NEW ZEALAND SOCIETY OF ACTUARIES PROFESSIONAL STANDARD NO. 40

VALUATION OF AND FUNDING FOR SUPERANNUATION SCHEMES

MANDATORY STATUS

EFFECTIVE DATE 31 DECEMBER 2026

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1 INTRODUCTION

1.1 Application

This Professional Standard applies to Actuaries preparing actuarial reports prepared under section 169 of the Financial Markets Conduct Act 2013, where the effective date as at which the Investigation report is made is on or after 31 December 2026.

1.2 Background

1.2.1 The Act states in section 169 that the manager of a defined benefit scheme or a life benefit scheme must ensure that a suitably qualified actuary examines the financial position of the scheme as at dates that are no more than 3 years apart.

1.2.2 A Member may prepare a report on the financial position of a defined benefit scheme or life benefit scheme whether or not the report is required by legislation, whether or not the scheme is for the time being registered under the Act, whether or not the scheme is set up on a defined benefit basis or a defined contribution basis or a hybrid basis, and whether or not the scheme is funded on an allocated or an unallocated basis. Although compliance with this Professional Standard may not be required in the particular circumstances, the Member preparing the report is advised to pay heed to the principles which underlie the Professional Standard.

1.2.3 The main purposes of an actuarial report are to provide the results of the Actuary's examination of the financial position of the scheme, document the basis of the examination and to recommend the contributions that should be made in the future to meet the funding objectives.

1.2.4 When undertaking the examination of the financial position of a superannuation scheme an Actuary must exercise professional judgement in determining the extent of the Investigation, the Funding Method and the underlying assumptions.

1.2.5 The Funding Methods used by actuaries require assumptions about future economic and demographic factors. These Funding Methods and assumptions must take into account every aspect of significance to the extent known by the Actuary, including the security of the scheme's benefits, the operating environment of the scheme's Sponsor, and the manner in which discretions are likely to be exercised. The appropriate Funding Method and elements in the set of assumptions adopted will vary between schemes and may vary over time for a given scheme.

1.3 Purpose

The purpose of this Professional Standard is to provide Actuaries with principles and directions that must be followed with regard to the preparation of a report prepared under section 169 of the Act into a scheme's financial position and the level of future contributions required to meet funding objectives.

1.4 Previous Versions

The previous versions of Professional Standard No. 40 are the version effective 30 June 2022, the version effective 31 December 2018, the version dated 31 March 2003, and the 1 November 1998 Standard. This 1998 Standard replaced the Guidance Note on Actuarial Reporting For Defined Benefit Superannuation Schemes originally adopted by the Society on 31 August 1987.

1.5 Legislation

1.5.1 This Professional Standard is mandatory for reports prepared for the purposes of section 169 of the Act.

1.5.2 This Professional Standard may be adopted on a non-mandatory basis for reports prepared for other purposes.

1.6 Changes to Referenced Documents

When this Professional Standard refers to another document, the reference relates to the document as it was as at the effective date of this Professional Standard. The referenced document may be amended, restated, revoked, or replaced after the effective date. In such a case, the Actuary should consider the extent to which the modification is applicable and appropriate to the guidance contained in this Professional Standard.

2 EFFECTIVE DATE

This Professional Standard takes effect for Investigations with effective dates on or after 31 December 2026.

3 DEFINITIONS

Accrued Benefits: the benefits (or the value of the benefits where appropriate) to which a member has an absolute right or a reasonable expectation to ultimately receive, which are attributable to past membership or service to the relevant date.

Act: The Financial Markets Conduct Act 2013 or any subsequent re-enactment of that Act.

Actuary: a Fellow of the Society.

Fair Value: has the same meaning as Fair Value Measurement as defined in accounting standard NZ IFRS13 Fair Value Measurement.

Funding Method: the systematic basis for meeting the cost of benefits. This also includes the method that is used to calculate the liabilities of the scheme.

Investigation: an actuarial investigation to which this Professional Standard applies.

Member: is a member of the Society.

