PROFESSIONAL STANDARD NO 2

INVESTIGATION OF DEFINED BENEFIT SUPERANNUATION FUNDS

A. The Institute issues professional standards -

* to indicate the standards expected by the Institute for particular types of work,

* to avoid the need for government regulation in particular areas of the actuary's work, and

* to help actuaries in situations of conflict.

B. Similar standards have been issued by actuarial bodies in other countries, with similar objectives. Overseas experience suggests that, for the profession to retain control over professional standards, it must take an active role in guiding its members as to what is expected of them in various circumstances.

C. This standard consists of a statement setting out the major facets of the task and a check list of matters which should be considered. It is not intended that the check list is exhaustive or that all matters listed should be covered in a report. The actuary should be able to justify the exclusion of any matter on which he has not reported.

D. The actuary may be reporting in a situation where information necessary to conform with this standard is not available or where the fund is of such a size that complete conformity would be prohibitively expensive. In these respects attention is drawn to Clause 21 and 22 of the Code of Professional Conduct.

E. This standard does not generally contain detailed rules because matters of judgement and opinion are involved. It is not intended that the standard should inhibit technical developments. However, actuaries should not depart from generally accepted practice without being able to justify so doing. In particular, members are reminded of their duty under the Code of Professional Conduct

 * not to act without the co-operation or guidance of an experienced actuary in situations where they have insufficient experience (Clause 16).

 * to describe or identify the data, methods and assumptions used, and any important implications of them (Clause 20).

F. A report by an actuary should indicate the party to whom it is addressed and the purpose for which it has been prepared. It should be dated, and identify the fund to which it relates and the effective date of the investigation. The name of the author, and the capacity in which he is acting, should be stated. The date of the immediately preceding report, if any, and its author, should generally be stated.

G. This standard should be read in conjunction with the Institute's booklet "Superannuation Fund Reporting in Australia" which defines generally accepted terminology and describes funding methods.

H. While the standard refers to defined benefit superannuation funds it applies also to "target benefit" funds, although it would be expected that explanations and recommendations would differ between these two classes of fund.

I. The standard does not extend to actuarial reports on prospective commitments of "pay-as-you-go" superannuation schemes (or parts of schemes). Depending on experience following its introduction it may become desirable either to extend the scope of this standard or to issue another standard for such schemes.

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INVESTIGATION OF DEFINED BENEFIT SUPERANNUATION FUNDS

INTRODUCTION

1. This standard sets down those matters which the Institute considers an actuary should address in investigating and reporting on the financial condition of a continuing defined benefit superannuation fund.

2. An actuarial report on a superannuation fund may occasionally be required by legislation. More usually a periodic actuarial report will be required to fulfil the requirements of the trust deed or other legal documentation of the fund. The main purposes of the actuarial report are to examine the funding status and to recommend the contributions to be made in future so that the assets of the fund are likely to be sufficient to pay benefits.

3. The amounts and the timing of payments of benefits from a defined benefit superannuation fund cannot be known precisely in advance. They will depend on such things as salary increases and death, disablement and resignation rates of members. Contributions are estimates, in accordance with a particular method of funding, of the payments to be made to the fund which, together with investments, will meet the costs of benefits.

4. The funding methods used by actuaries fall into two main groups, accrued benefit methods and projected benefit methods. Both require assumptions regarding future experience. These funding methods and assumptions must give proper weight to every aspect of significance, including the operating environment of the employer, and the manner in which discretions are likely to be exercised by trustees.

5. The appropriate funding method and elements in the family of assumptions adopted will vary between funds, and may vary with time for a given fund. In selecting the funding method and assumptions the actuary must try to ensure that the employer's revenue is charged systematically with amounts which are appropriate in relation to his superannuation obligations. Tax considerations may influence the selection. The actuary must also aim to promote the security of benefits for fund members and their dependants.

6. It follows that there can be no single correct employer contribution rate for a defined benefit superannuation fund. Similarly there can be no single answer as to what value of assets is sufficient in order that member's entitlements are adequately secured. Both are matters of judgement requiring the professional expertise of the actuary.

