



## **Prudential Standard GPS 340**

### **Insurance Liability Valuation**

#### **Objectives and key requirements of this Prudential Standard**

This Prudential Standard sets out requirements for the valuation of insurance liabilities of a general insurer or Level 2 insurance group.

The ultimate responsibility for the value of insurance liabilities rests with the Board of the general insurer or Level 2 insurance group.

A general insurer or Level 2 insurance group must value its insurance liabilities in accordance with the principles and methodology set out in this Prudential Standard.

For the purposes of the capital standards and reporting requirements under the *Financial Sector (Collection of Data) Act 2001* (FSCODA), a general insurer's or Level 2 insurance group's insurance liabilities must be valued in accordance with this Prudential Standard.

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**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).
3. Where a requirement applies to a Level 2 insurance group, the requirement is imposed on the **parent entity** of the Level 2 insurance group.
4. This Prudential Standard applies to insurers and Level 2 insurance groups (**regulated institutions**) from [*to be determined*].

**Interpretation**

5. Terms that are defined in GPS 001 appear in bold the first time they are used in this Prudential Standard.

**Valuation of insurance liabilities**

6. An insurer must value its insurance liabilities in accordance with this Prudential Standard, whether or not the insurer is required to have an Appointed Actuary. The valuation must then be used for the purpose of:
  - (a) calculating the insurer's **prescribed capital amount** in accordance with the capital standards; and
  - (b) completing the insurer's **yearly statutory accounts** in accordance with reporting standards made under the FSCODA.
7. Requirements for the measurement and reporting of insurance liabilities for Level 2 insurance groups are set out in Attachment A of this Prudential Standard.
8. An insurer must determine a value for both its outstanding claims liabilities and its premiums liabilities for each class of business underwritten by the insurer.
9. Outstanding claims liabilities relate to all claims incurred prior to the valuation date, whether or not they have been reported to the insurer. The value of the outstanding claims liabilities must include an amount in respect of the expenses that the insurer expects to incur in settling these claims. An insurer must determine the outstanding claims liabilities on a prospective basis, both net and gross of:
  - (a) reinsurance recoverables; and

- (b) non-reinsurance recoveries.
10. Premiums liabilities relate to all future claim payments arising from future events post the valuation date that will be insured under the insurer's existing policies that have not yet expired. The value of the premiums liabilities must include an amount in respect of the expenses that the insurer expects to incur in administering and settling the relevant claims and allow for expected premium refunds. In respect of premiums liabilities for which **reinsurance** has not yet been purchased, allowance must be made for this reinsurance in the premiums liabilities valuation (refer to paragraphs 34 to 43 of this Prudential Standard for further details on the assumptions relating to this reinsurance). Premiums liabilities are to be determined on a prospective basis, both net and gross of:
- (a) **expected reinsurance recoveries**; and
- (b) non-reinsurance recoveries.
11. The value of outstanding claims liabilities and premiums liabilities must not include any Government charges imposed such as levies, duties and taxes. Also, a deferred acquisition cost asset must not be reported as part of the value of outstanding claims liabilities or premiums liabilities valued under this Prudential Standard.
12. Premiums liabilities relating to insurance and reinsurance contracts written on a long-term (or continuous) basis, with the option for the party accepting the risk to cancel the contract prior to the expiry date, must make allowance for future claims anticipated to arise from risks covered up to the next possible cancellation date. For instance, a multi-year contract may be written on the basis that it may be cancelled by the risk carrier on a particular date (cancellation date) or within a particular period (so that the earliest cancellation date may be determined). In this case, the insurer or reinsurer would need to account for premiums liabilities for any unexpired risks which may:
- (a) arise up to and including the cancellation date; or
- (b) remain after the cancellation date.
13. In determining the value for outstanding claims liabilities and premiums liabilities, an insurer must determine a value for the central estimate and associated risk margin by class of business (subject to considerations of materiality and the professional judgement of the Appointed Actuary). The insurer must therefore calculate and report separately to APRA, and by class of business, central estimates and risk margins for outstanding claims liabilities and premiums liabilities.<sup>1</sup> However, this should not prevent analysis being undertaken on a basis which is more suitable, taking into account the nature of the data and the particular circumstances of the insurer.

