THE INSTITUTE OF ACTUARIES OF AUSTRALIA
A.B.N. 69 000 423 656

PROFESSIONAL STANDARD 400
INVESTIGATIONS OF DEFINED BENEFIT SUPERANNUATION FUNDS

APPLICATION

1. This Standard applies to actuarial investigations into the financial condition of continuing wholly or partially funded defined benefit superannuation funds and reports prepared on such investigations. For this purpose, a "defined benefit fund" is as defined in the Superannuation Industry (Supervision) Act. The term includes any fund from which defined benefit pensions are paid, where those pensions are **not** fully backed by annuity contracts or otherwise fully insured.

2. Reports prepared on existing funds in association with the appointment of a new actuary to the fund and special types of actuarial investigation of superannuation funds, for example in relation to mergers or apportionment of funds, should conform with this Standard where applicable. Reports on, and actuarial investigations into, unfunded defined benefit superannuation funds should also comply with relevant sections of this Standard.

LEGISLATION

3. Much of this Standard is independent of any legislation, but various legislative requirements are addressed in parts of this Standard. Legislation with which the actuary should be familiar includes the Superannuation Industry (Supervision) Act (SIS), the Superannuation Guarantee (Administration) Act (SG Act), and relevant sections of the Income Tax Assessment Act (Tax Act).

EFFECTIVE DATE

4. This Standard was first issued in 1984 as Professional Standard No 2.

LATEST REVISION

5. November 2002

TYPES OF INVESTIGATIONS

6. Regular actuarial investigations are required by legislation for regulated superannuation funds. Sometimes investigations and reports will be required to fulfil the requirements of the trust deed or other legal documentation of the fund. In other cases, an investigation may be requested by the trustees, employers or other fund sponsors. The main purposes of the actuarial investigation are usually 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. Information from actuarial investigations may be required under legislation or under accounting standards such as Australian Accounting Standard 25 (AAS 25).

7. When a new defined benefit fund is to be established, or an existing fund is to be substantially amended, actuarial calculations are often necessarily based on assumptions concerning which employees will join the new fund, or which members will transfer to the new arrangements. The calculations may also depend on estimated asset data. In these circumstances, an abbreviated report may quote a provisional contribution rate. The actuary should identify the report as a provisional one, but should, as a minimum, include in the report the information required by paragraphs 50, 51, 52, 53, 55, 56 and, to the extent possible, 57, 58, 59, 60, 61 and 64.

8. In preparing a provisional report, the actuary should draw attention to the need for a full actuarial investigation and report, including confirmation of the contributions required, to be prepared in accordance with this Standard either:

   (a) as at the date of commencement or re-organisation, but using actual new member or transferring member data, and actual asset values; or

   (b) in the case of a re-organisation, at an effective date not later than the first anniversary of the date of re-organisation.

   The actuary should be aware that, under SIS Regulation 9.29(b), any new defined benefit fund (established on or after 1 July 1994) that does not have any member being paid a defined benefit pension must have an actuarial investigation made as at the date of establishment.

   However, if a defined benefit fund commences after 12 January 1999 and pays a defined benefit pension from commencement, SIS Regulation 9.29A(2) applies rather than 9.29(b). In this case, the first investigation date can be within 12 months of commencement, rather than at commencement.

All reports on actuarial investigations undertaken to comply with the SIS Regulations must be issued within 12 months of the date at which the investigation is made.

9. (a) Actuaries should also note that this Standard is intended to cover a wide range of defined benefit superannuation funds and also investigations carried out or reports prepared for many different purposes. As a result, not all sections of the Standard will be relevant in all circumstances. Actuaries must, however, comply with those sections of the Standard which are relevant to, or significant in, the particular circumstances in which they are conducting an investigation or preparing a report.

(b) In particular, where a yearly investigation is required as a result of SIS Regulation 9.29A for a fund paying defined benefit pensions, it is not necessary at every annual investigation to undertake a full valuation of all liabilities and a detailed review of contribution requirements. A full investigation and report should be undertaken at least every three years. In between full investigations, if considered appropriate by the actuary having regard to the particular circumstances of the fund including the results of the previous full investigation and subsequent experience, it will be sufficient for the actuary to undertake a limited investigation aimed specifically at enabling the statements required by the SIS Regulations to be made. The report should also meet the requirements of Professional Standard 401 (Type 2 reports) and Guidance Note 465. The actuary should also have particular regard to paragraph 23 of the Standard.

(c) The checklist in Appendix 2 lists a number of items which may need to be considered as part of any actuarial investigation and/or in reports on such investigations, highlighting those items which must be considered in every investigation and addressed in the report where relevant.

METHODOLOGY AND ASSUMPTIONS

10. 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. Recommended contributions (for employers or other sponsors) are estimates, in accordance with a particular method of funding, of the payments to be made to the fund which, together with existing assets, future member contributions and future investment income, will meet the benefits.

11. The funding methods used by actuaries fall into two main groups, accrued benefit methods and projected benefit methods. Both require assumptions regarding future experience and the value to be placed on existing assets. 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.

12. 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 should normally try to ensure that the employer's revenue is charged systematically with amounts which are appropriate in relation to its superannuation obligations. Tax considerations may influence the selection. The actuary must also aim to promote security of benefits for fund members and their dependants. These two aims may conflict with one another. It is a matter for actuarial judgment to determine the balance between these two objectives where there is any conflict. Where funding and solvency certification is a relevant consideration, the need for such certification will have a major influence on this balance.