Non-investment Expenses: expenses incurred in the running of the scheme (and charged to the scheme) excluding those related to the provision of investment management services. They will include those for outsourced scheme administration, professional services such as audit, tax, actuarial and investment consulting, plus insurance and any other non-investment management expenses incurred by the scheme.

Society: the New Zealand Society of Actuaries.

Sponsor: the entity funding the balance of the costs of the scheme.

Termination Benefits: the benefits (or the value of the benefits where appropriate) which would be payable, as set out in the scheme's governing documents, if the scheme were terminated.

Vested Benefits: the benefits (or the value of the benefits where appropriate), where Vested Benefit has the same meaning as defined in accounting standard NZ IAS 26 Accounting and Reporting by Retirement Benefit Plans.

For the avoidance of doubt it is the benefit (or the present value of the expected benefit where appropriate – for example, where benefits are in the form of a pension or deferred benefit) to which the member of the scheme would have the right to payment if the member voluntarily ceased employment, along with the present value of benefits payable to members of the scheme who have previously left service, or are currently in receipt of a benefit. This excludes Non-investment Expenses associated with the payment of these benefits.

4 MATERIALITY

In case of omissions, understatements, or overstatements, the Actuary must assess whether or not the effect is material. The threshold of materiality under which the work is being conducted must be determined by the Actuary unless it is imposed by another party such as an auditor or the party who engages the provider of actuarial services. When determining the threshold of materiality, the Actuary must:

- Assess materiality from the point of view of the intended user(s), recognising the purpose of the actuarial services; thus, an omission, understatement, or overstatement is material if the Actuary expects it to

affect significantly either the intended user's decision-making or the intended user's reasonable expectations;

- Consider the actuarial services and the entity that is the subject of those actuarial services; and

- Consult with the party who engages the provider of actuarial services if necessary.

Where materiality has been imposed by another party it should be stated as such.

5 CONDUCTING THE EXAMINATION

5.1 Information and data

The Actuary must:

- seek to obtain all relevant information required for the Investigation from the scheme's trustee, its delegates or other sources; and

- take reasonable steps to verify the consistency, completeness, and accuracy of the information provided for the scheme, in order to determine whether or not the Actuary is able to rely on the information provided.

5.2 Valuation of assets

The value to be placed on the assets shall be the Fair Value.

5.3 Funding Method (including valuation of liabilities)

5.3.1 The amounts and the timing of payments of benefits from a scheme cannot be known precisely in advance. They will depend on such things as salary increases and death, disablement and resignation rates of the members of the scheme.

5.3.2 Recommended contributions for scheme Sponsors are estimates, in accordance with a particular Funding Method, of the payments to be made to the scheme which, together with existing assets, future member contributions and future investment income, will meet the benefits, tax and expenses payable by the scheme.

5.3.3 The Funding Method selected will depend on:

- the available information;

- the nature of the data;

- whether new members are being admitted to the scheme or not;

- the operating environment and circumstances of the scheme and the scheme Sponsor;

- consideration of the wishes/risk appetite of the Sponsor and trustee, including the desire for stability of future Sponsor contributions where relevant; and

- any other matters identified by the Actuary as being relevant.

5.4 Assumptions

5.4.1 The Actuary must determine assumptions that are suitable for the scheme in its circumstances and, in the Actuary's opinion, are either:

- best estimate; or

- more conservative than the best estimate assumption provided the circumstances, based on the Actuary's professional judgement, justify the use of more conservative assumptions.

5.4.2 When setting assumptions, the Actuary must:

- be satisfied as to their suitability in relation to the expected future experience of the scheme;

- be satisfied as to the consistency of the assumptions as a whole, taking account of the Actuary's determination as to any degree of conservatism allowed for under paragraph 5.4.1;

- consider the past experience of the scheme. If the experience of the scheme is not sufficiently credible, then the Actuary must consider the available relevant industry statistics or other information;

- consider the appropriateness of allowing for future discretionary benefit payments based on any regular past practice;

- take into account any special features of the experience; and

- have regard to relevant industry experience.

