risk concentrations.

49. In calculating the Catastrophe Risk Capital Charge, a licensed insurer may deduct the benefit of any appropriate reinsurance cover, provided the reinsurance agreement represents a true transfer of the risk of loss in respect of the pandemic or other extreme event and subject to paragraph 50.

50. A licensed insurer must not deduct the benefit of any reinsurance agreement if any of the circumstances described in paragraph 41(b)(i) to (iv) applies in respect of the agreement.

51. The Catastrophe Risk Capital Charge must include any gap or shortfall in the reinsurance cover plus the cost (if any) of one reinstatement of the full catastrophe reinsurance contract(s).

Actuarial review

52. The appointed actuary of a licensed insurer must review the basis on which the Catastrophe Risk Capital Charge has been calculated and be satisfied that the calculation adequately reflects the licensed insurer’s potential financial exposure, net of any relevant reinsurance, to a pandemic or any other extreme event that could have a Material financial impact on the licensed insurer.

53. If the appointed actuary is of the opinion that the financial exposure of the licensed insurer to extreme events is not adequately reflected in the Catastrophe Risk Capital Charge, the appointed actuary must recommend an increase in the Catastrophe Risk Capital Charge or an alternative method of calculation for determining the Catastrophe Risk Capital Charge, and the licensed insurer must increase its Catastrophe Risk Capital Charge accordingly, or use that alternative method, as the case may be. This provision must not be used to reduce the Catastrophe Risk Capital Charge.

3.3. Asset Risk Capital Charge

54. The Asset Risk Capital Charge is the sum of the Resilience Risk Capital Charge (Section 3.3.(a)) and the Asset Concentration Risk Charge (Section 3.3(b)).

55. An amount that is included in the Reinsurance Recovery Risk Capital Charge as a reinsurance recovery asset is not included in any element of the Credit, Equity and Property Risk Capital Charge or the Asset Concentration Risk Charge.

3.3.(a) Resilience Risk Capital Charge

Concept

56. The Resilience Risk Capital Charge reflects the exposure of a licensed insurer to adverse changes in the value of assets relative to the value of liabilities due to adverse credit events or economic or financial market shocks. Such shocks may manifest as changes in interest rates, exchange rates or other market and non-
market prices that affect the economic value of the licensed insurer's assets or liabilities.

57. The Resilience Risk Capital Charge incorporates the following (for which the calculation methods are set out below):

(a) the Credit, Equity and Property Risk Capital Charge (Subsection 3.3(a)(i)) ;

(b) the Foreign Currency Risk Capital Charge (Subsection 3.3(a)(ii));

(c) the impact of interest rate risk (Subsection 3.3(a)(iii)); and

(d) the Solvency Liability Resilience Impact (paragraph 59(b)).

**Calculation**

58. The following applies when calculating the Resilience Risk Capital Charge:

(a) **Scope:** the Resilience Risk Capital Charge calculation must include all assets and liabilities, including any derivatives and contingent liabilities, set out within the capital charge calculations below.

(b) **Shocks:** the Credit, Equity and Property Risk Capital Charge provides for unforeseen losses in asset values and the change in value of other exposures at a level determined by the prescribed Resilience Capital Factors set out within Table 1. Similarly, the Foreign Currency Risk Capital Charge and the impact of interest rate risk provide for unforeseen changes in foreign currency exchange rates and interest rates through prescribed factors.

(c) **Consequential change in the Insurance Risk Capital Charge:** as a result of the shocks, the Resilience Risk Capital Charge provides for the consequential change in a licensed insurer's Insurance Risk Capital Charge, by way of calculating the licensed insurer's Solvency Liability Resilience Impact (“SLRI”). The SLRI must:

i. reflect the nature of the business written and how it is managed, including any derivatives, contractual obligations and any other financial return that the licensed insurer reasonably expects to pay policyholders;

ii. reflect the effect of the shocks on the licensed insurer's Solvency Liabilities; and

iii. apply only the discretions set out within Section 4.2, and only in accordance with Section 4.2.

(d) **Hypothecated assets and liabilities:** the Resilience Risk Capital Charge for hypothecated portfolios of assets and liabilities may be separately calculated. However, the following criteria must be met for each hypothecated portfolio:
i. the specific assets and liabilities must have been hypothecated together because the value of the liabilities is dependent on the value of the assets, or to facilitate the effective financial management of the business;

ii. the hypothecated assets and liabilities must be managed together where such management includes risk management practices, management accounting and board reporting;

iii. the hypothecation used must be transparent: in particular, which assets and liabilities are hypothecated together, as well as how criteria (i) and (ii) above are met, must be documented;

iv. a consistent approach must be applied in the identification and management of hypothecated assets and liabilities. Where changes are made to the number, structure or nature of the hypothecated asset or liability portfolio or where there are significant changes in the financial amount of the hypothecated asset or liability portfolio, the justification for the change and potential impact must be documented;

v. the licensed insurer’s appointed actuary must be satisfied that all the above criteria are met before the treatment set out within this Subparagraph can be applied within the licensed insurer’s solvency calculations. If the appointed actuary is not satisfied in this respect then the Resilience Risk Capital Charge must be calculated without hypothecation.

(e) Taxation: the taxation treatment of the Resilience Risk Capital Charge must be in accordance with Section 4.3.

59. A Resilience Risk Capital Charge must be calculated for each Life Fund. Within a given Life Fund, where hypothecation is employed the Resilience Risk Capital Charge is calculated separately for each hypothecated portfolio and for the Residual, with the resulting amounts being added together to arrive at the total Resilience Risk Capital Charge for that Life Fund. Where hypothecation is not employed, the Resilience Risk Capital Charge calculation applies across the entire Life Fund.

(a) The Resilience Risk Capital Charge for each Life Fund is calculated under each of an Upshock and a Downshock movement in all nominal and real interest rates. The Resilience Risk Capital Charge for a given Life Fund will be the higher of the amounts calculated under the Upshock or Downshock for that Life Fund.

(b) The Resilience Risk Capital Charge (RRCC) is calculated (at the appropriate level) as follows:

\[ RRCC = ARI + SLRI \]  
(with RRCC subject to a minimum of zero), where

\[ ARI = \text{Asset Resilience Impact} \]
ARI = ∆AAIS + CEPPCC + FXCC

∆AAIS = reduction in the value of fixed interest-bearing assets resulting from the applicable interest rate shock. A decrease in the value of fixed interest-bearing assets is represented as a positive amount and an increase in the value of fixed interest-bearing assets is represented as a negative amount.

CEPPCC = Credit, Equity and Property Risk Capital Charge

FXCC = Foreign Currency Capital Charge

SLRI = Solvency Liability Resilience Impact

SLRI = RIRCC - IRCC. The SLRI is first calculated for each Related Product Group and Other Liabilities, and then summed to arrive at the SLRI for the hypothecated subgroup or Residual (or for the Life Fund as a whole, if hypothecation is not employed).

IRCC = Insurance Risk Capital Charge (Section 3.1).

RIRCC = Resilience Insurance Risk Capital Charge = IRCC re-calculated allowing for the impact of the scenarios of adverse experience implied by the CEPPCC, FXCC and the applicable interest shock, with allowance for appropriate discretions as set out in Section 4.2.

60. The above calculation specifies asset and liability scenarios that must be tested to arrive at a capital charge for the most adverse scenario. Where the circumstances of the Life Fund are such that other scenarios, consistent with the level of shock implied by the specified scenarios, are potentially more adverse then they must also be tested in order to arrive at the most adverse scenario.

3.3(a)(i) Credit, Equity and Property Risk Capital Charge (CEP Capital Charge)

61. The CEP Capital Charge is the sum of the:
   
   (a) Risk Weighted Exposures Charge (paragraph 66); and
   
   (b) Derivatives Capital Charge (paragraph 71).

62. The CEP Capital Charge must be calculated net of tax but with the amount of taxation (if any) clearly identified, in accordance with Section 4.3.

63. If the licensed insurer holds investments in a professionally managed Collective Investment Vehicle or in a subsidiary that is primarily used to hold investments for the licensed insurer, then the licensed insurer must ‘look through’ the investment vehicle or subsidiary to the underlying investments that represent the assets attributable to the licensed insurer. The licensed insurer must take account of any special conditions (such as guarantees or redemption restrictions) that the investment vehicle or subsidiary may provide.
64. For the purposes of paragraph 63, a **licensed insurer** must only 'look through' the investment vehicle or subsidiary if it is satisfied with the quality and reliability of the information about the underlying investments. If the **licensed insurer** is not satisfied with the quality and reliability of the information about the underlying investments or, if the 'look through' approach is unable to be applied, then the requirements of this **solvency standard** shall be applied to the investment vehicle or subsidiary.

**Risk Weighted Exposures Charge**

65. To the extent that this **solvency standard** applies to a **licensed insurer**, all of the **licensed insurer's** assets (unless paragraph 29 applies) and contingent liabilities (as described below) are included in the Risk Weighted Exposures Charge.

66. The Risk Weighted Exposures Charge is calculated as follows:

   (a) each of the **licensed insurer's** assets and contingent liabilities is assigned to the relevant Exposure Class (see Section 3.5 to determine the Counterparty Grade);

   (b) the absolute value of each asset and contingent liability is multiplied by the relevant Resilience Capital Factor (for each asset or contingent liability, this is the Risk Weighted Exposure);

   (c) the Risk Weighted Exposures Charge is the sum of the values of the Risk Weighted Exposures.

67. In calculating the Risk Weighted Exposures Charge, assets that have been guaranteed may be treated in accordance with Appendix C, in which case all of the requirements of Appendix C apply. For the avoidance of doubt, if a guarantee does not meet the requirements of paragraph 3 of Appendix C it must not be used to reduce the Risk Weighted Exposures Charge.

68. Except as set out in this paragraph, all known contingent liabilities must be included in the calculation of the Risk Weighted Exposures Charge, whether or not the contingent liabilities meet the test for disclosure within the NZ GAAP **financial statements** or are disclosed within the Alternative Financial Information of the **licensed insurer**. An exposure is not treated as a contingent liability if:

   (a) it has been recognised as a liability on the **licensed insurer's** balance sheet; or

   (b) it has been included in a Repayable Amount.

69. All contingent liabilities must be quantified assuming the contingent liability were to be paid or, where the value of the contingent liability is uncertain, the value must be estimated at a prudent amount and noted as such, with the basis of the estimation clearly described in the **licensed insurer's** Financial Condition Report.