13. A number of aspects of actuarial investigations, such as selection of assumptions and funding methods, are matters of judgment requiring the professional expertise of the actuary. It is usually the responsibility of the actuary, in consultation with the employer and/or trustees, to select appropriate funding methods and assumptions for the purpose of any actuarial investigation. In some circumstances, however, the actuary may be directed to use particular methods and/or assumptions. If the actuary considers that this will produce misleading results the actuary should attempt to persuade the employer or trustees, as

appropriate, that the assumptions and/or methods are inappropriate and should recommend appropriate alternatives. If this is unsuccessful, and the inappropriate assumptions are to be used, the actuary must prominently include appropriate qualifications in the report on the investigation or, if the actuary considers it appropriate, decline to undertake the investigation.

Funding Method

14. The funding method is the systematic basis for meeting the cost of benefits over the period of operation of the fund. The selection of a funding method should only be undertaken after any necessary consultation with trustees, employers or other fund sponsors. The method selected by the actuary should generally aim to ensure that, to the extent possible:

    (a) members' benefit entitlements, including any pension increases provided by the documentation, in accordance with precedent, or the intentions of the trustees and/or employer-sponsor, are fully funded before the members retire; and

    (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, 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.

15. In selecting a funding method, the actuary should also be satisfied as to its suitability in relation to the circumstances of the fund, such as any likely future growth or contraction in the fund membership and the stability of the fund membership. The actuary should also be aware of, and comment on if appropriate, the suitability of the funding method for the fund sponsor's reporting requirements (such as those imposed by Financial Accounting Standards Board No. 87 (FAS 87) for companies reporting in the United States).

16. In choosing a funding method particular attention should be given to the pace of funding implied by the method and its appropriateness for the circumstances of the fund, including:

(a) the pattern of expected cost which will emerge;

(b) the rate of build up of assets; and

(c) the likely emergence and treatment of any excess or deficiency of assets over liabilities.

Assumptions

17. When selecting assumptions, the actuary should be satisfied as to their suitability in relation to the expected experience of the fund and to each other. Consideration should be given to the past experience of the fund in relation to any significant assumptions where practicable and relevant.

18. The assumptions chosen should have regard to the likely future experience of the fund. Where the assumptions selected entail implicit or explicit margins, the actuary should be aware of the effect of any such margins on the investigation results.

19. Attention should be given to the suitability of assumed rates of earnings on investments, values placed on investments, investment policy, the taxation of future investment income and investment management costs. Allowance should normally be made for salary increases which could increase benefit entitlements, and for pension increases as provided by the documentation, in accordance with precedent or the intentions of the trustees and/or employer-sponsor. Allowance should also normally be made for ongoing administration and insurance expenses and for tax on contributions (net of allowable deductions).

20. When selecting assumptions, the actuary should be aware of the impact on the results of the investigation of variations in the assumptions selected. In appropriate circumstances, results should be determined using alternative assumptions with respect to future investment earnings and future salary increases, as well as any other assumptions which are likely to have a significant impact on the results, for example the value placed on assets.

Asset Valuation

21. Except where this Standard specifies otherwise, the method of valuing assets chosen by the actuary should have regard to the purpose of the

investigation, the assumptions used for determining the value of liabilities, and the nature of the assets held by the fund.

22. The actuary should have regard to Guidance Note 463 (Valuation of Superannuation Fund Assets) before placing a value on the assets for the purpose of the investigation.

Additional Considerations Applying to Pension Funds

23. The following issues should be considered in relation to pension funds and addressed in the report, where relevant:

(a) whether the fund has sufficient liquidity to provide for pensions either through drawdown of investment income or redemption of capital;

(b) the suitability of assets for matching the expected income streams;

(c) the sufficiency of assets, including future contributions, to provide for the risk of longevity;

(d) whether the fund provides a defined benefit pension, or is a "target benefit fund" where the defined benefit pension is adjusted to reflect the amount of assets available at the time the pension commences;

(e) the treatment of any surplus on the death of a pensioner;

(f) whether some or all of the members are actually in receipt of pensions;

(g) the implications in the event the fund becomes insolvent; and

(h) Where the fund is subject to a statement of opinion under SIS Regulation 9.31(1)(ba),
(i) the report should include the statement of opinion;
(ii) the actuary should consider whether the statement of opinion has any consequences for:
- the fund's funding status and the various measures of the fund's funding status described in paragraphs 24 to 44,
- the Funding and Solvency Certificate,
- the vested benefits for AAS25 purposes,

- SIS statements under Regulation 9.31(1)(b), (d) and (e).

In most circumstances it will be appropriate for the actuary to use best estimate assumptions (implying 50% probability of failure) for some or all of these purposes, notwithstanding the high degree of probability implied by a positive statement under SIS Regulation 9.31(1)(ba).

The actuary should explain any apparent inconsistencies between the statement of opinion under SIS Regulation 9.31(1)(ba) and any of the aforementioned measures, certificates or statements.

FUNDING STATUS

24. Funding status measures the extent to which the benefits of members of a fund in respect of membership or service completed at the date of an investigation are covered by assets.