5.4.3 The Actuary must determine assumptions, where appropriate, (whether explicitly or implicitly, as the case may be) in relation to:

- the expected (or, where appropriate, notional) rate of earnings on investments;

- future increases in benefits due to salary increases, the application of a crediting rate or investment returns or pension increases (as provided by the governing documents or in accordance with either precedent or the intentions of the trustee and/or scheme Sponsor);

- taxation of contributions and investment income;

- rate at which future cash flows are discounted;

- expenses incurred in running the scheme, including the costs of administration, insurance and in the provision of investment management;

- the rate and mode of exit of members of the scheme; and

- any other experience item the Actuary considers relevant and significant.

5.5 Other issues which must be considered

Where relevant, the Actuary must consider the following issues:

- whether the scheme has sufficient liquidity to provide for benefit payments as well as expenses either through investment income, sale of the scheme's assets, or contributions from the members or the scheme Sponsor;

- the suitability of assets for matching the expected benefit payments and expenses;

- the sufficiency of assets, including future contributions;

- any other relevant scheme specific factors.

Where relevant, the Actuary may consider the following issue:

- the strength of the Sponsor's covenant when advising on any deficit recovery, including payment of any expenses not reflected in the calculation of past service liabilities, along with consideration of impact on fair value of assets if the employer were to go insolvent (such as the impact on the value of illiquid assets due to a forced sale, or on the value of assets which are related to the scheme Sponsor).

5.6 Funding status measures - Accrued Benefits ratio

The Accrued Benefits ratio is determined as the ratio of the Fair Value of assets of the scheme to the Accrued Benefits of the scheme at the date of Investigation. The

purpose of the Accrued Benefits ratio is to measure the current state of funding members' retirement and other benefits, based on the valuation assumptions used for determining recommended contributions.

5.7 Funding status measures - Vested Benefits ratio

5.7.1 The Vested Benefits ratio is determined as the ratio of the Fair Value of Assets of the scheme to the total Vested Benefits of the scheme at the date of Investigation.

5.7.2 The purpose of the Vested Benefits ratio is to measure the capacity of the scheme's assets to meet the benefits that would be payable if all active members immediately voluntarily left the scheme and provision was made to cover the present value of benefits payable to members of the scheme who have previously left service or are currently in receipt of a benefit.

5.8 Results and future contributions

5.8.1 The Actuary must:

- determine the key results of, and considerations arising from, the Investigation;
- consider all issues regarded as material by the Actuary arising from or disclosed by the Investigation; and
- determine the recommended future levels of contributions, either as a percentage of salaries, or alternatively, expressed in some other form which is appropriate to the circumstances of the scheme.

5.8.2 In considering the future contributions, the Actuary must take into account the circumstances of the scheme including:

- the investment policy (including any large exposures to single assets or to assets which are illiquid or are not listed on a major stock exchange) and the degree to which the security of members' benefits could decline if there are falls in the investment markets;
- the liquidity of the assets to meet the normal requirements for benefit payments and other outgoings without the need to realise assets at possibly temporarily depressed prices;
- the maturity of the defined benefit section of the scheme;
- whether the scheme is closed or open to new defined benefit members;

- any potential reductions in the membership of the scheme and the expected benefits payable, and their potential to worsen the financial position of the scheme significantly in respect of the remaining members;

- any relevant provisions of the governing documents affecting funding and/or security of members' benefits;

- whether there are any additional protections for members' benefits beyond the Fair Value of Assets of the scheme. For example, the scheme Sponsor may have a bank guarantee in respect of the deficiency or there may be provisions in the governing documents, or elsewhere, giving the scheme legal recourse to the scheme Sponsor for any deficiency on a winding up of the scheme;

- the frequency with which the scheme's financial position is monitored by the Actuary;

- the crediting rate policy and the impact of that policy in relation to declared or interim rates on the overall financial position of the scheme;

- equity between the defined benefit and accumulation categories. For example, the potential impact of smoothed interest rates for accumulation members on the solvency of the defined benefits and the potential for a deficit in the defined benefit category to impact the benefits of accumulation members on the winding up of the scheme;

- any self-insurance arrangements including self-insurance liabilities;

- the level of future expenses (both investment and Non-investment); and

- any other circumstances that are, in the Actuary's opinion, material.

