

Prudential Standard GPS 110

Capital Adequacy

Objective and key requirements of this Prudential Standard

This Prudential Standard requires a general insurer or Level 2 insurance group to maintain adequate capital against the risks associated with their activities.

The ultimate responsibility for the prudent management of capital of a general insurer or Level 2 insurance group rests with its Board of directors. The Board must ensure that the general insurer or Level 2 insurance group maintains an appropriate level and quality of capital commensurate with the scale, nature and complexity of its business and risk profile, such that it is able to meet its obligations under a wide range of circumstances.

The key requirements of this Prudential Standard are that a general insurer or Level 2 insurance group must:

- have an Internal Capital Adequacy Assessment Process;
- maintain required levels of capital;
- determine its prescribed capital amount having regard to a range of risk factors that may adversely impact a general insurer or Level 2 insurance group's ability to meet its obligations. These factors include insurance risk, insurance concentration risk, asset risk, asset concentration risk and operational risk;
- comply with any supervisory adjustment to capital imposed by APRA;
- make certain public disclosures about the capital adequacy position of the general insurer or Level 2 insurance group;
- seek APRA's consent for certain planned capital reductions of the general insurer or Level 2 insurance group; and
- inform APRA of any significant, adverse changes in the general insurer or Level 2 insurance group's capital position.

Authority

1. This Prudential Standard is made under section 32 of the *Insurance Act 1973* (**the Act**).

Application

- 2. This Prudential Standard applies to each:
 - (a) **general insurer** authorised under the Act (**insurer**); and
 - (b) Level 2 insurance group as defined in *Prudential Standard GPS 001* (GPS 001).

Where a requirement applies to a Level 2 insurance group, the requirement is imposed on the **parent entity** of the Level 2 insurance group.

3. This Prudential Standard applies to insurers and Level 2 insurance groups (regulated institutions) from 1 January 2013 (effective date).

Interpretation

4. Unless otherwise defined in this Prudential Standard, expressions in bold are defined in GPS 001.

Objective

5. The **prescribed capital amount** in respect of a regulated institution is intended to be sufficient, such that if a regulated institution was to start the year with a **capital base** equal to the prescribed capital amount and losses occurred at the 99.5 per cent confidence level, then the assets remaining would be at least sufficient to provide for the central estimate of the insurance liabilities and other liabilities at the end of the year. The other liabilities to be provided for exclude those liabilities that satisfy the criteria for inclusion in the capital base.

Responsibility for capital management

- 6.5. Capital is the cornerstone of a regulated institution's financial health. It supports a regulated institution's operations by providing a buffer to absorb unanticipated losses from its activities and, in the event of such losses, enables the regulated institution to continue to meet its insurance obligations.
 - 7.6. As a consequence of the key role played by capital in the financial health of a regulated institution, the **Board of directors (Board)** of a regulated institution must ensure that the regulated institution has capital that is adequate for the scale, nature and complexity of its business and risk profile, such that it is able to meet its obligations under a wide range of circumstances.
- 8.7. In addition to the requirements in paragraph 6, the Board of the parent entity of a Level 2 insurance group must also have regard to:
 - (a) the potential for risk to compound across the group;

- (b) concentration of capital and risk within individual entities in the group;
- (c) guarantees and other commitments between entities in the group;
- (d) the capital needs of individual entities in the group;
- (e) the nature of capital held by the group, including its maturity, servicing costs and any double counting of capital within the group; and
- (f) the ability to readily transfer surplus or free capital within the group and the <u>type nature</u> of capital that may be available to individual entities from other entities in the group, if required.

Internal Capital Adequacy Assessment Process

- 9.8. A regulated institution (except regulated institutions in run-off) must have in place an **Internal Capital Adequacy Assessment Process (ICAAP)** that must:
 - (a) be adequately documented, with the documentation made available to APRA on request; and
 - (b) be approved by the Board initially, and when significant changes are made to the process.
 - 9. A regulated institution's ICAAP must be appropriate to the regulated institution's size, business mix and complexity of its operations and group structure (as applicable).
 - 10. A regulated institution that is part of a Level 2 insurance group may rely on the ICAAP of the Level 2 insurance group provided that the Board of the regulated institution is satisfied that the group ICAAP meets the criteria in paragraph 11 of this Prudential sStandard in respect of the regulated entity institution.
 - 11. The ICAAP must include at a minimum:
 - (a) adequate <u>policies</u>, <u>procedures</u>, <u>systems</u>, <u>controls</u> and <u>personnel procedures</u> to identify, measure, monitor and manage the risks arising from the regulated institution's activities on a continuous basis to ensure that capital is maintained at a level consistent with the regulated institution's risk profile and the Board's risk appetite; and the capital held against such risks;
 - (b) a strategy for ensuring adequate capital is maintained over time, including specific capital targets set out in the context of the regulated institution's risk profile, and the Board's risk appetite, and regulatory capital requirements. This includes plans for how the target levels of capital is are to be met and the means available for sourcing additional capital where required;

GPS 110 - 3

For the purposes of this paragraph, the Board of a Category C insurer refers to the senior officer outside Australia and Agent in Australia (as defined in Section 118 of the Act).

- (c) actions and procedures for monitoring the regulated institution's compliance with its <u>regulatory</u> capital requirements and <u>against</u> capital targets. <u>This</u>, includinges the setting of triggers to alert management to, and <u>specified actions to</u> avert <u>and rectify</u>, potential breaches of these requirements;
- (e)(d) stress testing and scenario analysis relating to potential risk exposures and available capital resources;
- (e) processes for reporting on the ICAAP and its outcomes to the Board and senior management of the regulated institution, and for ensuring that the ICAAP is taken into account in making business decisions; and
- (d)(f) policies to address the capital impact of material risks not covered by explicit regulatory capital requirements; and
- (e)(g) an ICAAP summary statement as defined in paragraph 12.
- 12. The ICAAP summary statement is a high level document that describes and summarises the capital assessment and management processes of the regulated institution. It must outline at a minimum the aspects of the ICAAP listed in paragraphs 11 (a) to (fet) and this paragraph—13. The ICAAP summary statement must also include:
 - (a) a statement of the objectives of the ICAAP, the expected level of financial soundness associated with the capital targets and the timeframe over which the ICAAP applies;
 - (b) a description of the key assumptions and methodologies utilised by the regulated institution in its ICAAP, including stress testing and scenario analysis;
 - (c) triggers for reviewing the ICAAP in light of changes to business operations, regulatory, economic and financial market conditions, group structure (as applicable) and other facts affecting the regulated institution's risk profile and capital resources;
 - (d) a summary of the regulated institution's policy for reviewing its ICAAP, including who is responsible for the review, details of the frequency and scope of the review, and mechanisms for reporting on the review and its outcomes to the Board and senior management;
 - (e) a description of the basis of measurement of capital used in the ICAAP, and an explanation of the differences where this basis differs from that used for regulatory capital; and
 - (a)(f) references to supporting documentation and analysis as relevant.
- 13. A regulated institution must ensure its ICAAP is subject to <u>regular and</u> robust independent review at <u>regular intervals</u> by appropriately qualified persons who are operationally independent of the conduct of capital management. The frequency and scope of the review must be appropriate to the regulated

- institution, having regard to the its size, business mix, and complexity of its operations and group structure (as applicable), and the nature and extent of any changes that have occurred or are likely to occur in its business profile or its risk appetite. In any event, the review must not be any less frequent than every three years. A review must be conducted at least every three years. The review must be sufficient to reach a view on whether the ICAAP is adequate and effective.
- 12. The regulated institution's policy for review of its ICAAP must be documented in the ICAAP summary statement, including the responsibility for the review, frequency and scope of the review, and reporting of the review to the Board and senior management.
- 14. A regulated institution must, on an annual basis, provide a report on the implementation of its ICAAP to APRA (ICAAP report). The ICAAP report must be provided to APRA within four months from the end of the financial year of the regulated institution. A copy of the ICAAP report must be provided to APRA no later than three months from the date on which the report has been prepared.

13.15. The ICAAP report must include:

- (a) detailed information on current and three-year projected capital levels relative to minimum <u>regulatory capital</u> requirements and target levels;
- (b) detailed information on the actual outcomes of applying the ICAAP over the period, relative to the planned outcomes in the previous ICAAP report (including analysis of the regulated institution's actual capital position relative to minimum capital requirements and capital targets, and actual-versus_planned capital management actions undertaken);
- (c) description of any material changes to the ICAAP since the previous ICAAP report; and
- (d) detail and outcomes of stress testing and scenario analysis used in undertaking the ICAAP;
- (e) a breakdown of capital usage over the planning horizon, as relevant, by material:
 - (i) business activity;
 - (ii) group members (as applicable);
 - (iii) geographic spread of exposures; and
 - (iv) risk types;
- (e)(f) an assessment of anticipated changes in the regulated institution's risk profile or capital management processes over the planning horizon;

- details of any review of the ICAAP since the previous ICAAP report, including any recommendations for change and how those recommendations have been, or are being, addressed; and-
- (h) references to supporting documentation and analysis, as relevant.
- 16. The ICAAP report submitted to APRA by the regulated institution must be accompanied by a declaration endorsed by the Board and signed by the CEO stating whether:
 - (a) capital management has been undertaken by the regulated institution in accordance with the ICAAP over the period and, if not, a description of, and explanation for, deviations;
 - (b) the regulated institution has assessed the capital targets contained in its ICAAP to be adequate given the size, business mix and complexity of its operations, and specifically for Level 2 insurance groups, given the location of operations of group members and the complexity of the group structure; and
 - (a)(c) the information included in the ICAAP report is accurate.

Capital base

- 14.17. In assessing the adequacy of a regulated institution's **capital base**, attention must be paid not only to the risks it is likely to face, but also to the quality of the support provided by various forms of capital. In assessing the quality of support provided by a particular form of capital, regard must be had to the extent to which it:
 - (a) provides a permanent and unrestricted commitment of funds;
 - (b) is freely available to absorb losses;
 - (c) does not impose any unavoidable servicing charges against earnings; and
 - (d) ranks behind the claims of policyholders and creditors in the event of the winding-up of the regulated institution.
- 15.18. Not all types of capital instruments meet these criteria equally. Due to the need to ensure that the capital base of a regulated institution provides adequate support for its activities, APRA imposes some restrictions on the composition of the capital base. The forms of capital deemed eligible for inclusion in the capital base, and the conditions as toof their inclusion, are specified in *Prudential Standard GPS 112 Capital Adequacy: Measurement of Capital* (GPS 112). GPS 112 defines the different categories and components of the capital base, and the restrictions on the quality of the capital that is used to meet the required level of capital for regulatory purposes.
- 16.19. A regulated institution's balance sheet may contain certain assets (such as deferred tax assets, goodwill and other intangibles) that are acceptable from an accounting perspective. However, for supervisory purposes, such assets are

either generally not available, or of questionable value, should the regulated institution encounter difficulties. A regulated institution is therefore required to make certain adjustments in determining the capital base. Details of these adjustments are provided in GPS 112.

Prudential Capital Requirement (PCR)

- 17.20. This Prudential Standard establishes a risk-based approach to measure the capital adequacy of a regulated institution. The required level of capital for regulatory purposes is referred to as the **Prudential Capital Requirement** (**PCR**). The PCR is intended to take account of the full range of risks to which a regulated institution is exposed.
- 18.21. A regulated institution must ensure that it has a capital base, at all times, in excess of its PCR.²
 - 19.22. The PCR for a regulated institution equals:
 - (a) a **prescribed capital amount** determined either:
 - (i) by applying the **Standard Method** set out in this Prudential Standard; or
 - (ii) by using an internal model developed by the regulated institution to reflect the circumstances of its business the **Internal Model-based Method (IMB Method)**; or
 - (iii) by using a combination of the methods specified in (i) or (ii) above; plus
 - (b) any **supervisory adjustment** determined by APRA under paragraph 34.
- 20.23. Regardless of the outcome of the method used for determining the prescribed capital amount, a regulated institution's prescribed capital amount cannot be:
 - (a) in the case of a regulated institution other than a **Category D insurer** or **Category E insurer**, less than \$5 million; and
 - (b) in the case of a Category D insurer or Category E insurer, less than \$2 million.

Standard Method

- 21.24. For regulated institutions using the Standard Method, the prescribed capital amount is determined as:
 - (a) the **Insurance Risk Charge**; plus
 - (b) the **Insurance Concentration Risk Charge**; plus

However, this does not apply to Category C insurers: refer to paragraphs 37 to 39.

- (c) the Asset Risk Charge; plus
- (d) the Asset Concentration Risk Charge; plus
- (e) the **Operational Risk Charge**; less
- <u>(f)</u> an aggregation benefit.
- 25. The prescribed capital amount in respect of a regulated institution determined under the Standard Method is intended to be sufficient, such that if a regulated institution was to start the year with a capital base equal to the prescribed capital amount and losses occurred at the 99.5 per cent confidence level, then the assets remaining would be at least sufficient to provide for the central estimate of the insurance liabilities and other liabilities at the end of the year. The other liabilities to be provided for exclude those liabilities that satisfy the criteria for inclusion in the capital base.

Insurance Risk Charge

22.26. The Insurance Risk Charge relates to the risk that the actual—value of net insurance liabilities is greater than the value—determined in accordance with Prudential Standard GPS 320 Actuarial and Related Matters (GPS 320). is insufficient to cover associated net claim payments and associated claim expenses as they fall due. The method for determining the Insurance Risk Charge is set out in Prudential Standard GPS 115 Capital Adequacy: Insurance Risk Charge.

Insurance Concentration Risk Charge

23.27. The Insurance Concentration Risk Charge for a regulated institution represents the net financial impact on the regulated institution from either a single large event, or a series of smaller events, within a one year period. The determination of the net financial impact is based on the formulae and requirements set out in *Prudential Standard GPS 116 Capital Adequacy: Insurance Concentration Risk Charge* (GPS 116). For lenders mortgage insurers, additional requirements for calculating the Insurance Concentration Risk Charge are also set out in GPS 116.

Asset Risk Charge

24.28. The Asset Risk Charge relates to the risk of adverse movements in the value of a regulated institution's on-balance sheet and off-balance sheet exposures. The method for determining the Asset Risk Charge is set out in *Prudential Standard GPS 114 Capital Adequacy: Asset Risk Charge* (**GPS 114**). Asset risk can be derived from a number of sources, including market risk and credit risk. For the purposes of this Prudential Standard and GPS 114, assets and exposures must be valued in accordance with the relevant reporting standards made under the *Financial Sector* (*Collection of Data*) *Act 2001* (**Collection of Data Act**)³.

For the purpose of calculating the prescribed capital amount of a Category C insurer, the Asset Risk Charge is to be applied only to the assets in Australia of the insurer consistently with

Asset Concentration Risk Charge

25.29. The Asset Concentration Risk Charge relates to the risk resulting from investment concentrations in individual assets or large exposures to individual counterparties or groups of related counterparties. The method for determining Asset Concentration Risk Charge is set out in *Prudential Standard GPS 117 Capital Adequacy: Asset Concentration Risk Charge*.

Operational Risk Charge

26.30. The Operational Risk Charge relates to the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. The method for determining the Operational Risk Charge for a regulated institution is set out in *Prudential Standard GPS 118 Capital Adequacy: Operational Risk Charge*.

Aggregation benefit

- 27.31. The aggregation benefit makes an explicit allowance for diversification between asset risk and the sum of insurance risk and insurance concentration risk in the calculation of the prescribed capital amount.
 - 28.32. The aggregation benefit formula is:

Aggregation benefit =
$$(A + I) - \sqrt{A^2 + I^2 + 2 \times correlation \times A \times I}$$

where:

- (a) 'A' is the Asset Risk Charge;
- (b) 'I' is the sum of the Insurance Risk Charge and Insurance Concentration Risk Charge; and
- (c) 'correlation' is:
 - (i) 20 per cent for all insurers except lenders mortgage insurers; or
 - (ii) 50 per cent for lenders mortgage insurers; or
 - (iii) the weighted average of the factors in sub-paragraphs (i) and (ii) for Level 2 insurance groups. The weighting of the factors must be by the size of the insurance risk charges for the non-lenders mortgage insurance and lenders mortgage insurance business, respectively.
- 29.33. The Asset Concentration Risk Charge and the Operational Risk Charge are not included in the calculation of the aggregation benefit.

APRA may adjust the Standard Method for calculating the prescribed capital amount

30.34. If APRA is of the view that the Standard Method for calculating the prescribed capital amount does not produce an appropriate outcome in respect of a regulated institution, or a regulated institution has used inappropriate judgement or estimation in calculating the prescribed capital amount, APRA may, in writing, adjust any aspect of the prescribed capital amount calculation for that regulated institution. If such an adjustment is applied to a regulated institution under this paragraph, the regulated institution must comply with the adjusted calculation.

Internal Model-based Method

31.35. A regulated institution may use its own internal capital measurement model to calculate the prescribed capital amount. Use of the IMB Method is conditional on APRA's approval. APRA approval requires a regulated institution to satisfy a range of criteria, as set out in *Prudential Standard GPS 113 Capital Adequacy: Internal Model-based Method* (GPS 113). Regulated institutions that do not use an internal model that meets the criteria specified in GPS 113 must use the Standard Method described in this Prudential Standard.

Supervisory adjustment to capital

32.36. APRA recognises that any measure of the adequacy of a regulated institution's capital involves judgement and estimation, including quantification of risks that may be difficult to quantify. If APRA is of the view that there are prudential reasons for doing so, APRA may, in writing, determine a supervisory adjustment to be included in the PCR⁵ of the regulated institution.

Category C insurers

33.37. By the nature of its Australian balance sheet, a Category C insurer will not typically have capital instruments of the type specified in GPS 112. Category C insurers are nevertheless required to meet a variant of the PCR. Specifically, Category C insurers are required to maintain assets in Australia⁶ that exceed their liabilities in Australia (adjusted for any surplus or deficit of technical provisions as required by GPS 320) (Net assets in Australia) by an amount that is greater than the PCR determined by this Prudential Standard.

Approval will take the form of a modification to this Prudential Standard pursuant to subsection 32(3A) of the Act, which permits APRA to modify a prudential standard to replace particular requirements in the standard with an in-house capital adequacy model.

Under subsection 32(3D) of the Act, prudential standards may include a power for APRA to approve, impose, adjust or exclude prudential requirements in the prudential standard in relation to a particular regulated institution.

An asset will not be counted as an asset in Australia for the purpose of this paragraph if Prudential Standard GPS 120 Assets in Australia excludes it from being an asset in Australia for the purpose of paragraph 28(a) of the Act, or it is not otherwise an asset in Australia within the meaning of paragraph 28(a) of the Act.

