THE INSTITUTE OF ACTUARIES OF AUSTRALIA
A.C.N. 000 423 656

PROFESSIONAL STANDARD 300
ACTUARIAL REPORTS AND ADVICE ON OUTSTANDING CLAIMS IN GENERAL INSURANCE

A. INTRODUCTION

Application

1. This standard applies to actuaries preparing estimates of th e liabilities for outstanding claims of general insurance companies, reinsurers, self insurers, insurance pools and statutory authorities involved in general insurance activities and providing advice on the provisions to be set aside to meet those liabilities in the balance sheet and for tax purposes.

2. This standard does not apply to outstanding claims advice for life or health insurance entities.

Legislation

3. This standard applies particularly to advice which is expected to be used to fulfil requirements under the Insurance Act 1973, the Corporations Act (in particular the accounting standards AASB1023 and AAS26), the Income Tax Assessment Act (including the taxation ruling IT2663 applying to direct insurers) and the various State and Commonwealth Acts under which Accident Compensation Schemes and State Government Insurance Offices operate.

First Issued

4. This standard was first issued in May 1994. It replaces the guidance note "Outstanding Claims in General Insurance - Note on Professional Practice" which was issued in 1985 and subsequently titled Guidance Note 350.

Latest Revision

5. Guidance Note 350 has been upgraded to a Professional Standard to complement the recently implemented accounting standards, taxation ruling and ISC requirements and amended to conform with the revised format for Professional Standards implemented in 1992.

B. DEFINITIONS

6. An insurer's **liabilities** for outstanding claims at a given date (the valuation date) are the present value of claim payments to be made after the valuation date, on claims which, under the terms of its contracts, arose on or before the valuation date plus the present value of the insurer's internal costs of administering and settling those payments.

7. **Outstanding claims** include claims which have been reported and have not yet been finalised, claims which have been incurred but not yet reported (IBNR), and claims which have been administratively finalised and which may be reopened.

8. **Claim payments** refer to payments to or on behalf of the claimant, and any third party costs such as investigation, medical and legal fees associated with each claim.

9. **Recoveries** refer to amounts or expected amounts to be recovered by an insurer in respect of particular claims. A distinction is made between reinsurance recoveries and non-reinsurance recoveries (salvage, subrogation, sharing agreements, etc).

10. A **central** estimate of the liabilities is an estimate which is intended to contain no deliberate or conscious over or under estimation. The nature of insurance claims is such that the actual value of the liabilities is unknown and it is usually very difficult to determine the central estimate with a reasonable degree of precision. For this reason the inherent uncertainty in the central estimate must also be considered.

11. An outstanding claim **provision** is an amount set aside in the insurer's accounts, to provide for outstanding claim liabilities. In order to deal with uncertainty a distinction is drawn in this document between the 'provision' (the amount set aside in the accounts) and the 'liability' (the unknown actual value of the outstanding claims).

12. A **prudential margin** refers to the amount by which the provision set aside in the accounts is greater than the actuarial central estimate of the liabilities due to the inherent uncertainty in the determination of the actuarial central estimate.

13. A **risk free rate of return** refers to the expected rate of return on a matched portfolio of investments with minimal risk.

14. **Short tail** classes of business refer to those classes of business where the claims are typically settled within one year of the date of occurrence of the events which give rise to them. **Long tail** classes of business refer to those classes of business where the claims are typically settled more than one year after the date of occurrence of the events which give rise to them.

C. PROCEDURES

15. Often, the insurer will not know, until well after the valuation date, exactly how much each claim is going to cost or when the payments will be made. It is, therefore, necessary to estimate the amount and timing of payments, on the basis of the available information, particularly the past behaviour of similar claims.

16. The steps which an actuary should take when advising on outstanding claims liabilities are similar to those for other actuarial investigations.

(1) Clarify the terms of reference and purpose of the report.
(2) Collect the necessary data.
(3) Analyse the experience.
(4) Select a valuation model.
(5) Select valuation assumptions.
(6) Do the valuation calculations.
(7) Reconcile the results with the previous investigation.

(8) Analyse variability and sensitivity.
(9) Reach conclusions.
(10) Present a written report.

17. It may be necessary to go through part of the process several times to determine an appropriate central estimate and prudential margin, for example collecting and analysing additional data. Steps may be combined or taken out of sequence. It may be appropriate to repeat parts of the process with different models or assumptions.

18. The actuary may be called upon to justify the work undertaken. The actuary should therefore compile and retain documentation which shows that the work conforms to this standard, the accounting standards and the taxation ruling as appropriate.

19. An approximation to an assumption or method is acceptable provided it does not materially affect the result. A difference is material if it is significant in the context of the purpose for which the advice is given. The actuary should choose a standard of materiality which should reasonably satisfy each anticipated user of the advice.