70. The appropriate Exposure Class for a contingent liability is determined as follows:
(a) for a Direct Credit Substitute, the Exposure Class is determined by assigning the
contingent exposure to column 2 of Table 1, where the appropriate Counterparty
Grade is the issuer rating of the party to whom the licensed insurer is exposed;

(b) despite (a), for all contingent liabilities that give rise to an exposure to a related
party the Exposure Class is 11 “Assets incurring a full Capital Charge”; and

(c) for other types of contingent liability, or where there is no Exposure Class that
appropriately reflects the risks inherent in the exposure, the Exposure Class
shall be 8 “Other Contingent Liabilities not covered elsewhere”.

Illustrative Examples

1) A licensed insurer provides a guarantee to Acme Bank in respect of a loan to ABC Limited, an A
rated institution. The licensed insurer is exposed to ABC Limited. The exposure is in respect of
a debt obligation of an A rated institution hence the Exposure Class is 3.

2) The licensed insurer provides a letter of credit to XYZ Limited, a related party of the licensed
insurer. The Exposure Class is 11.

Derivatives Capital Charge

71. The Derivatives Capital Charge is the total of the amounts calculated in accordance
with paragraphs 72 to 75.

72. For equity and bond derivatives, the amount is calculated by multiplying the asset
or liability net position by the relevant Resilience Capital Factor in column 3 of Table
1.

73. For options, the amount is the delta weighted position i.e. face value multiplied by
delta factor. The delta factor is that implied after the application of the appropriate
equity or bond Resilience Capital Factor in column 3 of Table 1, the shock in foreign
currency exchange rates specified in paragraph 77 and the shock in interest rates
specified in Table 2.

74. For mark-to-market gains on any derivatives, the amount is calculated by
multiplying the mark-to-market gain by the appropriate Resilience Capital Factor in
column 3 of Table 1.

75. The interest rate or foreign currency position arising from derivative transactions is
not to be included when calculating the Derivatives Capital Charge.
Table 1 – Exposure Classes and Resilience Capital Factors

Unless otherwise provided, in applying Table 1 the Counterparty Grade should be determined by reference to the issue rating from Table 4.1 or 4.2 if possible. If no such rating is available, the Counterparty Grade may be determined by reference an issuer rating from Table 5.

<table>
<thead>
<tr>
<th>Exposure Class</th>
<th>Definition</th>
<th>Resilience Capital Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Cash and Sovereign Debt</td>
<td>Notes and coin Cash at bank on call Debt or other obligations issued by or guaranteed irrevocably by the New Zealand government or a government or supra-national agency with a Counterparty Grade 1</td>
<td>0.5%</td>
</tr>
<tr>
<td>2 AA rated fixed interest</td>
<td>Any debt obligation (excluding subordinated debt) with Counterparty Grade 1 or 2 Cash management trusts with Counterparty Grade 1 or 2</td>
<td>2%</td>
</tr>
<tr>
<td>3 A rated fixed interest</td>
<td>Any debt obligation (excluding subordinated debt) with Counterparty Grade 3 Cash management trusts with Counterparty Grade 3</td>
<td>4%</td>
</tr>
<tr>
<td>4 Unpaid premiums &lt; 6 months past due</td>
<td>Unpaid premiums that are not yet due or are less than six months past the contractual due date for payment to the licensed insurer (except as provided in Exposure Class 14 below)</td>
<td>4%</td>
</tr>
<tr>
<td>5 BBB rated fixed interest</td>
<td>Any debt obligation (excluding Subordinated debt) or cash management trust with Counterparty Grade 4 Credit provided to a related party on not more than 90 day terms in the ordinary course of business on an arm’s length commercial basis and where payment is not overdue</td>
<td>6%</td>
</tr>
<tr>
<td>6 Unrated Local Authority Debt, and Third Party Claims Recoveries</td>
<td>Any debt obligation with a Local Authority that is unrated Claim recoveries collectable from third parties (excluding reinsurance recoveries)</td>
<td>8%</td>
</tr>
<tr>
<td>7 Other fixed interest and short term unpaid premiums</td>
<td>Any debt obligation or cash management trust that has a Counterparty Grade 5 or is unrated Subordinated debt of a counterparty with Counterparty Grade 1, 2 or 3 Unpaid premiums that are more than six months but less than twelve months past the contractual due date for payment to the licensed insurer (except as provided in Exposure Class 14 below)</td>
<td>15%</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>8 Other contingent liabilities not covered elsewhere</td>
<td>Other contingent liabilities not dealt with elsewhere</td>
<td>20%</td>
</tr>
<tr>
<td>9 Listed equity &amp; trusts, and property, plant and equipment</td>
<td>Equities listed on a recognised stock exchange Listed trusts (unless paragraph 63 requires applies) Listed property trusts Direct property holdings Owner occupied property Property, plant and equipment</td>
<td>25%</td>
</tr>
<tr>
<td>10 Unlisted equity, unlisted trusts</td>
<td>Unlisted equities Unlisted trusts (unless paragraph 63 applies)</td>
<td>35%</td>
</tr>
<tr>
<td>11 Assets incurring a full Capital Charge (if this row applies it must be used even if another row of this table could apply)</td>
<td>Loans to directors or associated parties of the licensed insurer Unsecured loans to employees or agents of the licensed insurer in excess of $1,000 Assets under a fixed or floating charge Obligations of a related party (except as provided in Exposure Class 5) Unpaid premiums that are twelve months or more past the contractual due date for payment to the licensed insurer (except as provided in Exposure Class 14 below)</td>
<td>100%</td>
</tr>
<tr>
<td>12 Residential mortgage loans</td>
<td>Direct first ranking residential mortgage loans with loan to valuation ratio not exceeding 80% and not in arrears</td>
<td>2.75%</td>
</tr>
<tr>
<td>13 Other direct lending</td>
<td>Other direct loans, whether secured or not</td>
<td>10%</td>
</tr>
<tr>
<td>14 Secured unpaid premiums and loans</td>
<td>Unpaid premiums (excluding reinsurance premiums) or loan debt due to the licensed insurer to the extent that it does not exceed the termination value of the contract under the appropriate resilience scenario</td>
<td>Nil</td>
</tr>
</tbody>
</table>
3.3.(a)(ii) Foreign Currency Risk Capital Charge

**Concept**

76. In applying this solvency standard a licensed insurer must consider the degree of mismatching between assets and liabilities in terms of foreign currency risk.

**Calculation**

77. The Foreign Currency Risk Capital Charge is calculated by multiplying the net open foreign exchange position in each currency other than New Zealand dollars, regardless of whether the position is long or short, by 22% and taking the sum of those amounts.

78. The net open foreign exchange position is the absolute value of the value of assets less the value of liabilities (taking into account applicable derivative positions and including any contingent liabilities) that are denominated in the relevant currency.

79. The Foreign Currency Risk Capital Charge should be calculated net of tax but with the amount of taxation, if any, clearly identified in accordance with Section 4.3.

80. Where an asset of a licensed insurer is denominated in a foreign currency and has been guaranteed, the underlying asset is included in the net open foreign exchange position, but the guarantee is not.

81. Where a New Zealand dollar asset of a licensed insurer is subject to a guarantee but the guarantee is limited to a particular foreign currency value, and that asset has been assigned the Resilience Capital Factor applicable to the guarantor in the Risk Weighted Exposures Charge, then the guaranteed amount, to the extent it is recognised under Appendix C, must be included in the calculation of the net open foreign exchange position for the relevant foreign currency (guarantees denominated in a foreign currency that do not limit the New Zealand dollar amount guaranteed do not need to be included in the net open foreign exchange position).

3.3(a)(iii) impact of interest rate risk

**Concept**

82. In applying this solvency standard a licensed insurer must consider the degree of mismatching between assets and liabilities in terms of interest rate risk.
**Calculation**

83. The impact of interest rate risk is calculated by reference to fixed interest-bearing assets and fixed interest-bearing liabilities. For the purposes of determining the impact of interest rate risk:

(a) fixed interest-bearing assets are those assets and derivative positions bearing a fixed interest rate for a period of time (re-set period) beyond the balance date at which the solvency calculation is performed. Fixed interest-bearing assets must be included in the calculation regardless of the existence of any guarantee in relation to such assets; and

(b) fixed interest-bearing liabilities are the Solvency Liability and derivative positions and any other liabilities, including fixed interest-bearing contingent liabilities, where the economic value depends upon discounting actual or expected cash flows for the time value of money; in other words those liabilities where the value depends implicitly or explicitly on interest rate assumptions.

84. The impact of interest rate risk is calculated by separately revaluing the licensed insurer's fixed interest-bearing assets and fixed interest-bearing liabilities under each of an Upshock and a Downshock movement in all nominal and real interest rates set out in Table 2, applied to all fixed interest-bearing assets and liabilities.

<table>
<thead>
<tr>
<th></th>
<th>Upshock (gross of tax)</th>
<th>Downshock (gross of tax)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nominal Interest Rate Instruments</strong></td>
<td>175 basis point increase</td>
<td>175 basis point decrease</td>
</tr>
<tr>
<td><strong>Real Interest Rate Instruments</strong></td>
<td>60 basis point increase</td>
<td>60 basis point decrease</td>
</tr>
</tbody>
</table>

85. The interest rate used for the revaluation after application of the Downshock movement in interest rates is limited to a minimum of 0.

86. For each of the Upshock and Downshock the net revaluation impact is calculated. The net revaluation impact is the change in the value of assets less the change in the value of liabilities resulting from the Upshock or Downshock (summed over both the nominal and real interest rate instruments).

87. Within a Life Fund, either the Upshock or the Downshock will apply to all of the hypothecated portfolios and the Residual, whichever shock gives the more adverse impact on the Solvency Margin for that Life Fund. Within the licensed insurer, either the Upshock or the Downshock may apply to a given Life Fund. Each Life Fund is required to be able to withstand whichever shock is more adverse, given the financial position of that Life Fund.

88. The Upshock and Downshock are both gross of tax in accordance with Section 4.3.
3.3.(b) Asset Concentration Risk Charge

Concept

89. The Asset Concentration Risk Charge reflects the risks to a licensed insurer from having large exposures to a single counterparty.

Calculation

90. In order to determine the Asset Concentration Risk Charge, the licensed insurer must first calculate the total value of the exposures of each Life Fund to any single entity or group of related entities (counterparty). For the purposes of the Asset Concentration Risk Charge the exposures must include assets, contingent liabilities included in the Risk Weighted Exposures Charge and the gross balance sheet asset in respect of derivatives with that counterparty (“asset derivative position”) or, where there is a legally binding netting agreement with that counterparty, the net asset derivative position with that counterparty.

91. Where an asset is guaranteed and the requirements of paragraph 3 of Appendix C are met, the guarantor may be substituted for the direct counterparty in respect of the guaranteed portion of the asset for the purposes of the Asset Concentration Risk Charge. The guarantor may be substituted to the full value of the guarantee whether or not paragraphs 7 and 8 of Appendix C apply. Where the licensed insurer has looked through a Collective Investment Vehicle or subsidiary in accordance with paragraph 63, the same look through basis must be used in calculating the Asset Concentration Risk Charge.