25. As a minimum, the actuary should establish and report on funding status in relation to Vested Benefits and either the Actuarial Value of Accrued Benefits or Accrued Retirement Benefits. Comment should also be made on funding status in relation to Fund Termination Benefits.

26. The actuary should also include in the report appropriate comment on funding status in relation to Retrenchment Benefits or other discretionary or contingent benefits, if these are specifically provided for in the trust deed or if the actuary believes that members' entitlements in these circumstances are relevant and significant. Actual calculation of Retrenchment or other discretionary benefits, or Fund Termination benefits, may not be necessary - see below. The following paragraphs include further comment on each of the funding measures referred to above.

27. In measuring funding status, the actuary will always need to consider the normal fund benefits payable in respect of active members of the fund. There may also be other benefit liabilities in respect of active members, former members, pensioners, deferred beneficiaries or members' dependants which need to be taken into account. Examples of these other benefits include the following:

    (a) any former members' or dependants' pensions (including allowance for pension increases provided by the documentation, in accordance with precedent or the intentions of the trustees and/or employer-sponsor);

(b) any former members' or dependants' outstanding allocated pension balances;

(c) benefits for members past retirement age, but not retired;

(d) deferred benefits for former members or dependants; and

(e) additional benefits of an accumulation nature held in respect of active or former members.

28. The appropriate approach to use when allowing for additional benefits such as those described in paragraph 27 in determining funding status ratios (ie. whether such benefits and corresponding assets should be included or excluded) should be determined by the actuary, based on the particular circumstances of the investigation. The actuary must describe in the report the approach used and the reasons for using it. Note that the treatment of particular additional benefits may vary when determining each of the funding status measures described below.

Vested Benefits

29. The purpose of the Vested Benefits ratio is to measure the capacity of fund assets to meet the total benefits which would be payable if all members voluntarily left employment at the date of investigation and received their vested entitlement. Vested Benefits for this purpose therefore means the total of the resignation benefits or early retirement benefits (or the value of these benefits where appropriate, eg. where benefits are in the form of a pension or deferred benefit) to which members would have the right or the expectation based on precedent if they all resigned or retired on the date of the investigation.

30. The Vested Benefits ratio is determined as the ratio of the assets of the fund to the total Vested Benefits of the fund at the date of determination. The assets of the fund for this purpose should be taken as the market value of assets plus any accrued items of income less costs of realisation and any accrued liabilities such as taxation. If material, the effect of excluding any asset with a value dependent on the continued operation of the employer and the effect of excluding any future income tax benefit should be indicated.

The actuary should comment on the treatment adopted.

31. Appropriate allowance should be made in calculating the Vested Benefits ratio for any additional benefits such as those listed in paragraph 27 above. Amounts in respect of such additional benefits may be excluded from the value of assets and Vested Benefits (rather than included in both the assets and Vested Benefits) if, in the actuary's opinion, it is appropriate to do so in the particular circumstances. Circumstances where exclusion of additional benefits may be considered appropriate include:

    (a) additional accumulation benefits that are credited with actual investment earnings or losses;

    (b) the value of pension benefits, where the fund is in a deficit position;

    (c) pension benefits that have been secured by the allocation of appropriate assets or the purchase of annuities; or

    (d) where the additional benefit can be considered to be precisely fully funded.

    The actuary should comment on the treatment adopted.

32. The Vested Benefit ratio for a fund should generally be no less than one, indicating that members' vested entitlements are fully covered by fund assets. Where this is not the case, the actuary's contribution recommendations should generally ensure that the ratio increases to one over a reasonably short time period, unless the actuary believes that this is not appropriate or necessary in the particular circumstances. In making such a recommendation, the possible need to report under Section 130 of the SIS Act needs to be borne in mind (refer to paragraph 47).

Accrued Retirement Benefits

33. The Accrued Retirement Benefit ratio measures the extent to which Accrued Retirement Benefits are secured by assets. It is intended to provide an indication of progress towards funding members' accrued retirement benefits and is determined as the ratio of the assets of the fund to the total Accrued Retirement Benefits of the fund at the date of

determination. For this purpose the assets of the fund should be taken as the value of assets used in the determination of recommended contribution rates. Total Accrued Retirement Benefits is the total for all active members of their Accrued Retirement Benefit (or the value of these benefits where appropriate, eg. where benefits are in the form of a pension or deferred benefit) at the investigation date, determined in accordance with Professional Standard 402. Any additional benefits, such as those described in paragraph 27, may be either included or excluded in determining total Accrued Retirement Benefits, as the actuary determines appropriate in the particular circumstances. Where additional benefits are excluded, a corresponding adjustment must also be made to the value of assets.

34. If the actuary adopts an approach for determining Accrued Retirement Benefits other than one described in Professional Standard 402, then the actuary must describe the approach used and the reason for using it. The method used should not normally be altered from the method used in the previous calculation of Accrued Retirement Benefits. However, there will be some circumstances in which a change of method is justifiable. If the method is altered, the actuary should state the reasons for making the change and indicate the effect of the change on the Accrued Retirement Benefit ratio.

35. Accrued Retirement Benefit ratios may be less than one, but neither this result nor the fact that the ratio for one fund is lower than the ratio for another is necessarily a matter for concern.