SCOPE

7. This standard applies to all defined benefit superannuation funds where assets are accumulated to meet the whole or part of fund liabilities. Where assets are accumulated to meet a part of the benefits the standard applies only to that part.

8. An actuarial report on an existing fund prepared in conjunction with the promotion of the appointment of a new manager for that fund (whether or not benefits are reviewed simultaneously) should conform to this standard. Particular attention should be given to explanations as required by paragraphs 19 and 20 especially if it is known that part or all of any changes in recommended rates of contribution are the result of different funding methods, assumptions or bases of valuation of assets.

9. The standard need not inhibit the quoting of a provisional contribution rate for a proposed (as distinct from an existing) defined benefit superannuation fund or for the proposed substantial re-organisation of a fund. In any event the actuary should identify the report as a provisional quotation and include the information required by paragraphs 16, 17 and 18.

10. Although special types of actuarial investigation of superannuation funds, for example in relation to mergers or apportionment of funds, are not addressed the Institute would expect that an actuary's approach to such investigations would be consistent with this standard.

FUNDING METHOD AND ASSUMPTIONS

11. The funding method is the systematic basis for meeting the cost of benefits over the years of operation of the fund. It should be selected by the actuary, after any necessary consultation with trustees, employers or other fund sponsors, and should recognise that -

    a) a member's benefit entitlements, including any pension increases provided by the documentation or in accordance with precedent, should be fully funded before he retires;

    b) the assets of the fund from time to time, after making provision for the entitlements of any beneficiaries or members who have ceased to be employed, should exceed the aggregate of benefits which employed fund members would reasonably expect to be payable to them on termination of membership having regard to the provisions of the documentation and the likely exercise of any discretions.

    Except where benefits are independent of salaries, rates of contributions should usually be related to salaries.

12. When selecting assumptions the actuary should be satisfied as to their suitability in relation to expected experience of the fund and to each other. Attention should be given to the suitability of assumed rates of earnings on investments having regard to the taxation status of the fund, values placed on assets and the investment policy of the fund. Allowance should normally be made for salary increases which could increase benefit entitlements, and for pension increases as provided by the documentation or in accordance with precedent.

13. Except where this standard specifies otherwise, the value of the assets of a superannuation fund for purposes of a report will be determined on a basis chosen by the actuary having regard to the purpose of the report, and the assumptions used for determining the value of liabilities.

FUNDING STATUS

14. Funding status measures the extent to which benefit expectations of members of a fund in respect of membership or contributions to the date of an investigation have been secured.

15. Many measures are possible but the actuary should establish the funding status in relation to -

a) **Vested Benefits**

By determining the adequacy of the fund to pay vested resignation benefits or early retirement benefits to which members would have the right or the expectation based on precedent if all resigned or retired on the date of the investigation.

The amount of the fund for this purpose should be taken as the market value of assets less costs of realisation. The effect of excluding any asset with a value dependent on the continued operation of the employer should be indicated.

Allowance should be made for any pensions currently being paid and for any other benefits for persons who are not employees (defined as R in c) below). The value of these benefits would usually be deducted from the amount of the fund before comparison with the value of the remaining benefits which would become payable on resignation or retirement.

b) **Termination of the fund**

By examining the adequacy of the amount of the fund, determined as in a) above, to pay the benefits set out in the fund documents if the fund were terminated on the date of investigation.

If no termination benefits are specified but the documents provide for apportionment of the fund among members, a statement to that effect will normally be adequate. If, recognising any documented priorities, apportionment would not fully cover pensions in course of payment, other deferred benefits and vested benefits, this should be stated.

c) **Accrued Benefits**

By measuring the extent to which accrued benefits are secured by the ratio:

$$\frac{A - R}{\text{Total Accrued Retirement Benefits}}$$

where

A is the value of assets used in the determination of contribution rates recommended for the future

R is any amount required for-

any existing members' or dependants' pensions (including allowance for pension increases provided by the documentation or in accordance with precedent)

postponed retirements

deferred benefits for former members or dependants

Total Accrued Retirement Benefits is normally

For a lump sum fund. The summation for all fund members of the normal retirement benefit based on current salary multiplied by

$$\frac{\text{Membership to date}}{\text{Membership to normal retirement date}}$$

Membership should include an appropriate allowance for membership of any previous fund the assets of which have been incorporated in the current fund, or for any period during which benefits for the member have accrued at a different rate.