92. For a Life Fund, the Asset Concentration Risk Charge for each counterparty applies to the total exposure to each counterparty that exceeds the limits specified in column 2 of Table 3. This is the excess. An excess is calculated for each obligation category in Table 3.

93. The Asset Concentration Risk Charge in respect of each counterparty is calculated as the sum of the products of the excess for each obligation category and the applicable Resilience Capital Factor determined from Table 1, except for obligation category 4 in Table 3 “Any other asset or counterparty exposure” for which the multiplier will be twice the applicable Resilience Capital Factor.

94. If more than one Resilience Capital Factor applies in respect of exposures to a counterparty in a given obligation category, the excess must be apportioned to each relevant Resilience Capital Factor based on the proportion of total exposures to that counterparty in that obligation category subject to each Resilience Capital Factor. The relevant Resilience Capital Factor (which must be twice the Resilience Capital Factor for obligation category “Any other asset or counterparty exposure”) is then applied to each portion of the excess and the sum of the products constitutes the Asset Concentration Risk Charge for that counterparty in that obligation category.

95. The Asset Concentration Risk Charge may be reduced, if, in respect of a particular asset or contingent liability the Risk Weighted Exposures Charge plus the Asset Concentration Risk Charge, prior to adjustment, exceeds 100% of the value of the
asset or contingent liability used for the Risk Weighted Exposures Charge calculation. The Asset Concentration Risk Charge that applies in respect of a given asset or contingent liability is determined on the basis of the apportionment set out in paragraph 94.

96. The Asset Concentration Risk Charge is the total for the Life Fund across all relevant counterparties.

97. For licensed insurers with total assets less than 10 million New Zealand dollars the following exposures do not need to be included in the calculation of the Asset Concentration Risk Charge: bank bills issued by or deposits (including term deposits and cash on call) with a registered New Zealand bank.

Table 3 – Asset Concentration Risk Limits

<table>
<thead>
<tr>
<th>Obligation Category</th>
<th>Limit (% of total assets of the Life Fund excluding any reinsurance recovery assets)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Issued by the New Zealand government or by a national government or supra-national agency of Counterparty Grade 1</td>
<td>100%</td>
</tr>
<tr>
<td>2. Issued by a New Zealand Local Authority or State-Owned Enterprise</td>
<td>50% (or $5m if greater)</td>
</tr>
<tr>
<td>3. Bank bills issued by or deposits (including term deposits and cash on call) with a specific New Zealand registered bank</td>
<td>25% (or $5m if greater)</td>
</tr>
<tr>
<td>4. Any other asset or counterparty exposure</td>
<td>10% (or $2m if greater)</td>
</tr>
</tbody>
</table>
A Life Fund has only two assets and these assets are with a single counterparty that is not a bank or a government entity.

Asset 1 is valued at $200m and is subject to a fixed charge and so is subject to a Resilience Capital Factor of 100% for the purposes of the Risk Weighted Exposures Charge.

Asset 2 is valued at $300m and is subject to a Resilience Capital Factor of 2% for the purposes of the Risk Weighted Exposures Charge.

The total asset base is $500m.

The excess of the limits specified in Table3 is the amount greater than 10% of the Life Funds asset base, this is $450m.

In order to determine the Asset Risk Concentration Charge the excess is apportioned based on the relative value of the total assets subject to each Resilience Capital Factor.

40% ($200m/$500m) of the excess ($180m) is subject to a Resilience Capital Factor of 2*100%

60% ($300m/$500m) of the excess ($270m) is subject to a Resilience Capital Factor of 2*2%

The Asset Risk Concentration Charge prior to adjustment is:

$180m*200% + $270m*4% = $370.8m

$180m of the asset base is however subject to a total Resilience Capital Charge of 300%. The Asset Concentration Charge may be reduced by $360m to reduce the total Risk Weighted Exposures Charge and Asset Concentration Charge to 100% for the relevant asset.

### 3.4. Reinsurance Recovery Risk Capital Charge

**Concept**

98. The Reinsurance Recovery Risk Capital Charge reflects the exposure of a licensed insurer to losses arising from failure to fully recover on reinsurance contracts (including catastrophe reinsurance contracts), including losses due to reinsurer failure and contract dispute.

**Calculation**

99. In order to determine the Reinsurance Recovery Risk Capital Charge a licensed insurer must make the following calculations separately for each of its reinsurance counterparties. Where arrangements with a reinsurer involve both liability and asset components, these may be taken as a single net exposure to
the extent they are subject to a legally enforceable right of offset. The reinsurer Counterparty Grade must be determined by reference to Table 5.

100. For claims already incurred (including any reserves for outstanding claims, claims reported but not paid, claims incurred but not reported, and reinsurance not yet received on claims already paid), the licensed insurer must determine the amount due in respect of reinsurance on these claims. This calculation must be performed using the Prescribed Solvency Assumptions, where applicable. This reinsurance recovery asset is then multiplied by the Reinsurance Risk Capital Factor determined by reference to the relevant reinsurer Counterparty Grade in Table 5.

101. The licensed insurer must also consider for each of its reinsurers whether, in its calculation of the Insurance Risk Capital Charge, any reinsurance arrangement gives rise to an asset in respect of reinsurance cash flows relating to future experience. This may require calculations to be done on both a net and gross of reinsurance basis, unless the appointed actuary is satisfied that no asset could arise under any of the reinsurance arrangements in place. Any resulting asset must then be multiplied by the appropriate Reinsurance Risk Capital Factor determined by reference to the relevant reinsurer Counterparty Grade in Table 5.

102. In addition, the licensed insurer must include an amount in the Reinsurance Recovery Risk Capital Charge in respect of the recovery risk associated with reinsurance assets arising as a result of recoveries assumed in the calculation of the Catastrophe Risk Capital Charge. This amount is calculated by multiplying the amount of reinsurance recoveries from each reinsurer, as allowed for in the calculation of the Catastrophe Risk Capital Charge, by the appropriate Reinsurance Risk Capital Factor determined by reference to the relevant reinsurer Counterparty Grade in Table 5.

103. The Reinsurance Recovery Risk Capital Charge is the sum of all the amounts, calculated in accordance with paragraphs 99 to 102, in respect of each reinsurer.

3.5. Determining Counterparty Grades

104. Some of the capital charges in this solvency standard depend upon the Counterparty Grade of reinsurers, other counterparties or the issue rating of an asset. The Counterparty Grade is determined with reference to:

(a) the credit rating of the asset in respect of investment assets (issue ratings) or, in some cases, the rating of the counterparty (issuer rating);

(b) the insurer financial strength rating in respect of reinsurance recovery assets;

issued by recognised rating agencies.

105. Because rating agencies do not always agree it is necessary to have a consistent method of determining which Counterparty Grade to use. Each licensed insurer must adopt a policy that states the rating agency that it will use as a first preference.
and other agencies (in order of preference) that it will use if the preferred agency
does not publish ratings for a particular counterparty or asset.

106. The Counterparty Grades are determined by reference to Table 4.1 or Table 4.2 in
respect of investment assets and by reference to Table 5 in respect of reinsurance
assets and in respect of issuer ratings.

107. Where an asset does not have a public rating, but the issuer has a public rating, the
rating of the issuer, determined by reference to Table 5, may be used.

Table 4.1 Short Term Ratings – normally for assets with terms of 12 months or less

<table>
<thead>
<tr>
<th>Counterparty Grade</th>
<th>Standard &amp; Poor's</th>
<th>Moody's</th>
<th>Fitch</th>
<th>AM Best</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A1+</td>
<td>F1+</td>
<td>AMB-1+</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>A1</td>
<td>P1</td>
<td>F1</td>
<td>AMB-1</td>
</tr>
<tr>
<td>3</td>
<td>A2</td>
<td>P2</td>
<td>F2</td>
<td>AMB-2</td>
</tr>
<tr>
<td>4</td>
<td>A3</td>
<td>P3</td>
<td>F3</td>
<td>AMB-3</td>
</tr>
<tr>
<td>5</td>
<td>Other</td>
<td>Other</td>
<td>Other</td>
<td>Other</td>
</tr>
</tbody>
</table>

Table 4.2 Long Term Ratings – normally for assets with terms of over 12 months

<table>
<thead>
<tr>
<th>Counterparty Grade</th>
<th>Standard &amp; Poor's</th>
<th>Moody's</th>
<th>Fitch</th>
<th>AM Best</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AAA</td>
<td>Aaa</td>
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</tr>
<tr>
<td>2</td>
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<td>4</td>
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<tr>
<td></td>
<td>BBB-</td>
<td>Baa3</td>
<td>BBB-</td>
<td>bbb-</td>
</tr>
<tr>
<td>5</td>
<td>Below/unrated</td>
<td>Below/unrated</td>
<td>Below/unrated</td>
<td>Below/unrated</td>
</tr>
</tbody>
</table>
Table 5 Reinsurer or Issuer Counterparty Grades

<table>
<thead>
<tr>
<th>Counterparty Grade</th>
<th>Standard &amp; Poor’s/Fitch</th>
<th>AM Best</th>
<th>Moody’s</th>
<th>Reinsurance Risk Capital Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AAA</td>
<td>A++</td>
<td>Aaa</td>
<td>2%</td>
</tr>
<tr>
<td>2</td>
<td>AA- to AA+</td>
<td>A+</td>
<td>Aa3 to Aa1</td>
<td>2%</td>
</tr>
<tr>
<td>3</td>
<td>A- to A+</td>
<td>A- A</td>
<td>A3 to A1</td>
<td>4%</td>
</tr>
<tr>
<td>4</td>
<td>BBB- to BBB+</td>
<td>B+ B++</td>
<td>Baa3 to Baa1</td>
<td>10%, up to a 20% proportion of the total reinsurance recovery asset, and 20% above that limit</td>
</tr>
<tr>
<td>5</td>
<td>Below/unrated</td>
<td>Below/unrated</td>
<td>Below/unrated</td>
<td>20%, up to a 10% proportion of the total reinsurance recovery asset, and 40% above that limit</td>
</tr>
</tbody>
</table>
4. Special circumstances, discretions and taxation

4.1. Special Circumstances

108. If the Reserve Bank is not satisfied that the calculation methods and/or capital charges specified in this solvency standard are appropriate for the risk profile of, or other matters relating to, the licensed insurer the Reserve Bank may vary or impose a condition of licence (see section 22(1) of the Act) to alter the Solvency Margin required to be held by the licensed insurer, or it may issue a new solvency standard (see section 55(2)(c) of the Act) to apply to the licensed insurer. Any specific solvency standard may incorporate amended capital charges, alternative calculation methods, alternative parameters or assumptions, or any other requirements considered appropriate by the Reserve Bank.