- 34.38. References to the capital base of a regulated institution elsewhere in this Prudential Standard are, where they are being applied to a Category C insurer, to be read as referring to 'net assets in Australia' of that insurer.
 - 35.39. For further detail regarding the treatment of Category C insurers, refer to *Prudential Standard GPS 120 Assets in Australia*.

Disclosure

- 36.40. To improve the understanding of its capital adequacy position by policyholders and other market participants, a regulated institution must publish, at least annually, the following items:
 - (a) the amount of its **Common Equity Tier 1 Capital**;
 - (b) the aggregate amount of any regulatory adjustments applied in the calculation of its Common Equity Tier 1 Capital;
 - (c) the amount of its **Additional Tier 1 Capital**;
 - (d) the aggregate amount of any regulatory adjustments applied in the calculation of its Additional Tier 1 Capital;
 - (e) the amount of its **Tier 2 Capital**;
 - (f) the aggregate amount of any regulatory adjustments applied in the calculation of its Tier 2 Capital;
 - (g) its total capital base derived from the items (a) to (f);
 - (h) its prescribed capital amount;
 - (i) the components of its prescribed capital amount; and
 - (j) its capital adequacy multiple (item (g) divided by item (h)).
- 37.41. A regulated institution must publish the information specified in paragraph 40 so that it is readily accessible to both policyholders and other market participants.
- 38.42. A regulated institution must not disclose any supervisory adjustment included in the PCR.
- 39.43. Compliance with paragraphs 40 and 41 by Level 2 insurance groups does not replace the obligation of insurers to comply with the disclosure requirements of this Prudential Standard. However, the parent entity of the Level 2 insurance

As provided for in paragraph 38, 'net assets in Australia' is the amount of assets in Australia that exceeds the liabilities in Australia (adjusted for any surplus or deficit of technical provisions relative to those required by GPS 320).

This item must separately identify any transition amount approved by APRA under the capital standards.

group may make the disclosures required by this Prudential Standard on behalf of each insurer within the group.

Reductions in capital base

- 40.44. A regulated institution must obtain APRA's written consent prior to making any planned reduction in its capital base. APRA's consent may be subject to conditions.
- 41.45. A reduction in a regulated institution's capital base includes, but is not limited to:
 - (a) a share buyback;
 - (b) the redemption, repurchase or early repayment of any qualifying Additional Tier 1 and Tier 2 Capital instruments issued by the regulated institution;
 - (c) trading in the regulated institution's own shares or capital instruments outside of any arrangement agreed upon with APRA in accordance with GPS 112;
 - (d) payment of dividends on paid-up ordinary shares that exceed a regulated institution's after-tax earnings (as reported to APRA in the regulated institution's **statutory accounts**), after <u>taking into accountineluding</u> any payments on more senior capital instruments, in the financial year to which they relate; and
 - (e) dividend or interest payments (whether whole or partial) on Additional Tier 1 or Tier 2 Capital that exceed a regulated institution's after-tax earnings (as reported to APRA in the regulated institution's statutory accounts), including any payments made on more senior capital instruments, calculated before any such payments are applied in the financial year¹⁰ to which they relate.

For insurers, 'financial year' refers to the last four quarters for which the insurer was required to submit quarterly returns¹¹ to APRA preceding the date of the proposed payment of interest or dividend.

For Level 2 insurance groups, 'financial year' refers to the last two six monthly periods for which the Level 2 insurance group was required to submit semi-annual returns¹² to APRA preceding the date of the proposed payment of interest or dividend.

For avoidance of doubt, the definition of 'financial year' in GPS 001 does not apply for the purposes of this paragraph.

As defined in GPS 112.

⁹ As defined in GPS 112.

In accordance with reporting standards made under the Collection of Data Act.

In accordance with reporting standards made under the Collection of Data Act.

42.46. A regulated institution proposing a capital reduction must provide APRA with an updated ICAAP report incorporating the proposed reduction. The regulated institution must satisfy APRA that its capital base, after the proposed reduction, will remain adequate for its future needs.

Reductions in capital for run-off insurers

- 43.47. This paragraph applies to **run-off insurers** planning a reduction in capital. The insurer must submit to APRA:
 - (a) documents clearly setting out and evidencing its current financial position; and
 - (b) documents setting out the projected capital position with insurance liabilities valued in accordance with the methodology set out in GPS 320, except that the valuation must demonstrate that the tangible assets of the insurer, after the proposed capital reduction, are sufficient to cover its insurance liabilities to a 99.5 per cent level of sufficiency, plus any other liabilities, as calculated by its **Appointed Actuary**. 14

Category C insurers

- 44.48. Any repatriation of assets in Australia, whether direct or indirect, by a Category C insurer that will result in a reduction in its net assets in Australia must be subject to APRA's prior consent consistent with the requirements of paragraphs 44 to 46. 15
- 45.49. Paragraph 48 does not apply to any repatriation of assets in Australia out of the current year profits of a Category C insurer where the assets being repatriated to the head office of the Category C insurer or any other branch or related entity¹⁶ of the Category C insurer do not exceed the Category C insurer's after-tax earnings in the year to which they relate (i.e. a repatriation of assets not wholly or partly funded from retained earnings).

Materiality

46.50. A regulated institution must take into account materiality when calculating its capital base and prescribed capital amount. Particular values or components are considered material to the overall result of a calculation if misstating or omitting them would produce results likely to be misleading to the users of the information.

As defined in GPS 114.

Measured in accordance with the Collection of Data Act.

Where an insurer does not have an Appointed Actuary, the insurer must ensure that the actuary engaged to provide this valuation meets the fit and proper criteria applicable to an Appointed Actuary under *Prudential Standard GPS 520 Fit and Proper*.

For example, the head office of a Category C insurer might cause a liability of another offshore branch to become a liability of the Category C insurer in Australia. If this change is unfunded, there will effectively be a weakening of the net assets in Australia of the Category C insurer but not an actual direct repatriation of assets. APRA will view this as amounting to an indirect repatriation of assets from Australia.

Notification requirements

- 47.51. A regulated institution must inform APRA as soon as practicable of:
 - (a) any breach or prospective breach of its PCR;
 - (b) any significant departure from its ICAAP; or
 - (c) any significant material adverse changes in the capital base or PCR.

The notice must include any remedial actions taken or planned to be taken to address the situation, and the timing of these actions.

Adjustments and exclusions

48.52. APRA may, by notice in writing to a regulated institution, adjust or exclude a specific <u>prudential</u> requirement in this Prudential Standard in relation to that regulated institution.

Transition

53. On application by a regulated institution, APRA may grant transitional relief from the obligation for the regulated institution to comply with any requirement in this Prudential Standard up until 31 December 2014. Any relief granted by APRA under this paragraph will have effect until no later than 31 December 2014.

Determinations made under previous Prudential Standards

- 54. An exercise of APRA's discretion under a previous version of this Prudential Standard does not continue to have effect under this Prudential Standard. For the purposes of this paragraph, 'a previous version of this Prudential Standard' includes:
 - (a) Prudential Standard GPS 110 Capital Adequacy (GPS 110) made on 18 June 2010;
 - (b) GPS 110 made on 23 June 2008;
 - (c) GPS 110 made on 25 September 2006;
 - (d) Prudential Standard GPS 111 Capital Adequacy: Level 2 Insurance Groups (GPS 111) made on 23 September 2011; and
 - (e) GPS 111 made on 17 December 2008.



Prudential Standard GPS 114

Capital Adequacy: Asset Risk Charge

Objective and key requirements of this Prudential Standard

This Prudential Standard requires a general insurer or Level 2 insurance group to maintain adequate capital against the asset risks associated with their activities.

The ultimate responsibility for the prudent management of capital of a general insurer or Level 2 insurance group rests with its Board of directors. The Board must ensure the general insurer or Level 2 insurance group maintains an appropriate level and quality of capital commensurate with the scale, nature and complexity of its business and risk profile, such that it is able to meet its obligations under a wide range of circumstances.

The Asset Risk Charge is the minimum amount of capital required to be held against asset risks. The Asset Risk Charge relates to the risk of adverse movements in the value of a general insurer's or Level 2 insurance group's on-balance sheet and off-balance sheet exposures. Asset risk can be derived from a number of sources, including market risk and credit risk.

This Prudential Standard sets out the method for calculating the Asset Risk Charge. This charge is one of the components of the Standard Method for calculating the prescribed capital amount for general insurers and Level 2 insurance groups.

Table of Contents

<u>Authority</u>	3
Application	3
Level 2 insurance groups	
Interpretation	3
Asset Risk Charge	3
Asset Risk Charge calculation	3
Assets and liabilities to be stressed	
Real interest rates stress	
Expected inflation stress	7
Currency stress	
Equity stress	8
Property stress	
Credit spreads stress	
Default stress	
Aggregation formula	13
Adjustments and exclusions	
Transition	
Attachments Attachment A – Level 2 insurance groups	16
Attachment B – Off-balance sheet exposures	18
Attachment C - Treatment of collateral and gurantees as risk mitig	ants
	21
Attachment D – Extended Licensed Entity (ELE)	23

Authority

1. This Prudential Standard is made under section 32 of the *Insurance Act 1973* (**the Act**).

Application

- 2. This Prudential Standard applies to each:
 - (a) **general insurer** authorised under the Act (**insurer**); and
 - (b) **Level 2 insurance group** as defined in *Prudential Standard GPS 001 Definitions* (**GPS 001**).

Where a requirement is made in respect of a Level 2 insurance group, the requirement is imposed on the **parent entity** of the Level 2 insurance group.

3. This Prudential Standard applies to insurers and Level 2 insurance groups (regulated institutions) from 1 January 2013 (effective date).

Level 2 insurance groups

4. Certain adjustments to the methodologies and calculations in this Prudential Standard apply to Level 2 insurance groups. These adjustments are set out in Attachment A.

Interpretation

5. Unless otherwise defined in this Prudential Standard, expressions in bold are defined in GPS 001.

Asset Risk Charge

- 6. This Prudential Standard sets out the method for calculating the **Asset Risk** Charge for a regulated institution using the **Standard Method** to determine its prescribed capital amount.
- 7. The Asset Risk Charge relates to the risk of an adverse movement in a regulated institution's **capital base** due to credit or market risks. Both assets and liabilities may be affected. Off-balance sheet exposures may also be affected.

Asset Risk Charge calculation

- 8. The Asset Risk Charge is calculated as:
 - (a) the **aggregated risk charge component** determined in accordance with paragraph 9; less
 - (b) any **tax benefits** determined in accordance with paragraphs 12 to 14.

Aggregated risk charge components

9. A regulated institution must calculate the **risk charge components**, as defined in paragraph 10, by considering the impact on the capital base of the regulated institution of a range of stresses. These risk charge components are then aggregated using the formula set out in paragraphs 73 to 75, which allows for the likelihood of the stress tests occurring simultaneously. The result of applying the formula is defined as the aggregated risk charge component.

Risk charge components

- 10. The risk charge components are calculated by determining the fall in the capital base of the regulated institution of in seven stress tests:
 - (a) **real interest rates** determined in accordance with paragraphs 27 to 32;
 - (b) **expected inflation** determined in accordance with paragraphs 33 to 36;
 - (c) **currency** determined in accordance with paragraphs 37 to 39;
 - (d) **equity** determined in accordance with paragraphs 40 to 43;
 - (e) **property** determined in accordance with paragraphs 44 to 48;
 - (f) **credit spreads** determined in accordance with paragraphs 49 to 60; and
 - (g) **default** determined in accordance with paragraphs 61 to 72.

These stresses are applied either directly to asset values or by way of changes to economic variables which in turn affect the value of both assets and liabilities. Some assets and liabilities may be impacted by more than one of the seven stress tests and will need to be considered in each relevant stress test. For the stresses in (a), (b) and (c), the impact on the capital base will be two separate amounts and these need to be included in the aggregation formula.

11. For the purposes of paragraph 10, no risk charge component can be negative. Therefore, if there is no fall in the capital base of the regulated institution due to the application of the stresses, the risk charge component is assumed to be zero.

Tax benefits

12. The risk charge component for each stress test must be calculated so that no value is attributed to any tax benefits that may result from the stress test. However, tax benefits may be deducted from the aggregated risk charge components.

13. The tax benefits deducted from the aggregated risk charge component are the tax benefits resulting from the stress tests, reduced to allow for the reduction in Asset Risk Charge due to the aggregation formula. The tax benefits are therefore calculated as:

tax benefits from stress tests $\times \frac{\text{aggregated risk charge component}}{\text{sum of risk charge components}}$

14. The tax benefits from paragraph 13 must be recognised as a deduction from the asset risk charge only if tax legislation allows them to be absorbed by the existing deferred tax liabilities. For this purpose, the deferred tax liabilities are those liabilities (if any) that remain after netting off the deferred tax assets and liabilities in the calculation of the deductions from Tier 1 Capital in *Prudential Standard GPS 112 Capital Adequacy: Measurement of Capital* (GPS 112).

Assets and liabilities to be stressed

- 15. In determining each risk charge component, a regulated institution must include the effective exposure of the regulated institution's assets and liabilities to each of the risks if the exposure is impacted by the stress test. Some assets and liabilities may have effective exposures to multiple risks.
- 15.16. Investment income receivables must be included with the asset that generated the income and then subject to the appropriate stress tests.
- 16.17. The following assets and liabilities must not be stressed:
 - (a) assets whose value must be deducted from the capital base (e.g. goodwill in subsidiaries) in GPS 112; and
 - (b) any part of assets in excess of the asset concentration limits specified in *Prudential Standard GPS 117 Capital Adequacy: Asset Concentration Risk Charge*.
- 17.18. In addition to paragraph 17, a regulated institution that is an employer sponsor of a defined benefit superannuation fund does not need to reassess any deficit in the fund as a result of the seven stress tests, unless the regulated institution has provided a guarantee in relation to the benefits.
- 18.19. The stress tests must be applied to the **fair value** of each of the regulated institution's assets. The risk charge component for each asset is the value reported in the regulated institution's **statutory accounts** less the stressed value of the asset.

Off-balance sheet exposures

19.20. A regulated institution can be exposed to various asset risks through transactions or dealings other than those reflected on its balance sheet. Each of the stress tests must include any changes to the regulated institution's onbalance sheet assets and liabilities that would result from application of the stresses to the regulated institution's off-balance sheet exposures. A regulated

institution must use effective exposure for any off-balance sheet exposures of the regulated institution. Detailed information on the treatment of off-balance sheet exposures is set out in Attachment B.

Collateral and guarantees

20.21. The impact of applying the asset risk stresses may be reduced where the regulated institution holds certain types of collateral against an asset, or where the asset has been guaranteed. Detailed information on the eligibility of collateral and guarantees is set out in Attachment C.

Treatment of specific asset classes

- 22. Hybrid assets such as convertible notes must be split into their interest-bearing and equity/option exposures. A regulated institution must consider the changes in value of the two exposures separately for each of the asset risk stresses.
- 21.23. For assets of a regulated institution held under a trust or in a controlled investment entity, the regulated institution may calculate the Asset Risk Charge by looking-through to the assets and liabilities of the trust. Alternatively, the investment may be treated as an equity asset (a listed equity asset if the investment is listed, and an unlisted equity asset if the investment is unlisted). Look-through must be used if the trust or controlled investment entity is both unlisted and geared.
- 22.24. A security which is the subject of a repurchase or securities lending agreement must be treated as if it were still owned by the lender of the security. Any counterparty risk that arises from the transaction must be recognised in the default stress.
- 23.25. Term deposits issued by an <u>authorised deposit-taking institution (ADI)</u> must be treated in the same way as a corporate bond issued by the ADI. If the ADI guarantees a minimum amount on early redemption, this minimum amount can be recognised as a floor to the stressed value of the asset in each of the real interest rates and expected inflation stresses. In the credit spreads stress, the minimum amount can be recognised as a floor to the stressed value, but it must be reduced by multiplying it by (1 default factor).

Extended Licence Entity

24.26. In certain circumstances, a regulated institution may choose to hold assets in a **Special Purpose Vehicle (SPV)** or other related entity, rather than on its own balance sheet. Detailed information on the treatment of an Extended Licence Entity is set out in Attachment D.

For this purpose, an investment entity is an entity where the sole purpose of the entity is investment activities.

Real interest rates stress

- 25.27. This stress measures the impact on the capital base of a regulated institution from changes in real interest rates.
- 26.28. Real interest rates are the portion of the nominal risk-free interest rates that remain after deducting expected CPI inflation.
- 27.29. All assets and liabilities whose values are dependent on real or nominal interest rates must be revalued using the stressed real or nominal rates.
- 28.30. The stress adjustments to real interest rates are determined by multiplying the nominal risk-free interest rates by 0.25 (upward stress) or by -0.20 (downward stress). The stress adjustments must be added to the nominal risk-free interest rates. The stress adjustments must also be added to real yields if these are used explicitly in the valuation of assets or liabilities (e.g. inflation indexed bonds).
 - 29.31. The maximum stress adjustment is 200 basis points in either direction.
 - 30.32. The regulated institution must calculate the impact on the capital base of an upwards movement and a downwards movement in real interest rates. The impact of each calculation cannot be less than zero. Both impact calculations must be used for the purposes of the aggregation formula in paragraph 73.

Expected inflation stress

- 31.33. This stress measures the impact on the capital base of changes to expected Consumer Price Index (CPI) inflation rates. The expected inflation stress also affects nominal interest rates. The expected inflation stress does not apply to assets that are affected by the property or equity stresses.
 - 32.34. In each scenario, assets and liabilities whose values are dependent on expected inflation or nominal interest rates must be revalued using the stressed expected inflation or nominal interest rates.
 - 33.35. The stress adjustments to expected inflation rates are an increase of 125 basis points and a decrease of 100 basis points. The stress adjustments must be added to the nominal risk-free interest rates. The stress adjustments must also be added to any explicit expected inflation rates used in the valuation of assets or liabilities.
- 34.36. The regulated institution must calculate the impact on the capital base of an upward movement and downward movement in expected inflation or nominal interest rates. The impact of each calculation cannot be less than zero. Both impact calculations must be used for the purposes of the aggregation formula in paragraph 73.

Currency stress

35.37. This stress measures the impact on the capital base of changes in foreign currency exchange rates.

- 36.38. The regulated institution must calculate the impact on the capital base of both an increase and a decrease of 25 per cent in the value of the Australian dollar against all foreign currencies. In each of these scenarios, the Australian dollar must be assumed to move in the same direction against all foreign currencies. The impact of each calculation cannot be less than zero. Both impact calculations must be used for the purposes of the aggregation formula in paragraph 73.
 - 37.39. An increase in the capital base arising from a movement of the Australian dollar against one foreign currency cannot be used as an offset to reductions in the capital base arising from the movement of the Australian dollar against other foreign currencies.