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<sup>1</sup> Such reporting is required in both an Actuarial Valuation Report (AVR) and in statutory reporting (refer to reporting standards made under the FSCODA).

14. The valuation of insurance liabilities reflects the individual circumstances of the insurer. In any event, the minimum value of insurance liabilities must be the greater of a value that is:
  - (a) determined on a basis that is intended to value the insurance liabilities of the insurer at a 75 per cent level of sufficiency; and
  - (b) the central estimate plus one half of a standard deviation above the mean for the insurance liabilities of the insurer.
15. The principles of this Prudential Standard must be applied to the calculation of both gross and net insurance liabilities.

*The central estimate*

16. The central estimate is intended to reflect the mean value in the range of possible values for the outcome (that is, the mean of the distribution of probabilistic outcomes). The determination of the central estimate must be based on assumptions as to future experience which reflect the experience and circumstances of the insurer and which are:
  - (a) made using judgement and experience;
  - (b) made having regard to available statistics and other information; and
  - (c) neither deliberately overstated nor understated.
17. Where experience is highly volatile, model parameters estimated from the experience can also be volatile. The central estimate must therefore reflect as closely as possible the likely future experience of the insurer. Judgement may be required to limit the volatility of the assumed parameters to that which is justified in terms of the credibility of the experience data.
18. The central estimate will be measured as the present value of the future expected payments. This measurement process will involve prospective calculations and modelling techniques, and will require assumptions in respect of the expected future experience, taking into account all factors which are considered to be material to the calculation, including:
  - (a) discount rates;
  - (b) claims escalation;
  - (c) claims and policy management expenses; and
  - (d) claims run-off.
19. In establishing the central estimate assumptions, regard must be given to the materiality of:
  - (a) the class of business being considered; and

- (b) the effect of particular assumptions on the determined result.
20. The assumptions used must be consistent for the estimation of both outstanding claims liabilities and premiums liabilities. Where they are not, the reasons must be documented.

*The risk margin*

21. The risk margin is the component of the value of the insurance liabilities that relates to the inherent uncertainty that outcomes will differ from the central estimate. It is aimed at ensuring that the value of the insurance liabilities is established at an appropriate and sufficient level. The risk margin does not relate to the risk associated with the underlying assets, such as asset-liability mismatch risk.
22. Risk margins must be determined, for each class of business and in total, on a basis that reflects the experience of the insurer. In any event, the risk margins must be valued so that the insurance liabilities of the insurer, after any diversification benefit, are not less than the greater of a value that is:
- (a) determined on a basis that is intended to value the insurance liabilities of the insurer at a 75 per cent level of sufficiency; and
  - (b) the central estimate plus one half of a standard deviation above the mean for the insurance liabilities of the insurer.
23. When selecting the methodology and assumptions to be used in determining the risk margin for a class of business, consideration should be given to a range of factors, including:
- (a) the robustness of the valuation models;
  - (b) the reliability and volume of the available data and other information;
  - (c) past experience of the insurer and the general insurance industry; and
  - (d) the particular characteristics of each class of business.
24. Estimation of a standard deviation above the mean may present technical difficulties when components of the uncertainty in the central estimate do not permit statistical analysis to be undertaken. Estimation of a standard deviation above the mean will generally require both the exercise of judgement and technical analysis.
25. The risk margin plays a role in achieving an appropriate pattern of profit emergence for a class of business. However, the risk margin must not be used as a tool for smoothing the effect of changes in assumptions or valuation methods.
26. From year to year, risk margins would generally be a similar percentage of the central estimate for each class of business, unless there has been a material change in uncertainty. Changes in uncertainty may derive from changes in a number of elements such as reinsurance arrangements and recoveries, the insurer's risk

profile or volume of business, or external factors (for example, legislative requirements). The Appointed Actuary must document any material changes.