Actuarial Value of Accrued Benefits

36. Either as an alternative to the Accrued Retirement Benefits ratio, or in addition to it, the actuary may include an Actuarial Value of Accrued Benefits ratio. The purpose of the Actuarial Value of Accrued Benefits ratio is also to measure progress towards funding members' retirement and other benefits, taking into account the valuation assumptions and funding method being used for determining recommended contributions. Such a ratio would be calculated in the same way as the Accrued Retirement Benefits ratio, except that in the denominator "Total Accrued Retirement Benefits" would be replaced by "Total Actuarial Value of Accrued Benefits". This amount should be determined using an approach consistent with Professional Standard 402. As for the other ratios, the additional benefits described in paragraph 27 may be included or excluded in determining the Actuarial Value of Accrued

Benefits ratio as the actuary determines is appropriate in the particular circumstances.

37. In determining the "Total Actuarial Value of Accrued Benefits" the actuary should be aware of, and comment in the report (where this is relevant) on, the appropriateness or otherwise of this figure for the purposes of Australian Accounting Standard 25 (Financial Reporting by Superannuation Plans) (AAS 25) (which requires **all** additional benefits such as those described in paragraph 27 to be included when determining "Accrued Benefits").

Retrenchment and Discretionary Benefits

38. The actuary must comment on the coverage of retrenchment benefits by assets in the report on any investigation, where such benefits are specifically provided for in the trust deed and/or the actuary believes they are relevant and significant. In some circumstances, the actuary may determine that it is appropriate to quantify funding status in relation to Retrenchment Benefits (in addition to determining the other ratios described above). For this purpose, Retrenchment Benefits would be determined to be the benefits (or the value of the benefits where appropriate, eg. where benefits are in the form of a pension or deferred benefit), as set out in the fund documents, which would be payable if all active members were retrenched on the date of investigation. Appropriate allowance should be made for any additional benefits such as those described in paragraph 27.

39. Similarly, where significant discretions exist in determining resignation or retrenchment benefits, the actuary must comment in the report on the coverage of these discretionary benefits by assets. The actuary may also consider that it is appropriate to determine funding status in relation to the discretionary benefits, determined as if all fund members resigned, retired, or were retrenched on the date of investigation and any available discretion was exercised in full. Appropriate allowance should be made for any additional benefits.

40. The Retrenchment Benefits ratio (or the ratio allowing for any discretionary benefits) is determined as the ratio of the assets of the fund to the total Retrenchment Benefits (or discretionary benefits) of the fund at the date of determination. The assets of the fund for this purpose should be determined as described for the Vested Benefits ratio in paragraph 30. Particular attention should be given to the value

placed on assets dependent on the continued operation of the employer.

41. In circumstances where the trust deed of a fund provides for a specific benefit on retrenchment, or at the discretion of the trustee or employer (which is likely to be higher than the benefit included in determining the Vested Benefits ratio), and the actuary has **not** calculated a specific Retrenchment Benefit ratio (or a ratio allowing for the discretionary benefits), the report on the investigation should include comments on the nature of the higher benefit and give an indication of its general effect on the Vested Benefits ratio.

Fund Termination Benefits

42. The actuary must comment on funding status in relation to Fund Termination Benefits in the report on any investigation. For this purpose, Fund Termination Benefits are the benefits (or the value of the benefits where appropriate) which would be payable, as set out in the fund documents, if the fund were terminated on the date of investigation. The actuary should examine the nature and priority of the liabilities on termination of the fund to determine if a quantified assessment of the adequacy of the fund assets is appropriate. If no termination benefits are specified but the documents provide for apportionment of the fund among members, a statement to that effect in the report will normally be adequate. If termination benefits are fully or partially specified in the documents, the actuary may determine that it is appropriate to calculate a Fund Termination Benefits ratio based on the amount (or value) of these termination benefits. Appropriate allowance should be made for any additional benefits such as those described in paragraph 27.

43. The Fund Termination Benefits ratio, if required, would be determined as the ratio of the assets of the fund to the total Fund Termination Benefits. The assets of the fund for this purpose should be determined as described for the Vested Benefits ratio in paragraph 30 above.

General

44. For each of the funding status ratios included in the report, the actuary should comment on the purpose of the ratio, the treatment of any additional benefits in determining the ratio, the reasons for any changes in the ratio since the previous investigation, and the expected future

trend of the ratio over the period to the next regular actuarial investigation, under the valuation assumptions and the contribution rates or levels recommended. The ratios should not be used, without specific actuarial advice, for comparisons between funds or the measurement of unfunded liabilities.

PROFESSIONAL JUDGMENT

45. There can be no single correct employer contribution rate for a defined benefit superannuation fund. Similarly there can be no single relationship between the value of assets and members' benefit entitlements, which could be viewed as indicating that these entitlements are adequately secured. Both are matters of judgment requiring the professional expertise of the actuary.

SIS REQUIREMENTS

46. The requirements of the SIS Regulations in relation to the conduct of actuarial investigations and the contents of reports on such investigations are described in Appendix 1, together with the Institute's interpretation of, and comments on, these requirements.

