

NEW ZEALAND SOCIETY OF ACTUARIES

PROFESSIONAL STANDARD NO. 90 GENERAL ACTUARIAL PRACTICE

STATUS MANDATORY

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1. INTRODUCTION

1.1 Application

1.1.1 This professional standard applies to every Member providing Prescribed Actuarial Services, as defined in this professional standard. However, there are situations where a Member may deviate from the requirements of this professional standard but still comply with this professional standard:

- a) Legislation may impose obligations upon a Member. Compliance with requirements of legislation, that conflict with this professional standard, is not a deviation from this professional standard.
- b) The Code of Conduct or a professional standard applicable to the Work may conflict with this professional standard. Compliance with these requirements that conflict with this professional standard is not a deviation from this professional standard.
- c) The Member may depart from the requirements in this professional standard while still complying with this professional standard if the Member provides an appropriate statement to each Intended User with respect to the nature, rationale, and effect of any such departure.

d) When a Member is providing Actuarial Advice which is not Prescribed Actuarial Services, the Member must consider the requirements of this Professional Standard and determine which of these requirements should apply. The level of detail provided and the extent to which the requirements of this standard are met will depend on the nature of the communication and advice.

1.1.2 When a team is providing Prescribed Actuarial Services, The Member or Members named as authors of the advice are responsible for ensuring the requirements of this standard are met.

1.2 Background

1.2.1 International Standard of Actuarial Practice 1 General Actuarial Practice was approved by the International Actuarial Association on 18 November 2012. The International Actuarial Association encourages relevant actuarial standard-setting bodies to consider taking one of the following courses of action, if it has been determined that this International Standard of Actuarial Practice 1 is relevant for actuaries in their jurisdiction:

- a) adopting International Standard of Actuarial Practice 1 as a professional standard with appropriate modification, where items covered in International Standard of Actuarial Practice 1 are not currently contained in existing professional standards, or where such portions of existing professional standards are to be withdrawn;
- b) endorsing International Standard of Actuarial Practice 1 as a professional standard as an alternative to existing professional standards;
- c) modifying existing professional standards to obtain substantial consistency with International Standard of Actuarial Practice 1; or
- d) confirming that existing professional standards are already substantially consistent with International Standard of Actuarial Practice 1.

1.2.2 The New Zealand Society of Actuaries has determined that International Standard of Actuarial Practice 1 is relevant to its Members. It has reviewed the extent to which existing professional standards are consistent with all the requirements of this professional standard and found that while there were significant aspects of International Standard of Actuarial Practice 1 covered by the Code of Conduct, Professional Standard No 90:

Communications and Professional Standard No 91: Economic Valuations, various aspects were not covered. This professional standard is intended to meet the various requirements of the International Actuarial Association, as set out in International Standard of Actuarial Practice 1, which are not or are not intended to be covered by the Code of Conduct.

1.3 Purpose

1.3.1 The purpose of this professional standard is to:

- a) provide guidance to Members when providing Actuarial Services to give Intended Users confidence that:
 - Actuarial Services are provided professionally and with due care;
 - the results are relevant to their needs, are presented clearly and understandably, and are complete; and
 - the assumptions and methodology used are disclosed appropriately.
- b) and to meet the requirements of the International Actuarial Association that there is a Standard which is substantially consistent with International Standard of Actuarial Practice 1.

1.4 Previous versions

1.4.1 This professional standard replaces PS 90, which was effective from 1 June 2015 and PS 91, which was effective from 1 July 2010.

1.5 Legislation

1.5.1 There is no legislation relevant to this professional standard.

1.6 Changes to referenced documents

1.6.1 When this professional standard refers another document, the reference relates to the document as it was at the effective date of this Standard. The referenced document may be amended, restated, revoked, or replaced after the effective date. In this case, the Member must consider the extent to which the modification is applicable and appropriate to the requirements in this professional standard.

1.7 Code of Conduct

- 1.7.1 The Society's Code of Conduct, particularly section 5 "Actuarial Advice", sets out requirements that the Member must take into account in addition to the requirements of this professional standard when determining the content of any form of Advice.
- 1.7.2 The Member is responsible for determining which of the requirements of the Code of Conduct apply. To avoid doubt, it is expressly stated that no part of this professional standard can be used to justify non-compliance with the Code of Conduct. It remains the Member's responsibility to comply with the Code of Conduct at all times.