27. The risk margin may include an allowance for diversification. The reporting standards made under the FSCODA require the insurer to report a stand-alone risk margin and a diversified risk margin for each of the insurer's classes of business. The stand-alone risk margin refers to the risk margin that would be applied to a class of business where no allowance for diversification with other classes of business has been allowed. The diversified risk margin refers to the risk margin that has been applied to the class of business after allowance for diversification across the whole insurance portfolio. The Appointed Actuary must clearly document the justification for and method of determining such diversification allowance (which must be assessed on a holistic basis for the insurer).

### **Discount Rates**

28. The rates to be used in discounting the expected future claims payments of insurance liabilities denominated in Australian currency for a class of business are derived from yields of Commonwealth Government Securities (CGS), as at the calculation date, that relate to the term of the future insurance liability cash flows for that class.
29. Where the term of the insurance liabilities denominated in Australian currency exceeds the maximum available term of CGS, other instruments with longer terms and current observable, objective rates are to be used as a reference point for the purpose of extrapolation. If there are no other suitable instruments, or the Appointed Actuary elects to use an instrument that does not meet this requirement, the Appointed Actuary must justify the reason for using that particular instrument in the insurer's Actuarial Valuation Report (AVR). Adjustments must be made to remove any allowances for credit risk and illiquidity that are implicit in the yields of those instruments.
30. For foreign insurance liabilities not denominated in Australian currency, the risk-free discount rate must be based on the yields of highly liquid sovereign risk securities with current observable, objective rates, in the currency of the insurance liabilities and with counterparty grade 1. If there are no securities satisfying this requirement, or the Appointed Actuary elects to use an instrument that does not meet this requirement, the Appointed Actuary must justify the reason for using that particular instrument in the insurer's AVR. Adjustments must be made to remove any allowances for credit risk and illiquidity that are implicit in the yields of those instruments.

### *Methods for valuing insurance liabilities*

31. A method, or methods, must be adopted for valuing an insurer's insurance liabilities. Comprehensive actuarial analysis and modelling techniques should be employed, subject to considerations of materiality. The appropriateness of any method, or methods, will depend on:
  - (a) the class of business being considered;

- (b) the nature, volume and quality of the available data in relation to the experience of the insurer and the industry;
  - (c) the circumstances of the insurer; and
  - (d) considerations of materiality.
32. Approximate methods may be used when valuing an insurer's insurance liabilities subject to the principles of this Prudential Standard, and where the result is not material or not materially different from that which would result from a full valuation process. The onus for justification of the appropriateness of any valuation method rests with:
- (a) the Board of the insurer; and
  - (b) the Appointed Actuary.

### *Claims escalation*

33. Appropriate allowance must be made for future claims escalation when determining the central estimates of both outstanding claims liabilities and premiums liabilities. Future claims payments may increase over current levels as a result of wages or price increases (inflation) and/or court-awarded interest, other environmental or economic causes (superimposed inflation). Claims payments include third party costs incurred in settling those claims, for example, investigation, medical and legal fees.

### **Estimation of reinsurance recoverables**

34. The estimation of the value of the insurance liabilities may be undertaken on a gross basis, with a separate estimate of the value of reinsurance recoveries (that is, amounts expected to be recovered under the insurer's reinsurance arrangements), or on a net basis. In either case, the principles of this Prudential Standard must be applied. Where the process is undertaken on a net basis, it is still necessary to value separately the estimates of the gross insurance liabilities and the reinsurance recoverables and expected reinsurance recoveries.<sup>2</sup>

### *Documentation of reinsurance arrangements*

35. For the purpose of calculating an insurer's insurance liabilities, it must be assumed initially that:
- (a) reinsurance arrangements are fully documented;
  - (b) reinsurance arrangements are 100 per cent placed, that is, there are no gaps in the insurer's reinsurance arrangements; and

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<sup>2</sup> This is also required to comply with reporting standards made under the FSCODA.