Equity stress

- 38.40. This stress measures the impact on the capital base of a fall in equity and other asset values. This stress applies to both listed and unlisted equity assets and to any other assets that are not considered in any of the other asset risk stresses. This stress also includes an increase to equity volatility. The volatility stress will affect assets whose value is affected by movements in equity volatility (e.g. equity derivatives).
- 39.41. For listed equities, the fall in value is to be determined by increasing the dividend yield on the ASX 200 index at the reporting date by 2.5 per cent. The same proportionate fall in value must be applied to both Australian and overseas listed equities.
 - 40.42. For unlisted equities and other assets, the fall in value is to be determined by increasing the dividend yield on the ASX 200 index at the reporting date by three per cent. The same proportionate fall in value must be applied to all unlisted equities and other assets. The ASX 200 dividend yield must be determined using dividends for the 12 months prior to the reporting date and asset values at the reporting date.
 - 41.43. For assets whose value is affected by movements in equity volatility, an addition of 15 per cent must be made to the forward-looking equity volatility parameter for all durations.

Property stress

- 42.44. This stress measures the impact on the capital base of changes in property and infrastructure asset values.
- 43.45. The fall in value of the assets must be determined by increasing the rental yield for property assets or earnings yield for infrastructure assets by 2.75 per cent
- 44.46. For property assets, the rental yields are to be based on the most recent leases in force and are determined net of expenses.
- 45.47. For infrastructure assets, the yields to be used are the earnings yields before tax.

46.48. The rental yields and fall in value can be determined separately for each asset, or on a portfolio basis.

Credit spreads stress

- 47.49. This stress measures the impact on the capital base of an increase in credit spreads and the risk of default.
- 48.50. This stress applies to interest bearing assets, including cash deposits and floating rate assets. Credit derivatives and zero-coupon instruments such as bank bills must also be included.
- 51. The stressed value of an asset must be determined by adding the spread specified in the table below to the current yield on the asset and then multiplying the reduced value of the asset by (1 default factor). The credit spreads and default factors depend on the **counterparty grade** and the nature of the asset:

Table 1: Credit spreads and default factors

Counterparty grade	Default (%)	Bonds ² spread (%)	Structured/ securitised spread (%)	Re-securitised spread (%)
1 (government)	0.0	0.0	0.0	0.0
1 (other)	0.2	0.6	1.0	1.8
2	0.6	0.8	1.4	2.4
3	1.2	1.2	2.0	3.2
4	3.0	1.6	2.5	4.0
5	6.0	2.0	3.0	5.0
6	10.0	2.5	3.5	6.0
7	16.0	3.0	4.5	7.5

49.52. A securitised/structured asset is an asset that provides an exposure to a pool or portfolio of assets or risks. This is typically in the form of a tranched exposure and includes credit related securitisation exposures and insurance linked securities. Examples of these assets include Residential Mortgage Backed Securities (RMBS), Asset-backed Securities (ABS) and Catastrophe Bonds. A covered bond issued by an ADI must not be treated as a securitised/structured asset.

² and other non-securitised assets.

- 53. An investment that provides Eexposures to an untranched pools of multiple reference entities, assets or risks must be treated:
 - (a) on a 'look through' basis; or
 - (b) as an equity asset (applying the equity stress instead of the credit spreads stress); or
 - (a)(c). A regulated institution may apply to APRA to treat these exposures as a securitised asset using the counterparty grade external rating of the untranched pool or the weighted average rating of the constituents.
- 50.54. Credit wrapped bonds must be treated as a securitised asset if the external rating of the bond makes some allowance for the structural protection offered by the credit wrap. Otherwise the bond must be treated as a bond with no credit wrap.
- 51.55. A re-securitisation exposure is a securitisation exposure in which the risk associated with an underlying pool of exposures is tranched and at least one of the underlying exposures is a securitisation exposure. In addition, an exposure to one or more re-securitisation exposures is a re-securitisation exposure.
- 52.56. For floating rate assets, the increase in yield must be assumed to apply for the period until a regulated institution has the contractual right to redeem the asset at face value. For at-call floating rate assets, only the default factor must be applied. For floating rate assets that are not immediately redeemable, both the credit spread and default factors must be applied.
- 53.57. For fixed rate assets where the regulated institution has a contractual right to early redemption of the asset, the stressed value of the asset is subject to a minimum of the guaranteed redemption value multiplied by (1 default factor).
- 54.58. Unsecured loans that have a 100 per cent charge applied in the default stress in accordance with paragraph 67 must be assumed to be unaffected by the credit spreads stress.
- 55.59. The 'government' category applies to assets guaranteed by the Commonwealth Government and assets guaranteed by foreign governments that have a counterparty grade of 1 and are denominated in the official or national currency of the guarantor.
 - <u>60.</u> Assets guaranteed by an Australian state or territory government may be rated up one grade. <u>For example, Aassets</u> with counterparty grade 1 can be treated as grade 1 (government) and assets with counterparty grade 2 can be treated as grade 1 (other).

Default stress

56.61. This stress applies to reinsurance assets, over the counter derivatives, unpaid premiums, and all other credit or counterparty exposures that have not been affected by the credit spreads stress.

- 57.62. This stress includes the risk of counterparty default. A regulated institution must determine risk charges for the default stress for the risk of counterparty default on exposures that include (but are not limited to) reinsurance assets, unpaid premiums, futures and options, swaps, hedges, warrants, forward rate and repurchase agreements.
 - 63. The default factors are specified in the following table. These factors apply to all assets affected by this stress, with the exception of certain types of assets specified in later paragraphs in this section.

Table 2: Default factors by counterparty grade

Counterparty grade	Default factor (%)		
1 (government)	0		
1 (other)	2		
2	2		
3	4		
4	6		
5	8		
6	12		
7	20		

- 58.64. For the purpose of the default stress, reinsurance assets are to be the central estimate of reinsurance assets as measured in accordance with *Prudential Standard GPS 320 Actuarial and Related Matters* (**GPS 320**), For other assets, the default factor must be applied to the amount of loss that would be incurred if the counterparty defaulted and no recovery was made.
- 59.65. For unpaid premiums the factors are 4 per cent for premiums due less than 6 months previously and 8 per cent for other premiums due.
- 60.66. For unclosed business a 4 per cent factor applies. Unclosed business is business that has been accepted by the regulated institution but for which there is insufficient information available to report an exact amount of premium.
- 61.67. The following types of unsecured loans have a 100 per cent default factor applied:
 - (a) Loans to directors of the regulated institution, or their spouses;
 - (b) Loans to directors of related bodies corporate, or their spouses;
 - (c) Loans to a parent or related company that are not on commercial terms; and
 - (d) Loans to employees exceeding \$1,000.

62.68. Assets guaranteed by an Australian state or territory government may be rated up one grade. For example, Aassets with counterparty grade 1 can be treated as grade 1 (government) and assets with counterparty grade 2 can be treated as grade 1 (other).

Reinsurance recoverables due from non-APRA-authorised reinsurers

69. Reinsurance recoverables from non-APRA-authorised reinsurers are subject to the default stress factors that are higher than would otherwise apply under paragraph 63. These are set out in Table 3 below.

<u>Table 3: Default factors by counterparty grade for non-APRA-authorised</u> reinsurance recoverables

Counterparty grade	Default factor (%)
1 (government)	<u>2</u>
<u>1 (other)</u>	<u>2</u>
<u>2</u>	<u>4</u>
<u>3</u>	<u>6</u>
<u>4</u>	<u>8</u>
<u>5</u>	<u>12</u>
<u>6</u>	<u>20</u>
7	<u>20</u>

such that the factors in paragraph 61 are stepped down a grade (e.g. for a grade 4 non APRA authorised reinsurer the factor used would be that applying for a grade 5 APRA-authorised reinsurer).

63.70. The default factors for reinsurance recoverables from non-APRA-authorised reinsurers arising under reinsurance contracts incepting on or after 31 December 2008 are as specified in Table 4 below apply (in replacement of those specified in Table 2 in paragraph 63) to each reinsurance recoverable on and from the second annual balance date after the event giving rise to the reinsurance recoverable occurred.³ This treatment applies only to the extent that the reinsurance recoverables are not supported by collateral, a guarantee or a letter of credit as specified in Attachment C of this Prudential Standard.⁴

For a claims made policy, the reference to "event" is to the date a claim notification was made.

For the avoidance of doubt, the default factors specified in paragraph 70 apply to the amount of relevant reinsurance recoverables that exceeds the amount of available collateral, guarantee or letter of credit.

Table <u>4: Default factors for reinsurance recoveries from non-APRA</u> authorised reinsurers on and from the second balance date

Counterparty grade	Default factor (%)	
1	20	
2	40	
3	60	
4	100	
5	100	
6	100	
7	100	

- 64.71. A default factor of 100 per cent applies to a reinsurance recoverable due from a non-APRA-authorised reinsurer if:
 - a) the recoverable has become a receivable (i.e. it is due and payable); and
 - b) the receivable is overdue for more than six months since a request for payment has been made to the reinsurer; and
 - c) there is no formal dispute between the insurer and reinsurer in relation to that receivable.⁵
- 65.72. For the purposes of determining the amount of a reinsurance recoverable, if there is an offsetting arrangement between the regulated institution and the reinsurer that results in premium being withheld by the insurer in lieu of claim payments, the withholding of that premium is taken to be payment to the extent any claims payments are overdue. However, if there is a requirement for offsets to be approved by the reinsurer the date of the offset request is taken to be the date that approval is given.

Aggregation formula

66.73. The aggregated risk charge component is calculated as:

The aggregated risk charge component is calculated as:
$$A_{default} + \sqrt{\sum_{x,y} Max(0, Corr_{x,y}.A_x.A_y.sign(x).sign(y))}$$

where

(a) A_x is the risk charge component for asset risk stress x;

Any dispute between the insurer and reinsurer in relation to a receivable arising from a reinsurance recoverable would have been taken into account in the valuation processes provided for under GPS 320.

- (b) A_{ν} is the risk charge component for asset risk stress y;
- (c) $\sum_{x,y}$ is the sum over all combinations of asset risk stresses, excluding the default stress;
- (d) $Corr_{x,y}$ is the correlation between asset risk stresses x and y;
- (e) sign(x) is 1 for the equity, property and credit spreads stresses. For the real interest rates and expected inflation stresses, sign(x) is 1 if the stress is a decrease in rates, otherwise it is -1. For the currency stress, sign(x) is 1 if the stress is a depreciation of the Australian dollar against foreign currencies, otherwise it is -1; and
- (f) sign(y) is defined in the same way as sign(x).

74. The correlation matrix is:

Table 5: Asset Risk Charge correlation matrix

	RIR	INF	CUR	EQY	PROP	CSP
RIR	1	0.2	0.2	0.2	0.2	0.2
INF	0.2	1	0.2	0.4	0.4	0.2
CUR	0.2	0.2	1	0.6	0.2	0.4
EQY	0.2	0.4	0.6	1	0.4	0.8
PROP	0.2	0.4	0.2	0.4	1	0.4
CSP	0.2	0.2	0.4	0.8	0.4	1

67.75. The real interest rates, expected inflation and currency stresses apply in two directions. The aggregation needs to be performed twice for each of these stresses if both stresses produce a non-zero risk charge component, with the larger of the aggregates chosen. If two of the bidirectional stresses have a non-zero risk charge component for stresses in both directions, the aggregation will need to be performed four times — once for each combination of stresses. If all three of the bidirectional stresses have a non-zero risk charge component for stresses in both directions, the aggregation will need to be performed eight times.

Adjustments and exclusions

68.76. APRA may, by notice in writing to a regulated institution, adjust or exclude a specific requirement in this Prudential Standard in relation to that regulated institution.

Transition

69.77. On application by a regulated institution, APRA may grant transitional relief from the obligation for the regulated institution to comply with any requirement in this Prudential Standard up until 31 December 2014. Any relief granted by APRA under this paragraph will have effect until no later than 31 December 2014.

Attachment A

Level 2 insurance groups

1. The following adjustments to the methodologies and calculations in the main body of this Prudential Standard must be applied by the Level 2 insurance group:

Tax benefit

(a) Unlike insurers, Level 2 insurance groups can rely on tax benefits of other entities within the Level 2 insurance group. However, a Level 2 insurance group cannot recognise tax benefits whose value is contingent on the tax benefits being used by entities outside the Level 2 insurance group;

Currency stress

(b) Level 2 insurance groups must make all consolidation adjustments for intra-group arrangements before applying the currency stress outlined in the main body of the Prudential Standard;

Default stress

- (c) Level 2 insurance groups must make all consolidation adjustments for intra-group arrangements before applying the stress outlined in the main body of the Prudential Standard; and
- (d) The modification to the default stress relating to reinsurance recoverables from non-APRA-authorised reinsurers, as set out in paragraphs 69 and 70 of the main body of the Prudential Standard, does not apply to the reinsurance recoverables of the **international business** of the Level 2 insurance group. 6 and;
- (e) The modification to the default stress relating to reinsurance recoverables from non APRA authorised reinsurers, as set out in paragraph 68 of the main body of the Prudential Standard, does not apply to the reinsurance recoverables of the international business of the Level 2 insurance group⁷.
- 2. A Level 2 insurance group must consult with APRA prior to entering into a material securitisation transaction in order to reduce the Asset Risk Charge.
- 3. A Level 2 insurance group may use a best endeavours basis to determine the identification of asset or counterparty exposures for international business. The best endeavours basis must use information held by entities within the Level 2

For clarity, this means that the reinsurance recoverables from non-APRA-authorised reinsurers of entities within the Level 2 insurance group that are not insurers are not stepped down a gradesubject to the default factors in Table 3 or subject to the default factors in Table 4 of this Prudential Standard for the default stress test.

For clarity, this means that the reinsurance recoverables from non-APRA-authorised reinsurers of entities within the Level 2 insurance group that are not insurers are not stepped down a grade for the default stress test.

insurance group, or otherwise publicly available information, in a manner consistent with the group's documented credit risk management policies.

Attachment B

Off-balance sheet exposures

- 1. A regulated institution can be exposed to various asset risks through transactions or dealings other than those reflected on its balance sheet.
- 2. The principle of considering the effective exposure of the regulated institution to asset risks must be applied to any off-balance sheet exposures of the regulated institution. Changes to the capital base arising from off-balance sheet exposures must be recognised in each of the asset risk stresses.
- 3. As a general rule, a regulated institution must not be exposed to a counterparty for an unlimited amount and any exposure must be for a finite period. An exception to this rule is where a potential credit exposure results from reinsurance of an insurance contract that is required by law to be unlimited. Before a regulated institution does enter into an arrangement with a counterparty that does not have appropriate limits, it must:
 - (a) notify APRA;
 - (b) explain how this arrangement complies with its **Risk Management** Strategy; and
 - (c) explain how it will be valued for the purposes of capital adequacy calculations.

Such an exposure may cause APRA to review the regulated institution's prescribed capital amount and adjust this in accordance with paragraph 36 of *Prudential Standard GPS 110 Capital Adequacy* (**GPS 110**).

Direct credit substitutes

- 4. To the extent that a regulated institution has issued instruments of the following kind:
 - (a) guarantees (including written put options serving as guarantees);
 - (b) letters of credit; or
 - (c) any other credit substitute (other than insurance) in favour of another party,

the regulated institution is exposed to the risk of having to make payment on these instruments should a default event occur which requires the regulated institution to pay an amount under the instrument. The risk of such events occurring must be considered in the default stress. The default factors must be applied to the face value of each exposure. Where the credit substitute is supported by collateral or a guarantee, the provisions of relevant paragraphs from Attachment C may be applied.

Derivatives

- 5. Derivatives include forwards, futures, swaps, options and other similar contracts. Derivatives expose a regulated institution to the full range of investment risks, even though in many cases there may be no, or only a very small, initial outlay.
- 6. Changes to the capital base that would arise from changes in the value of derivatives (and other hedging instruments) must be included in the risk charges arising from each of the asset risk stresses.
- 7. A risk charge must be applied to the fair value of over the counter derivatives in the default stress to allow for the risk of counterparty default. This is in addition to any charges that would arise from other asset risk stresses.
- 8. A regulated institution must consult with APRA prior to entering into derivative contracts other than those over:
 - (a) equities;
 - (b) interest rates; and
 - (c) foreign exchange.

Such an exposure may cause APRA to review the regulated institution's prescribed capital amount and adjust this in accordance with paragraph 31 of GPS 110.

Surety bonds

- 9.8. A different approach to that set out in paragraph 4 of this Attachment is available for surety bonds issued by the regulated institution. The regulated institution has the choice of either:
 - (a) treating any surety bonds the insurer has issued as a type of direct credit substitute. In this case, 25 per cent of the value of the asset over which the surety has been written must be included in the assets at risk for the asset risk charge. The type of underlying asset will determine which asset risk stresses are to be applied; or
 - (b) seeking written approval from APRA to treat any surety bonds the insurer has issued as if they were an insurance risk (for the purposes of meeting the requirements of the prudential standards only). This would require the insurer to include surety bond exposures within the insurer's assessment of insurance liabilities, as determined under GPS 320, and to apply the relevant capital factors specified in *Prudential Standard GPS 115 Capital Adequacy: Insurance Risk Charge*. For the purpose of calculating net outstanding claims liabilities and net premiums liabilities (as determined under GPS 320) the regulated institution may treat any risk mitigation arrangement as if it were reinsurance. A regulated institution seeking APRA's approval for this approach would need to include with its application a written confirmation from the regulated institution's

Appointed Actuary that that person is able to appropriately measure the risk of the surety bond business within the regulated institution's insurance liabilities.

The regulated institution must use the same approach for all surety bonds issued by it, and apply that approach consistently over time.

- 10.9. For the purposes of paragraph 8 of this Attachment, a surety bond means an undertaking given by an regulated institution at the request of a person (Customer) pursuant to an agreement (Surety Agreement) between the regulated institution and the Customer made in the following circumstances:
 - (a) the Customer enters into the Surety Agreement in order to enable the Customer to meet a requirement of another agreement (Principal Agreement) between the Customer, or a person associated with the Customer, and a person other than the regulated institution (Principal);
 - (b) under the surety bond, the regulated institution undertakes to make a payment to, or perform an obligation for the benefit of, the Principal or another person nominated by the Principal (Beneficiary) in the circumstances specified in the surety bond;
 - (c) the surety bond is issued to the Principal or the Beneficiary in relation to or in connection with an obligation owed by the Customer, or a person associated with the Customer, to the Principal under the Principal Agreement being an obligation which:
 - (i) is a performance obligation or contains an element of performance on the part of the Customer, or a person associated with the Customer; and
 - (ii) does not relate solely to an obligation on the part of the Customer, or a person associated with the Customer, to pay a stipulated amount to the Principal in the event that a specified event occurs; and
 - (d) under the Surety Agreement, the Customer is liable to the regulated institution if the regulated institution makes a payment or incurs a liability to the Principal or the Beneficiary under the surety bond.