47. In undertaking an actuarial investigation of a regulated fund, an actuary should also be aware of the requirements of Sections 129 and 130 of the SIS Act, which apply to actuaries performing actuarial functions (such as actuarial investigations) under the Act or Regulations. Guidance Note 460 (Prudential Reporting to Trustees and the Regulator) provides guidance to actuaries to assist them in complying with the provisions of these sections and should be referred to when undertaking an actuarial investigation. In particular the actuary should be aware of the requirements of the Act where the actuary forms an opinion that the financial position of the fund may be, or may be about to become, "unsatisfactory" (ie. assets less than vested benefits) and the guidance given in Sections 7 and 8 of Guidance Note 460 on the determination of "unsatisfactory financial position".

48. In reviewing the financial position of a defined benefit superannuation fund which is used for Superannuation Guarantee purposes and, in particular, determining recommended contribution levels, the actuary must also consider the provisions of the SIS Regulations with regard to the funding and solvency of defined benefit funds. Guidance Note 461 provides guidance on some aspects of these requirements. Particular

attention should be given to the need to certify the minimum level of contributions required to ensure solvency (based on coverage of funded minimum requisite benefits) at the expiry of the funding and solvency certificate. The future contribution rates or levels recommended as part of the actuarial investigation should be at least equal to the minimum level specified in the current funding and solvency certificate. It may also be necessary in some circumstances to specifically determine funded status in relation to minimum requisite benefits and/or funded minimum requisite benefits, in addition to the funded status measures described above.

49. When carrying out actuarial investigations of defined benefit funds regarded as technically insolvent under SIS and hence subject to actuarial management in accordance with Regulation 9.19, the actuary must pay particular attention to the provisions of the technical insolvency program agreed with the trustee and the contents of the relevant special funding and solvency certificates.

CONTENTS OF REPORTS ON ACTUARIAL INVESTIGATIONS

General

50. The purpose of the investigation, the circumstances under which it has been prepared, and to whom the report is addressed should be clearly stated in the report. The report should also contain a statement that the investigation and report have been undertaken in accordance with this Standard (or any departures disclosed, with reasons).

51. Reports should contain a clear identification of the current legal documents governing the fund and/or a summary of the material provisions relating to benefits and contributions, including the customary exercise of discretions, which affect benefits. If the investigation applies only to part of a fund or does not cover all benefits, the report should clearly identify which assets and benefits are included or excluded from the investigation.

Legislative Requirements

52. Certain information is required to be included in an actuarial report

pursuant to SIS Regulations 9.31, 9.32 or 9.33 (for investigations undertaken at effective dates after 30 June 1994). The actuary should be prepared to justify any decision to recommend rates or levels of employer contributions which are insufficient to enable a favourable statement to be made in accordance with SIS Regulation 9.31(1)(d) or 9.31(1)(e)(ii).

53. Where the actuary becomes aware, as part of the actuarial investigation, of any matter which appears to indicate non-compliance with any of the Regulations, the actuary should normally comment on such a matter in the report or otherwise advise the Trustee. Section 129 of the Superannuation Industry (Supervision) Act and Guidance Note 460 deal with advice to the trustees and/or the Regulator of breaches of fund compliance relating to actuarial functions.

54. The actuary should also be aware of the possible need to alert trustees to the occurrence of "significant events", which are required to be notified to members under SIS Regulations 2.32 and 2.33.

Funding Method

55. The actuary should describe the funding method in every report. Where relevant, the description should include a general explanation of the determination of the long term level of contributions implied by the funding method, as well as any variations in levels of contributions around the long term level. If the funding method does not require determination of a long term level of contribution, the report should describe how recommended contribution levels are determined under the particular funding method. In all cases the description should indicate whether an allowance has been made for future new members and the impact of this allowance on contribution levels. If the funding method does not satisfy (a) or (b) of paragraph 14 for any reason, including legal requirements in the documentation of the fund, then that reason should be stated.

Assumptions

56. All material assumptions, whether explicit or implicit, should be stated. These should include any assumptions made because of shortcomings in data. The actuary should also describe the general approach used to determine the assumptions and the extent to which the experience of the fund has been relied upon in setting the assumptions. (This would

include comments on whether a review of past experience was undertaken and the extent of that review.) Comment should also be made on the effect of any margins included in the assumptions, if the actuary believes such comment is appropriate and/or the margins are significant. Any qualifications as to the appropriateness of the assumptions and/or funding method and the results based on these assumptions and methods, should also be clearly stated in the report (refer to paragraph 13).

57. The report should indicate whether audited or unaudited accounts have been used in determining asset values and whether adjustments have been made to the value of particular assets in accordance with paragraph 22. Where adjustments have been made, the reasons for, and nature of, the adjustments should be described.

Changes Since Previous Investigation

58. If, since the preceding investigation, there has been any change in funding methods, assumptions or the method of valuation of assets, the reasons for the change should be explained. Material effects of changes should be quantified. Particular attention should be paid to explanations of changes if the previous investigation was conducted by a different actuary.

Contributions

59. Reports should contain clear recommendations as to the future levels or rates of contributions to be made to the fund in future years. Note that different contribution levels may be required or appropriate for different purposes, for example funding of benefits and to enable certification of solvency. However, the level(s) of contributions recommended in the report should be those required for funding purposes.

60. Where the funding method used involves determination of long-term contribution levels, the contribution recommendation should state both the long term level of contribution implied by the funding method and assumptions adopted, and indicate any variations around this level of contribution in the short term to allow for any surplus or deficit. In other cases, the expected future pattern or trend of contributions should be indicated. Except where benefits are independent of salaries, rates of contribution expressed as a percentage of salaries should generally be shown.