6 MATTERS TO REPORT

In addition to the contents of this Professional Standard, in deciding on the content and the level of detail for reporting, the Actuary must have regard to the reporting requirements given in the Society's other Professional Standards.

6.1 General

The report must include the following information:

6.1.1 The name of the scheme.

6.1.2 To whom the report is addressed.

6.1.3 The purpose(s) for which the Investigation is made and the report is prepared.

6.1.4 The dates as at which the current Investigation and the immediately preceding Investigation (if any) were made.

6.1.5 The name, professional qualifications and signature of the Actuary.

6.1.6 The date the report is signed.

6.2 Governing documents

The report must include the following information:

6.2.1 The date of the latest trust deed governing the scheme and the dates of any subsequent amendments.

6.2.2 A summary of material provisions relating to benefits and contributions, including the benefits paid if the scheme is wound up (i.e. Termination Benefits).

6.3 Relevant developments

The report must include the following information in respect of matters affecting the scheme that have occurred between the date of the immediately preceding Investigation and the date of the current Investigation:

6.3.1 The contribution rates recommended by the Actuary at the previous Investigation and the contribution rates paid.

6.3.2 Any discrepancy between the trust deed and the trustee's practice, of which the Actuary is aware, and which has a material bearing on the results of the Investigation.

6.3.3 Comment on any material developments in the scheme.

6.3.4 Comment on external events that have had a material effect on the results of the Investigation.

6.3.5 Where significant to the liabilities of the scheme, for persons who were members at the dates of the current and immediately preceding Investigation, a statement of the average annual rate of increase in salary or pensionable salary.

6.3.6 A statement of the average annual rate of investment earnings, and how this has been calculated.

6.3.7 A statement of the average annual rate of Non-investment Expenses and how this has been calculated.

6.3.8 If significant to the scheme's financial position, where the interest rate applied to an accumulation of contributions is different from the annual rate of investment earnings shown in paragraph 6.3.6, a statement of the impact of the difference on the scheme's financial position.

6.3.9 Comment on how investment expenses have been allowed for.

6.4 Scheme information

6.4.1 The report must include at least the following information in respect of the information used in preparing the report:

6.4.2 The source of the membership data.

6.4.3 A summary of the membership data for each category of membership, subject to any restrictions implied by the Privacy Act 1993 and any subsequent re-enactments.

6.4.4 A reconciliation of the number of members at the date of the current Investigation with the number of members at the date of the immediately preceding Investigation.

6.4.5 Comment on the sufficiency and reliability of the membership data.

6.5 Investments

The report must include at least the following in respect of the investments of the scheme:

6.5.1 A summary of the investment strategy of the scheme and comment on the appropriateness of the investment strategy having regard to the nature of the liabilities of the scheme.

6.5.2 The source of the asset and revenue data.

6.5.3 A reconciliation between the Fair Value of the scheme's assets at the date of the current Investigation and the date of the immediately preceding Investigation, including the principal items of income and outgo for the period between Investigations.

6.5.4 Comment on the sufficiency and reliability of the data relating to the scheme's assets and revenue.

6.5.5 A description of the assets.

6.5.6 Comment on whether or not the assets are invested in accordance with the investment strategy.

6.5.7 Comment on any material risks posed by the assets of which the Actuary is aware.

6.6 Methodology and assumptions

The report must include at least the following in respect of the Funding Method and assumptions adopted for the report:

6.6.1 An explanation of the funding objectives and the Funding Method used to achieve those objectives.

6.6.2 An explanation of the implications of the funding objectives and the Funding Method in terms of the stability of future contribution rates and future funding levels.

6.6.3 A statement as to whether or not there has been any change in the Funding Method or funding objectives, or both, since the date of the report on the immediately preceding Investigation, and, if so, an explanation of the effect of such changes.

6.6.4 A statement of assumptions used to value the liabilities, a statement as to the allowance for Non-investment Expenses and the ability of that allowance to meet the expected future Non-investment Expenses and a comment on how investment expenses are allowed for.