4.2. Discretions

109. Discretions may be applied, as set out below, by a licensed insurer in the process of calculating the:

   (a) Insurance Risk Capital Charge; and

   (b) Resilience Risk Capital Charge.

110. In both calculations the valuation is being performed under an assumed scenario of adverse experience: in the former case under the Prescribed Solvency Assumptions and in the latter case under the adverse impact implied by the additional application of the CEP Capital Charge, impact of interest rate risk and Foreign Currency Risk Capital Charge calculations. The discretions assumed to be applied should be consistent with these scenarios of adverse experience.

111. The discretions assumed to be applied must be applied consistently within each calculation of a licensed insurer’s Minimum Solvency Capital.

112. The following sections provide further guidance on the application of discretions. 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

113. When applying termination value discretions the appointed actuary must consider the impact of these discretions on future discontinuance rates, the impact on the Insurance Risk Capital Charge and the impact (if any) on the Resilience Risk Capital Charge.

114. It is not appropriate to assume the application of discretions in the calculation of Current Termination Values used in calculating the Insurance Risk Capital Charge.
Reduction in Discretionary Benefits

115. This discretion applies where a licensed insurer is able to reduce or discontinue discretionary benefits. In determining the Minimum Solvency Capital, where it is likely that discretionary benefits would be reduced or discontinued under the above scenarios of adverse experience, then it is appropriate to allow for that reduction. When applying such discretions the appointed actuary must also consider the impact of these discretions on future discontinuance rates and the impact on the Insurance Risk Capital Charge and Resilience Risk Capital Charge. The unvested policyholder benefits liability forms part of Other Liabilities under this solvency standard. In carrying out the calculations in this solvency standard, the licensed insurer may reduce the value of this liability, to the extent that is justified under the relevant scenario of adverse experience.

116. The amount and timing of the reduction in discretionary benefits assumed in the calculation of Minimum Solvency Capital should be consistent with a licensed insurer's ability to reduce discretionary benefits in practice.

117. Approximate methods, consistently applied, may be used to determine levels of future discretionary benefits under the above scenarios of adverse experience assumed.

Increases to Expense Charges - Inflation Linked

118. Where a licensed insurer has discretion to increase policy expense charges in line with the changes in an inflation index and where the licensed insurer has consistently utilised such discretions in the previous five years, it is appropriate to allow for inflation-linked increases to charges. The amount and timing of the indexation of charges assumed in the projection must be consistent with a licensed insurer's normal practice. The underlying inflation rate should be the same as the rate calculated under the Prescribed Solvency Assumptions.

119. Where there is insufficient past experience to prove consistent utilisation of such discretions in the previous five years, the amount and timing of the indexation of charges assumed in the projection must be realistic in the circumstances.

Quantum (one-off) Increase to Expense Charges

120. Where a licensed insurer has discretion to increase policy expense charges, other than in line with the changes in an inflation index, and it is likely that the discretion would be exercised under the scenarios of adverse experience used for assessing Minimum Solvency Capital, then it is appropriate to allow for the exercise of the discretion.
**Premium Rate Increase**

121. **Premium** rates may be increased to reflect changes in loss experience where:

(a) it is likely that the discretion would be exercised under the above scenarios of adverse experience; and

(b) the timing and extent of the discretion applied is consistent with normal practice or, in the absence of sufficient past experience to prove “normal practice” is realistic in the circumstances.

122. In determining the Insurance Risk Capital Charge and the Resilience Risk Capital Charge, the appointed actuary should consider all appropriate factors including the unexpired risks, any guaranteed renewal options, the effect of anti-selection exercised by discontinuing policy owners, the delays in claims reporting and the time lags involved in assessing experience and making the subsequent changes to premium rates.

**Claw-back of Acquisition Commission**

123. Where acquisition commission paid may be recovered and it is likely that this discretion would be exercised under the above scenarios of adverse experience, it is appropriate to allow for the exercise of this discretion. The timing and extent of the discretion applied should be consistent with established practice of the licensed insurer and a realistic assessment of what is achievable given potential delays in recoverability and the possible risk of adviser/broker default.

**4.3. Taxation**

124. In considering the appropriate adjustment for taxation the appointed actuary must consider the taxation status of the licensed insurer, in respect of New Zealand taxation laws, and other entities within the licensed insurer’s taxation group (if any), against applicable taxation laws, and whether any requirements or aspects of the taxation laws need to be taken into account.

125. Taxation should be applied to the calculation of the Solvency Margin in the following manner:

(a) where, for reporting purposes, the Policy Liability is calculated on a net of tax basis the Best Estimate Liability, Policy Liability and Solvency Liability should be calculated net of tax for the purposes of this solvency standard.

(b) where, for reporting purposes, the Policy Liability is calculated on a gross of tax basis the Best Estimate Liability, Policy Liability and Solvency Liability should be calculated gross of tax with an appropriate amount of deferred tax liability being explicitly calculated and added for the purposes of this solvency standard.
(c) the Insurance Risk Capital Charge, the Catastrophe Risk Capital Charge, the Resilience Risk Capital Charge, the Asset Concentration Risk Capital Charge and Reinsurance Recovery Risk Capital Charge must be calculated with allowance for tax. The gross amount of these capital charges and the taxation on these capital charges, if any, must be clearly identified. The taxation calculations to be performed are specific to the application of this solvency standard, should effect the capital charge calculations made, and the results may differ from taxation calculations prepared for other purposes.

(d) additional current or deferred taxation liabilities or assets that arise as a result of the capital charge calculations in paragraph(c) must be clearly identified and arrived at using a prudent assessment of the taxation rate and any other relevant taxation assumptions. For any current or deferred taxation assets to be included within the taxation effect of the capital charge calculations in paragraphs (a) and (b), the potential recovery of such taxation assets must be beyond doubt were the licensed insurer to be wound-up.

(e) using the results of the calculations in paragraphs (c) to (d) and any other necessary information, the licensed insurer must calculate its net taxation position were the licensed insurer to be wound-up (“net taxation position upon wind-up”) by adjusting, as appropriate, the net taxation position reported in the licensed insurer’s financial statements or Alternative Financial Information for the taxation effect of all capital charges listed in paragraph (c). In arriving at the net taxation position upon wind-up, taxation liability and taxation asset balances may be netted off where this treatment is legally certain.

(f) if the net taxation position upon wind-up is an asset arising from a deferred taxation asset of the licensed insurer, then the net taxation position upon wind-up must be treated as a Deduction from Capital in accordance with Section 2.

(g) all numeric capital factors to be used within the capital charge calculations are stated gross of taxation (that is, before any allowance for taxation).
5. Obligations of the licensed insurer

5.1. Reporting to the Reserve Bank

126. Section 56(d) of the Act allows the Reserve Bank to include within a solvency standard requirements relating to reports about the financial condition or solvency of a licensed insurer. Section 56(g) of the Act allows the Reserve Bank to include within a solvency standard requirements relating to the disclosure of information relating to the financial condition or solvency of the licensed insurer.

5.2. Licensed Insurer must provide Solvency Returns to the Reserve Bank

127. A licensed insurer must provide an Annual Solvency Return and the accompanying information set out in (a) to (e) to the Reserve Bank. The Annual Solvency Return and accompanying information must be supplied within the timeframe required under section 81(1) of the Act for the provision of financial statements or group financial statements to the Reserve Bank. If the licensed insurer is exempt from section 81(1) of the Act, the Annual Solvency Return and accompanying information must be supplied within the timeframe specified in regulation 12(c) of the Insurance (Prudential Supervision) Regulations 2010 for the provision of financial information. The Annual Solvency Return must be in the form specified by the Reserve Bank and be accompanied by:

(a) a certification by two directors of the licensed insurer (or in the case of an overseas insurer, its New Zealand chief executive officer) in the form specified by the Reserve Bank;

(b) a copy of the audited financial statements or group financial statements of the licensed insurer or where Alternative Financial Information has been used, a copy of that information;

(c) a report by the auditor of the licensed insurer on the audit of the Annual Solvency Return;

(d) a Financial Condition Report prepared by the appointed actuary of the licensed insurer; and

(e) a report from the appointed actuary that meets the requirements of section 78 of the Act.

128. A licensed insurer must provide a Half-yearly Solvency Return to the Reserve Bank. The Half-yearly Solvency Return must be supplied within the timeframe required under section 81(2) of the Act for the provision of interim financial information. If the licensed insurer is exempt from section 81(2) of the Act, the Half-yearly Solvency Return and accompanying information must be supplied within 4 months of the date that is 6 months after the end of the licensed insurer’s financial year. The Half-yearly Solvency Return must be in the form specified by the Reserve Bank and must be accompanied by a certification by two directors of
the licensed insurer (or in the case of an overseas insurer, its New Zealand chief executive officer) in the form specified by the Reserve Bank.

5.3. Audit of Annual Solvency Return

129. A licensed insurer must engage its auditor to undertake an audit of the Annual Solvency Return and must do everything necessary to allow the auditor to undertake this function.

130. The auditor’s report on the Annual Solvency Return must address the matters prescribed in this solvency standard and must be signed by the auditor.

131. The Reserve Bank may, at its discretion, require independent review of the audit and auditor’s report.

5.4. Financial Condition Report by the Appointed Actuary

132. A licensed insurer must engage its appointed actuary to prepare a Financial Condition Report for the licensed insurer and must do everything necessary to enable the appointed actuary to undertake this function.

5.5. Disclosure of Solvency Calculations

133. A licensed insurer must disclose the information set out in paragraphs 136 and 137 in its financial statements or group financial statements. This disclosure must be as at the balance date to which the financial statements or group financial statements relate along with a comparative for the immediately preceding financial year.

134. For an overseas insurer subject to this solvency standard, the disclosure under paragraph 133 need only be made within the financial statements or group financial statements prepared for the New Zealand Branch.

135. A licensed insurer must disclose the information set out in paragraphs 136 and 137 on its website (if any). This disclosure must be updated within 10 working days following the required date for submission of each of the Annual and Half-yearly Solvency Returns to the Reserve Bank to reflect the information in those returns.

136. The information, for each Life Fund of the licensed insurer based on the solo solvency calculations of the licensed insurer, is the:

   (a) Actual Solvency Capital;

   (b) Minimum Solvency Capital;

   (c) Solvency Margin; and

   (d) Solvency Ratio.
137. The information, in respect of the aggregate Solvency Margin requirements of the 
licensed insurer, is the:

(a) Aggregate Actual Solvency Capital;

(b) Aggregate Minimum Solvency Capital, adjusted to take account of the Fixed 
Capital requirement;

(c) Aggregate Solvency Margin, being the Aggregate Actual Solvency Capital less 
the Aggregate Minimum Solvency Capital; and

(d) The Aggregate Solvency Ratio, being the ratio of the Aggregate Actual 
Solvency Capital to Aggregate Minimum Solvency Capital.