Attachment C

Treatment of collateral and guarantees as risk mitigants

- 1. The impact of applying the asset risk stress tests may be reduced where the regulated institution holds certain types of collateral against an asset, or where the asset has been guaranteed, as a means of reducing risk.
- 2. For a regulated institution where the assets in question are reinsurance recoverables due from non-APRA-authorised reinsurers, different rules regarding treatment of collateral and guarantees apply (refer to paragraphs 6 to 10 of this Attachment).

Collateral

- 3. Collateral held against an asset may be considered in place of the asset if this would reduce the asset risk charge. Where the fair value of the collateral does not cover the full value of the asset, the collateral can only replace that part of the asset that is covered by the collateral.
- 4. Collateral can be recognised in place of an asset only to the extent that it takes the form of a registered charge, registered mortgage or other legally enforceable security interest in, or over, an eligible collateral item. Eligible collateral items are cash, government securities, or debt obligations (i.e. loans, deposits, placements, interest rate securities and other receivables) where the counterparty has a counterparty grade of 1, 2 or 3. The eligible collateral item must also be held for a period not less than that for which the asset is held.

Guarantees

5. The stresses applied in the credit spreads and default stresses may be determined using the counterparty grade of a third-party guarantor if the guarantee is explicit, unconditional, irrevocable and legally enforceable for the remaining term to maturity of the related asset. The guarantor must have a counterparty grade (or for governments, a long-term foreign currency credit rating) of 1, 2 or 3. Guarantees provided by the regulated institution's parent or a related entity are not eligible for this treatment.

Collateral, guarantees and letters of credit in respect of reinsurance recoverables due from non-APRA-authorised reinsurers

- 6. Where a regulated institution possesses recognised collateral in Australia against reinsurance recoverables due from a non-APRA-authorised reinsurer, it may, in the default stress, apply the default factor relevant to the collateral to the value of the reinsurance recoverables (instead of applying the default factor that would otherwise apply to the reinsurance recoverables). For the purposes of this paragraph, collateral is recognised only:
 - (a) to the extent that it takes the form of:
 - (i) assets held in Australia which form part of a trust fund maintained by a trustee resident in Australia for the benefit of the insurer;

- (ii) deposits held by the insurer in Australia, which are controlled by the insurer in Australia, made by the non-APRA-authorised reinsurer;
- (iii) a combination of the two forms of collateral specified in paragraphs (i) and (ii); or
- (iv) any other form of collateral as may be approved by APRA in writing in a particular case; and
- (b) if it provides effective security against liabilities arising under the reinsurance contract; and
- (c) if it is not available for distribution to creditors of the reinsurer other than the insurer in the event of the insolvency of the reinsurer.
- 7. Where the fair value of the collateral does not cover the full value of the reinsurance recoverables, only that part of the value of the reinsurance recoverables that is covered by collateral may be assigned the default factor applicable to the collateral.
- 8. Where a regulated institution possesses a guarantee or letter of credit in respect of the reinsurance recoverables due from a non-APRA-authorised reinsurer, the default factor to be used is that applicable to the guaranter or the issuer of the letter of credit, as the case may be. This paragraph applies only if each of the following conditions is satisfied:
 - (a) the guarantor or issuer of the letter of credit is an ADI or, in the case of a **Category E** insurer, its parent entity or other related entity provided the entity has a counterparty grade of 1, 2 or 3;
 - (b) the guarantee or letter of credit is explicit, unconditional and irrevocable;
 - (c) the guarantor or issuer of the letter of credit is obliged to pay the insurer in Australia; and
 - (d) the obligation of the guarantor or issuer of the letter of credit to pay the insurer is specifically linked to performance of the reinsurance contract or contracts under which the reinsurance recoverables arise.
- 9. Except in the case of a Category E insurer, a guarantee or letter of credit provided to an insurer by its parent entity or other related entity is not eligible for the treatment provided for in this paragraph 8 of this Attachment.
- 10. The collateral, guarantee or letter of credit referred to in paragraphs 6 to 8 of this Attachment must be effective for the expected period for payment of claims under the reinsurance contract under which the reinsurance recoverables arise. If this is impractical, the collateral, guarantee or letter of credit must be effective for a period of at least 24 months and must include a termination provision requiring the issuer to give the insurer 12 months written notice of the issuer's intention to terminate the collateral, guarantee or letter of credit.

Attachment D

Extended Licensed Entity (ELE)

- 1. In certain circumstances, a regulated institution may choose to hold assets in a SPV or other related entity, rather than on its own balance sheet. Where a regulated institution receives approval under paragraph 3 of this Attachment, the regulated institution will be able to determine its Asset Risk Charge based on the individual assets and liabilities of the related entity, rather than simply on the regulated institution's direct exposure to that entity. This treats the activities of the regulated entity and the related entity as comprising an Extended Licensed Entity (ELE).
- 2. The extent to which the risk of a regulated institution's exposure to a related entity is commensurate with the underlying holdings of that entity, depends on the extent to which the regulated institution has control over, or is integrated with the entity, as well as on the existence of material third party liabilities of the entity. The regulated institution must consider any potential complications under a scenario where underlying asset holdings must be liquidated during financial stress.
- 3. Subject to the specific requirements set out in paragraph 4 of this Attachment, a regulated institution may apply to APRA to have one or more related entities approved as part of its ELE. Once approved, APRA will allow the regulated institution to 'look through' the legal structures involved, and to 'consolidate' the balance sheet of the related entity with its own, for the purposes of determining the Asset Risk Charge. In effect, this allows the regulated institution to treat its own balance sheet and that of the approved related entity as a single entity for the purpose of calculating that charge.
- 4. In deciding whether to approve an entity as part of a regulated institution's ELE, APRA will have regard to the following criteria in respect of the relationship between the regulated institution and the related entity:
 - (a) the related entity must be wholly owned and controlled by the regulated institution, with a Board of directors/trustees that is comprised entirely of members of the regulated institution's **Board** or senior management;
 - (b) the regulated institution must demonstrate to APRA that there are no legal or regulatory barriers (e.g. restrictions imposed by law or a regulator in a foreign jurisdiction) to the transfer of the assets back to the regulated institution;
 - (c) the regulated institution's risk management systems and controls must apply fully to the operations of the related entity. The senior management of the regulated institution must be in a position to monitor the operations of the related entity to the same extent as the operations of the regulated institution itself. Systems for monitoring and maintaining control over the related entity must be included within the internal and external audit programs of the regulated institution;

- (d) the regulated institution must be able to furnish stand-alone accounting records for the related entity, and provide APRA with full and unfettered access to this information at any time (including during on-site visits);
- (e) where the related entity holds or invests in assets on behalf of the regulated institution, the related entity must have no material third party liabilities, other than exempt tax liabilities and employee entitlements;
- (f) where the related entity borrows on behalf of the regulated institution, all funds must be on-lent directly to the regulated institution; and
- (g) the related entity must not conduct any business that the regulated institution would otherwise be prevented from conducting under the Act.



Prudential Standard GPS 115

Capital Adequacy: Insurance Risk Charge

Objective and key requirements of this Prudential Standard

This Prudential Standard requires a general insurer or Level 2 insurance group to maintain adequate capital against the insurance risks associated with their activities.

The ultimate responsibility for the prudent management of capital of a general insurer or Level 2 insurance group rests with its Board of directors. The Board must ensure that the general insurer or Level 2 insurance group maintains an appropriate level and quality of capital commensurate with the scale, nature and complexity of its business and risk profile, such that it is able to meet its obligations under a wide range of circumstances.

The Insurance Risk Charge is the minimum amount of capital required to be held against insurance risks. The Insurance Risk Charge relates to the risk that the value of the net insurance liabilities is greater than the value determined by the Appointed Actuary or Group Actuary.

This Prudential Standard sets out the method for calculating the Insurance Risk Charge. This charge is one of the components of the Standard Method for calculating the prescribed capital amount for general insurers and Level 2 insurance groups.

Authority

1. This Prudential Standard is made under section 32 of the *Insurance Act 1973* (**the Act**).

Application

- 2. This Prudential Standard applies to each:
 - (a) **general insurer** authorised under the Act (**insurer**); and
 - (b) **Level 2 insurance group** as defined in *Prudential Standard GPS 001 Definitions* (**GPS 001**).

Where a requirement is made in respect of a Level 2 insurance group, the requirement is imposed on the **parent entity** of the Level 2 insurance group.

3. This Prudential Standard applies to insurers and Level 2 insurance groups (regulated institutions) from 1 January 2013 (effective date).

Interpretation

- 4. Unless otherwise defined in this Prudential Standard, expressions in bold are defined in GPS 001.
- 5. For the purposes of this Prudential Standard the term **Actuary** is a reference to either the **Appointed Actuary** for an insurer or the **Group Actuary** for a Level 2 insurance group (as appropriate).

Insurance Risk Charge

- 4.6. This Prudential Standard sets out the method for calculating the **Insurance Risk**Charge for a regulated institution using the **Standard Method** to determine its prescribed capital amount.
- 5.7. The Insurance Risk Charge relates to the risk that the value of net insurance liabilities is greater than the value determined in accordance with *Prudential Standard GPS 320 Actuarial and Related Matters* (**GPS 320**). It has two components:
 - (a) a risk charge in respect of Outstanding Claims Risk; and
 - (b) a risk charge in respect of Premiums Liability Risk.

The total Insurance Risk Charge is the sum of the risk charge for each of the two components.

Outstanding Claims Risk

6.8. The risk charge for Outstanding Claims Risk relates to the risk that the value of the net outstanding claims liabilities, is greater than the value determined in

- accordance with GPS 320, will be insufficient to cover associated net claim payments and any associated claim expenses as they fall due.
- 7.9. For the purposes of the Standard Method, the risk charge for each **class of business** is calculated by multiplying the net outstanding claims liabilities for that class (as determined in accordance with GPS 320) by the relevant Outstanding Claims Risk Capital Factor in Attachment A. The total risk charge for outstanding claims risk is the sum of the risk charges for each class of business.

Premiums Liability Risk

- 8.10. The risk charge for Premiums Liability Risk relates to the risk that the value of the net premiums liabilities, is greater than the value determined in accordance with GPS 320, will be insufficient to cover associated net claim payments and any associated claim expenses as they fall due. It also relates to the risk that material net written premium, as defined in paragraph 17, will be insufficient to fund the liabilities arising from that business.
- 9.11. For the purposes of the Standard Method, the risk charge for each class of business is calculated by multiplying the sum of:
 - (a) net premiums liabilities as determined in accordance with GPS 320; and
 - (b) material net written premiums

by the relevant Premiums Liability Risk Capital Factor in Attachment A. The total risk charge for Premiums Liability Risk is the sum of the risk charges for Premiums Liability Risk for each class of business.

Classes of business

- 10.12. For the purposes of the Outstanding Claims Risk Capital Factor and Premiums Liability Risk Capital Factor, all but the 'other' direct class of business and 'other' reinsurance class of business have been classified into different categories in Attachment A (Table 1 and Table 2 respectively). The 'other' class of business must be allocated to a category by the Appointed Actuary, in accordance with paragraph 13.
- 11.13. For the purpose of calculating the Insurance Risk Charge in respect of any 'other' business (whether it is direct business or reinsurance), the Appointed Actuary or Group Actuary (as appropriate) is required to determine the most appropriate category (i.e. category A, B or C) in Table 1 and Table 2 of Attachment A. The choice must be based on the underlying risk characteristics of the business being written. The regulated institution must then apply the corresponding Outstanding Claims Risk Capital Factor and Premiums Liability Risk Capital Factor listed in Attachment A in determining the Insurance Risk Charge.

The other class of business is as defined in paragraph 1(k) of Attachment B of GPS 001.

- 12.14. If the 'other' class of business includes multiple risks with differing risk profiles, the Appointed Actuary or Group Actuary (as appropriate) may subdivide the net outstanding claims liabilities, net premiums liabilities and material net written premiums into more than one category.
- 13.15. The reasons for selecting the specific risk category or categories to which the 'other' class of business is assigned must be documented in the **Insurance Liability Valuation Report**.

Business covering multiple classes

- 14.16. Where a regulated institution underwrites an inwards reinsurance contract which spans multiple classes, the contract must be allocated by using an appropriate method (provided the same method is used for all contracts and all subsequent periods). Appropriate methods include:, including the following methods:
 - (a) <u>allocate allocating</u> the contract on a pro rata basis to each of the relevant categories; or
 - (b) <u>allocate allocating</u> the contract to the category which represents the greatest exposure; or
 - (c) <u>allocate allocating</u> the contract to the category representing the greatest premium income.

The regulated institution may use an alternative method from those listed above for allocating inwards reinsurance business that spans multiple classes. The regulated institution must be able to demonstrate that the chosen method is appropriate and is used for all contracts and all subsequent periods.

Material net written premiums

- 17. With respect to direct business and reinsurance business where policies incept in the following reporting period and where these policies would have a material impact on capital adequacy, net written premium for exposure that has not been included in the calculation of the premiums liabilities is to be subject to the premiums liabilities risk charge. This premium amount is defined as **material net written premium.** The materiality of the business that incepts in the next reporting period should be determined in accordance with the Australian accounting and auditing standards subject to APRA's discretion.
- 18. The value of material net written premium, calculated in paragraph 17, must also reflect the full premium revenue for inwards proportional reinsurance for the full term of the current reinsurance contract where the treaty extends beyond

This requirement is based on the principle that an insurer should be able to meet its insurance obligations at all times, not just at the quarterly reporting dates. With regards to written contracts for which insurers are not on risk in the current reporting period, APRA has not defined how far into the subsequent reporting period the capital requirement applies. APRA expects that at the reporting date, insurers will hold sufficient capital for all general insurance contracts for which the general insurer is committed, regardless of when the contract incepts.

the end of the current reporting period but the revenue has not yet been recognised.³

Securitisation

19. If a regulated institution securitises insurance liabilities, the net insurance liabilities may reduce. The regulated institution must consult apply to APRA for approval to include the prior to entering into the securitisation transaction in order to be able to reduce the Insurance Risk Charge.

Adjustments and exclusions

<u>15.20.</u> APRA may, by notice in writing to a regulated institution, adjust or exclude a specific <u>prudential</u> requirement in this Prudential Standard in relation to that regulated institution.

Transition

16.21. On application by a regulated institution, APRA may grant transitional relief from the obligation for the regulated institution to comply with any requirement in this Prudential Standard. Any relief granted by APRA under this paragraph will have effect up until no later than 31 December 2014.

For the avoidance of doubt, the reinsurance revenue for inwards reinsurance business should be recognised for the full term of current reinsurance contracts, usually 12 months from the inception of the contract, and not any shorter period. For reinsurance contracts that are continuous but cancellable at regular intervals or on specified dates, the term of the contract can be measured to the earliest cancellation date that is not less than 12 months from the previous cancellable date.

Attachment A

Table 1: Direct insurance business

Category	Class of business	Outstanding Claims Risk Capital Factor	Premiums Liability Risk Capital Factor
A	Householders Commercial Motor Domestic Motor	9.0%	13.5%
В	Travel Fire and ISR Marine and Aviation Consumer Credit Other Accident	11.0%	16.5%
С	Mortgage CTP Public and Product Liability Professional Indemnity Employers' Liability	14.0%	21.0%

Table 2: Inwards reinsurance business

Category	Class of business	Reinsurance type	Outstanding Claims Risk Capital Factor	Premiums Liability Risk Capital Factor
A	Householders Commercial Motor	Proportional	10.0%	15.0%
	Domestic Motor	Non- proportional	12.0%	18.0%
В	Travel Fire and ISR	Proportional	12.0%	18.0%
	Marine and Aviation Consumer Credit Other Accident	Non- proportional	14.0%	21.0%
С	Mortgage CTP	Proportional	15.0%	22.5%
	Public and Product Liability Professional Indemnity Employers' Liability	Non- proportional	17.0%	25.5%



Prudential Standard GPS 116

Capital Adequacy: Insurance Concentration Risk Charge

Objective and key requirements of this Prudential Standard

This Prudential Standard requires a general insurer or Level 2 insurance group to maintain adequate capital against the risks associated with insurance concentration in their activities.

The ultimate responsibility for the prudent management of capital of a general insurer or Level 2 insurance group rests with its Board of directors. The Board must ensure that the general insurer or Level 2 insurance group maintains an appropriate level and quality of capital commensurate with the scale, nature and complexity of its business and risk profile, such that it is able to meet its obligations under a wide range of circumstances.

The Insurance Concentration Risk Charge is the minimum amount of capital required to be held against insurance concentration risks. The Insurance Concentration Risk Charge relates to the risk of an adverse movement in the general insurer's or Level 2 insurance group's capital base due to a single large loss or series of losses.

This Prudential Standard sets out the method for calculating the Insurance Concentration Risk Charge. This charge is one of the components of the Standard Method for calculating the prescribed capital amount for general insurers and Level 2 insurance groups.