1.8 Third Parties

- 1.8.1 In considering the requirements of the Society's Code of Conduct and this professional standard, Members must assume that a Communication is likely to be disclosed to third parties unless its distribution is specifically restricted.

2. EFFECTIVE DATE

- 2.1.1 This professional standard takes effect from 1 March 2018.

3. DEFINITIONS

3.1 Definitions

- 3.1.1 **Actuarial Advice:** means written, electronic or oral Advice:
 - a) given by a Member in a professional capacity in areas of work in which actuaries are reasonably understood to have expertise; or
 - b) given by a Member and relied upon by the recipient because the recipient reasonably believes the Advice to be given in a professional actuarial capacity;including, but not limited to, Advice:
 - a) in accordance with legislative requirements, or standards or guidelines set by a Government or statutory agency or regulator;
 - b) in accordance with any standards or guidance issued by the Society;
 - c) as an expert witness before a court of law or statutory tribunal;
 - d) as a participant in the disciplinary scheme of a professional body;

- e) in relation to liability or asset valuations, economic valuations, premium setting, investment strategy; or
- f) for the purpose of providing information needed to prepare financial reports for a business entity or government agency, or for the purpose of preparing such reports

and includes Advice provided on a pro bono basis.

- 3.1.2 **Advice:** includes any conclusion, result, opinion or recommendation.
- 3.1.3 **Code of Conduct:** means the Code of Actuarial Conduct adopted under clause 16 of the Rules of the Society.
- 3.1.4 **Communication:** means any statement (including oral statements) issued or made by a Member with respect to Prescribed Actuarial Services.
- 3.1.5 **Entity:** means the subject in whole or in part, of the Actuarial Service, including an enterprise, an insurer, a pensions or benefits plan, a social security scheme, an individual, a government department or agency, a group etc.
- 3.1.6 **Intended User:** means any legal entity or natural person (usually including the Principal) whom the Member intends at the time the Member performs Prescribed Actuarial Services to use the Report.
- 3.1.7 **Legislation:** means an act, statute, regulations or other binding authority such as accounting standards or regulatory guidance that is effectively binding.
- 3.1.8 **Member:** means a member of the Society.
- 3.1.9 **Prescribed Actuarial Services:** means Actuarial Advice:
 - a) provided in a statutory role, and/or
 - b) within the scope of one of the Society's other Professional Standards, and/or
 - c) provided for inclusion in financial statements, and/or
 - d) which could significantly affect an Intended Reader's decision making or an Intended Reader's reasonable expectations.

To avoid doubt Prescribed Actuarial Services does not include anything written for general publication such as in a book, newspaper or magazine, or anything written for the education of

others or for presentation/discussion at a conference or similar event.

- 3.1.10 **Principal:** means the party who engages the provider of Prescribed Actuarial Services. The Principal will usually be the client or the employer of the Member.
- 3.1.11 **Report:** means the Member's Communications presenting the results of Prescribed Actuarial Services to an Intended User in any recorded form, including but not limited to paper, word processing or spreadsheet files, e-mail, website, slide presentations, or audio or video recordings. To avoid doubt, a Report does not include anything written for general publication such as in a book, newspaper or magazine, or anything written for the education of others or for presentation/discussion at a conference or similar event.
- 3.1.12 **Society:** means the New Zealand Society of Actuaries.
- 3.1.13 **Subsequent Event:** means an event of which the Member becomes aware after the effective date of the analysis by the Member (or the date to which the Prescribed Actuarial Service refer) but before the Member's Communication on the results of these Prescribed Actuarial Services is delivered.
- 3.1.14 **Work:** means all actuarial activities performed by a Member related to Prescribed Actuarial Services. It usually includes acquisition of knowledge of the circumstances of the assignment, obtaining sufficient and reliable data, selection of assumptions and methodology, calculations and examination of the reasonableness of their result, use of other persons' work, formulation of opinion and Advice, documentation, Reporting and all other Communication.

3.2 Examples

- 3.2.1 This professional standard includes a number of examples, as it was considered that these examples assisted in providing framework in which Members must exercise their professional judgement. In no case are these examples to be considered exhaustive.