5.6. Advice to the Reserve Bank on likely failure to maintain Solvency Margin

138. Section 24 of the Act requires that, if a licensed insurer has reasonable grounds to 
believe that a failure to maintain a Solvency Margin is likely to occur at any time 
within the next three years, the licensed insurer must report the likely failure to the 
Reserve Bank as soon as is reasonably practicable.

139. In order to determine if the licensed insurer is likely to maintain the required 
Solvency Margin over the three year assessment period, and whether a reporting 
obligation arises, the licensed insurer should:

(a) consider a forward looking assessment of its compliance with the solvency 
standard in addition to the calculations at the most recent balance date. This 
forward looking assessment should extend for at least three years from the 
licensed insurer’s last annual or half year balance date and take into account 
known aspects of the licensed insurers business plan, its enterprise risk 
management practices and the external environment; and

(b) put in place procedures, including reporting to the appointed actuary, that 
allow for the identification and escalation of circumstances that may give rise 
to a reporting obligation under section 24.
6. Obligations of the appointed actuary

6.1. Financial Statements

140. Section 77 of the Act requires that the licensed insurer ensure that actuarial information contained in, or used in the preparation of, the financial statements or group financial statements is reviewed by the appointed actuary. Section 77(4)(c) allows the Reserve Bank to specify, within a solvency standard, information that is actuarial information in addition to that specified in the Act. The specified actuarial information is:

(a) the Policy Liability;

(b) the reinsurance and any other recovery asset(s) relevant to the Policy Liability, or relevant to outstanding claims reserves or incurred but not reported claims reserves held outside of the Policy Liability;

(c) any deferred or other tax asset relevant to the Policy Liability;

(d) any deferred acquisition cost or deferred fee revenue relevant to the Policy Liability;

(e) the unvested policyholder benefits liability; and

(f) any other information deemed by the appointed actuary to warrant actuarial review for the purpose of profit or solvency reporting.

141. If it is a licensed insurer's established policy to seek the advice of the appointed actuary in respect of part or all of this actuarial information and to always adopt that advice in its financial statements or group financial statements, then the advice from the appointed actuary to the licensed insurer satisfies the review requirements.

142. In other circumstances the appointed actuary must undertake whatever additional work is necessary in order to complete the review.

143. In completing the review the appointed actuary may need to utilise the skills and experience of other experts in accordance with paragraph 149.

144. The results of the appointed actuary's review must be documented in a report that meets the requirements of section 78 of the Act.

6.2. Solvency Calculations

145. The appointed actuary must perform or review all aspects of the Solvency Margin calculations. The results of the review must be documented in the Financial Condition Report.
146. The appointed actuary’s review must include specific comment on: the basis for determining the Catastrophe Risk Capital Charge, taxation, whether the licensed insurer is exposed to any significant off balance sheet exposures that have not been disclosed in the licensed insurer’s financial statements and the extent to which those exposures have been taken into account in the calculation of the Asset Risk Capital Charge and any other Material issues arising from Sections 2, 3 and 4.

6.3. Financial Condition Report

147. The Financial Condition Report prepared by the appointed actuary must:

(a) identify and describe the Material risks (of which it is reasonable to expect the appointed actuary to be aware) facing a licensed insurer, including any risks arising from any off balance sheet exposures, that in the appointed actuary’s opinion pose a threat to the licensed insurer’s ability to maintain the required Solvency Margin now or in the future, and where practicable quantify such risks;

(b) comment on the steps taken or proposed to be taken by the licensed insurer to address the risks identified in (a);

(c) note where the licensed insurer has issued any ordinary shares, perpetual shares or Credit Union Securities that do not meet the requirements set out in Sections 2.3 or 2.4, and the relevant sections of Appendix D;

(d) advise the licensed insurer on the appropriate treatment, for solvency purposes, of any insurance business with risk characteristics not adequately covered by this solvency standard;

(e) advise the licensed insurer, if relevant, on the treatment of derivatives and the approximate impact on the Asset Risk Capital Charge over the course of the year and at the date of calculation of the Solvency Margin;

(f) comment on the adequacy of the Resilience Risk Capital Charge including the risks involved with mismatching of assets and liabilities;

(g) detail all assumptions used in the calculation of the Solvency Margin, and disclose and justify the use of any simplifying assumptions or methodologies (see Section 1.6), separately distinguishing assumptions made on the following bases:

   i. best estimate;

   ii. solvency assumptions made to arrive at the Insurance Risk Capital Charge, both prescribed and any other assumptions made including discretions;

   iii. all assumptions made to arrive at the Resilience Risk Capital Charge, including discretions assumed;

   iv. the basis for the estimation of the value of any contingent liability, if such estimate is made;
(h) describe how all the principles supporting the Resilience Risk Capital Charge have been met;

(i) identify those assumptions to which the licensed insurer’s Solvency Margin is most sensitive (“key sensitivities”) and quantify the impact on the Solvency Margin of those key sensitivities;

(j) advise the licensed insurer on whether, in the appointed actuary’s opinion, the licensed insurer needs to consider reporting to the Reserve Bank under section 24 of the Act, taking account of the licensed insurer’s forward looking assessment of the Solvency Margin and the appointed actuary’s assessment of the licensed insurer’s business plans, its enterprise risk management practices and the external environment; and

(k) for any Financial Condition Report that is prepared following a licensed insurer’s financial year that ends after 1 January 2015 include a reinsurance statement that includes all of the information set out in paragraph 148.

148. The information referred to in paragraph 147(k) is:

(a) a list of all reinsurance agreements currently in place, including the name of the reinsurer, the starting and expiry date of the agreement, the form of the agreement (e.g. quota share, excess of loss, facultative) and whether any reinsurance agreement has been treated as an immaterial reinsurance agreement under Appendix E;

(b) the retention of the licensed insurer and cession to reinsurers (minimum and maximum if applicable), the capacity provided by each reinsurance agreement, and whether the licensed insurer retains any exposure other than the retention that is not reinsured;

(c) the method for calculating reinsurance commissions, selection rebates or selection discounts, and the maximum commission, selection rebate or selection discount payable (if applicable) for the reporting year;

(d) an assessment of whether any reinsurance agreement gives rise to a Repayable Amount and if so the value of the Repayable Amount Adjustment and an explanation of how that value was calculated (including, where relevant, how any Repayable Amounts have been apportioned to Related Product Groups or the Life Funds and any difference between the Repayable Amount Adjustment and the total of the Repayable Amounts); and

(e) if the licensed insurer is required, by subparagraph (f), to report the results of stress testing undertaken under paragraph 17 of Appendix E, the following information in relation to that stress testing;

   i. the combination of parameters that could result in the reinsurer realising a significant loss under the agreement (or a statement that no such scenario exists); and
ii. the scenarios performed under paragraph 17(a) of Appendix E and the Solvency Reinsurance Balance under those scenarios; and

iii. in each case a comment on the likelihood of the scenario occurring, based on quantitative evidence where possible;

(f) stress testing of reinsurance agreements must be carried out in accordance with paragraph 17 of Appendix E and must be included in the reinsurance statement at the times and on the basis set out below:

i. for reinsurance agreements incepted before 1 January 2015, the information in subparagraph (e) must be included in the first Financial Condition Report that is required to include a reinsurance statement;

ii. for reinsurance agreements incepted after 1 January 2015, the information in subparagraph (e) must be included in the Financial Condition Report that relates to the financial year in which the agreement was incepted;

iii. if, following the inclusion of the results of a stress test of a reinsurance agreement in a reinsurance statement, there are significant changes to the agreement, or a party exercises any significant discretion under the agreement, the reinsurance agreement should be re-stress tested with the stress testing result included in the Financial Condition Report that relates to the year in which the change or exercise of discretion occurred;

iv. stress testing should be undertaken on the following basis:

   A. with modelling undertaken from the point of inception:

   B. if stress testing is being undertaken post inception and the actuarial assumptions used differ from those assumed at the time of inception this should be clearly disclosed and an explanation provided;

   C. if stress testing is being undertaken post inception and if any discretions were exercised under the agreement this should be modelled from the time of the exercise of the discretion;

   D. if stress testing is being undertaken post inception and there were significant changes to the agreement post inception then those changes must be incorporated into the inception based stress testing from the point of time the changes apply.

149. The appointed actuary may need to deal with issues that are not within the skills and experience of the appointed actuary. In this situation the appointed actuary will need to utilise the skills and experience of others and may rely on other relevant experts, provided that reliance is appropriate and adequate disclosure is included on the nature of that reliance.
6.4. New Zealand Society of Actuaries' Professional Standards

150. The appointed actuary must ensure that all actuarial work carried out for the purposes of, or supporting, this solvency standard is carried out in accordance with the New Zealand Society of Actuaries' Professional Standards.

Standard Ends
Appendix A: Prescribed Solvency Assumptions

Discount Rates

1. For life insurance policies, the Prescribed Solvency Assumption(s) for gross investment yield and liability discount rate will be risk free rate(s), based on current observable, objective rates that relate to the nature, structure and term of the future obligations. Typically, government bond or swap rates may be appropriate rates for this purpose, or they may be an appropriate starting point in determining appropriate discount rates.

Servicing Costs

2. The Prescribed Solvency Assumption for Maintenance Costs must include a margin of 7.5% above the greater of the unit costs required to cover:

   (a) actual Maintenance Costs in the twelve months prior to the date at which the Solvency Margin is calculated; and

   (b) expected Maintenance Costs in the twelve months subsequent to the date at which the Solvency Margin is calculated.

3. The Prescribed Solvency Assumption for Investment Management Costs must be based on an asset profile which, under the adverse circumstances of the Solvency Liability, would be expected to yield a return equal to the Prescribed Solvency Assumption for gross investment yield referred to in paragraph 1 above. The Prescribed Solvency Assumption must also include a margin of 7.5% above this base requirement. However, if the licensed insurer has contractually agreed to pay a higher Investment Management Cost regardless of the asset profile adopted, then this higher expense must be assumed.

4. When determining Servicing Costs for each policy, the appointed actuary must be satisfied that direct and indirect expenses have been allocated to individual policies in an appropriate manner.

5. The Servicing Cost assumptions may be adjusted to allow for one-off expenses (both actual and expected), for example, expenses arising from major redundancy programmes and/or merger implementations. These assumptions should exclude costs that would not be incurred if the licensed insurer ceased to write new business, provided this adjustment does not reduce the cost below best estimate. This provision must not be used to sanction the exclusion of operational expenses relating to the servicing of policies.