Table of Contents

Authority	3
Application	
Level 2 insurance groups	
Interpretation	
Insurance Concentration Risk Charge	4
Insurance Concentration Risk Charge formula	
Reinsurance arrangements	
Natural perils vertical requirement	
Natural perils horizontal requirement	8
Other accumulations vertical requirement	
Lenders mortgage insurer concentration risk charge	15
Use of alternative capital and risk mitigants	
Catastrophe models	
Review and reporting	
Adjustments and exclusions	
Transition	
Determinations made under previous Prudential Standards	17
Attachment A – Lenders mortgage insurer concentration risk cha	rge 19
PML and Prescribed Stress Scenario	20
	20 20
PML and Prescribed Stress Scenario Determining the lenders mortgage insurer concentration risk charge	20 20 21
PML and Prescribed Stress Scenario Determining the lenders mortgage insurer concentration risk charge Prescribed calculation of PML	20 20 21
PML and Prescribed Stress Scenario	20 21 22 22
PML and Prescribed Stress Scenario Determining the lenders mortgage insurer concentration risk charge Prescribed calculation of PML LMIs in run-off Available Reinsurance Allowable Reinsurance Net premiums liability deduction	20 21 22 22 23
PML and Prescribed Stress Scenario	20 21 22 22 23 23
PML and Prescribed Stress Scenario Determining the lenders mortgage insurer concentration risk charge Prescribed calculation of PML LMIs in run-off Available Reinsurance Allowable Reinsurance Net premiums liability deduction	20 21 22 22 23 23
PML and Prescribed Stress Scenario	20 21 22 23 23 the
PML and Prescribed Stress Scenario Determining the lenders mortgage insurer concentration risk charge Prescribed calculation of PML LMIs in run-off	20 21 22 23 23 the24
PML and Prescribed Stress Scenario Determining the lenders mortgage insurer concentration risk charge Prescribed calculation of PML LMIs in run-off Available Reinsurance Allowable Reinsurance Net premiums liability deduction Table A - PD, LGD and seasoning factors to be applied in determining PML of LMIs Attachment B – Level 2 insurance groups Insurance Concentration Risk Charge formula	20 21 22 23 23 the24
PML and Prescribed Stress Scenario Determining the lenders mortgage insurer concentration risk charge Prescribed calculation of PML LMIs in run-off Available Reinsurance Allowable Reinsurance Net premiums liability deduction Table A - PD, LGD and seasoning factors to be applied in determining PML of LMIs Attachment B – Level 2 insurance groups Insurance Concentration Risk Charge formula Reinsurance arrangements	20 21 22 23 23 the24
PML and Prescribed Stress Scenario Determining the lenders mortgage insurer concentration risk charge Prescribed calculation of PML LMIs in run-off Available Reinsurance Allowable Reinsurance Net premiums liability deduction Table A - PD, LGD and seasoning factors to be applied in determining PML of LMIs Attachment B – Level 2 insurance groups Insurance Concentration Risk Charge formula Reinsurance arrangements Use of alternative capital and risk mitigants	20 21 22 23 23 the24 26
PML and Prescribed Stress Scenario Determining the lenders mortgage insurer concentration risk charge Prescribed calculation of PML LMIs in run-off Available Reinsurance Allowable Reinsurance Net premiums liability deduction Table A - PD, LGD and seasoning factors to be applied in determining PML of LMIs Attachment B – Level 2 insurance groups Insurance Concentration Risk Charge formula Reinsurance arrangements	20 21 22 23 23 the24 26 26

Authority

1. This Prudential Standard is made under section 32 of the *Insurance Act 1973* (**the Act**).

Application

- 2. This Prudential Standard applies to each:
 - (a) **general insurer** authorised under the Act (**insurer**); and
 - (b) **Level 2 insurance group** as defined in *Prudential Standard GPS 001 Definitions* (**GPS 001**).

Where a requirement applies to a Level 2 insurance group, the requirement is imposed on the **parent entity** of the Level 2 insurance group.

3. Subject to any specific transition rules, This Prudential Standard applies to insurers and Level 2 insurance groups (regulated institutions) from 1 January 2013 (effective date).

Level 2 insurance groups

4. Paragraphs 9 to 59 apply to insurers only. The remaining paragraphs apply to all regulated institutions. Attachment B sets out additional requirements for Level 2 insurance groups.

Interpretation

- 4.5. Unless otherwise defined in this Prudential Standard, expressions in bold are defined in GPS 001.
- 5.6. For the purposes of this Prudential Standard:
 - (a) **aggregate reinsurance cover** includes:
 - (i) aggregate eatastrophe reinsurance arrangements refers to reinsurance cover that protects the regulated institution from an accumulation of retained losses from multiple events of a certain size; and
 - (ii) aggregate stop-loss reinsurance arrangements refers to reinsurance cover that protects the regulated institution from an accumulation of retained losses from multiple events on a part or totality of its portfolio.
 - (a)(b) natural perils are all natural events, including, but not limited to, such as earthquakes, storms and eyclones conflagration as well as fire or surge following a natural peril, as well as man-made disasters, such as bushfires, that affect property risks and other classes of business to which a regulated institution is exposed; and

(b)(c) whole-of-portfolio is an estimation approach that takes into account all possible perils in all possible regions to determine the size of loss that could occur from a single event at a certain exceedance probability for a regulated institution's portfolio. The time horizon to be considered is one year. For clarity, this does not assume that two or more events occur in the same year.

Insurance Concentration Risk Charge

- 6.7. This Prudential Standard sets out the method for calculating the **Insurance**Concentration Risk Charge for a regulated institution using the **Standard**Method to determine its prescribed capital amount.
- 7.8. The Insurance Concentration Risk Charge for a regulated institution is intended to represents the net financial impact on the regulated institution from either a single large event, or a series of smaller events, within a one year period. The determination of the net-financial-impactInsurance Concentration Risk Charge is based on the formulae and requirements set out in this Prudential Standard.

Insurance Concentration Risk Charge formula

- 8.9. Subject to the transition rule in paragraph 62, the Insurance Concentration Risk Charge for an insurer is the greatest of the following amounts:
 - (a) the natural perils vertical requirement determined in accordance with paragraphs 18 to 26;
 - (b) the natural perils horizontal requirement determined in accordance with paragraphs 27 to 43;
 - (c) the other accumulations vertical requirement determined in accordance with paragraphs 44 to 52; and
 - (d) where applicable¹, lenders mortgage insurer concentration risk charge determined in accordance with paragraph 53.

An insurer does not need to calculate amounts for each of sub-paragraphs (a) to (d) above if it <u>ean-is</u> able to demonstrate that the amount determined for one or more of those sub-paragraphs is always expected to be materially lower than the amount determined for one of the other sub-paragraphs.

- 10. The Insurance Concentration Risk Charge calculated in paragraph 9, must not be less than zero.
- 11. An insurer must not make tax adjustments to the amounts calculated in paragraph 9.

Only a **lenders mortgage insurer** must calculate (d). The definition of lenders mortgage insurer in GPS 001 includes a reinsurer that writes lenders mortgage insurance. Therefore, a reinsurer that provides reinsurance on lenders mortgage insurance must calculate (d).

9.12. Where there is a change in the insurer's business (for example, due to a material purchase or sale of a portfolio of business) or reinsurance program (for example, due to material cancellations or additions to reinsurance layers), the insurer must recalculate all applicable components of the Insurance Concentration Risk Charge. The insurer must consult with APRA to determine the approach to recalculate the natural perils horizontal requirement in paragraph 9.

Reinsurance arrangements

- 10.13. In calculating potential reinsurance recoverables in any component of the Insurance Concentration Risk Charge², an insurer may take into account potential reinsurance recoverables receivable from a reinsurance arrangement to which it is a party only if the reinsurance arrangement:
 - (a) complies with the two month and six month rules imposed under *Prudential Standard GPS 230 Reinsurance Management* (**GPS 230**); or
 - (b) fails to comply with those rules as at the date of the relevant deadline, but:
 - (i) subsequent to the deadline specified under the two month rule, the reinsurance arrangement is documented in accordance with the other requirements of the two month rule (in which case the reinsurance recoverables from the reinsurance arrangement may be taken into account until the reinsurance arrangement fails to comply with the six month rule); or
 - (ii) subsequent to the deadline specified under the six month rule, the reinsurance arrangement is documented in accordance with the other requirements of the six month rule; or
 - (c) has been treated by APRA, under GPS 230, as complying with the two month rule and six month rule.
- 11.14. In calculating potential reinsurance recoverables in any component of the Insurance Concentration Risk Charge³, an insurer may take into account potential reinsurance recoverables receivable from a reinsurance arrangement only if the reinsurance arrangement meets the 'governing law' and 'dispute' requirements of GPS 230.
 - 15. Subject to paragraph 16, an insurer must havein place, at the inception date of its catastrophe reinsurance program, a contractually agreed reinstatement, at an agreed price or rate, of its catastrophe reinsurance arrangements at the inception date of its catastrophe reinsurance program. that reduces its natural perils vertical requirement (determined in accordance with paragraph 18). An insurer with multiple inception dates for its catastrophe reinsurance program must consult with APRA to determine the approach to the relevant inception date in this paragraph.

This includes the determination of reinsurance for lenders mortgage insurance in Attachment A.

This includes the determination of reinsurance for lenders mortgage insurance in Attachment A.

- 16. An insurer that does not have a contractually agreed reinstatement of its catastrophe reinsurance program as required by paragraph 15 must demonstrate to APRA that it is not practical or appropriate given the nature of its reinsurance arrangements. The insurer must set out its approach to the placement of reinstatement of cover in it its **Reinsurance Management Strategy** (**ReMS**). If APRA is not satisfied with the approach taken by the insurer, APRA may apply a supervisory adjustment to the prescribed capital amount in accordance with paragraph 36 of *Prudential Standard GPS 110 Capital Adequacy* (**GPS 110**).
- 12.17. During the period of the catastrophe reinsurance program, an insurer must review and consider the adequacy of reinstatements of all or parts of its reinsurance program, including the requirements of paragraph 16. This review must also consider the financial and operational implications of not having a sufficient number of contractually agreed reinstatements during the period of cover. Details of this review must be included in the insurer's ReMS and Internal Capital Adequacy Assessment Process (ICAAP).

Natural perils vertical requirement

- 13.18. The natural perils vertical requirement (NP VR) for an insurer that has exposures to natural perils is calculated as:
 - (a) the greater of:
 - (i) NP PML defined in paragraph 21 less NP reinsurance recoverables defined in paragraph 22; and
 - (ii) the **net whole-of-portfolio loss** defined in paragraph 23;

less

- (a)(b) NP reinstatement premiums defined in paragraph 24; plus
- (b)(c)NP reinstatement cost defined in paragraph 25; less
- (d) any other adjustments to NP VR in accordance with paragraph 26.

An insurer does not need to calculate amounts for sub-paragraphs 18(a)(i) and 18(a)(ii) if it is able to demonstrate that one of these amounts is expected to be materially lower than the amount determined for the other.

- 14.19. NP VR must be calculated and reported to APRA as at each **reporting date**. The calculation of NP VR, at a reporting date, must take into account the reinsurance program in place at the reporting date and the reinsurance program for the next **reporting period**. The NP VR calculation at each reporting date must only include potential reinsurance recoverables that were contractually agreed on or before the reporting date. Where the reinsurance programs in these two reporting periods differ, the largest NP VR must be used.
- 15.20. An insurer must be able to determine its NP VR at all times. An insurer must regularly monitor the level of NP VR during the reporting period, including determining the impact of _the occurrence_a catastrophic event. Where an event

occurs during the reporting period, the insurer must determine the impact of that event on the level of the NP VR. Any changes made to the NP VR as a result of the catastrophic event are then to be applied until the end of the current reinsurance treaty or the occurrence of another event that impacts the NP VR, whichever occurs first.

NP PML

- 16.21. An insurer that has exposures to natural perils must determine a Probable Maximum Loss (PML) for its portfolio (NP PML). NP PML is the gross loss arising from the occurrence of a single event, such that the size of the loss from the eventwhere that loss is equal to not less than the whole-of-portfolio annual loss with a 0.5 per cent probability of occurrence. NP PML must not include any allowance for potential reinsurance recoverables. The calculation of NP PML must include:
 - (a) the impact of the event on all classes of business of the insurer;
 - (b) an allowance for non-modelled risksperils⁴; and
 - (c) potential growth in the insurer's portfolio over the reporting period.

NP reinsurance recoverables

17.22. An insurer that has exposures to natural perils must determine the level of potential reinsurance recoverables should there be in relation to the occurrence of the event that gives rise to its. NP PML (NP reinsurance recoverables). NP reinsurance recoverables must not include any amounts due from aggregate eatastrophe reinsurance cover or aggregate stop loss reinsurance cover. Refer to paragraphs 51 and 52 for further details on eligibility of potential reinsurance recoverables.

Net whole-of-portfolio loss

18.23. An insurer that has exposures to natural perils must determine the net loss arising from the occurrence of a single event, where that net loss is not less than the whole-of-portfolio annual net loss with a 0.5 per cent probability of occurrence (net whole-of-portfolio loss).

NP reinstatement premiums

19.24. An insurer that writes **reinsurance** may receive inwards reinstatement premiums from cedants as a result of the event that gives rise to its NP PML or the net whole-of-portfolio loss determined in paragraph 23, as appropriate (NP reinstatement premiums). NP reinstatement premiums must only be included in NP VR if the reinsurance contract specifically stipulates that offsetting with

Where certain perils are material to an insurer but not included in its computer-based modelling techniques, an allowance for losses in respect of these perils would need to be estimated and added to the NP PML.

The net loss is the gross loss less potential reinsurance recoverables.

the cedant will occur at the time of the payment of the reinsurance claim. insurer has contractually binding netting arrangements with the cedant.

NP reinstatement cost

20.25. An insurer that has exposures to natural perils must determine the cost (if any) of reinstating all catastrophe reinsurance cover relating to the reinsurance recoverables determined in paragraph 22 or paragraph 23, as appropriate (NP reinstatement cost). In determining this cost, if the insurer does not have contractually agreed rates for the reinsurance cover, the insurer must estimate the cost based on current reinsurance market conditions. The amount must not be less than the full original cost of the cover with no deduction for the expiry of time since the inception of the reinsurance arrangements unless the insurer is able to demonstrate to APRA that the amount materially overstates the cost that would prevail.

Other adjustments to NP VR

21.26. An insurer may apply to APRA to reduce its NP VR for recognise potential reinsurance recoverables from aggregate estastrophe reinsurance or aggregate stop loss reinsurance reinsurance cover if the cover is in place for the current reporting period and the entirety of the next reporting period. Aggregate reinsurance cover is eligible to be considered for inclusion in the NP VR once the aggregate reinsurance cover has reached its attachment point, or will as a result of the occurrence of NP PML or net whole of portfolio loss in paragraph 23, as appropriate. The reinsurance recoverables from aggregate reinsurance cover must then be applied up until the cover has been exhausted by claims by the insurer or the date that the aggregate reinsurance treaty expires, whichever occurs first. The reinsurance arrangements must meet the requirements of paragraphs 13 and 14 to be considered under this paragraph. The insurer must agree with APRA a methodology for the determination of the credit adjustment that may be given tomade for this these type of reinsurance arrangement.

Natural perils horizontal requirement

- <u>22.27.</u> The natural perils horizontal requirement (**NP HR**) for an insurer <u>that has exposures to natural perils</u> is calculated as:
 - (a) the greater of **H3 requirement** and **H4 requirement** defined in paragraphs 29 and 36, respectively; less
 - (b) aggregate offset (if any) defined in paragraph 32; less

(e)(b) **PL** offset (if any) defined in paragraph 43.

An insurer does not need to calculate both H3 requirement and H4 requirement if it is able to demonstrate that one of these amounts is expected to be materially lower than the amount determined for the other.

23.28. NP HR must be calculated at the reporting date on or prior to the inception date of the insurer's catastrophe reinsurance program and then held constant for the remaining duration of the catastrophe reinsurance program. If the catastrophe reinsurance program of an insurer has multiple inception dates, the insurer should agree with APRA the reporting date that will apply to the calculation of NP HR. The NP HR calculation must only include potential reinsurance recoverables that were contractually agreed on or before the relevant reporting date. If there is a material change to the reinsurance program during the treaty year, the insurer must approach APRA to determine whether NP HR should be re-calculated.

H3 requirement

- 24.29. The **H3 requirement** is calculated as:
 - (a) the greater of:
 - (i) three times the **H3 loss** defined in paragraph 30 less **H3 reinsurance** recoverables defined in paragraph 31; and
 - (ii) three times the **net H3 loss** defined in paragraph 32;

less

- (b) **H3 aggregate offset** defined in paragraph 33; less
- (a)(c) H3 reinstatement premiums defined in paragraph 33; plus
- (d) **H3 reinstatement cost** defined in paragraph 35.

An insurer does not need to calculate amounts for sub-paragraphs 29(a)(i) and 29(a)(ii) if it is able to demonstrate that one of these amounts is expected to be materially lower than the amount determined for the other.

- 25.30. An insurer that has exposures to natural perils must determine the gross loss arising from the occurrence of a single event, such that the size of the loss from the eventwhere that loss is not less than is equal to the whole-of-portfolio annual loss with a 10 per cent probability of occurrence (H3 loss). This amount must not include any allowance for potential reinsurance recoverables. The calculation of H3 loss must include:
 - (a) the impact of the event on all classes of business of the insurer;

The first reporting period after the effective date of this Prudential Standard may be part way through the catastrophe reinsurance program treaty year. If this is the case, the insurer must determine NP HP as if the requirement to determine NP HP applied at the incention date of the

determine NP HR as if the requirement to determine NP HR applied at the inception date of the catastrophe reinsurance program (ignoring any events that may have occurred between the inception date of the current catastrophe reinsurance program and the effective date of this Prudential Standard).

- (b) an allowance for non-modelled perils risks⁷; and
- (c) potential growth in the insurer's portfolio over the reporting period.
- 31. An insurer that has exposures to natural perils must determine the level of potential reinsurance recoverables in relation to should there be the occurrence of three H3 losses over the catastrophe reinsurance program treaty year (H3 reinsurance recoverables). The reinsurance recoverables must not include any amounts due from aggregate catastrophe reinsurance or aggregate stop loss reinsurance reinsurance cover as this is provided for under paragraph 33. Refer to paragraphs 51 and 52 for further details on eligibility of potential reinsurance recoverables.
- 32. An insurer that has exposures to natural perils must determine the net loss arising from the occurrence of a single event, where that net loss is not less than the whole-of-portfolio annual net loss with a 10 per cent probability of occurrence (net H3 loss).
- 26.33. An insurer may reduce its H3 requirement for potential reinsurance recoverables from aggregate reinsurance cover (H3 aggregate offset). The insurer must not allow for any reinstatements of aggregate reinsurance cover unless these have been contractually agreed with the reinsurer(s). If reinstatements are included, the cost of reinstatement must be netted from the offset. The insurer must agree with APRA a methodology for the determination of this adjustment. This methodology may reduce the retention on any aggregate reinsurance cover for any portion of paid and outstanding claims and premiums liabilities that contribute to the insurer's retained losses, provided it does not result in a double-count between this offset and the PL offset determined in accordance with paragraph 43.
- 27.34. An insurer that writes reinsurance may receive inwards reinstatement premiums from cedants as a result of the events that give rise to three H3 losses or three net H3 losses determined in paragraph 32, as appropriate (H3 reinstatement premiums). H3 reinstatement premiums must only be included in the H3 requirement if the reinsurance contract specifically stipulates that offsetting with the cedant will occur at the time of the payment of the reinsurance claim.insurer has contractually binding netting arrangements with the cedant.
- 35. An insurer that has exposures to natural perils must determine the cost (if any) of reinstating catastrophe reinsurance cover after the occurrence of the first two H3 losses or the first two net H3 losses determined in paragraph 32, as appropriate (H3 reinstatement cost). In determining this cost, if the insurer does not have contractually agreed rates for the reinsurance cover, the insurer must estimate the cost based on the current reinsurance market conditions that would prevail after the occurrence of the events. The amount must not be less than the full original cost of the cover, with no deduction for the expiry of time

Where certain perils are material but not included in the its computer-based modelling techniques, an allowance for losses in respect of these perils would need to be estimated and added to the H3 loss.