6.6.5 If there has been a practice of discretionary increases in benefits of which the Actuary is aware, a statement of the extent to which this practice has been assumed to continue.

6.6.6 A statement as to which are the most financially significant assumptions and, for these, an explanation of how the values for these assumptions were derived. This explanation shall include at least:

- If the investment earnings assumption is one of the most financially significant assumptions, an explanation of the relationship between the investment earnings assumption and the current investment strategy of the scheme, any changes assumed in the future to the investment strategy and the allowances made for each of future investment expenses, Non-investment Expenses and taxation, and

- If the mortality assumption is one of the most financially significant assumptions, a statement of the provision made for future improvement in mortality.

6.6.7 A statement of any changes since the date of the immediately preceding Investigation in the assumptions used to calculate the Accrued Benefits, or the type, or amount of benefits and the reason(s) for those changes.

6.7 Results of the Investigation

The report must:

6.7.1 Compare the Accrued Benefits to the Fair Value of the assets, as at the date of the current Investigation.

6.7.2 Compare the Vested Benefits to the Fair Value of the assets, as at the date of the current Investigation.

6.7.3 State how the relationships in 6.7.1 and 6.7.2 are likely to change over the period until the date of the next Investigation if the assumptions used to calculate these values are borne out in practice.

6.7.4 Show a summary of the actuarial present value of the benefits valued according to the nature of the benefit (retirement etc.), the Actuary's allowance for future Non-investment Expenses (if any), members' future contributions (if any) and the Sponsor's future contributions (if any), where these items are relevant to the Funding Method.

6.7.5 Show the contribution rate(s) determined by the Actuary according to the Funding Method and assumptions used and if the scheme is in actuarial deficit any additional rate or amounts necessary to clear the deficit within a time period acceptable to the Financial Markets Authority.

6.7.6 Show the contribution rate(s) recommended by the Actuary payable until the date of the next actuarial Investigation. If the contribution rate(s) recommended by the Actuary imply a change in the contribution rate(s) after the date of the next actuarial Investigation, an indication of the extent and the timing of the change(s).

6.7.7 Comment on whether the contribution rate(s) is/(are) inclusive or exclusive of Employer Superannuation Contribution Tax or any similar tax.

6.7.8 Include a comment on whether or not the benefits on wind-up differ from the ongoing benefits and, where appropriate, note that legal advice may be required in the case where the trust deed specifies annuities to be payable.

6.7.9 Include comments on material events, of which the Actuary is aware, which have occurred subsequent to the date of the current Investigation and prior to the date of signature of the report that may significantly affect the financial position of the scheme.

6.7.10 Include an indication or description of the volatility of the future funding level and the major causes of volatility. This should include the sensitivity of valuation results to changes in key assumptions, such as the discount rate, future pension increases and future mortality.

6.7.11 Provide an explanation of the change in the financial position of the scheme since the previous Investigation showing at least the impact of variation between actual experience and assumed experience for each of the key assumptions and the impact of any changes in the key assumptions.

6.8 Other matters

The report must include the following additional matters:

6.8.1 A recommendation of the date as at which the next actuarial Investigation should be carried out and, if applicable, the circumstances that could cause the trustee to seek an earlier actuarial Investigation of the scheme.

6.8.2 Comment on the adequacy or otherwise of the arrangements made to protect the scheme against excessive losses arising from the payment of benefits on death or disability.

6.8.3 A statement of whether there are any conflicts of interest for the Actuary and, if so, what they are.

6.8.4 The following statement:

"This report was prepared in accordance with Professional Standard No. 40 - Valuation of and Funding for Superannuation Schemes, issued by the New Zealand Society of Actuaries, and also complies with Professional Standard No. 90 General Actuarial Practice, issued by the New Zealand Society of Actuaries. The Funding Method and the economic and demographic assumptions have been determined in accordance with the professional judgement of the Actuary preparing the report." Where appropriate any deviations from either of these Professional Standards should be disclosed together with the implications of those deviations.