D. DATA

20. The actuary should be familiar with the relevant aspects of the procedures for the administration and accounting of the insurer's claims and policies.

21. The actuary should be conversant with the general characteristics of the insurance portfolio which may have a material bearing on the estimation of the liabilities. This may include familiarity with the contractual terms and legislated benefits payable under policies written as well as other attributes, such as deductibles, policy limits and reinsurance arrangements.

22. The actuary also has a responsibility to be familiar with the general economic, legal and social trends in the community which may have a bearing on the liabilities.

23. The actuary should be familiar with the insurer's assets and its investment policy.

24. It is the actuary's responsibility to ensure that the data utilised is appropriate, and sufficient for the valuation. The actuary should, where possible, take reasonable steps to verify the overall consistency of the valuation data with the insurer's financial records.

E. LIABILITIES

Analysis

25. The estimation of liabilities will require the subdivision of the data into groups of claims exhibiting similar characteristics. When determining appropriate subdivisions a balance must be found between homogeneity and statistical reliability.

26. The claims experience should at least be analysed with respect to the development over time of claims or cohorts of claims. Depending on the availability and reliability of the data, analysis should include some or all of

- the rate of reporting claims
- the rate of settlement
- the development of payments
- the adequacy of case estimates
- other analyses relevant to the circumstances.

27. The experience would normally be analysed without distinguishing between reported, IBNR and reopened claims. However in some circumstances it may be appropriate to analyse IBNR and reopened claims separately from those reported.

28. The experience should normally be analysed on a gross basis. Analysis of the reinsurance and other recovery experience should be appropriate to the circumstances. In some situations it may be more appropriate to analyse the experience net of reinsurance and/or other recoveries. Separate estimates of the recovery amounts may still have to be made. In making such judgments, the actuary should be aware that the net valuation result will usually be the most important.

29. The analysis should take into account any special features of or changes to the experience such as changes in deductibles, aggregate limits, claims handling procedures, the mix of business within the portfolio, and the impact of large claims paid and outstanding. The analysis should investigate any trends in the development of the experience, particularly those from causes other than inflation.

Valuation Model

30. Selection of the most appropriate valuation model to estimate the liabilities is the responsibility of the actuary. The actuary may investigate more than one model before arriving at an estimate. The model or models should take into account the available data, the nature of the portfolio, and the results of the analysis of experience.

Claims Experience Assumptions

31. Selection of the claims experience assumptions should have regard to the valuation model and the analysis of the experience. These assumptions should include trends in the claims experience (other than inflation) and assumptions about reinsurance or other recoveries.

32. The actuary need not change assumptions from those of the prior valuation unless the effect of the change is material. The actuary should not spread the effect of any changes over more than one valuation. The effect of any change should be disclosed.

Inflation

33. Future claim payments may well be greater, as a result of wage or price inflation, court awarded interest or other economic or environmental causes, than payments at current levels on similar claims. Any such claim escalation should be allowed for when estimating the outstanding claim liabilities.

Discount Rate

34. In arriving at an appropriate discount rate assumption the actuary should consider matters including market rates, the risk free rate, the assets held by the insurer and the insurer's investment policy. The actuary's attention is drawn to the Accounting Guidance Release AAG 13 "Determination of Interest Rates for Measuring Certain Liabilities at Present Value" in the context of the accounting standards.

35. The risk free rate of return should normally be the starting point for determining the appropriate discount rate. The actuary should where appropriate explain the reasons for adopting a higher or lower rate than the risk free rate.

36. For short tail classes, the actuary may choose on the grounds of materiality not to make specific allowance for discounting.

Expenses

37. Appropriate allowance for future costs of administering and settling claims (in addition to those included in payments on individual claims) should be made having regard for the insurer's level of expenses, organisational structure and future administrative developments. The complexity of the approach used to determine the allowance should be commensurate with the materiality of the amount of the allowance.

Valuation Results

38. It is the actuary's responsibility to ensure that the valuation calculations are carried out accurately. The resulting estimate of the liabilities should normally be a central estimate. However if in the actuary's opinion it is inappropriate to make a central estimate, the reasons should be explained and the nature of the estimate(s) described.

39. The actuary has a responsibility to consider the reasonableness of the estimates produced by the valuation procedures employed and to quantify the effects of any changes in the valuation basis since the previous actuarial valuation. Explanation should be sought where possible for any major departures from past results.

Uncertainty

40. Outstanding claim liabilities are often difficult to estimate. The extent of the liabilities depends on future economic, social and environmental factors outside the control of the insurer as well as on unknown past and future events and the insurer's own actions. It is part of the actuary's task to respond to uncertainty, both as a technical matter and in the presentation of results.