4. MATERIALITY

4.1.1 In case of omissions, understatements, or overstatements, the Member 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 Member unless it is imposed by another party such as an auditor or the Principal. When determining the threshold of materiality, the Member must:

- a) assess materiality from the point of view of the Intended User(s), recognising the purpose of the Prescribed Actuarial Services; thus, an omission, understatement, or overstatement is material if the Member expects it to affect significantly either the Intended User's decision-making or the Intended User's reasonable expectations;
- b) consider the Prescribed Actuarial Services and the Entity that is the subject of those actuarial services; and
- c) consult with the Principal if necessary.

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

5. DATA, ASSUMPTIONS, METHODOLOGY AND RESULTS

5.1 Data

5.1.1 The Member must consider whether sufficient and reliable data are available to provide the Prescribed Actuarial Services. Data are sufficient if they include the appropriate information for the Work. Data are reliable if that information is materially accurate.

5.1.2 The Member must take reasonable steps to review the consistency, completeness, and accuracy of the data used. These might include:

- a) undertaking reconciliations against audited financial statements, trial balances, or other relevant records, if these are available;
- b) testing the data for reasonableness against external or independent data;
- c) testing the data for internal consistency; and
- d) comparing the data to that for a prior period or periods.

The Member must describe this review in the Report.

- 5.1.3 To the extent possible and appropriate when setting Entity-specific assumptions, the Member must consider using data specific to the Entity for which the assumptions are being made. Where such data are not available, relevant, or credible, the Member must consider industry data, data from other comparable sources, population data, or other published data, adjusted as appropriate. The data used, and the adjustments made, must be described in the Report.
- 5.1.4 The Member must consider the possible effect of any data deficiencies (such as inadequacy, inconsistency, incompleteness, inaccuracy, and unreasonableness) on the results of the Work. If the data is sufficient and reliable, then any deficiencies need not be considered further. If not, then the Member must:
- a) decline to undertake or continue to perform the Prescribed Actuarial Services; or
 - b) work with the Principal to modify the Prescribed Actuarial Services or obtain appropriate additional data; or
 - c) subject to the Code of Conduct, perform the Prescribed Actuarial Services as well as possible and disclose the data deficiencies in the Report (including an indication of the potential impact of those data deficiencies).

5.2 Reliance on Others

- 5.2.1 The Member may use information prepared by another party such as data, relevant contracts, insurance contract or pension plan provisions, opinions of other professionals, projections, and supporting analyses (but excluding assumptions or methodology). The Member may take responsibility for such information, or the Member may state that reliance has been placed upon the source of this information and disclaim responsibility.
- 5.2.2 If the Member selects the party on whom to rely, the Member must consider the following:
- a) the other party's qualifications;
 - b) the other party's competence, integrity, and objectivity;
 - c) the other party's awareness of how the information is expected to be used;

- d) discussions and correspondence between the Member and the other party regarding any facts known to the Member that are likely to have a material effect upon the information used; and
 - e) the need to review the other party's supporting documentation.
- 5.2.3 If the Member states reliance on the information prepared by another party and disclaims responsibility for it, the Member must:
 - a) disclose that fact (including identifying the other party) in every Communication to which it is relevant;
 - b) disclose the nature and extent of such reliance;
 - c) examine the information for evident shortcomings;
 - d) when practicable, review the information for reasonableness and consistency; and
 - e) report the steps, if any, that the Member took to determine whether it was appropriate to rely on the information.

5.3 Assumptions and methodology

- 5.3.1 The assumptions and methodology may be set by the Member, prescribed by the Principal or another party or mandated by legislation. Where the Report is silent about who set an assumption or methodology, the Member who authored the Report will be assumed to have taken responsibility for such assumption or methodology.
- 5.3.2 There will often be a range of assumptions that the Member could determine as being acceptable for a particular Advice. The Member must use a set of assumptions in the Advice that is internally consistent, free of intentional bias by the Member and appropriate to the purpose, scope and proposed use of the Advice.
- 5.3.3 The Member must assess whether an assumption set is reasonable in the aggregate. While assumptions might be justifiable individually, it is possible that prudence or optimism in multiple assumptions will result in an aggregate assumption set that is no longer valid. If not valid, the Member must make appropriate adjustments to achieve a reasonable assumption set and final result.
- 5.3.4 The Member must determine if the assumptions used for different components of the Work are materially consistent, and that any significant interdependencies are modelled appropriately. The Member must disclose any material inconsistency in the Report.