- (c) reinsurance recoverables and expected reinsurance recoveries will be received in full.<sup>3</sup>

Where reinsurance arrangements are not fully documented or are not fully placed, or there is a risk that reinsurance assets will not be received from a reinsurer, the insurer will either not be able to recognise the reinsurance assets or will be required to hold capital against these risks.<sup>4</sup>

*Assessment and comment by the Appointed Actuary*

36. The Appointed Actuary<sup>5</sup> must make a specific assessment of and comment on the recoverability of reinsurance assets and expected reinsurance recoveries from **non-APRA authorised reinsurers**. The Appointed Actuary must consider all relevant matters, including:
- (a) quality of information and data available on potential reinsurance recoverables;
  - (b) credit risk;
  - (c) willingness to pay;
  - (d) documentation and placement of contracts; and
  - (e) any legal or other issues that may create an impediment to the insurer realising the reinsurance asset.
37. Aggregate reinsurance assets and expected reinsurance recoveries must be separated into subsets which identify those that derive from documented and non-documented reinsurance arrangements, those that derive from reinsurance arrangements that are fully placed and not fully placed, and those likely to be recoverable and those not likely to be recoverable from reinsurers. In providing this advice, the Appointed Actuary must consider the materiality of reinsurance assets. If they are material, the Appointed Actuary must assess the potential range of amounts not recoverable from reinsurers, based on the uncertainty of individual and aggregate gross losses. For the purposes of *Prudential Standard GPS 114 Capital Adequacy: Asset Risk Charge*, the reinsurance recoverables due from non-APRA-authorized reinsurers for each accident year must be identified in the AVR.

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<sup>3</sup> For further detail in respect of documentation of reinsurance arrangements, refer to *Prudential Standard GPS 230 Reinsurance Management*.

<sup>4</sup> Refer to reporting standards made under the FSCODA for recognition of assets. Refer to *Prudential Standard GPS 112 Capital Adequacy: Measurement of Capital* and *GPS 110 Capital Adequacy* for detail in respect of capital requirements in relation to these risks.

<sup>5</sup> If an insurer is exempt from the requirement to appoint an actuary, the insurer must make the assessment and comment as required by this paragraph.

*Treatment of reinsurance expenses and deferred reinsurance expense*

38. APRA maintains a consistent approach in allowing for the cost of all types of reinsurance arrangements. The principle is that APRA requires an insurer to ensure in all prudential reporting that reinsurance coverage matches the risk exposures in the underlying portfolio, irrespective of the type of reinsurance contract.
39. This Prudential Standard requires insurers to capitalise the cost of reinsurance at inception as **deferred reinsurance expense** (DRE), and expense that capitalised amount over the life of the reinsurance coverage. The establishment of the DRE will be associated with the establishment of a liability to pay a reinsurance premium; the liability will be reduced as payments are made. The payment of the premium occurs according to the reinsurance contract, and the expensing of the DRE occurs in accordance with the expected pattern of the incidence of risk.
40. For the calculation of premiums liabilities, the premiums liabilities must include the purchase cost for reinsurance arrangements where existing reinsurance arrangements are insufficient to fully cover the exposure period for premiums liabilities. The existence of DRE on the balance sheet indicates the existence of reinsurance that may provide partial cover for the premiums liabilities. To the extent that the current reinsurance arrangements cover the premium liability exposure, insurers are not required to include the cost of reinsurance in the premiums liabilities. However, an additional reinsurance cost must be included for any part of the premiums liabilities not covered by current reinsurance arrangements.<sup>6</sup>
41. For any part of the current reinsurance arrangements that cover future business that has not yet been written, that portion of the associated DRE asset cannot be used to reduce premiums liabilities calculated under this Prudential Standard. To the extent DRE from the underlying reinsurance is not deducted in *GPS 112 Capital Adequacy: Measurement of Capital* (GPS 112), the future business portion of the DRE can be used to increase the surplus (or decrease the deficit) in premiums liabilities calculated in accordance with GPS 112. This revised surplus (or deficit) is included as part of adjusted net assets in Australia for Category C insurers and the capital base for all other insurers.