6. The Prescribed Solvency Assumption for Servicing Costs should not be applied to any component of those expenses that is contractually agreed for the life of the policy, for example, renewal commission.
Inflation Rate

7. The Prescribed Solvency Assumption for inflation in respect of Maintenance Costs and all other cash flows that are subject to inflation must be determined using the Best Estimate Assumption methodology, but based on the Prescribed Solvency Assumption for gross investment yield. The Prescribed Solvency Assumption for inflation is subject to a minimum of 0%.

Taxation

8. For the taxation treatment of the Insurance Risk Capital Charge in respect of these Prescribed Solvency Assumptions, refer to Section 4.3.

Insurance Claims

9. The Prescribed Solvency Assumptions for probabilities of death, disablement and other contingent events on which the payments of insurance claims are to be based are shown in Table 6:

Table 6 – Prescribed Probabilities

<table>
<thead>
<tr>
<th>Insured Lives: (Individual and Group)</th>
<th>110% of Best Estimate Assumptions for mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annuitants:</td>
<td>Base</td>
</tr>
<tr>
<td></td>
<td>Improvements</td>
</tr>
<tr>
<td></td>
<td>90% of Best Estimate Assumptions for mortality</td>
</tr>
<tr>
<td></td>
<td>2% per annum in addition to the Best Estimate Assumptions</td>
</tr>
<tr>
<td>Total Permanent Disability: (Individual and Group)</td>
<td>120% of Best Estimate Assumptions for morbidity</td>
</tr>
<tr>
<td>Disability Income: (Individual and Group)</td>
<td>Active Lives</td>
</tr>
<tr>
<td></td>
<td>Claims in Payment (Projection Method)</td>
</tr>
<tr>
<td></td>
<td>Claims in Payment (Case Estimate)</td>
</tr>
<tr>
<td></td>
<td>IBNR is to be treated consistently with Claims in Payment</td>
</tr>
<tr>
<td></td>
<td>150% of Best Estimate Assumptions for claims costs</td>
</tr>
<tr>
<td></td>
<td>Reduction of 25% in Best Estimate Assumptions for termination rates</td>
</tr>
<tr>
<td></td>
<td>125% of Best Estimate Assumptions for case estimate, adjusted to allow for the prescribed investment earnings assumption. Limited to the case estimate calculated using the maximum benefit period of the individual policy.</td>
</tr>
<tr>
<td>Trauma: (Individual and Group)</td>
<td>130% of Best Estimate Assumptions for morbidity</td>
</tr>
<tr>
<td>Other Insured Events: (Individual and Group)</td>
<td>130% of Best Estimate Assumptions for claims costs</td>
</tr>
</tbody>
</table>
10. Appropriate assumptions must be applied (on bases consistent with the above) for claims that have been incurred but not reported (“IBNR”) and claims that have been reported but not admitted (“RBNA”).

11. The appointed actuary must make appropriate specific allowance for Material specialised risks. A specialised risk is a risk that cannot be suitably allowed for through the use of a margin applied to the underlying Best Estimate Assumption. These specialised risks may be allowed for through the determination of specific additional reserves.

Voluntary Discontinuances

12. The Prescribed Solvency Assumption for the rate of voluntary discontinuances (including partial surrender) must reflect an adverse change in experience of 40% of the Best Estimate Assumption.

13. The Prescribed Solvency Assumption for rates of premium dormancy and conversion of policies to paid-up status must reflect an adverse change in experience of 40% of the Best Estimate Assumption.

14. An adverse change in experience may be an increase or a decrease in the rate of discontinuances. The adverse change must be that which increases the Insurance Risk Capital Charge at the Related Product Group level utilised for Best Estimate Assumptions.

Options Provided to Policyholders

15. The Prescribed Solvency Assumption in relation to experience after the exercise of an option must allow for appropriate risk margins applied to Best Estimate Assumptions.

16. The Prescribed Solvency Assumption for the take up rate of the option must reflect an adverse change of 10% of the Best Estimate Assumption.

Investment-Linked Policies

17. A Prescribed Solvency Assumption must be included to reflect the additional risks that may be borne by the entity in conducting investment-linked business.

18. The prescribed margin is 0.25%, which must be applied to the Solvency Liability as determined immediately prior to the inclusion of this margin.

19. The prescribed margin of 0.25% must also be applied to the Current Termination Value as determined immediately prior to the inclusion of this margin.
Appendix B: Materiality

1. All calculations required in relation to this **solvency standard** are subject to the following Materiality requirements.

2. Particular values or components are considered Material to the overall result of a calculation when their misstatement or omission would cause that result to be misleading to the users of the information.

3. Materiality tests assess the significance of the particular value or component by relating it to the amount of the overall result to which it contributes.

4. The base amount for Materiality purposes is the Solvency Margin.

5. The **appointed actuary** must consider Materiality relative to the amount of both:
   
   (a) the major individual components of the calculation; and
   
   (b) the overall cumulative effect of those individual components.

6. Values or components generating variations in amounts of 10% or more of the Solvency Margin must be presumed Material, while those generating variations in amounts of 5% or less of the Solvency Margin may be presumed immaterial. The Materiality of values or components generating variations between 5% and 10% will be a matter for professional judgement.

7. In applying the Materiality standards described in paragraphs 4 to 6 above:
   
   (a) it is appropriate to use as the base amount for Materiality purposes a rolling average of the Solvency Margin provided that the average so derived is a function of not less than three and not more than five years experience and reflects the current and anticipated future experience; and
   
   (b) it is appropriate, as the Solvency Margin approaches zero, for alternative key indicators to be used in establishing Materiality.

8. Materiality applies to all aspects of the determination and covers the acceptability of grouped data, modelled projections and approximate valuation methods.
Appendix C: Guarantees

1. The portion of an asset covered by a guarantee that meets the requirements of paragraph 3 of this appendix may be assigned the Resilience Capital Factor that would be applicable were the guarantor the principal counterparty, plus an Additional Capital Factor of 2%. In determining the Resilience Capital Factor for a guaranteed asset the Counterparty Grade in Table 1 should be interpreted as an issuer rating (determined by reference to Table 5). The portion of an asset considered to be covered by a guarantee is that portion of the asset equal to the value of the guarantee calculated in accordance with paragraphs 4 to 9 of this appendix. Any portion of the asset in excess of the value of the guarantee must be assigned the Resilience Capital Factor applicable absent the guarantee.

2. For the purposes of this appendix the following definitions apply:

   *Beneficiary* in respect of a guarantee means the *licensed insurer* who benefits from the guarantee;

   *Maturity in respect of a guarantee* includes a maturity date and any date on which the guarantor has the capacity to terminate, otherwise end or increase the effective cost of the guarantee;

   *Maturity in respect of the underlying asset* means the longest possible remaining time that the asset may remain an asset of the *licensed insurer* (irrespective of any potential rights to call);

   *Principal counterparty* means the counterparty to the transaction with the *licensed insurer* that gave rise to the underlying asset;

   *Residual maturity* means the time remaining until maturity. For a demand loan the residual maturity of the loan shall be deemed to be 3 years and the residual maturity of a guarantee of a demand loan shall be deemed to be the initial maturity.

3. The guarantee must:

   (a) be provided by a guarantor with an issuer Counterparty Grade (or for governments, the long-term foreign currency credit rating) of 1, 2, or 3 (refer Table 5); and

   (b) be provided by a party that is not a parent entity of the *licensed insurer* and is not a related party of the *licensed insurer*; and

   (c) be legally enforceable, clearly documented in writing and, if exercised, represent a direct claim on the guarantor that may be pursued without legal action being taken against the principal counterparty; and

   (d) be explicitly referenced to a specific asset or pool of assets; and

   (e) cover all types of payments the principal counterparty is required to make under the documentation (including interest); and
(f) be irrevocable by the guarantor prior to maturity (that is the guarantor may not have the right to unilaterally terminate the guarantee prior to any specified date on which the guarantee will mature or may otherwise terminate); and

(g) be unconditional (there must be no conditions that need to be fulfilled prior to the guarantor being liable on default of the principal counterparty).

4. Where an asset, or pool of assets, of a licensed insurer is subject to more than one guarantee, but those guarantees are limited to the extent of common collateral, the guarantees may only be recognised up to the value of that collateral.

5. For the purposes of paragraph 1, the value of a maturity matched guarantee is the guaranteed amount. A maturity matched guarantee exists when the residual maturity of the guarantee is the same or greater than the residual maturity of the underlying asset. A guarantee of a demand loan where the initial maturity of the guarantee is 3 years or greater shall be considered to be a maturity matched guarantee.

6. For the purposes of paragraph 1 above, the value of a maturity mismatched guarantee must be calculated in accordance with paragraphs 7 to 9 below. A maturity mismatched guarantee exists if the residual maturity of the guarantee is less than the residual maturity of the underlying asset.

7. Except as provided in the next sentence, the value of a maturity mismatched guarantee where the residual maturity of the guarantee is equal to or less than 12 months is 0. Where a maturity mismatched guarantee of residual maturity equal to 12 months provides that it will be renewed automatically unless a notice of termination is given, and the licensed insurer has no reason to believe that the guarantee will not be renewed, the guarantee may be recognised in the 12 months prior to renewal provided that the value of the guarantee is calculated in accordance with the formula in paragraph 8 and the residual maturity of the guarantee is considered to be 6 months for the entirety of that 12 months for the purposes of that formula.

8. Subject to paragraph 7, if a guarantee is maturity mismatched, the value of the guarantee for the purposes of paragraph 1 must be adjusted in accordance with the following formula:

\[
\text{Value of guarantee} = \text{guarantee amount} \times \frac{\min(T, \text{residual maturity guarantee})}{\min(5, \text{residual maturity asset})}
\]

Where residual maturity is measured in years or part thereof; and

“T” is the lesser of 5 and the residual maturity of the asset.

9. Where there is a single guarantee, limited in sum, that applies to a pool of assets where the residual maturity of the assets in the pool differ, the licensed insurer must assume that the guarantee applies to the asset with the longest residual maturity first for the purposes of paragraph 8.
Appendix D: Qualifying criteria for capital instruments

1. To be included within a licensed insurer’s Capital, each capital instrument must meet the following qualifying criteria for that instrument.

D.1 Ordinary shares: qualifying criteria

Permanence

2. The principal amount of the ordinary shares must be perpetual (i.e. there is no maturity date) and cannot be repaid outside of liquidation (i.e. the ordinary shares are not redeemable as defined in section 68 of the Companies Act 1993) setting aside discretionary acquisitions permitted by section 58 of the Companies Act 1993.