Funding Status Measures

61. The actuary should briefly describe in the report the purpose of and method used (including the treatment of any additional benefits) to calculate any funding status measures determined as part of the investigation. The actuary should also comment on the trend of the funding status measures given in the report, explaining any significant changes which have occurred since the previous investigation, or are likely to occur in the future. The comments should cover:

    (a) the impact of any significant changes in fund membership;

    (b) where the measures depend on market values of assets which can fluctuate widely, the influence which such fluctuations would have on the measures;

    (c) likely future trends of the measures based on the recommended rates of contribution and the valuation assumptions adopted; and

    (d) the actuary's ability to make the statements required under SIS Regulations 9.31(1)(b) (coverage of the value of accrued benefits), 9.31(1)(ba) (statements of opinion relating to defined benefit pensions), 9.31(1)(d) (assessment of the likely future financial position of the fund based on projected coverage of vested benefits), and 9.31(1)(e) (continuing solvency of the fund).

Changes in Benefits

62. The report should also describe any adjustments to benefits which appear necessary in view of the results of the investigation, and the reasons for these adjustments.

63. Where the actuary is reporting on changes in benefits he/she should, where relevant and significant, report the effect that the changes would have on:

    (a) the contributions recommended pursuant to paragraph 59;

    (b) the funding status measures described in paragraphs 29 to 43 with respect to:
        (i) the level at the date of the investigation, and

(ii) future expected trends;

(c) any statements required under SIS Regulations 9.31 or 9.32 (relating to coverage of vested or accrued entitlements, continuing solvency of the fund or funding of liabilities);

(d) any benefit certificates and/or funding and solvency certificates issued in relation to the fund; and

(e) any reporting requirements under Section 130 of the SIS Act.

Miscellaneous Matters

64. The actuary should comment if in his or her judgment:

(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; or

(c) the basis of reserving for capital gains tax liabilities or other tax liabilities is considered inappropriate for the purposes of the actuarial investigation.

65. 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 of the work of the first actuary.

66. The actuary may wish to prepare a summary of the full report on the actuarial investigation, for example to provide the information required for the purposes of AAS 25 or for provision to members. Any such summary report should comply with the requirements of Professional Standard 401. (It should be noted that the SIS Regulations generally require a copy of the full actuarial report to be made available to a member on request.)

PROFESSIONAL STANDARD 400

Appendix 1

1. This Appendix is based on the Superannuation Industry (Supervision) Regulations.

2. The requirements for actuarial investigations are set out in Regulations 9.26 to 9.33. Actuaries should be familiar with these Regulations.

3. Statements provided in accordance with the Regulations:

   (a) should only be made after an investigation in terms of this Standard has been made by the actuary or the actuary has reviewed the previous investigation taking full account of events subsequent to the investigation; and

   (b) should accompany or be part of reports on actuarial investigations required in accordance with the SIS Regulations and carried out under this Standard.

4. It is acceptable practice either for the statements under Regulation 9.31, 9.32 or 9.33 to be a separate letter to the party who receives the full actuarial report or for the statements to be a separate section or appendix to the actuary's full report. The actuary should be satisfied that the statements include any necessary qualifications. Where a separate letter is prepared, in addition to the information required under the Regulation, the Actuary should include brief reference to the full report or the external data sources (membership, benefits, assets, etc.) on which the statements are based. Statements should be dated and signed by the Actuary who signed the report on the actuarial investigation.

5. SIS Regulation 9.31 requires the actuary to include in the report on an actuarial investigation of a private sector (or fully funded public sector) superannuation scheme (among other things):

   (a) a statement of the actuary's opinion on whether assets are adequate to meet the value of liabilities in respect of accrued benefits at the investigation date (9.31(1)(b));

   (b) a statement regarding the financial position of the fund, indicating whether it is, or may be about to become, "unsatisfactory" (ie. assets inadequate to cover vested benefits - 9.31(1)(d)); and

(c) a statement of the actuary's opinion regarding the likelihood of being able to certify the solvency of the fund in any funding and solvency certificates required to be issued in the 3 years following the investigation (9.31(1)(e)).

The actuary should also refer to paragraph 23 of this Standard and Guidance Note 465 in regard to statements of opinion under SIS regulation 9.31(1)(ba).

6. The Institute interprets the above requirements as set out below:

(a) The statements required by Regulations 9.31(1)(a) and 9.31(1)(b) are to be taken together. For statement (a), the dollar value of the assets should be stated on a basis consistent with the accrued liabilities in statement (b), so that the asset value should normally be the same as that defined in paragraph 33 of this Standard, before any reduction to allow for any additional benefits described in paragraph 27 of this Standard. Similarly, when a full investigation has been undertaken (refer paragraph 9), the value of accrued liabilities should be determined in accordance with paragraph 36 of this Standard (ie. the Actuarial Value of Accrued Benefits) including an allowance for all additional benefits. Where a full investigation has not been undertaken and the actuary has formed a 9.31(1)(b) opinion based on the results of the previous full investigation and subsequent experience, the statement may be made without the dollar value of the accrued liabilities being stated.