*Allowance for future reinsurance expense*

42. The estimation of expected reinsurance recoveries in respect of premiums liabilities for which reinsurance has not yet been purchased can assume that the necessary reinsurance related to those liabilities will be purchased and documented. Allowance must be made for the purchase cost of this future reinsurance expense in the premiums liabilities valuation. This assumption must only be made when:
  - (a) existing reinsurance arrangements are documented;

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<sup>6</sup> See paragraph 42.

- (b) the estimated expected reinsurance recoveries relate to the same classes of business that are currently covered by the existing documented reinsurance arrangements; and
- (c) it is fully expected that the reinsurance will be replaced on similar terms when current arrangements expire.

*Estimation undertaken on the combined claims experience of several classes of business*

43. The estimation of the value of reinsurance recoverables and expected reinsurance recoveries would normally be undertaken on the basis of each class of business written by the insurer. However, there are certain forms of reinsurance where reinsurance assets and expected reinsurance recoveries receivable depend on the combined claims experience of several or all classes of business underwritten by the insurer. In such instances, the estimation will be required to factor in all the individual results by class of business covered by the reinsurance arrangements.

**Non-reinsurance recoveries**

44. Non-reinsurance recoveries are amounts that may be recovered under arrangements other than reinsurance arrangements, such as salvage, subrogation and sharing agreements. The treatment of non-reinsurance recoveries must be consistent with that required by reporting standards made under the FSCODA.

**Reporting current period claims expense**

45. The reporting forms under the FSCODA require the reporting of claims expense divided into two parts - current period and non-recurring. In determining the current period claims expense the approach has some important differences from that used in the valuation of insurance liabilities described above.
46. The change in outstanding claims liabilities (including risk margins) over a period, added to the net claim payments in that period, results in the net claims expense for that period. A component of the net claims expense is the current period net claims expense; this component arises from claims incurred in the current period, defined as the financial year to date. The insurer must calculate and report the value of the current period net claims expense. The remaining balance of the net claims expense represents the non-recurring component which also must be reported. Both items must be calculated by APRA class of business. The current period net claims expense must include:
- (a) gross claims payments, less any associated recoveries received and receivable, from reinsurance and non-reinsurance, including salvage, subrogation and GST recoveries;
  - (b) outstanding claims liabilities, net of any associated recoverable amounts from reinsurance and non-reinsurance, including salvage, subrogation and GST recoveries. The net outstanding claims must be determined before any allowance for discounting or risk margins; and

- (c) claims handling expense attributable to the paid and outstanding claims incurred in the current period.
47. Quarterly actuarial reviews are not required to be completed specifically for the calculation of the current period net claims expense. However, the insurer should seek advice from the Appointed Actuary regarding establishing a suitable approach for its calculation.

**Adjustments and exclusions**

48. APRA may, by notice in writing to an insurer or Appointed Actuary, adjust or exclude a specific requirement in this Prudential Standard in relation to that insurer, Appointed Actuary or other actuary subject to this Prudential Standard.

## Attachment A - Level 2 insurance groups

### Valuation of insurance liabilities

1. A Level 2 insurance group may consist of Australian business only (insurers authorised by APRA) or may comprise both Australian and **international business**.
2. Subject to paragraph 5 of this Attachment, a Level 2 insurance group must determine the value of its insurance liabilities in a manner consistent with that set out in this Attachment. The valuation must then be used for the purpose of:
  - (a) calculating the Level 2 insurance group's **prescribed capital amount** in accordance with the capital standards; and
  - (b) completing the Level 2 insurance group's **accounts** in accordance with reporting standards made under the FSCODA.