3. Neither the licensed insurer nor any related party of the licensed insurer may do anything to create an expectation at issuance that the ordinary shares will be repaid or cancelled, and the contractual terms of the ordinary shares (wherever set out) must not contain any feature that may give rise to such an expectation.

4. The ordinary shares can only be included within Capital to the extent the ordinary shares are paid-up and the paid-up amount has been irrevocably received by the licensed insurer.

Loss absorption

5. After retained earnings and revenue and other reserves, the issued ordinary shares must incur the first and proportionately greatest share of any losses as they occur in all circumstances, including on a going concern basis and upon wind-up of the licensed insurer.

Servicing charge

6. Distributions must meet the following requirements:

(a) distributions must only be paid out of distributable items (retained earnings included) of the licensed insurer. The level of distributions may not be linked in any way to the amount paid at issuance and may not be subject to a contractual cap (except that distributions may not exceed distributable items);

(b) there must be no circumstances under which the distributions are obligatory and in all circumstances the licensed insurer must be able to waive any distribution;

(c) any waived distributions must be non-cumulative (i.e. 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);

(d) non-payment of distributions must not be an event constituting default of the licensed insurer or any related party of the licensed insurer;
(e) distributions may only be paid by the licensed insurer after all other legal and contractual obligations have been met, such as payment obligations on more senior capital instruments and debt having been made. This means that the ordinary shares must not have any preferential or predetermined rights to distributions of capital or income; and

(f) the licensed insurer must not be required to make any distribution if it would result in the licensed insurer breaching any requirement of a solvency standard or condition of licence of the licensed insurer.

**Ranking on winding-up**

7. The ordinary shares must represent the most subordinated claim in the event of liquidation of the licensed insurer.

8. Ordinary shareholders are entitled to a claim on the residual assets of the licensed insurer that is proportional with their share of issued capital, after all senior claims have been repaid in liquidation (i.e. the claim is variable and unlimited and not fixed or capped).

9. The paid-up amount, or any future payments related to the ordinary shares, must not be secured nor covered by a guarantee of the licensed insurer or any related party of the licensed insurer or be subject to any other arrangement that legally or economically enhances the seniority of the holder’s claim. The ordinary shares must not be subject to netting or offset claims on behalf of the holder of the ordinary shares.

10. The paid-up amount must be classified as equity.

**Other appropriate features**

11. The ordinary shares must be directly issued by the licensed insurer and neither the licensed insurer nor any related party of the licensed insurer over which the licensed insurer exercises control or significant influence can have purchased the ordinary shares nor directly or indirectly funded their purchase.

12. Holders of the ordinary shares must have full voting rights arising from the ownership of the shares.

13. The amount of ordinary shares must be clearly and separately disclosed within the licensed insurer’s financial statements or Alternative Financial Information.

**D.2 Perpetual non-cumulative preference shares: qualifying criteria**

**Permanence**

14. The principal amount of the perpetual non-cumulative preference shares (“Perpetuals”) must be perpetual (i.e. there is no maturity date).

15. Neither the licensed insurer nor any related party of the licensed insurer may do anything to create an expectation at issuance that the Perpetuals will be repaid or cancelled (except as provided for in paragraph 17), and the contractual terms of the
Perpetuals (wherever set out) must not contain any feature that may give rise to such an expectation.

16. The Perpetuals can only be included within Capital to the extent the Perpetuals are paid-up and the paid-up amount has been irrevocably received by the licensed insurer.

17. The Perpetuals may only be callable or redeemable (as defined in section 68 of the Companies Act 1993) at the initiative of the licensed insurer and only after a minimum of five years from the date on which the licensed insurer irrevocably receives the proceeds of payment for the Perpetuals, except that a Perpetual instrument may provide for a call within the first five years of issuance as a result of a tax or regulatory event. An event will not meet the definition of a tax or regulatory event if it is an event that the licensed insurer was in a position to anticipate at the time of the issue of the instrument or if the event is minor or insignificant.

Loss absorption

18. The Perpetuals must have the potential to absorb losses on a going concern basis and upon wind-up of the licensed insurer.

Servicing charge

19. Distributions must meet the following requirements:

(a) the licensed insurer must have full discretion at all times to cancel distributions on the Perpetuals. Any waived distributions must be non-cumulative (i.e. 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);

(b) cancellation of distributions must not be an event constituting default of the licensed insurer or any related party of the licensed insurer. Holders of the Perpetuals must have no right to apply for the liquidation or voluntary administration of the licensed insurer or any related party of the licensed insurer or appoint a receiver of the property of the licensed insurer or any related party of the licensed insurer on the grounds that the licensed insurer fails to make, or may become unable to make, a distribution on the Perpetuals;

(c) cancellation of distributions must not impose restrictions on the licensed insurer, or any related party of the licensed insurer, except in relation to:

   A. the acquisition, repurchase or redemption of ordinary shares, Perpetuals or other capital instruments; or

   B. dividend stopper arrangements that stop distributions on ordinary shares, other Perpetuals or other capital instruments;

(d) the licensed insurer must have full access to cancelled distributions to meet obligations as they fall due;
(e) distributions on the Perpetuals must only be paid out of distributable items (retained earnings included) of the licensed insurer;

(f) the Perpetuals must not have a credit sensitive distribution feature\(^4\), such as 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;

(g) the Perpetuals must not contain any step-ups or incentives to redeem. This requires that the terms of the Perpetuals must provide for the distribution rate to be fixed for the entire term of the instrument and must not provide for the rate to be altered or reviewed except for the following:

   A. a distribution may be cancelled, in whole or in part; and

   B. where there is a variable rate and where the formula for setting the rate is fixed at the outset. For example, it would be acceptable to specify the distribution rate as a fixed margin above a recognised market benchmark such as the bank bill rate;

   C. conversion from a fixed rate to a floating rate (or vice versa) in combination with a call option without any increase in credit spread will not in itself be viewed as an incentive to redeem. However the licensed insurer or any related party of the licensed insurer must not do anything that creates an expectation that the call will be exercised. A change in the margin will be considered to be an incentive to redeem\(^5\); and

(h) the licensed insurer must not be required to make any distribution if it would result in the licensed insurer breaching any requirement of a solvency standard or condition of licence of the licensed insurer.

**Ranking on winding-up**

20. The Perpetuals must represent the most subordinated claim after ordinary shares in the event of liquidation of the licensed insurer.

21. The paid-up amount of the Perpetuals, or any future payments related to the Perpetuals, must not be secured nor covered by a guarantee of the licensed insurer or any related party of the licensed insurer or subject to any other arrangement that legally or economically enhances the seniority of the holder’s claim. The Perpetuals must not be subject to netting or offset claims on behalf of the holder of the Perpetuals.

**Other appropriate features**

22. The Perpetuals must be directly issued by the licensed insurer and neither the licensed insurer nor any related party of the licensed insurer over which the

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\(^4\) 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.

\(^5\) Conversion from a fixed rate to a floating rate that is calculated 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.
A licensed insurer exercises control or significant influence can have purchased the Perpetuals nor directly or indirectly funded their purchase. Except that the licensed insurer may issue a perpetual instrument to a Special Purpose Vehicle ("SPV") in conjunction with a Perpetuals capital instrument issued by the SPV to third party investors at the same time. The Perpetuals capital instrument issued by the SPV to third party investors will qualify as Capital provided that the following criteria are fully satisfied:

(a) the perpetual instrument issued by the licensed insurer to the SPV must meet the qualifying criteria for classification as Perpetuals (except that it may be purchased by a related party SPV);

(b) the Perpetuals capital instrument issued by the SPV to third party investors would, if issued by the licensed insurer, meet the qualifying criteria for classification as Perpetuals;

(c) the terms and conditions of the perpetual instrument issued by the licensed insurer to the SPV must match, in all material respects, the terms and conditions of the Perpetuals capital instrument issued at the same time by the SPV to third party investors;

(d) the proceeds from the issue of the Perpetuals capital instrument issued by the SPV to third party investors must be immediately and directly invested in the perpetuals capital instrument issued to the SPV by the licensed insurer and be available, without limitation to, the licensed insurer; and

(e) the SPV must be controlled by the licensed insurer.

23. The amount of the Perpetuals must be clearly and separately disclosed within the licensed insurer's financial statements or Alternative Financial Information.

D.3 Credit Union Securities: qualifying criteria

24. Credit Union Securities ("Securities") are a capital instrument that may only be issued by credit unions under the Friendly Societies and Credit Union Act 1982.

Permanence

25. The principal amount of the Securities must be perpetual (i.e. there is no maturity date) and cannot be repaid outside of liquidation.

26. The Securities can only be included within Capital to the extent the Securities are paid-up and the paid-up amount has been irrevocably received by the licensed insurer.

Loss absorption

27. After retained earnings and revenue and other reserves, the Securities must incur the first and proportionately greatest share of any losses as they occur in all circumstances, including on a going concern basis and upon wind-up of the licensed insurer.
28. The Securities must be issued in accordance with the requirements and provisions of the Friendly Societies and Credit Unions Act 1982.

**Servicing charge**

29. Distributions must meet the following requirements:

(a) distributions must only be paid out of distributable items (retained earnings included) of the licensed insurer. The level of distributions may not be linked in any way to the amount paid at issuance and may not be subject to a contractual cap (except that distributions may not exceed distributable items);

(b) there must be no circumstances under which the distributions are obligatory and in all circumstances the licensed insurer must be able to waive any distribution;

(c) any waived distributions must be non-cumulative (i.e. 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);

(d) non-payment of distributions must not be an event constituting default of the licensed insurer or any related party of the licensed insurer;

(e) distributions may only be paid by the licensed insurer after all other legal and contractual obligations have been met, such as 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; and

(f) the licensed insurer must not be required to make any distribution if it would result in the licensed insurer breaching any solvency standard or condition of licence of the licensed insurer.

**Ranking on winding-up**

30. The Securities must represent the most subordinated claim in the event of liquidation of the licensed insurer.

31. The paid-up amount, or any future payments related to the Securities, must not be secured nor covered by a guarantee of the licensed insurer or any related party of the licensed insurer or be subject to any other arrangement that legally or economically enhances the seniority of the holder’s claim. The Securities must not be subject to netting or offset claims on behalf of the holder of the Securities.

32. The paid-up amount must be classified as equity.

**Other appropriate features**

33. The Securities must be directly issued by the licensed insurer and neither the licensed insurer nor any related party of the licensed insurer over which the licensed insurer
exercises control or significant influence can have purchased the Securities nor directly or indirectly funded their purchase.