For a pension fund. As for lump sum fund but with pensions valued at normal retirement date according to the assumptions used by the actuary in determining contributions.

There may be cases where the actuary considers it more appropriate to adopt the actual past accrual of benefits for each fund member instead of uniform past and future accrual as above.

Where the normal retirement benefit is based on the averaging of salary over a period of years, Total Accrued Retirement Benefits may be adjusted by an allowance for such averaging.

Accrued benefit ratios will usually be less than unity, but neither this result nor the fact that the accrued benefit ratio for one fund is lower than the ratio for another is necessarily a matter for concern. Ratios should move towards unity as the fund matures.

The interpretation of accrued benefit ratios, or other measures of funding status, requires the professional expertise of the actuary. The ratios should not be used for the measurement of unfunded liabilities nor, without specific advice, for comparisons between funds.

CONTENTS OF REPORTS

16. Reports should contain a clear identification of the current documents covering the fund and/or a summary of the material provisions relating to benefits and contributions. If the report applies only to part of a fund, or does not cover all benefits, that should be made clear. Attention should be paid to the customary exercise of discretions which affect benefits.

17. The actuary should describe the funding method briefly in every report, and should explain the funding method fully in the first report where it is proposed to be adopted (or substituted for another method). The description should state

    a) the timing and size of any expected increases or decreases in rates of contribution implied by the funding method

    b) if for any reason, including legal requirements in the documentation of the fund, the funding method does not satisfy a) or b) of paragraph 11.

18. All material assumptions, whether explicit or implicit, should be stated. These should include any assumptions made because of shortcomings in data.

19. If, since the preceding investigation, there has been any change in funding methods, assumptions or the basis of valuation of assets, the reasons for the change should be explained. Material effects of changes should be quantified.

20. Reports should contain a clear recommendation of contributions to be made to the fund in future years (or if preferred an appropriate range of contributions) or of any adjustments to benefits which appear necessary in view of the results of the investigation. An explanation for any proposed changes should be given.

21. The actuary should comment on the trend of the funding status measures given in the report, explaining any discontinuities which have occurred, or are likely to occur. The comments should cover

    a) the potential impact of the exercise by trustees, employers or other fund sponsors of any discretion to increase benefit payments to members on resignation, retrenchment, early retirement or otherwise, where this is material

    b) where the measures depend on market values of assets, which can fluctuate widely, the influence of such fluctuations.

22. Where any change in benefits is contemplated the actuary should report the effect that it would have on

    a) the contributions recommended pursuant to paragraph 20

    b) the funding status measures in paragraph 15.

23. The actuary should comment if in his judgement

    a) the investment policy pursued by the fund is inappropriate to the form and incidence of its benefit payments, or

    b) inadequate or inappropriate insurance has been effected by the fund.

24. While the object of any report is to communicate with the party to whom the report is addressed, the actuary should bear in mind that sufficient information should be given to enable another actuary to make an objective appraisal.

TAXATION

25. The Institute does not prescribe any particular method or assumptions as approved actuarial practices for taxation (or any other) purposes. It believes that contributions determined by an actuary in accordance with this standard should be allowed as deductions by the Commissioner of Taxation.

26. The Institute recognises the responsibilities of the Commissioner of Taxation to protect the revenue by allowing taxation deductions only for reasonable levels of superannuation contribution. An actuary recommending contributions materially in excess of those calculated according to Taxation Rulings should be prepared to demonstrate clearly that such contributions are necessary to maintain an adequate funding status or improve the funding status to a level which might be expected by members of a fund.