### *Australian business*

3. In respect of **Australian business**, the insurance liability valuation for a Level 2 insurance group should be consistent with that for an insurer under this Prudential Standard subject to identified consolidated adjustments such as intra-group transactions and diversification. In the case of a Level 2 insurance group with only Australian business, the valuation of group insurance liabilities must be based on the valuation of each insurer in the group and must be compiled as follows:
  - (a) the sum of the insurance liabilities for each insurer in the group; plus or minus
  - (b) consolidation adjustments for intra-group transactions (which are likely to be eliminations); plus or minus
  - (c) consolidation adjustments for diversification benefits in risk margins (if any); plus or minus
  - (d) any other adjustments the Group Actuary considers necessary to comply with this Prudential Standard.
4. On the application of the parent entity of a Level 2 insurance group, APRA may determine in writing that the Group Actuary of the Level 2 insurance group can apply the method set out in paragraphs 5 to 9 of this Attachment in relation to its Australian business. APRA may specify that the determination is subject to conditions.

### *International business*

5. In the case of a Level 2 insurance group with international business, the Group Actuary must also determine appropriate values in respect of outstanding claims

and premiums liabilities for the international controlled entities before applying the steps described in paragraph 3 of this Attachment.

6. In respect of outstanding claims, the consolidated accounts of the group prepared in accordance with **Australian Accounting Standards** will include consolidated gross outstanding claims liabilities (and corresponding recovery assets). Given that those standards are, in most respects, the same as APRA requirements for outstanding claims, the Group Actuary may adopt the outstanding claims liabilities from the consolidated accounts of the group subject to:
  - (a) ensuring that the risk margins are in accordance with APRA standards; and
  - (b) any other adjustments that are needed, in the Group Actuary's opinion, to materially comply with APRA standards.
7. In respect of premiums liabilities, the consolidated group accounts prepared in accordance with Australian Accounting Standards will not include prospective estimates of premiums liabilities. The Group Actuary must make an appropriate estimate of premiums liabilities and advise the group accordingly.
8. In respect of international business, the premiums liability valuation for a Level 2 insurance group may be based on accounting entries premiums liabilities, subject to:
  - (a) assessment by the Group Actuary of the appropriateness of these entries relative to the requirements of this Prudential Standard; and
  - (b) any adjustments required as a consequence of this assessment.

The requirements specified in paragraphs (a) and (b) will not apply to international consolidated entities which APRA deems to be immaterial. The parent entity of a Level 2 insurance group will need to consult with APRA prior to excluding any international consolidated entities from the requirements in paragraphs (a) and (b). Consolidation adjustments referred to in paragraph 3 of this Attachment may also be required.
9. For international business the premiums liabilities may be recorded as the equivalent accounting entries<sup>7</sup> provided they are subject to a liability adequacy test by the Group Actuary, in accordance with the requirements of Australian Accounting Standards, at a 75 per cent level of sufficiency. The business segments used should not, however, combine Australian and international businesses in the same segments because the Australian business already has a premiums liability estimate from its AVR that is used as a component of the group results.
10. The determination of the capital base of a Level 2 insurance group where premiums liabilities are reported on the basis of paragraphs 8 and 9 of this Attachment will, in some circumstances, differ to that prescribed under GPS 112.

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<sup>7</sup> The net premiums liabilities are estimated as unearned premiums less deferred acquisition costs less the data relevant reinsurance items plus any liability adequacy test adjustments.

Any amount of premiums liabilities determined using accounting entries which is higher than the corresponding amount calculated under the prescribed liability adequacy test (i.e. a surplus) cannot be included in the capital base of the Level 2 insurance group as a surplus technical provision. Any amount of premiums liabilities determined using accounting entries which is lower than the corresponding amount calculated under the prescribed liability adequacy test (i.e. a deficit) must be included in the capital base of the Level 2 insurance group as a deficit technical provision.