41. There are a number of components of this uncertainty, including:

- The model(s) chosen for analysis and projection will never exactly match the actual claim process.
- Past claim fluctuations will result in uncertainty in estimating the parameters of the model, even if a perfect model could be found.
- Undetected errors in the data may result in errors in estimating the parameters of the model.
- Future economic and environmental conditions are not known and may be different from those assumed.
- Future claim fluctuations will result in uncertainty in the projected payments, even if the true parameter values could be found for a perfect model.

42. Assessment of uncertainty will generally require use of one or more of:

- statistical analysis;
- sensitivity analysis - making changes to the model assum ptions and/or the models themselves;
- analysis of the outcomes of previous valuations;
- analysis of different scenarios; and
- judgment.

43. In many cases, the range of reasonable uncertainty will be very large. The conclusions which may be drawn at different ends of this range may be totally different (eg large profits vs insolvency). While it is the actuary's responsibility to provide the principal with a single central estimate of the liabilities, it is also important to explain the practical consequences of the uncertainty of this estimate.

F. PROVISIONS

44. The precise amount required to meet an insurer's liability for outstanding claims is almost always unknown but a fixed amount must be set aside as a provision in the accounts at the balance date. The directors of the entity have the ultimate responsibility for the provision, not the actuary. In some cases the actuary may be asked to advise on the provisions to be set aside or to comment on those adopted.

45. The uncertainty of liability estimates and the inherent variability of conditions affecting future claim payments usually results in a desire to establish provisions in excess of the central estimate of liabilities.

46. The extent of any prudential margin included in the provision to allow for uncertainty in estimation is a matter of judgment and will depend on such matters as:

- the actuary's confidence in the valuation approach and assumptions
- the quality and depth of the historical data available
- statistical fluctuations affecting ultimate claim costs
- actual outcomes of past provisions for the insurer concerned and other insurers.

47. The actuary should not recommend or support a provision which is less than the central estimate of the liabilities.

48. The actuary should not recommend or support a provision which is excessive.

49. When advising on prudential margins the actuary should have regard to their reasonableness and consistency over time, between classes of business and between reports for different purposes.

50. Provisions for taxation purposes should be calculated on the same basis as that considered reasonable for the provisions in the accounts under the relevant accounting standard. The only variation should be for matters specified in Taxation Rulings, Taxation law or otherwise accepted by the taxation authorities (and based on independent taxation advice). It should be noted that the component of the provisions representing the estimated liability for indirect claims handling expenses may not be included for provisions under the taxation ruling IT2663.

G. REPORTING

51. The actuary should prepare, date and sign a written report. The report should state:

- who has commissioned the report and, if different, the addressee(s) of the report
- the name of the actuary and the capacity in which the actuary is acting
- the purpose of the report or the terms of reference given
- the extent, if any, to which the report falls short of, or oes beyond, its stated purpose
- the extent of compliance with this standard and the reasons for not complying fully with this standard
- any restrictions on the actuary.

52. The report should deal with:

- the nature, accuracy and interpretation of the data
- the analysis of experience
- the valuation model and key assumptions
- any changes in the method and key assumptions since the last similar report
- comparisons of actual experience with that expected under the assumptions in the last similar report
- the results of the valu ation
- uncertainty of the valuation result.

53. The report should describe the steps taken by the actuary to verify the accuracy of the data, any limitations on the extent or quality of the data and the extent to which the actuary has relied upon the insurer or the insurer's auditor for checking.

54. The assumptions and methods should be stated clearly and their derivation explained. Any qualifications should also be clearly stated.

55. Where the legislation, accounting standards or other rulings req uire the actuary to use specific assumptions, particularly if they are materially different from those the actuary would otherwise use under this standard, the actuary must clearly state the circumstances, discuss whether or not the assumptions are reasonable and consistent with this standard, and discuss the implications of divergence from this standard.

56. Where the principal requires the actuary to use specific assumptions or the actuary is relying upon an interpretation of legislation, accounting standards or other rulings supplied by the principal or its advisers, the actuary must clearly state the circumstances, discuss whether or not the assumptions are reasonable and consistent with this standard, and discuss the implications of divergence from this standard.

57. Sufficient detail of the valuation results should be available in the report or separately to enable the insurer to comply with the disclosure requirements under the accounting standards, and complete Insurance Act and Income Tax returns unless requested otherwise.

58. In some circumstances it may be necessary to prepare a short statement or certificate regarding the valuation. Considerable care is required to ensure that the statement contains the necessary relevant information and will not be misleading nor quoted out of context. The certificate should include a reference to the actuary's full report and the qualifications stated therein.

END OF PROFESSIONAL STANDARD 300