The net loss is the gross loss less potential reinsurance recoverables.

since the inception of the reinsurance arrangements <u>unless the insurer is able to demonstrate to APRA that the amount materially overstates the cost that would prevail in the market after the occurrence of the events.</u>

H4 requirement

28.36. The **H4 requirement** is calculated as:

- (a) the greater of:
 - (i) four times **H4 loss** defined in paragraph 37 less **H4 reinsurance** recoverables defined in paragraph_38; and
 - (ii) four times the **net H4 loss** defined in paragraph 39;

<u>less</u>

- (b) **H4 aggregate offset** defined in paragraph 40; less
- (a)(c) H4 reinstatement premiums defined in paragraph 40; plus
- (d) H4 reinstatement cost defined in paragraph 42.

An insurer does not need to calculate amounts for sub-paragraphs 36(a)(i) and 36(a)(ii) if it is able to demonstrate that one of these amounts is expected to be materially higher than the amount determined for the other.

- 29.37. An insurer that has exposures to natural perils must determine the gross loss arising from the occurrence of a single event, such that the size of the loss from the eventwhere that loss is equal tonot less than the whole-of-portfolio annual loss with a 16.7 per cent probability of sufficiency (H4 loss). This amount must not include any allowance for potential reinsurance recoverables. The calculation of H4 loss must include:
 - (a) the impact of the event on all classes of business of the insurer;
 - (b) an allowance for non-modelled risksperils⁹; and
 - (c) potential growth in the insurer's portfolio over the reporting period.
- 38. An insurer that has exposures to natural perils must determine the level of potential reinsurance recoverables in relation to should there be the occurrence of four H4 losses_over the catastrophe reinsurance program treaty year (H4 reinsurance recoverables). The reinsurance recoverables must not include any amounts due from aggregate catastrophe reinsurance or aggregate stop loss reinsurance reinsurance cover as this is provided for under paragraph 40. Refer

Where certain perils are material but not included in <u>its computer-the-based</u> modelling <u>techniques</u>, an allowance for losses in respect of these perils would need to be estimated and added to the H4 loss, <u>by either calculating a loss exceedance curve or aggregating the 1 in 200 year loss from each peril using the square root of sum of squares approach.</u>

to paragraphs 51 and 52 for further details on eligibility of potential reinsurance recoverables.

- 30.39. An insurer that has exposures to natural perils must determine the net loss 10 arising from the occurrence of a single event, where that net loss is not less than the whole-of-portfolio annual net loss with a 16.7 per cent probability of occurrence (net H4 loss).
- 31.40. An insurer may reduce its H4 requirement for potential reinsurance recoverables from aggregate reinsurance cover (H4 aggregate offset). The insurer must not allow for any reinstatements of aggregate reinsurance cover unless these have been contractually agreed with the reinsurer(s). If reinstatements are included, the cost of reinstatement must be netted from the offset. The insurer must agree with APRA a methodology for the determination of this adjustment. This methodology may reduce the retention on any aggregate reinsurance cover for any portion of paid and outstanding claims and premiums liabilities that contribute to the insurer's retained losses, provided it does not result in a double-count between this offset and the PL offset determined in accordance with paragraph 43.
- 32.41. An insurer that writes reinsurance may receive inwards reinstatement premiums from cedants as a result of the event that gives rise to four H4 losses or four net H4 losses determined in paragraph 39, as appropriate (H4 reinstatement premiums). H4 reinstatement premiums must only be included in the H4 requirement if the reinsurance contract specifically stipulates that offsetting with the cedant will occur at the time of the payment of the reinsurance claim.insurer has contractually binding netting arrangements with the cedant.
- 33.42. An insurer that has exposures to natural perils must determine the cost (if any) of reinstating catastrophe reinsurance cover after the occurrence of the first three H4 losses or the first three net H4 losses determined in paragraph 39, as appropriate (H4 reinstatement cost). In determining this cost, if the insurer does not have contractually agreed rates for the reinsurance cover, the insurer must estimate the cost based on the current reinsurance market conditions that would prevail after the occurrence of the events. The amount must not be less than the full original cost of the cover, with no deduction for the expiry of time since the inception of the reinsurance arrangements unless the insurer is able to demonstrate to APRA that the amount materially overstates the cost that would prevail in the market after the occurrence of the events.

Aggregate offset

34. An insurer may reduce its H3 requirement and H4 requirement for potential reinsurance recoverables from aggregate catastrophe reinsurance or aggregate stop loss reinsurance if the cover is in place for the current reporting period and the entirety of the next reporting period (aggregate offset). The reinsurance arrangements must meet the requirements of paragraphs 51 and 52 to be considered under this paragraph. The insurer must agree with APRA a

The net loss is the gross loss less potential reinsurance recoverables.

methodology for the determination of the credit that may be given to these types of reinsurance arrangements.

PL offset

- 35.43. The Appointed Actuary of the insurer must determine the portion of the <u>net</u> premiums liability provision which relates to catastrophic losses¹¹ (**PL offset**). PL offset by class of business is determined by:
 - (a) calculating the amount of the insurer's <u>net</u> premiums liability central estimate provision that relates to catastrophic losses;
 - (b) annualising the amount from sub-paragraph (a); and
 - (c) <u>applying adding</u> the diversified risk margin¹² to the amount from subparagraph (b); and
 - (c)(d) adding and then the **Premiums Liability Risk Capital Factor**, as a percentage Charge 13 to the amount from sub-paragraph (b) (c).

The Appointed Actuary must then sum the outcomes from sub-paragraph (e) (d) by class of business to determine the total PL offset. The Appointed Actuary must provide this determination to the insurer in a timely manner that allows the insurer to lodge reporting forms to APRA within the timeframes specified by the Reporting Standards made under the Financial Sector (Collection of Data) Act 2001. The Appointed Actuary must include details of the determination of the PL offset in the Insurance Liability Valuation Report.

Other accumulations vertical requirement

- 36.44. The other accumulations vertical requirement (**OA VR**) for an insurer that has exposures to other accumulations is calculated as:
 - (a) **OA PML** defined in paragraphs 47 and 48; less
 - (b) **OA reinsurance recoverables** defined in paragraph 49; plus
 - (c) **OA reinstatement cost** defined in paragraph 52.

37.45. An insurer must be able to determine its OA VR at all times. An insurer must regularly monitor the level of its OA VR, including determining the impact of the occurrence of an event. Where an event occurs during the reporting period,

Catastrophic losses are those that give rise to a relatively significant number of claims and occur no more frequently than every three months. The Appointed Actuary needs to consider historical data over an appropriate period of time.

The diversified risk margin will already be determined in accordance with *Prudential Standard GPS 320 Actuarial and Related Matters* (**GPS 320**) and does not need to be split into a catastrophic and attritional loss component. The diversified risk margin will be a dollar amount determined by applying the percentage risk margin to the amount determined in sub-paragraph (b)

The <u>Premiums Liability Risk Charge will be the prescribed factor Premiums Liability Risk Capital Factor for that class of business from *Prudential Standard GPS 115 Capital Adequacy: Insurance Risk Charge* multiplied by the amount determined in sub-paragraph (c).</u>

the insurer must determine the impact of that event on the level of OA VR. Any changes made to the OA VR as a result of the event are then to be applied until the end of the current reinsurance treaty or the occurrences of another event that impacts OA VR, whichever occurs first.

38.46. OA VR must be calculated and reported to APRA at each reporting date. The calculation of OA VR, at the reporting date, must take into account the reinsurance program in place at the reporting date and the reinsurance program for the next reporting period. The OA VR calculation at each reporting date must only include potential reinsurance recoverables that were contractually agreed on or before the reporting date. Where the reinsurance programs in these two reporting periods differ, the largest OA VR must be used.

OA PML

39.47. An insurer that has exposures to accumulations of losses arising from a common dependent source or non-natural perils (other accumulations) must determine a PML for its portfolio (OA PML). A PML is the gross loss arising from the occurrence of a single event, such that the size of the where that loss from the eventhas is equal to the whole of portfolio loss with a 0.5 per cent probability of occurrence over 12 months. An insurer must consider all classes of business and all business underwritten in those classes in determining the largest loss—scenario. OA PML must not include any allowance for potential reinsurance recoverables.

40.48. An insurer that has exposures to other accumulations may reduce OA PML for any losses within the other accumulations scenario that are already specifically allowed for in the **premiums liabilities** of the insurer. This amount must be determined by the Appointed Actuary and included in the Insurance Liability Valuation Report. APRA may require the insurer to modify the adjustment to OA PML.

OA reinsurance recoverables

41.49. An insurer that has exposures to other accumulations must determine the level of potential reinsurance recoverables should there be the in relation to the occurrence of OA PML (**OA reinsurance recoverables**). OA reinsurance recoverables may include any amounts due from aggregate stop loss reinsurance cover if the cover has reached its attachment point, or will as a result of the

For the purposes of this paragraph, 'potential reinsurance recoverables' include reinsurance assets receivable from the Commonwealth Government in respect of:

The determination of OA PML must consider the nature of products provided, losses that may lead to an aggregation of multiple per-risk or per-policy losses arising from one dependent cause, the potential for multiple classes of insurance and/or portfolios to be impacted from this one dependent cause and whether the upper limit of reinsurance cover purchased is sufficiently high to cover the OA PML.

⁽a) a high cost claim indemnity as defined under the *Medical Indemnity Act* 2002 (**Medical Indemnity Act**); and

⁽b) amounts payable under the High Cost Claims Protocol as defined under the Medical Indemnity Act.

- occurrence of OA PML.¹⁶ The reinsurance recoverables must then be applied up until the cover has been exhausted by claims by the insurer or the date that the aggregate reinsurance treaty expires, whichever occurs first is in place for the current reporting period and the entirety of the next reporting period. Refer to paragraphs 51 and 52 for further details on eligibility of potential reinsurance recoverables.
- 42. An insurer may reduce the retention on any aggregate stop loss reinsurance arrangements <u>cover</u> for any portion of paid and outstanding claims and premiums liabilities that contribute to the insurer's retained losses. An insurer must only make this adjustment if these amounts affect the retention during the current reporting period and the entirety of the next reporting period. APRA may require the insurer to modify the adjustment to the retention on the aggregate stop loss reinsurance arrangements.
- 43.50. An insurer may discount the retention on any aggregate stop loss reinsurance arrangements cover for the time value of money if the retention is fixed and not indexed for inflation. The discount period must not be greater than the average period of discount in determining the premiums liability provision. The discount rate must be the relevant **risk-free discount rates** used by the Appointed Actuary in the Insurance Liability Valuation Report.
- 44.51. An insurer must only apply the premiums liability adjustment in paragraph 49 or paragraph 50. The insurer must not apply the adjustment from both paragraphs 49 or 50 as this will result in the premiums liability provisions being deducted twice.

OA reinstatement cost

45.52. An insurer that has exposures to other accumulations must determine the cost (if any) of reinstating all catastrophe reinsurance cover relating to the reinsurance recoverables determined in paragraph 49 (**OA reinstatement cost**). In determining this cost, if the insurer does not have contractually agreed rates for the reinsurance cover, the insurer must estimate the cost based on current reinsurance market conditions. The amount must not be less than the full original cost of the cover, with no deduction for the expiry of time since the inception of the reinsurance arrangements <u>unless the insurer is able to demonstrate to APRA that the amount materially overstates the cost that would prevail</u>.

Lenders mortgage insurer concentration risk charge

46.53. A lenders mortgage insurer must determine the lenders mortgage insurer concentration risk charge (**LMICRC**) by applying Attachment A.

The attachment point in this calculation can be reduced for any portion of paid and outstanding claims and premiums liabilities that contribute to the retained losses. APRA may require the insurer to modify the adjustment made in accordance with this paragraph.

Securitisation Use of alternative capital and risk mitigants

47.54. If a regulated institution securitises insurance liabilities, the net insurance liabilities may reduce. The regulated institution must consult APRA prior to entering into the securitisation transaction in order to be able to reduce the Insurance Concentration Risk Charge. If an insurer is considering the use of protections including alternative capital or risk mitigants to reduce the Insurance Concentration Risk Charge, the insurer must apply to APRA for approval to include that mitigant in the calculation of the Insurance Concentration Risk Charge. This includes, but is not limited to, the use of securitisation, reinsurance premium protections, capital market structures and catastrophe bonds.

Catastrophe models

- 48.55. It is common practice for an insurer to use computer-based modelling techniques, developed either in-house or by external providers, to estimate likely losses under different catastrophe scenarios. If an insurer uses such a model, the model must be conceptually sound and capable of consistently producing realistic calculations. APRA will expect the regulated institution to An insurer must be able to demonstrate an understanding of the model used in estimating losses. This understanding will include:
 - (a) that the model has been researched and testedthe type of data and assumptions used in the model;
 - (b) that the insurer has taken measures to ensure that the data used to estimate its losses is sufficiently consistent, accurate and complete, and there is appropriate documentation of any estimates of data used the methodology used to incorporate the data and assumptions into the model; and
 - (c) the sensitivity of the resulting figures to changes in the model's assumptions an understanding of the model used in estimating losses, including;
 - (i) perils and elements that are not included in the model;
 - (ii) assumptions and any estimates used in the modelling process; and
 - (ii) the sensitivity of the model outputs as a result of the factors in (i) and (ii).
- 49. A regulated institution must be able to demonstrate that they have thoroughly researched the model and tested each type of catastrophic event that may affect their portfolio of risks at varying exceedance probabilities. Similarly, a regulated institution must calculate its losses using data that is consistent, accurate and complete. Where a regulated institution lacks access to the relevant data, it must be able to explain the rationale for, and details of, any estimates of data that it uses. This would include analysis of the sensitivity of the results to changes in the estimates and assumptions.

Review and reporting

- 50.56. An insurer must document in its ReMS the process and methodologies for setting and monitoring its Insurance Concentration Risk Charge. This must also include justification for any adjustments or assumptions made, such as all allowances made for aggregate reinsurance arrangements cover and adjustments to OA VR. GPS 230 sets out further details on this requirement.
- 51.57. In addition to the requirements of paragraph 56, an insurer that writes lenders mortgage insurance business must outline in its ReMS how it manages the exposures and mitigants in place for the risk in relation to future <u>placement of</u> reinsurance arrangements.
- 52.58. The Appointed Actuary of an insurer must review and comment on the adequacy of the calculation of the Insurance Concentration Risk Charge as part of the **Financial Condition Report**. For an insurer that has other accumulations exposures, the Appointed Actuary must consider the impact on the Insurance Concentration Risk Charge of the occurrence of the review must include the exposure to multiple events in a year, and whether this would materially alter the Insurance Concentration Risk Charge.
 - 53.59. An insurer must inform APRA within 20 business days of any material changes to its Insurance Concentration Risk Charge that results from any changes in its ReMS, risk profile, classes of business underwritten or reinsurance program.

Adjustments and exclusions

54.60. APRA may, by notice in writing to a regulated institution, adjust or exclude a specific <u>prudential</u> requirement in this Prudential Standard in relation to that regulated institution.

Transition

- 61. On application by a regulated institution, APRA may grant transitional relief from the obligation for the regulated institution to comply with any requirement in this Prudential Standard. Any relief granted by APRA under this paragraph will have effect up until no later than 31 December 2014.
- 55.62. A regulated institution must calculate the NP HR that would apply under paragraph 9 of this Prudential Standard or paragraph 2 of Attachment B, as appropriate. This amount is not required to be included in the Insurance Concentration Risk Charge until reporting periods beginning after 1 January 2014. A regulated institution must document in its ICAAP how its capital resources will be able to meet the NP HR by 1 January 2014.

Determinations made under previous Prudential Standards

<u>56.63.</u> An exercise of APRA's discretion under a previous version of this Prudential Standard does <u>not</u> continue to have effect under this Prudential Standard. For the purposes of this paragraph, 'a previous version of this Prudential Standard' includes:

- (a) Prudential Standard GPS 116 Capital Adequacy: Concentration Risk Charge (GPS 116) made on 18 June 2010;
- (b) GPS 116 made on 10 March 2010;
- (c) GPS 116 made on 23 June 2008;
- (d) Prudential Standard GPS 111 Capital Adequacy: Level 2 Insurance Groups (GPS 111) made on 23 September 2011; and
- (e) GPS 111 made on 17 December 2008.

Attachment A

Lenders mortgage insurer concentration risk charge

- 1. This Attachment applies to a lenders mortgage insurer (**LMI**) for the purposes of determining the lenders mortgage insurer concentration risk charge (**LMICRC**).
- 2. For the purposes of this Attachment:
 - (a) **Loans** are loans secured by an insured mortgage over residential or other property;
 - (b) **Sum insured** is the original exposure amount for an LMI as stated in the mortgage insurance policy;
 - (c) **Loan-to-Valuation Ratio** (**LVR**) is the ratio of the amount of the loan to the value of the secured residential property, as at the date of origination of the loan. Where the mortgage insurance premium is capitalised in the loan amount, the LVR must be calculated including the premium; that is, the loan amount must be increased by the amount of the capitalised premium, irrespective of whether the premium is insured. The inclusion of a First Home Owners Grant in the deposit for a mortgaged property will not otherwise increase the LVR of a loan;
 - (d) Probability of default (**PD**) is the risk of default by the borrower;
 - (e) Loss given default (**LGD**) is the loss to the LMI upon default by the borrower;
 - (f) **Age** is the length of time from the date of origination of the loan to the date of calculation for the purposes of determining the seasoning factors in Table A:
 - (g) A **standard loan** is a loan predominantly secured by residential property and meets the following criteria:
 - (i) the LMI or lender has formally verified the borrower's income and employment; and
 - (ii) the borrower passes standard credit checks and income requirements as documented in the LMI or lender's underwriting or credit policies and procedures;
 - (h) A **non-standard loan** is a loan predominantly secured by residential property which does not meet the criteria in paragraph 2(g) above;
 - (i) A **commercial loan** is a loan that is not predominantly secured by a registered mortgage over residential property;
 - (j) **Coverage type** refers to whether the **LMI policy** of insurance provided is for 100 per cent of the loan or pool amount, or less than 100 per cent of the loan amount or pool amount. The latter is referred to as top cover for

individual LMI policies and partial cover for pooled LMI policies;

- (k) **Individual LMI policy** is lenders mortgage insurance underwritten and issued in respect of an individual loan. Bulk and/or tranche transactions associated with securitisations where each loan is individually insured falls into this category;
- (l) **Pooled LMI policy** is lenders mortgage insurance underwritten and issued in respect of a pool of loans. For clarity, each loan is not individually insured;
- (m) **Premiums liability** is calculated in accordance with GPS 320. **Net premiums liability** is the premiums liability after netting of **reinsurance recoverables** and **non-reinsurance recoveries**. Net premiums liability is also calculated in accordance with GPS 320: and
- (n) **Outstanding claims liabilities** (**OCL**) are as calculated in accordance with GPS 320.