- 5.3.5 Where appropriate to the purpose of the Prescribed Actuarial Services, the Member must consider and address the sensitivity of the methodology to the effect of variations in key assumptions. The Member must take into account whether the results of the sensitivity tests reflect a reasonable range of variation in the key assumptions, consistent with that purpose.
- 5.3.6 Where the assumptions or methodology are prescribed by the Principal or another party:
- a) When an assumption or methodology is mandated by legislation, the Member must disclose in the Report that the assumption or methodology was mandated by legislation and that the Report should not be used for other purposes where the assumptions and methodology used are not appropriate (unless appropriately adjusted); or
 - b) If the Member is willing to support the prescribed assumption or methodology, the Member may disclose the party who prescribed the assumption or methodology and the Member's support; or
 - c) If the Member is not willing to support the prescribed assumption or methodology, the Member must disclose in any Report that fact, the party who prescribed the assumption or methodology, and the reason why the Member does not support the prescribed assumption or methodology; or
 - d) If the Member has been unable to judge the appropriateness of the prescribed assumption or methodology or the Member was not qualified to judge the appropriateness of the assumption, the Member must disclose in the Report that fact, the party who prescribed the assumption or methodology, and the reason why this party, rather than the Member, set the assumption or methodology.

5.4 Subsequent Events

- 5.4.1 The Member must consider any Subsequent Event that has the potential of materially changing the results of the Prescribed Actuarial Services if the event had been reflected in the Work and disclose such an event in the Member's Communication.

5.5 Results

- 5.5.1 The Member must be satisfied as to the material accuracy of the results given the purpose, scope and proposed use of the Prescribed Actuarial Services. The Member must perform appropriate validation tests and reasonableness checks on the valuation result and key intermediate results.

6. COMMUNICATION

6.1 General Principles

- 6.1.1 Any Communication should aim to be appropriate to the particular circumstances and take the skills, understanding, levels of relevant technical expertise, and needs of the Intended User into consideration to allow the Intended User to understand the implications of the Member's Communication.
- 6.1.2 Every Communication shall clearly identify the issuing Member. When two or more individuals jointly issue a Communication, at least some of which is actuarial in nature, the Communication shall identify all responsible Members, unless the Members judge it inappropriate to do so.
- 6.1.3 Any Communication initially issued in draft form must be clearly identified as draft and any limitations on its applicability and on the responsibility taken by the Member for the Advice therein must be clearly stated.
- 6.1.4 The Member must complete and provide to the Principal a Report, if the Member is conveying the results of Prescribed Actuarial Services, except that a Member's Report under section 78 of the Insurance (Prudential Supervision) Act 2010 is exempt from the requirements of this professional standard which relate to a Report, provided that all matters which would otherwise be included in the Report are included in a financial condition report and/or another report which complies with the relevant professional standards of the Society and has been provided to the Principal.
- 6.1.5 A Report may comprise one or several document(s) that may exist in several different formats. Where a Report comprises multiple documents:
 - a) The Member must communicate to all Intended Users which documents comprise the Report.

- b) The Member must ensure that Report components (especially those in electronic media) are such that they can be reliably reproduced for a reasonable period of time.
 - c) The Member must consider the requirements of this professional standard and determine how those requirements should be applied. The level of detail provided and the extent to which the requirements of this professional standard are met in each Communication comprising the Report will depend on the nature of the Communication and the Advice.
- 6.1.6 In a Report, the Member must present all information with sufficient detail that another Member qualified in the same practice area could make an objective appraisal of the reasonableness of the Member's Work.
- 6.1.7 The content of a Report may be constrained by circumstances such as legal, legislative, regulatory, or supervisory proceedings. Constraints could also include other standards such as financial reporting standards or an Entity's accounting policy. The Member must follow the requirements of this professional standard to the extent reasonably possible within such constraint.
- 6.1.8 A Member may prepare a short form of a Report, in addition to the full Report or as part of the full Report, provided that such a short form of a Report is accurate, not misleading and contains sufficient information to enable its subject matter to be put into proper context by its Intended Users. A Member should use his or her professional judgment and exercise discretion in determining what needs to be included in such a Report, having regard to the Code, the guidance set out in this standard and normal commercial practice.