(b) "Adequacy" will generally require the value of accrued liabilities to be fully covered by assets to enable the statement required by Regulation 9.31(1)(b) to be made in the positive. In cases where the Actuarial Value of Accrued Benefits ratio is less than one, but the actuary believes this to be appropriate in the context of the funding method adopted and recommended future contribution levels, as will often be the case, the SIS Regulations nonetheless require the actuary to state that "the value of ..assets... is NOT adequate to meet the value of the liabilities...in respect of accrued benefits". However this statement may be accompanied by comments indicating why the actuary believes this to be appropriate (or no cause for concern) in the particular circumstances.

(c) "Unsatisfactory" financial position in terms of Regulation 9.31(1)(d) is measured by the Vested Benefits ratio determined in accordance with paragraphs 29 to 31 of this Standard, but including any additional benefits described in paragraph 27. Allowance should also be made for any constraints imposed by Section 8 of Guidance Note 460.

7. To complete the statement required by Regulation 9.31(1)(d), the actuary should have made a projection of the Vested Benefits ratio in three years' time (or longer if required) based on paragraphs 29 to 31 of this Standard, the recommended contributions over the next three years and the actuarial assumptions. The details of this projection do not need to be included in the statement. (It should be noted that paragraph 11.2 of Guidance Note 460 requires the SIS Regulations to be interpreted as requiring a continuous test.)

   Alternatively, the actuary must be satisfied that the circumstances of the fund are such that it is clear from inspection whether the statements required under 9.31(1)(d) can be made.

8. To complete the statement required by Regulation 9.31(1)(e), the actuary should have made a projection of the "minimum benefits index", as defined in Regulation 9.15(2), in three years' time (or longer if required), based on the recommended contributions over that period and the actuarial assumptions. The details of this projection do not need to be included in the statement.

   Alternatively, the actuary must be satisfied that the circumstances of the fund are such that it is clear from inspection whether the statements required under 9.31(1)(e) can be made.

9. There may be circumstances in which the actuary considers that it is reasonable to recommend contribution rates which are not sufficient to enable the statements required by Regulations 9.31(1)(d) and 9.31(1)(e)(ii) to be made in the positive. In this context, where statement (d) cannot be made in the positive it means that the actuary may be required to state that the financial position of the fund is, or may be about to become, unsatisfactory in terms of Section 130 and Regulation 9.04. Where statement (e)(ii) cannot be made in the positive it means

that the actuary may have to state that any funding and solvency certificate required by the Regulations in the period following the actuarial investigation may not be able to be given (or that the certification of solvency required by Regulation 9.10(1)(e) will not be able to be given).

10. The Regulations do not require contributions to be made at a level which will allow statements (d) and (e)(ii) to be made in the positive. However, in these circumstances, the report or separate letter should alert the reader to the fact that the contributions are not sufficient to allow a positive statement, and should explain the reasons why a lower contribution than would be required for this purpose is reasonable for funding purposes.

11. The actuary may wish to amend a statement relating to an investigation prior to the next investigation. This may occur, for example, where the levels of employer contributions recommended or being paid differ from those on which the previous statement had been based. In such circumstances, an amended statement should be issued. This statement should refer to the previous statement, the changes in circumstances since the previous statement, and in actuarial methods, assumptions or asset values which may have led to the amended statement. An amended statement should include details of the date of the next investigation under the Regulations.

12. SIS Regulations 9.31(1)(f) and 9.32(d) require an actuarial report to include a statement as to whether or not a “Prescribed Event” has occurred in the period covered by the report. Prescribed Events are only of relevance to superannuation funds which have applied for, and been granted, a Pre July 1988 Funding Credit (PJFC). Accordingly, such a statement need only be made in actuarial reports on funds which have, have had or expect to have, a PJFC.

PROFESSIONAL STANDARD 400
Appendix 2

SUPERANNUATION FUND REPORTS - CHECK LIST

This checklist consists of matters the actuary should consider when undertaking an actuarial investigation of a defined benefit superannuation fund, and preparing a report on that investigation. Every item will not necessarily need to be addressed in every investigation or report.

- Items indicated in **bold type** must be included in all reports.
- Items in *italics* must be considered in the investigation and included in reports where relevant and significant.
- Items in plain text must be at least considered in the investigation where relevant (but not necessarily commented on in the report).

1. IDENTIFICATION

1.1 Name of Fund
1.2 Purpose and circumstances of investigation
1.3 Date of investigation
1.4 To whom the report is addressed
1.5 Name of actuary accepting responsibility
1.6 Capacity in which acting
1.7 Date of report
1.8 Previous similar report
1.8.1 Name of actuary
1.8.2 Date of investigation
1.8.3 Date of report