PML and Prescribed Stress Scenario

- 3. For the purpose of this Attachment, the **Probable Maximum Loss (PML)** is assumed to arise from a catastrophic event such that the size of loss from the three year event is equal to a loss with a 0.5 per cent probability of occurrence. APRA requires the PML to be determined on the basis of a Prescribed Stress Scenario as defined in paragraph 4 of this Attachment.
- 4. The **Prescribed Stress Scenario** is in the form of a three-year economic or property downturn, and is applied to the business in force as at the calculation date. The LMI must assume a constant aggregate sum insured over the three-year scenario (except for LMIs in run-off as provided in paragraph 18 of this Attachment).
- 5. The modelled losses must be allocated in the proportion of 25 per cent to year one, 50 per cent to year two and 25 per cent to year three of the downturn. These losses include future claim payments in the lenders mortgage insurer's Premiums Liabilities that relate to an economic downturn.

Determining the lenders mortgage insurer concentration risk charge

- 6. Subject to paragraph 7 of this Attachment, the LMICRC is calculated by:
 - (a) working out the PML in accordance with paragraphs 8 to 18 'Prescribed Calculation of PML' of this Attachment;
 - (b) deducting the amount of Allowable Reinsurance in accordance with paragraphs 19 to 24 of this Attachment; and
 - (c) deducting the amount of net premiums liability relating to an economic downturn, in accordance with paragraph 25 of this Attachment.
- 7. LMICRC must not be less than 10 per cent of the PML as determined in

paragraph 6(a) of this Attachment. This means that the sum of the deductions in 6(b) and 6(c) of this Attachment must not exceed 90 per cent of the PML.

Prescribed calculation of PML

- 8. The PML of an LMI is calculated by the addition of the amounts calculated in paragraph 9 to 18 of this Attachment for all LMI policies in force at the calculation date.
- 9. For each individual LMI policy, the PML is the sum insured multiplied by all of the relevant factors that apply to the policy loan type as set out in Table A.
- 10. Where a policy or loan has characteristics of more than one loan and/or coverage type, the exposure must be recognised in the category that produces the highest PML for that exposure.
- 11. For each pooled LMI policy, the PML is calculated by applying the principles in paragraphs 9 and 10 of this Attachment and then applying the terms of the pool cover to the calculated PML amount.¹⁷
- 12. For an LMI writing inwards reinsurance on a non-proportional basis, the PML for each of these contracts is calculated by:
 - (a) determining the impact of the Prescribed Stress Scenario on the business that is reinsured by applying the rules in paragraphs 8 to 11 of this Attachment; and
 - (b) determining under the terms of the inwards reinsurance contract, the amount of claim by the cedant against the LMI that will arise under (a) above.

This amount becomes the LMI's PML.

- 13. For an LMI writing coverage for an additional loan, or otherwise changing or extending an individual LMI policy, the LMI must determine the PML based on the total sum insured to which it is exposed and the LVR must be based on the total loan as at the most recent date of underwriting (and in accordance with paragraph 2(b) of this Attachment). The age of the individual LMI policy must be based on the origination date of the original loan and not the date of the extension to the individual LMI policy, unless a different methodology has been agreed with APRA.
- 14. For an LMI writing any other lenders mortgage insurance business not captured in paragraphs 9 to 13 of this Attachment, the LMI must consult with APRA. APRA must approve the method for calculating the PML in these instances.

_

For example, reducing the PML amount by any aggregate deductible, applying a maximum cover limit or other partial cover factors, if applicable.

- 15. APRA may direct an LMI to assume that the sum insured, LVR or age of a particular loan or group of loans is either:
 - (a) the sum insured, LVR or age as specified in APRA's direction; or
 - (b) the sum insured, LVR or age worked out by applying instructions contained in APRA's direction.
- 16. APRA may determine a formula for the calculation of the PML in relation to an exposure that does not readily fit into the definitions of loans and / or coverage types.
- 17. APRA may direct an LMI to reclassify a loan where it considers the relevant factor(s) in Table A of the original classification do not reflect the inherent risk of the loan.

LMIs in run-off

18. For an LMI no longer writing new business (i.e. in run-off), the sum insured is expected to decrease over the three-year scenario and it may be appropriate for an LMI in run-off to adjust its PML downwards. The methodology for adjusting an LMI's PML in a run-off situation must be approved by APRA and documented in the LMI's ReMS.

Available Reinsurance

- 19. In addition to the requirements on potential reinsurance recoverables in this Prudential Standard (refer to paragraphs 13 and 14 of this Prudential Standard), only reinsurance arrangements that are contractually committed may be applied during the Prescribed Stress Scenario.
- 20. APRA recognises that the business that is covered by an LMI's reinsurance arrangements and therefore relevant to the Available Reinsurance calculation will vary for each LMI. In some cases, the level of paid claims, Outstanding Claims Liability and/or Premiums Liability ¹⁸ for the period of the Prescribed Stress Scenario may need to be allowed for in determining how much reinsurance will be available to meet claims arising from the Prescribed Stress Scenario. If an LMI allows for any of these amounts in its Available Reinsurance calculation, the level must be subject to review by the Appointed Actuary, as part of prescribed actuarial advice ¹⁹ or through other written advice.
- 21. An LMI must allocate the PML, and any addition to this in accordance with paragraph 20 of this Attachment, over each year of the prescribed three-year stress scenario and then apply its reinsurance program(s) to the resulting projected claims. To the extent that approximations are necessary, a best estimate approach must be used.

Outstanding claims liability and premiums liability provisions in excess of a 75 per cent level of sufficiency must not be recognised.

The Insurance Liability Valuation Report or Financial Condition Report that are required to be completed by the Appointed Actuary in accordance with GPS 320.

- 22. In calculating Available Reinsurance, the LMI must consider the impact of the Prescribed Stress Scenario on its overall reinsurance arrangements and take account of all the relevant financial impacts.²⁰
- 23. APRA may require the LMI to vary the amount of Available Reinsurance applied in the LMI's calculation of its LMICRC.²¹

Allowable Reinsurance

24. The amount of Available Reinsurance to be deducted from the PML in determining the LMICRC is limited to a maximum of 60 per cent of the PML, irrespective of the amount available under paragraphs 19 to 23 of this Attachment. This amount of Available Reinsurance is referred to as **Allowable Reinsurance**.

Net premiums liability deduction

25. Net premiums liability of the LMI that relate to an economic downturn may be deducted from the PML in determining the LMICRC. The percentage of total net premiums liability of the LMI that is deducted must be determined by the Appointed Actuary. The methodology for the determination of the percentage must be included in the Insurance Liability Valuation Report.

This might include, for example, allowing for reversing accruals for experience bonus or other financial adjustments.

APRA will review the allowable reinsurance calculation as set out in the ReMS when making this determination.

Table A - PD, LGD and seasoning factors to be applied in determining the PML of LMIs

Standard loans

The aggregate PD and LGD factors by LVR, over the three-year scenario, for standard loans are:

LVR	PD factor	LGD factor – 100 per cent cover	LGD factor – top cover
Greater than 100%	14.0%	40%	
95.01 – 100%	8.2%	40%	
90.01 – 95%	5.1%	40%	Minimum of:
85.01 – 90%	3.2%	30%	100%; or
80.01 - 85%	2.0%	30%	LGD factor /
70.01 – 80%	1.9%	30%	Top cover % ²²
60.01 - 70%	0.9%	20%	
Less than 60.01%	0.6%	20%	

The seasoning factors by age for standard loans are:

Age of loan	Seasoning factor
Less than 3 years	100%
3 years to less than 5 years	75%
5 years to less than 10 years	25%
10 years or more	5%

-

Top cover % is the percentage of the loan amount covered by the lenders mortgage insurance.

Non-standard loans

The aggregate PD and LGD factors by LVR, over the three-year scenario, for non-standard loans are:

LVR	PD factor	LGD factor – 100 per cent cover	LGD factor – top cover
Greater than 100%	31.5%	40%	
95.01 – 100%	18.5%	40%	
90.01 - 95%	11.5%	40%	Minimum of:
85.01 – 90%	7.2%	30%	100%; or
80.01 - 85%	4.5%	30%	LGD factor /
70.01 - 80%	4.3%	30%	Top cover % ²³
60.01 - 70%	2.0%	20%	
Less than 60.01%	0.9%	20%	

The seasoning factors by age for non-standard loans are:

Age of loan	Seasoning factor	
Less than 3 years	100%	
3 years to less than 5 years	75%	
5 years to less than 10 years	25%	
10 years or more	5%	

Commercial loans

The PML for the three-year scenario is the sum insured multiplied by 8 per cent. No seasoning factor applies to commercial loans.

_

Top cover % is the percentage of the loan amount covered by the lenders mortgage insurance.

Attachment B

Level 2 insurance groups

1. A Level 2 insurance group must comply with paragraphs 1 to 8 and 60 to 63 of this Prudential Standard and the requirements of this Attachment to determine its Insurance Concentration Risk Charge.

Insurance Concentration Risk Charge formula

- 1.2. Subject to the transition rule in paragraph 62 of this Prudential Standard, the Insurance Concentration Risk Charge for a Level 2 insurance group is the greatest of the following amounts:
 - (a) the natural perils vertical requirement determined in accordance with the principles of paragraphs 18 to 26 of this Prudential Standard;
 - (b) the natural perils horizontal requirement determined in accordance with the principles of paragraphs 27 to 43 of this Prudential Standard;
 - (c) the other accumulations vertical requirement determined in accordance with the principles of paragraphs 44 to 52 of this Prudential Standard; and
 - (d) where applicable²⁴, lenders mortgage insurer concentration risk charge determined in accordance with the principles of Attachment A.

A Level 2 insurance group does not need to calculate amounts for each of sub-paragraphs (a) to (d) above if it is able to demonstrate that the amount determined for one or more of those sub-paragraphs is always expected to be materially lower than the amount determined for one of the other sub-paragraphs.

- 3. Each component of the Insurance Concentration Risk Charge in paragraph 2 of this Attachment must be determined after consolidation of intra-group reinsurance arrangements.
- 4. The Insurance Concentration Risk Charge determined in paragraph 2 of this Attachment must not be less than zero.
- 5. A Level 2 insurance group must not make tax adjustments to the amounts calculated in paragraph 2 of this Attachment.
- 6. Where there is a change in the Level 2 insurance group's business (for example, due to a material purchase or sale of a portfolio of business) or reinsurance program (for example, due to material cancellations or additions to reinsurance layers), the Level 2 insurance group must consult with APRA to determine the

A Level 2 insurance group that includes a **lenders mortgage insurer** must calculate (d). The definition of lenders mortgage insurer in GPS 001 includes a reinsurer that writes lenders mortgage insurance. Therefore, a Level 2 insurance group with a reinsurer that provides reinsurance on lenders mortgage insurance must calculate (d).

- approach to recalculate all applicable components of the Insurance Concentration Risk Charge in paragraph 2 of this Attachment.
- 7. In the application of paragraph 2 of this Attachment, a Level 2 insurance group must either:
 - (a) undertake the calculations by applying a regional approach where the regions are to be agreed with APRA and are expected to be consistent with the regions used for the Level 2 insurance group's accounts²⁵; or
 - (b) apply to APRA to use a different method that is consistent with a whole-of-portfolio approach and achieves at least the same level of security to policyholders as the calculation of the relevant gross and net losses on a whole-of-portfolio basis. The application to APRA must include a detailed description of the method and how the resulting Insurance Concentration Risk Charge provides at least the same level of security to policyholders.
- 8. A Level 2 insurance group must not apply to APRA, under paragraph 7(b), to use an alternative method to determine the lenders mortgage insurer concentration risk charge in paragraph 2 of this Attachment.

Reinsurance arrangements

- 2.9. In calculating potential reinsurance recoverables in any component of the Insurance Concentration Risk Charge²⁶, a Level 2 insurance group may take into account:
 - (a) potential reinsurance recoverables receivable from a reinsurance arrangement to which a Level 1 insurer is a party only if the reinsurance arrangement meets the requirements of paragraphs 13 and 14 of this Prudential Standard; and
 - (b) potential reinsurance recoverables receivable from a reinsurance arrangement to which any other consolidated entity carrying on insurance business in a foreign jurisdiction is a party only if the reinsurance arrangement meets the requirements (if any) for documentation of reinsurance contracts applicable in that jurisdiction.²⁷
- 10. Subject to paragraph 11 of this Attachment, a Level 2 insurance group must have in place, at the inception date of its catastrophe reinsurance program, a contractually agreed reinstatement of its catastrophe reinsurance arrangements at the inception date of its catastrophe reinsurance program that reduces its natural perils vertical requirement at an agreed price or rate. A Level 2 insurance group with multiple inception dates for its catastrophe reinsurance program must consult with APRA to determine the approach to the inception date in this paragraph.

Australia must be treated as a single region for the purposes of this sub-paragraph.

This includes the determination of reinsurance for lenders mortgage insurance in Attachment A.

For avoidance of doubt, this paragraph excludes intra-group reinsurance arrangements as these are consolidated in accordance with paragraph 3 of this Attachment.

- 11. A Level 2 insurance group that does not have a contractually agreed reinstatement of its catastrophe reinsurance program as required by paragraph 10 of this Attachment must demonstrate to APRA that it is not practical or appropriate given the nature of its reinsurance arrangements. The Level 2 insurance group must set out its approach to the placement of reinstatement of cover in its ReMS. If APRA is not satisfied with the approach taken by the insurer, it may apply a supervisory adjustment to the prescribed capital amount in accordance with paragraph 36 of GPS 110.
- 3.12. During the period of the catastrophe reinsurance program, a Level 2 insurance group must review and consider the adequacy of reinstatements of all or parts of its reinsurance program, including the requirements of paragraph 11. This review must also consider the financial and operational implications of not having a sufficient number of contractually agreed reinstatements during the period of cover. Details of this review must be included in the Level 2 insurance group's ReMS and ICAAP.

Securitisation Use of alternative capital and risk mitigants

13. If a regulated institution securitises insurance liabilities, the net insurance liabilities may reduce. The regulated institution must consult APRA prior to entering into the securitisation transaction in order to be able to reduce the Insurance Concentration Risk Charge. If a Level 2 insurance group is considering the use of protections including alternative capital or risk mitigants to reduce the Insurance Concentration Risk Charge, the insurer must apply to APRA for approval to include that mitigant in the calculation of the Insurance Concentration Risk Charge. This includes, but is not limited to, the use of securitisation, reinsurance premium protections, capital market structures and catastrophe bonds.

Catastrophe models

- 14. It is common practice for a Level 2 insurance group to use computer-based modelling techniques, developed either in-house or by external providers, to estimate likely losses under different catastrophe scenarios. If a Level 2 insurance group uses such a model, the model must be conceptually sound and capable of consistently producing realistic calculations. APRA will expect the regulated institution to A Level 2 insurance group must be able to demonstrate an understanding of the model used in estimating losses. This understanding will include:
 - (a) that the model has been researched and tested the type of data and assumptions used in the model;
 - (b) that the Level 2 insurance group has taken measures to ensure that the data used to estimate its losses is sufficiently consistent, accurate and complete, and there is appropriate documentation of any estimates of data used the methodology used to incorporate the data and assumptions into the model; and

- (c) the sensitivity of the resulting figures to changes in the model's assumptions an understanding of the model used in estimating losses, including:
 - (i) perils and elements that are not included in the model;
 - (ii) assumptions and any estimates used in the modelling process; and
 - (iii) the sensitivity of the model outputs as a result of the factors in (i) and (ii).

A regulated institution must be able to demonstrate that they have thoroughly researched the model and tested each type of catastrophic event that may affect their portfolio of risks at varying exceedance probabilities. Similarly, a regulated institution must calculate its losses using data that is consistent, accurate and complete. Where a regulated institution lacks access to the relevant data, it must be able to explain the rationale for, and details of, any estimates of data that it uses. This would include analysis of the sensitivity of the results to changes in the estimates and assumptions.

Review and reporting

- 15. A Level 2 insurance group must document in its ReMS the process and methodologies for setting and monitoring its Insurance Concentration Risk Charge. This must also include justification for any adjustments or assumptions made, such as all allowances made for aggregate reinsurance arrangements cover and adjustments to OA VR. GPS 230 sets out further details on this requirement.
- 16. In addition to the requirements of paragraph 15 of this Attachment, a Level 2 insurance group that writes lenders mortgage insurance business must outline in its ReMS how it manages the exposures and mitigants in place for the risk in relation to future placement of reinsurance arrangements.
- 4.17. The Group Actuary of a Level 2 insurance group, as required by GPS 320, must review and comment on the adequacy of the calculation of the Insurance Concentration Risk Charge for the Level 2 insurance group as part of the Level 2 insurance group's Insurance Liability Valuation Report. For a Level 2 insurance group that has other accumulations exposures, the Group Actuary must consider the impact on the Insurance Concentration Risk Charge of the occurrence of multiple OA events in a year.
- 5.18. A Level 2 insurance group must inform APRA within 20 business days of any material changes to its Insurance Concentration Risk Charge that results from any changes in its ReMS, risk profile, classes of business underwritten or reinsurance program.



Prudential Standard GPS 117

Capital Adequacy: Asset Concentration Risk Charge

Objectives and key requirements of this Prudential Standard

This Prudential Standard requires a general insurer or Level 2 insurance group to maintain adequate capital against the risks associated with asset concentration in their activities.

The ultimate responsibility for the prudent management of capital of a general insurer or Level 2 insurance group rests with its Board of directors. The Board must ensure that the general insurer or Level 2 insurance group maintains an appropriate level and quality of capital commensurate with the scale, nature and complexity of its business and risk profile, such that it is able to meets its operations under a wide range of circumstances.

The Asset Concentration Risk Charge is the minimum amount of capital required to be held against asset concentration risks. The Asset Concentration Risk Charge relates to the risk of a concentration in exposures to a particular asset, counterparty or group of related counterparties resulting in adverse movements in the general insurer or Level 2 insurance group's capital base.

This Prudential Standard sets out the method for calculating the Asset Concentration Risk Charge. This charge is one of the components of the Standard Method for calculating the prescribed capital amount for general insurers and Level 2 insurance groups.

Authority

1. This Prudential Standard is made under section 32 of the *Insurance Act 1973* (**the Act**).

Application

- 2. This Prudential Standard applies to each:
 - (a) **general insurer** authorised under the Act (**insurer**); and
 - (b) **Level 2 insurance group** as defined in *Prudential Standard GPS 001 Definitions* (**GPS 001**).

Where a requirement is made in respect of a Level 2 insurance group, the requirement is imposed on the **parent entity** of the Level 2 insurance group.