34. The amount of the Securities must be clearly and separately disclosed within the licensed insurer’s financial statements or Alternative Financial Information.
Appendix E: Reinsurance

Overview

1. This appendix defines when a Repayable Amount exists in respect of a reinsurance agreement. The requirements of this appendix apply to all of the licensed insurer’s reinsurance agreements, except for an immaterial reinsurance agreement. An immaterial reinsurance agreement is an agreement that may be considered immaterial under the Materiality requirements in Appendix B.

2. The principle to be applied in determining whether a Repayable Amount exists is that the intended application is to obligations that are in substance in the nature of a liability of the licensed insurer but have been treated as reinsurance for financial reporting purposes. The intent is therefore to provide a treatment that differs from that under financial reporting standards. The objective is to ensure that such obligations have broadly the same impact on the licensed insurer’s Solvency Margin as would be the case had the obligation been included in Other Liabilities.

3. In this appendix any reference to an amount received includes a reference to an amount accounted for as received or receivable and any reference to an amount paid, payable or to pay includes an amount accounted for as paid or payable or to pay.

Definition and value of Repayable Amount

4. The following paragraphs define a Repayable Amount. Subject to paragraph 5, an amount shall be considered to be a Repayable Amount if it meets any one of the tests in paragraphs 6, 10, or 14 of this appendix. The value of the Repayable Amount under each test is the value ascribed in paragraph 6, 12 and 16.

5. Any amount that has been included in Other Liabilities is not a Repayable Amount. Prior to 1 January 2019, no Repayable Amount shall exist in relation to reinsurance of insurance contracts written prior to 1 January 2016, except that if under the reinsurance agreement the reinsurer is obligated to pay claims only when the licensed insurer’s loss exceeds a certain amount in relation to both reinsurance of insurance contracts written before and after 1 January 2016 (stop-loss agreements), all reinsurance flows under the contract must be assessed to determine if a Repayable Amount exists.

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.

6. A Repayable Amount equal in value to the Solvency Reinsurance Balance will exist in relation to a reinsurance agreement if:

   (a) the value of the Solvency Reinsurance Balance is more than 0; and
(b) it is highly unlikely that the reinsurer could realise a significant loss under the agreement, taking into account the time value of money.\(^6\)

7. The **licensed insurer** must be able to demonstrate that the risk to the reinsurer of loss arises from insurance or lapse risk, rather than from credit risk (i.e. insolvency of the **insurer**). Significant means more than minor in the opinion of the **appointed actuary**.

8. In order to assess whether it is highly unlikely that the reinsurer could realise a significant loss under the agreement, the **licensed insurer** must undertake the stress tests required under paragraph 17 and make the assessment required under paragraph 18.

9. The existence of a feature in the **reinsurance** agreement that may result in payments being made by the reinsurer to the **licensed insurer** on the basis of experience, including a persistency bonus or profit commission, will not in itself be sufficient to indicate that a **reinsurance** agreement contains a Repayable Amount. However, the **licensed insurer** must be able to demonstrate through stress testing that **reinsurance premium** levels are not set at such a level, or that the operation of these features is not such, that it is highly unlikely that the reinsurer could suffer a significant loss under the agreement.

**Specified event test**

*The purpose of the specified event test is to ensure that potential obligations on the **licensed insurer** to pay amounts to the reinsurer are recognised in solvency calculations*

10. Subject to paragraph 11, an amount will be a Repayable Amount if the **licensed insurer** will, on the occurrence of an event specified in the **reinsurance** agreement, be under an obligation to pay that amount to the reinsurer otherwise than from out of the future profits arising from the reinsured portfolio. The circumstances of the occurrence of the specified event include but are not limited to the following:

(a) financial deterioration, insolvency or administration of the **licensed insurer**; or

(b) poor experience on the underlying portfolio, such as a higher than expected rate of claims or higher than expected lapse rate; or

(c) termination of the agreement or withdrawal of the portfolio.

11. The following shall not give rise to a Repayable Amount under paragraph 10 (for the avoidance of doubt, if one of the following apply a Repayable Amount may still exist as a result of another specified event in the **reinsurance** agreement):

(a) the amount becomes payable on lapse of an underlying insurance contract and the **licensed insurer** is entitled to receive a broadly equivalent amount from a third party in respect of that amount (claw-back commission); or

(b) the amount is payable to adjust for an error in calculation; or

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\(^6\) The profit or loss to the reinsurer should be assessed as the present value of cash flows paid and received by the reinsurer over the life of the **reinsurance** agreement.
(c) the licensed insurer may be subject to contractual damages (including amounts payable due to the rescission of the agreement by a court) for non-performance of an obligation or breach of contract; or

(d) the specified event is the termination of the reinsurance agreement or withdrawal of the portfolio and either A or B applies:

A. both parties must agree to such termination or withdrawal at the point of termination or withdrawal and the amount that will become payable is to be determined at the point of termination or withdrawal based on the arms length commercial value of the portfolio at that point in time and may not be related to amounts paid in the past by the reinsurer to the licensed insurer; or

B. termination may be affected by either or both parties as substantially a result of any of the following:
   i. substantial fraud, misrepresentation or non-disclosure of a material fact in relation to the agreement, in either case by a party other than the reinsurer and at or before the time the reinsurance agreement is entered into, which substantially reduces the value of the portfolio from that anticipated;
   ii. the agreement or performance of the agreement, or an important part thereof, is rendered illegal, prohibited or is otherwise impossible;
   iii. war or civil unrest (or a similar event) that materially affects the performance of the obligations under the agreement by the licensed insurer or reinsurer; or
   iv. the licensed insurer takes steps which result in the reinsurer no longer receiving amounts under the agreement in respect policies reinsured, provided that any amount payable in such an event is the loss of future profits to the reinsurer.

12. If paragraph 10 applies, the value of the Repayable Amount shall be the maximum value of the obligation, at the date of the assessment, that the licensed insurer may be subject to on the occurrence of the specified event.

13. Paragraph 10 applies whether or not the obligation on the licensed insurer is subordinated to policy holders and other creditors.

Embedded obligations test

The purpose of the embedded obligations test is to assess whether there are debt-like obligations embedded within the reinsurance agreement, even if the agreement as a whole transfers sufficient risk

14. The licensed insurer must consider whether any individual cash flows, or group of cash flows, under the reinsurance agreement give rise to a Repayable Amount under this paragraph. An amount received from the reinsurer will give rise to a Repayable Amount under the embedded obligations test if the licensed insurer must, under any circumstance except for those circumstances set out in a and b below, repay that
amount otherwise than from out of the future profits arising from the reinsured portfolio. The circumstances referred to are:

(a) termination of the reinsurance agreement or withdrawal of the portfolio (termination events must be considered under the specified event test); or

(b) any event specified in subparagraphs 11(a)-(c).

15. At a minimum the licensed insurer must consider whether amounts received as reinsurance commission give rise to a Repayable Amount under paragraph 14. Reinsurance commission includes all payments made to the licensed insurer by the reinsurer, of which the purpose or effect is to fund some portion of the licensed insurer’s acquisition costs, including selection rebates, selection discounts or any other similar amounts.

16. Where an amount is assessed as a Repayable Amount under paragraph 14, the licensed insurer may value that amount as either:

(a) the portion of the Solvency Reinsurance Balance attributable to repayment of that amount, less any broadly equivalent amount the licensed insurer expects to receive from third parties that has been included in the Repayable Amount; or

(b) the value of the amount received, less any broadly equivalent amount the licensed insurer expects to receive from third parties that has been included in the Repayable Amount and less any amount that has been repaid;

provided that no amount less than 0 will be a Repayable Amount.

**Stress testing**

17. Each reinsurance agreement (other than an immaterial reinsurance agreement) must be stress tested in the manner set out in subparagraphs (a) and (b) of this paragraph. The stress tests must be undertaken at a time appropriate, and on the basis set out, to enable the licensed insurer to meet the requirements to report to the Reserve Bank under paragraph 148(f) of the solvency standard. In undertaking these stress tests reasonable assumptions may be made as to the exercise of discretions under the reinsurance agreement, such as increases in reinsurance premiums. Stress tests must:

(a) provide at least three scenarios that test the sensitivity of the Solvency Reinsurance Balance to changes in relevant parameters, such as mortality, morbidity and lapse rates, where those parameters are set at levels where experience is significantly worse than under the Prescribed Solvency Assumptions in Appendix A; and

(b) quantify at least one combination of relevant parameters, such as mortality, morbidity and lapse rates, that would result in the reinsurer making a significant loss under the agreement or otherwise state that there is no scenario under which the reinsurer will make a significant loss.

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7 Agreements must be stress tested whether or not the Solvency Reinsurance Balance is greater than 0.
18. If, in relation to paragraph 17(b), the combination of parameters that results in the reinsurer making a significant loss is highly unlikely to occur, or there is no scenario under which the reinsurer makes a significant loss, then the Solvency Reinsurance Balance will be a Repayable Amount. In making this assessment the licensed insurer should take into account the nature of the risk reinsured. For example, an agreement under which the reinsurer is required to make payment in the event that a low probability but extreme event occurs would be considered to transfer sufficient risk if the reinsurer could make a loss if that event occurred. However, if the agreement is not to cover loss only in low probability events, the licensed insurer should be able to demonstrate that a loss to the reinsurer is possible under a scenario of greater likelihood.

19. The Reserve Bank may notify the licensed insurer in writing that the licensed insurer must quantify the Solvency Reinsurance Balance under a particular scenario.

Repayable Amount calculation and adjustment

20. If a Repayable Amount exists under more than one of the tests in this appendix in respect of a reinsurance agreement, the Repayable Amount in respect of that agreement shall be calculated by:

(a) summing all the Repayable Amounts; and

(b) adjusting the sum downwards to ensure that no element is captured more than once, subject to the proviso that the net balance must not be less than the largest Repayable Amount calculated under any one of the tests.

21. The Repayable Amount Adjustment for a Life Fund is calculated in accordance with paragraph 44. In interpreting paragraph 44 the following applies:

(a) an amount will not be considered to be accounted for in the calculation of the licensed insurer's Solvency Margin to the extent that that amount does not increase the Insurance Risk Capital Charge, for example due to the Insurance Risk Capital Charge being based on Current Termination Values (that do not include the Repayable Amount) for a particular Related Product Group;

(b) without limiting how a licensed insurer can demonstrate that an amount has been accounted for in the calculation of the Solvency Margin, the following may be relied on to show that such amount has been so included:

i. the basis of the Insurance Risk Capital Charge for a particular Related Product Group is the Solvency Liability and, in respect of that Related Product Group, the Solvency Liability has been increased by the Repayable Amount attributable to that Related Product Group; or

ii. the basis of the Insurance Risk Capital Charge for a particular Related Product Group is the Current Termination Values, and the Current Termination Values have been increased by the Repayable Amount attributable to that Related Product Group.