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 the fund

2.2.1 By employer

2.2.2 By benefit type (accumulation or defined benefit)

2.2.3 By class of employee

2.2.4 By country or currency

2.3 Investment arrangements

2.4 Insurance arrangements

2.5 Compliance status (actual or anticipated)

2.6 Taxation status

2.6.1 Investment income

2.6.2 Capital gains

2.6.3 Contributions

3. TRUST DEED OR GOVERNING RULES

3.1 Governing rules on which investigation based

3.1.1 Date of original (or most recent consolidated) documentation

3.1.2 Dates of subsequent amendments

3.2 Current benefit provisions

3.3 Current contribution provisions

3.4 Timing of investigations

3.4.1 Governing rules

3.4.2 Legislative requirements

3.5 Rights to review contributions/benefits

3.6 Benefit guarantees

3.6.1 On termination

3.6.2 Other

3.7 Benefit discretions

4. ACCOUNTS

4.1 Audited or Unaudited

4.2 Any inconsistencies with statistical data

4.3 Any inconsistency of contributions with previous recommendations

5. EXPERIENCE

5.1 Quality of data
5.2 Investment returns
5.3 Salary increases
5.3.1 Inflation
5.3.2 Other
5.4 Membership numbers
5.4.1 At investigation date
5.4.2 Changes since previous investigation
5.5 Mortality
5.5.1 Active members
5.5.2 Retired members
5.6 Disability
5.6.1 Permanent
5.6.2 Temporary
5.6.3 Partial
5.7 Resignation
5.7.1 Cash benefits
5.7.2 Deferred or transfer benefits
5.8 Retirement
5.8.1 Normal
5.8.2 Early
5.8.3 Late
5.8.4 Commutation
5.9 Pension increases
5.10 Dependency
5.10.1 Proportions married, etc.
5.10.2 Age differences between spouses
5.10.3 Numbers, ages of children
5.11 Discretions
5.12 Pattern of New Members
5.12.1 Age Distribution
5.12.2 Salary Distribution
5.13 Expenses
5.13.1 Administration
5.13.2 Investment
5.13.3 Insurance

6. ASSETS

6.1 Quality of data
6.2 Summary by type
6.2.1 Investment Vehicle
6.2.2 Asset Classes
6.3 Expected return
6.4 Term
6.5 Dependent on employer
6.6 Suitability to liabilities
6.7 Value
6.7.1 Market
6.7.2 Book
6.7.3 For contribution rate recommendations
6.8 Taxation
6.8.1 Accrued tax liabilities
6.8.2 Effective tax rates
6.8.3 CGT reserving procedures

7. INVESTMENT POLICY

7.1 Current policy and trend
7.2 Impact on return
7.3 Suitability to liabilities

8. INSURANCE

8.1 Need for/Adequacy of insurance arrangements

9. DETERMINATION OF CONTRIBUTION RATE

9.1 Funding method and assumptions
9.1.1 Summary description
9.1.2 Changes from previous investigation
9.1.3 Suitability and implications
9.1.4 Quantification of changes
9.2 Summary of results
9.2.1 Valuation balance sheet
9.2.2 Alternative presentation

9.3 Reasons for results

9.3.1 Analysis of surplus

9.3.2 Alternative explanation

9.4 Recommendations

9.4.1 Long-term Contribution rates (or expected future levels/ trend of contributions)

9.4.2 Short-term variation in contribution rates

9.4.3 Benefits

9.4.4 Other

9.5 Outlook

10. FUNDING STATUS

10.1 Vested Benefits ratio

10.1.1 Current

10.1.2 At previous investigation

10.1.3 Outlook

10.2 Accrued Retirement Benefits ratio

10.2.1 Current

10.2.2 At previous investigation

10.2.3 Outlook

10.3 Actuarial Value of Accrued Benefits ratio

10.3.1 Current

10.3.2 At previous investigation

10.3.3 Outlook

(Note that at least one of 10.2 or 10.3 must be included or, if desired, both may be included.)

10.4 Retrenchment and/or Discretionary Benefits ratio

10.4.1 Defined retrenchment benefit or discretionary benefit?

10.4.2 Current

10.4.3 At previous investigation

10.4.4 Outlook

10.5 Fund Termination Benefits ratio

10.5.1 Current

10.5.2 At previous investigation

10.5.3 Outlook

10.6 Funded Minimum Requisite Benefits Ratio

10.6.1 Current

10.6.2 At previous investigation

10.6.3 Outlook

(Note that some comment on coverage of Fund Termination Benefits

must be included in every report but, depending on the definition of termination benefits in the trust deed, it may not be necessary to calculate a ratio. Refer to paragraph 42 for further details. Similarly, some comment on coverage of Retrenchment and/or Discretionary Benefits must be included in every report (where specific benefits are provided in the trust deed) but, depending on the definition of these benefits in the trust deed, it may not be necessary to calculate a ratio. Refer to paragraphs 38 to 41 for further details.)

11. INFORMATION REQUIRED BY SIS REGULATIONS

11.1 The statements required under Regulations 9.31, 9.32 or 9.33 of the SIS Regulations (as appropriate).

12. INFORMATION REQUIRED FOR OTHER PURPOSES

12.1 Accounting information
- 12.1.1 Fund accounts (AAS 25 etc)
- 12.1.2 Employer accounts (FAS 87 etc)

12.2 Superannuation Guarantee/Solvency Information
- 12.2.1 Funding and Solvency Certificate
- 12.2.2 Benefit Certificate

12.3 Reporting to Trustees and/or the Regulator (Sections 129 & 130 of the SIS Act)

The SIS and SGC requirements are covered by Institute Guidance Notes.

13. STATEMENT OF COMPLIANCE WITH IAA STANDARDS

13.1 Professional Standards
- **13.1.1 Professional Standard 400**
- *13.1.2 Professional Standard 401 or 402*

13.2 Guidance Notes
- *13.2.1 Guidance Note 460 and 461*
- *13.2.2 Any other relevant Guidance Note*

END OF PROFESSIONAL STANDARD 400