6.2 Contents of a Report

- 6.2.1 The Member must include in a Report:
- a) the Member's name and relevant professional qualifications;
 - b) if applicable, the name of the organisation on whose behalf the Member is issuing the Report and, if applicable, the Member's position held in that organisation;
 - c) the capacity in which the Member is providing the Report;
 - d) the name of the Principal;

- e) the scope and intended use of the Report, including a summary of any agreed terms of reference and of any other instructions given by the Principal;
- f) the date on which it was completed;
- g) the results of Prescribed Actuarial Services;
- h) the methodology and assumptions;
- i) the data used (paragraph 5.1.3);
- j) statements of the extent of, and any limitations to, the Member's responsibilities both to the Principal, other Intended Users and to other third parties;
- k) an outline of the circumstances in which the Advice can be relied on and a statement that the Advice should not be used in other circumstances;
- l) any restrictions on distribution.

6.2.2 Unless to do so would produce a result that would be inappropriate or would potentially mislead the Intended Users of the Prescribed Actuarial Services, the Member must disclose in a Report, if applicable:

- a) the name(s) of any others responsible for the Advice (paragraph 1.1.2);
- b) the effective date of the Report;
- c) the professional standard(s) under which the Work was performed, other than this professional standard;
- d) comment on the extent to which the Report falls short of or goes beyond its stated purpose;
- e) the title of legislation that is directly relevant to the Advice in the Report;
- f) reference to any relevant previous Work, including Work by another author, which has a Material bearing on the Work;
- g) any deviation from the requirements in this professional standard (paragraph 1.1.1 c);
- h) the steps taken to review the consistency, completeness, and accuracy of the data used (paragraph 5.1.2);

- i) any adjustments to the data (paragraph 5.1.3);
- j) any data deficiencies, including an indication of the potential impact of these data deficiencies (paragraph 5.1.4 c);
- k) any reliance on information prepared by another party for which the Member disclaims responsibility and the steps taken to determine whether it was appropriate to rely on the information (paragraph 5.2.3);
- l) where the Member is not willing to support the assumptions or methodology, the information set out in paragraph 5.3.6 c);
- m) where the Member has been unable to judge the appropriateness of the assumption or methodology, the information set out in paragraph 5.3.6 d);
- n) the threshold of materiality under which the Work is being conducted;
- o) where materiality has been imposed by another party, a statement to that effect (paragraph 4.1.2);
- p) the potential variability of the results;
- q) where assumptions and methodology are mandated by legislation, the information set out paragraph 5.3.6 a).

6.2.3 If Material, the Report must include comment on:

- a) any inconsistency in the assumptions used (paragraph 5.3.4);
- b) where appropriate, the Material elements of uncertainty and the sensitivity of the results to variations in the methodology and key assumptions (paragraph 5.3.5);
- c) issues which are relevant to the Prescribed Actuarial Services but which are outside the terms of reference, or if the Member believes that the scope of the Work should have been wider in order to include other Material issues, a comment to this effect;
- d) any Subsequent Events (Paragraph 5.4).

6.2.4 Unless the Member judges it inappropriate, any Communication shall indicate to what extent and how supplementary information and explanation can be obtained from the Member or another party.

6.3 Peer Review

- 6.3.1 The Member must consider to what extent, if at all, it is appropriate for the Report to be independently reviewed, in totality or by component, before the final Report is delivered to the Principal or distributed to the Intended Users. The purpose of peer review is to ensure the quality of the Report, with the process tailored to the complexity of the Work and the specific environment in which the Member Works.
- 6.3.2 If a peer review is deemed to be appropriate the Member must select a reviewer who is not otherwise involved with the specific component(s) reviewed and is knowledgeable and experienced in the practice area of the Prescribed Actuarial Services.
- 6.3.3 If the reviewer is a Member, the reviewer must consider the requirements of this professional standard, as applicable, in performing the review.