3. This Prudential Standard applies to insurers and Level 2 insurance groups (regulated institutions) from 1 January 2013 (effective date).

Interpretation

- 4. Unless otherwise defined in this Prudential Standard, expressions in bold are defined in GPS 001.
- 5. For the purposes of this Prudential Standard:
 - (a) **eligible collateral item** means cash, government securities or debt obligations where the obligor has a counterparty rating of Grade 1, 2 or 3 as defined in Attachment C of GPS 001;
 - (b) **non-reinsurance exposures** are the on- and off- balance sheet exposures of an insurer or Level 2 insurance group other than exposures to a reinsurer;
 - (c) **reinsurance exposures** are the on- and off- balance sheet exposures of an insurer or Level 2 insurance group to **reinsurance assets**; and
 - (d) **residual maturity** is the remaining time until the expiration or the repayment of a financial instrument.

Asset Concentration Risk Charge principles

- 6. This Prudential Standard sets out the method for calculating the **Asset** Concentration Risk Charge for a regulated institution using the Standard Method to determine its prescribed capital amount.
- 7. The Asset Concentration Risk Charge relates to the risk of a regulated institution's concentrations in <u>exposures to a particular asset</u>, <u>counterparty of group of related counterparties particular assets</u> resulting in adverse movements in the regulated institution's capital base.

- 8. For the purposes of the Asset Concentration Risk Charge, exposures include all on- and off-balance sheet exposures of the regulated institution. On-balance sheet exposures of the regulated institution should be net of any deductions regulatory adjustments expressly related to the item that are required under Prudential Standard GPS 112 Capital Adequacy: Measurement of Capital.
- 9. All exposures should be converted to Australian dollars (**AUD**) as at the reporting date.
- 10. The amount of any exposure which is subject to the Asset Concentration Risk Charge must <u>not</u> be subject to the **Asset Risk Charge** as defined in *Prudential Standard GPS 114 Capital Adequacy: Asset Risk Charge*. The portion of the exposure which is not subject to the Asset Concentration Risk Charge <u>must</u> be subject to the Asset Risk Charge.

Definitions

- 11. Two or more counterparties will form a **group of related counterparties** if they are linked by:
 - (a) cross guarantees;
 - (b) common ownership or management;
 - (c) the ability of a counterparty to exercise control (defined in accordance with the **Australian Accounting Standards**) over the other(s), whether direct or indirect;
 - (d) financial interdependency such that the financial soundness of any of them may affect the financial soundness of the other(s); or
 - (e) other connections or relationships exist between counterparties, which in the regulated institution's assessment, constitute exposure to the counterparties as a single risk.
- 12. In respect of any overseas entities within a Level 2 insurance group carrying on **international business**, identification of asset or counterparty exposures is to be carried out on a best endeavours basis using information held by entities within the Level 2 insurance group, or otherwise publicly available information, in a manner consistent with the group's documented eredit—risk management policies.
- 13. For the purposes of the limits in respect of non-reinsurance exposures in Attachment A, exposures are classified depending on whether or not the counterparty is part of an APRA-regulated group. A counterparty is part of an APRA-regulated group if the ultimate parent is:
 - (a) authorised by APRA under the Act as a general insurer or **authorised NOHC**; or
 - (b) authorised by APRA under the *Banking Act 1959* as an **authorised deposit-taking institution (ADI)** or authorised NOHC of an ADI; or

- (c) registered by APRA under the *Life Insurance Act 1995* as a life company.
- 14. For the purposes of the limits in Table 2 (c) of Attachment A, exposures are classified as either short-term or long-term. Short-term means a **residual maturity** of less than or equal to one year. Long-term means perpetual or a residual maturity of greater than one year.

Asset Concentration Risk Charge calculation

- 15. The Asset Concentration Risk Charge for each exposure of a regulated institution to a particular asset, counterparty or group of related counterparties is the amount by which this exposure exceeds the limits set out in Attachment A. Separate treatment applies for reinsurance exposures and non-reinsurance exposures. A differing treatment also applies for collateral, guarantees and reinsurance recoverables from non-APRA-authorised reinsurers as set out in paragraphs 19 to 31.
- 16. For <u>non-reinsurance</u> exposures to unrelated parties that are part of an APRA-regulated group (Table 2 (c) of Attachment A), the Asset Concentration Risk Charge is calculated as the maximum amount after applying each of the sub-limits to the relevant exposures.
- 17. In the case of reinsurance exposures (both on-balance and off-balance sheet) to a group of related counterparties, exposures need to be compared and aggregated against each of the limits in Table 1 of Attachment A. This means that:
 - (a) reinsurance exposures within the group that have a counterparty grade of 5 or below are compared to the limit (Table 1 (c)) and an <u>amount Asset Concentration Risk Charge</u> is determined;
 - (b) The reinsurance exposures of grade 5 and below that are not part of the calculation in sub-paragraph (a) Asset Concentration Risk Charge are then added with those with a counterparty grade of 4 and compared to the limit (Table 1(b)), and a further Asset Concentration Risk Charge amount is determine dd. The; and
 - (c) reinsurance exposures of grade 4 and below that are not part of the calculation in sub-paragraphs (a) or (b) Asset Concentration Risk Charge are then added to those with a counterparty grade above 4 and compared to the limit (Table 1(a)).

The total Asset Concentration Risk Charge for the reinsurance exposure is the sum of the above three risk charges amounts from each sub-paragraph above.

<u>17.18.</u> The total Asset Concentration Risk Charge is the sum of each resulting risk charge for each exposure of the regulated institution.

Treatment of collateral and guarantees as risk mitigants

18.19. A regulated institution that holds certain types of collateral against an asset, or where the asset has been guaranteed, as a means of reducing risk may apply a

different approach to determining the Asset Concentration Risk Charge for that asset. Where the assets in question are **reinsurance recoverables** due from non-APRA-authorised reinsurers, different rules regarding treatment of collateral and guarantees apply (refer to paragraphs 25 to 31).

Collateral

- 19.20. Subject to paragraph 22, where a regulated institution possesses eligible collateral against an asset (other than reinsurance recoverables due from non-APRA-authorised reinsurers), it may treat the underlying asset as an exposure to the eligible collateral item. This means that the asset is included in the limits in Attachment A with respect to the collateral, rather than the underlying counterparty.
- 20.21. For the purposes of paragraph 20, collateral is recognised only to the extent that it takes the form of a charge, mortgage or other security interest in, or over, an eligible collateral item. The eligible collateral item must be held for the period for which the asset is held.
- 21.22. Where the **fair value** of the collateral does not cover the full value of the asset, the collateral counterparty rating can only replace that part of the asset that is covered by the collateral. The remaining portion of the asset must be treated as an exposure to the underlying counterparty.

Guarantees

- 22.23. Subject to paragraph 24, where a regulated institution possesses an asset (other than reinsurance recoverables due from non-APRA-authorised reinsurers) that has been explicitly, unconditionally and irrevocably guaranteed for its remaining term to maturity by a guarantor with a counterparty rating (or for governments, the long-term foreign currency credit rating) of grade 1, 2 or 3, it may treat the underlying asset as an exposure to the counterparty providing the guarantee. This means that the asset is included in the limits in Attachment A with respect to the guarantee, rather than the underlying counterparty.
- 23.24. Guarantees provided to a regulated institution by its own parent or a related entity are not eligible for the treatment provided for in paragraph 23.

Reinsurance recoverables due from non-APRA-authorised reinsurers

Collateral

24.25. Subject to paragraphs 26, 27 and 30, where a regulated institution possesses eligible collateral in Australia against reinsurance recoverables due from a non-APRA-authorised reinsurer, it may elect to treat the reinsurance recoverable as an exposure to the eligible collateral. This means that the asset is included in the limits in Attachment A with respect to the collateral, rather than the underlying reinsurer.

- 25.26. For the purposes of paragraph 25, eligible collateral is recognised only:
 - (a) to the extent that it takes the form of:
 - (i) assets held in Australia which form part of a trust fund maintained by a trustee resident in Australia;
 - (ii) deposits held by the regulated institution in Australia made by the non-APRA-authorised reinsurer;
 - (iii) a combination of the two forms of collateral specified in subparagraphs (i) and (ii); or
 - (iv) any other form of collateral as may be approved by APRA in writing in a particular case;
 - (b) if it provides effective security against liabilities arising under the reinsurance contract; and
 - (c) if it is not available for distribution to creditors of the reinsurer other than the regulated institution in the event of insolvency of the reinsurer.
- 26.27. Where the fair value of the collateral does not cover the full value of the reinsurance recoverables, only the part of the value of the reinsurance recoverables that is covered by collateral may be assigned the counterparty grade of the collateral. The remaining portion of the reinsurance recoverable must be treated as an exposure to the underlying reinsurer.

Guarantees

- 27.28. Subject to paragraph 30, where a regulated institution possesses a guarantee or letter of credit in respect of the reinsurance recoverables due from a non-APRA-authorised reinsurer, it may elect to treat the reinsurance recoverables as an exposure to the guarantor or the issuer of the letter of credit (as applicable). This means that the asset is included in the limits in Attachment A with respect to the guarantor or issuer of the letter of credit, rather than the underlying reinsurer. This paragraph applies only if:
 - (a) the guarantor or issuer of the letter of credit is an ADI or, in the case of a **Category E insurer**, its parent entity or other related entity provided the entity has a counterparty rating of grade 1, 2 or 3;
 - (b) the guarantee or letter of credit is explicit, unconditional and irrevocable;
 - (c) the guarantor or issuer of the letter of credit is obliged to pay the regulated institution in Australia; and
 - (d) the obligation of the guarantor or issuer of the letter of credit to pay the regulated institution is specifically linked to performance of the reinsurance contract or contracts under which the reinsurance recoverables arise.

- 28.29. Except in the case of a Category E insurer, a guarantee or letter of credit provided to a regulated institution by its parent entity or other related entity is not eligible for the treatment provided for in paragraph 28.
- 29.30. The collateral, guarantee or letter of credit referred to in paragraphs 25 and 28 must be effective for the expected period for payment of claims under the reinsurance contract under which the reinsurance recoverables arise. If this is impractical, the collateral, guarantee or letter of credit must be effective for at least 2 years but be renegotiable each year to allow at least a year to identify alternative arrangements if the collateral, guarantee or letter of credit cannot be renegotiated.
- 30.31. Subject to paragraph 32, a A regulated institution may elect to not apply the treatment for reinsurance recoverables from non-APRA-authorised reinsurers in paragraphs 25 and 28 and instead apply the counterparty grade of the non-APRA-authorised reinsurer in order to determine the Asset Concentration Risk Charge. APRA may, in writing, require a regulated institution to apply a specified treatment to reinsurance recoverables from non-APRA-authorised reinsurers supported by collateral, guarantee or letter of credit, rather than the treatment that would otherwise apply under this paragraph.
 - 31. APRA may determine that a regulated institution must apply a specified treatment for:
 - (a) a particular reinsurance recoverable;
 - (b) a class of reinsurance recoverables;
 - (c) reinsurance recoverables from a particular non-APRA-authorised reinsurer:
 - (d) reinsurance recoverables from a class of non APRA authorised reinsurers;
 - (e) a particular collateral item, guarantee or letter of credit;
 - (f) a class of collateral items, guarantees or letters of credit; or
 - (g) a combination of sub-paragraphs (a), (b), (c), (d), (e) and (f).
 - 32. In making this determination, APRA will have regard to the previous use by the regulated institution of paragraphs 25, 28 and 31, the level of reinsurance recoverables from non-APRA-authorised reinsurers, the resulting change in the Asset Concentration Risk Charge and any other relevant matters.

Adjustments and exclusions

33. If a large claim or aggregation of claims arising from a catastrophic event causes the outstanding reinsurance assets of a regulated institution to temporarily exceed the limits in Attachment A, the regulated institution may apply to APRA to vary the application of the limits for a specified period of time. APRA may grant written approval for such variation subject to conditions and may specify any period of time for such variation.

- 34.32. A regulated institution may apply to APRA to vary the application of the limits in Attachment A-for a specified period of time for a specified asset or an asset of a specified class. In deciding whether to grant the application, APRA will have regard to the type of exposure, the term of the exposure, the ability for the regulated institution to mitigate the Asset Concentration Risk Charge by other means and any other matters which APRA considers relevant. APRA may grant written approval for such variation subject to conditions and may specify any period of time for such variation.
- 35. A regulated institution may apply to APRA to vary the application of all limits in Attachment A. In deciding whether to grant the application, APRA will have regard to:
 - (a) the ultimate parent or any intermediate parent of the regulated institution and whether it is APRA regulated;
 - (b) the risks insured by the regulated institution and whether third parties are involved in the insurance provided by the regulated institution; and
 - (c) whether the regulated institution is writing compulsory insurances, such as workers' compensation insurance, public liability insurance or professional indemnity insurance, to a group of practitioners that require such cover in order to practise.
- 36. Regulated institutions which meet any of the criteria above (i.e. APRA-regulated parent, third parties involved and/or compulsory insurances) are unlikely to be granted approval. APRA may grant written approval subject to conditions and may specify any period of time for such variation.
- 37.33. APRA may, by notice in writing to a regulated institution, adjust or exclude a specific prudential requirement in this Prudential Standard in relation to that regulated institution.

Transition

38.34. On application by a regulated institution, APRA may grant transitional relief from the obligation for the regulated institution to comply with any requirement in this Prudential Standard up until 31 December 2014. Any relief granted by APRA under this paragraph will have effect until no later than 31 December 2014.

Attachment A

This attachment sets out the Asset Concentration Risk Charge limits for exposures to single assets, counterparties and groups of related counterparties.

Table 1: Reinsurance exposures

	Exposure – reinsurance counterparty or group of counterparties	AUD limit
(a)	Exposures to reinsurers with a counterparty grade of 1, 2 or 3	No limit
(b)	Exposures to reinsurers with a counterparty grade of 4	50% of capital base
(c)	Exposures to reinsurers with a counterparty grade of 5, 6 or 7	25% of capital base

Table 2: Non-reinsurance exposures

	Exposure – asset, counterparty or group of counterparties	AUD limit
(a)	Governments with a counterparty grade 1 or 2	No limit
(b)	Related parties that are part of an APRA-regulated group	Greater of \$20 million and 100% of capital base
(c)	Unrelated parties that are part of an APRA-regulated group:	
	(i) Short-term exposures ¹	Greater of \$20 million and 100% of capital base
	(ii) Long-term exposures ²	Greater of \$10 million and 50% of capital base
	(iii) Total exposure	Greater of \$20 million and 100% of capital base
(d)	All other exposures	25% of capital base

 $[\]frac{1}{2}$ As defined in paragraph 14 of this Prudential Standard. $\frac{2}{2}$ As defined in paragraph 14 of this Prudential Standard.



Prudential Standard GPS 118

Capital Adequacy: Operational Risk Charge

Objectives and key requirements of this Prudential Standard

This Prudential Standard requires a general insurer or Level 2 insurance group to maintain adequate capital against the operational risks associated with their activities.

The ultimate responsibility for the prudent management of capital of a general insurer or Level 2 insurance group rests with its Board of directors. The Board must ensure that the general insurer or Level 2 insurance group maintains an appropriate level and quality of capital commensurate with the scale, nature and complexity of its business and risk profile, such that it is able to meet its obligations under a wide range of circumstances.

The Operational Risk Charge is the minimum amount of capital required to be held against operational risks. The Operational Risk Charge relates to the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.

This Prudential Standard sets out the method for calculating the Operational Risk Charge. This charge is one of the components of the Standard Method for calculating the prescribed capital amount for general insurers and Level 2 insurance groups.

Authority

1. This Prudential Standard is made under section 32 of the *Insurance Act 1973* (**the Act**).

Application

- 2. This Prudential Standard applies to each:
 - (a) **general insurer** authorised under the Act (**insurer**); and
 - (b) **Level 2 insurance group** as defined in *Prudential Standard GPS 001 Definitions* (**GPS 001**).

Where a requirement is made in respect of a Level 2 insurance group, the requirement is imposed on the **parent entity** of the Level 2 insurance group.

3. This Prudential Standard applies to insurers and Level 2 insurance groups (regulated institutions) from 1 January 2013 (effective date).

Interpretation

4. Unless otherwise defined in this Prudential Standard, expressions in bold are defined in GPS 001.

Operational Risk Charge

- 5. This Prudential Standard sets out the method for calculating the **Operational Risk Charge** for a regulated institution using the **Standard Method** to determine its **prescribed capital amount**.
- 6. The Operational Risk Charge is the minimum amount of capital a regulated institution must hold against the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.

Calculation of the Operational Risk Charge

- 7. The Operational Risk Charge for a regulated institution is calculated as the sum of:
 - (a) the Operational Risk Charge for inwards reinsurance business (**ORCI**) defined in paragraph 9; and
 - (b) the Operational Risk Charge for business that is not inwards reinsurance business (**ORCNI**) defined in paragraph 10.

The Operational Risk Charge for a Level 2 insurance group is calculated after consolidation of intra-group exposures.

- 8. For the purposes of paragraphs 9 and 10:
 - (a) GP₁ is written premium revenue (gross of reinsurance) for the 12 months ending on the **reporting date**;
 - (b) GP_0 is written premium revenue (gross of reinsurance) for the 12 months ending on the date 12 months prior to the reporting date;
 - (c) Written premium revenue includes fire services levy, other levies imposed by state and territory governments, and revenue relating to portfolio transfers and unclosed business;
 - (d) NL is the central estimate of insurance liabilities (net of reinsurance) at the reporting date;
 - (e) $|GP_1 GP_0|$ is the absolute value of the difference between GP_1 and GP_0 .

All of the values determined under this paragraph should correspond to the value in the regulated institution's **statutory accounts**. All transfers of insurance business made in accordance with the Act must be recognised in line with the corresponding requirements under *Australian Accounting Standard AASB 1023 General Insurance Contracts*.

9. The ORCI is calculated as follows:

$$ORCI = 2\% \times \{maximum(GP_1, NL) + maximum(0, |GP_1-GP_0| - 0.2 \times GP_0)\}$$

10. The ORCNI is calculated as follows:

$$ORCNI = 3\% \times \{maximum(GP_1, NL) + maximum(0, |GP_1-GP_0| - 0.2 \times GP_0)\}$$

Adjustments and exclusions

11. APRA may, by notice in writing to a regulated institution, adjust or exclude a specific prudential requirement in this Prudential Standard in relation to that regulated institution.

Transition

12. On application by a regulated institution, APRA may grant transitional relief from the obligation for the regulated institution to comply with any requirement in this Prudential Standard up until 31 December 2014. Any relief granted by APRA under this paragraph will have effect up until no later than 31 December 2014.