27. The Institute does not approve any funding method which makes allowance for prospective salary increases in placing a value on benefit liabilities but does not make corresponding allowance for such increases in relation to contributions. A permissable exception is where contributions are separately calculated and disclosed as necessary to fund over a stated period of years liabilities in excess of those expected to be met by normal contributions for new members.

SUPERANNUATION FUND REPORTS - CHECK LIST

1. IDENTIFICATION

1.1 Name of fund
1.2 Purpose of investigation
1.3 Date of investigation
1.4 Name of actuary accepting responsibility
1.5 Capacity in which acting
1.6 Date of report
1.7 Previous similar report
  1.7.1 Name of actuary
  1.7.2 Date

2. GENERAL COMMENT ON NATURE OF FUND

2.1 Structure of Fund
  2.1.1 Defined (or target) benefit
  2.1.2 Lump sum or pension benefits
  2.1.3 Open or closed to new members
2.2 Any subdivision of fund
  2.2.1 By employer
  2.2.2 By class of employee
  2.2.3 By country or currency
2.3 Investment arrangements
2.4 Insurance arrangements

3. TAXATION STATUS

3.1 Investment income
3.2 Contributions
3.3 Excessive benefits
  3.3.1 Excess benefits fund

4. TRUST DEED

4.1 Original deed dated
4.2 Amendments dated
4.3 Current benefit provisions
4.4 Current contribution provisions
4.5 Timing of investigations
4.6 Rights to review contributions/benefits
4.7 Benefit guarantees
  4.7.1 On termination
  4.7.2 Other
4.8 Benefit discretions

5. ACCOUNTS

5.1 Complete
5.2 Consistent with statistical data
5.3 Contributions consistent with previous recommendations
5.4 Audited

6. EXPERIENCE - RECENT AND EXPECTED

6.1 Veracity of data
6.2 Investment returns
6.3 Membership numbers
6.4 Mortality
  6.4.1 Active members
  6.4.2 Retired members
6.5 Disability
  6.5.1 Permanent
  6.5.2 Temporary
  6.5.3 Partial
6.6 Resignation
  6.6.1 Cash benefits
  6.6.2 Deferred or transfer benefits
6.7 Retirement
  6.7.1 Normal
  6.7.2 Early
  6.7.3 Late
  6.7.4 Commutation

6.8 Dependancy
    6.8.1 Proportions married, etc.
    6.8.2 Age differences between spouses
    6.8.3 Numbers, ages of children
6.9 Ages at entry
6.10 Salary increases
    6.10.1 Inflation
    6.10.2 Other
6.11 Pension increases
6.12 Expenses
    6.12.1 Administration
    6.12.2 Investment
    6.12.3 Insurance

7. ASSETS

7.1 Veracity of data
7.2 Summary by type
7.3 Expected return
7.4 Term
7.5 Dependent on employer
7.6 Suitability to liabilities
7.7 Value
    7.7.1 Market
    7.7.2 Book
    7.7.3 For purposes of report

8. INVESTMENT POLICY

8.1 Current policy and trend
8.2 Impact on return
8.3 Suitability to liabilities

9. INSURANCE

9.1 Need for/Adequacy of insurance arrangements

10. DETERMINATION OF CONTRIBUTION RATE

10.1 Veracity of data
10.2 Funding method and assumptions
    10.2.1 Summary description
    10.2.2 Changes from previous investigation
    10.2.3 Suitability and implications
10.3 Quantification of changes
10.4 Summary of results
    10.4.1 Valuation balance sheet
    10.4.2 Alternative presentation
10.5 Reasons for results
    10.5.1 Analysis of surplus
    10.5.2 Alternative explanation
10.6 Recommendations
    10.6.1 Contribution rate
    10.6.2 Benefits
    10.6.3 Other
10.7 Outlook

11. FUNDING STATUS

11.1 Vested benefits
11.2 Termination of fund
11.3 Accrued benefits
    11.3.1 Current
    11.3.2 At previous investigation
    11.3.3 Outlook