Actuarial Standards Board

Conseil des normes actuarielles

Standards of Practice

June 2015

Ce document est disponible en français

1000—General

Table of Contents

1000 –	- General	1002
1100	Introduction	1004
1110	Definitions	1004
1120	Interpretation	1010
1130	Judgment	1013
1200	Application	1016
1210	Accepted actuarial practice	1016
1220	Educational notes	1017
1230	Scope	1017
1240	Associates	1020
1300	Permitted Deviations	1021
1310	Conflict with law	1021
1320	Conflict with terms of engagement	1022
1330	Unusual and unforeseen situations	1022
1340	Materiality	1023
1400	The Engagement	1027
1410	Accepting and continuing an engagement	1027
1420	Financial interest of the actuary	1030
1430	Financial interest of the client or employer	1030
1440	General knowledge	1031
1450	Knowledge of the circumstances of the case	1031
1500	The Work	1033
1510	Approximation	1033
1515	Event	1035
1520	Subsequent events	1036
1530	Data	1040
1540	Control	1043
1550	Reasonableness of result	1043
1560	Documentation	1044

1600	Another Person's Work	1046
1610	Actuary's use of another person's work	1046
1620	Auditor's use of an actuary's work	1048
1630	CIA/CICA Joint Policy Statement	1049
1640	Review or repeat of another actuary's work	1055
1700	Assumptions	1059
1710	Needed assumptions	1059
1720		
1730	Appropriate assumptions	1065
1740	Provision for adverse deviations	1071
1750	Comparison of current and prior assumptions	1080
1800	Reporting	1082
1810	Standard reporting language	1082
1820	Reporting: external user report	1083
1830	Reporting: internal user report	1091
1840		

1100 Introduction

1110 Definitions

- .01 Each term set over dotted underlining has the meaning given in this section and has its ordinary meaning otherwise (e.g., external user).
- .02 Accepted actuarial practice is the manner of performing work in Canada in accordance with the Rules and these Standards of Practice. Standards of Practice are the responsibility of the Actuarial Standards Board and approval of standards and changes to standards is made through a process that involves consultation with the actuarial profession and other interested parties. Unless the context requires otherwise, references to accepted actuarial practice refer to accepted actuarial practice for work in Canada. [pratique actuarielle reconnue]
- .03 <u>Actuarial cost method</u> is a method to allocate the present value of a plan's obligations to time periods, usually in the form of a <u>service cost</u> and an accrued liability. [méthode d'évaluation actuarielle]
- .03.1 Actuarial evidence work is work where the actuary provides an expert opinion with respect to any area of actuarial practice in the context of an actual or anticipated dispute resolution proceeding, where such expert opinion is expected or required to be independent. A dispute resolution proceeding may be a court or court-related process, a tribunal, a mediation, an arbitration, or a similar proceeding. Actuarial evidence work may include the determination of capitalized values in respect of an individual, or the provision of an expert opinion with respect to a dispute involving an actuarial practice area, such as pensions or insurance, or questions of professional negligence. [travail d'expertise devant les tribunaux]
- .04 <u>Actuarial present value method</u> is a method to calculate the lump sum equivalent at a specified date of amounts payable or receivable at other dates as the aggregate of the present values of each of those amounts at the specified date, and taking into account both the time value of money and <u>contingent events</u>. [méthode de la valeur actuarielle]
- .04.1 <u>Actuary</u>, as it is used in these standards, means anyone bound by these standards for <u>work</u> in Canada. [actuaire]
- .05 <u>Anti-selection</u> is the tendency of one party in a relationship to exercise options to the detriment of another party when it is to the first party's advantage to do so. [antisélection]
- .06 <u>Appointed actuary</u> of an entity is an <u>actuary</u> formally appointed, pursuant to legislation, by the entity to monitor the <u>financial condition</u> of that entity. [actuaire désigné]

- .07 <u>Appropriate engagement</u> is one that does not impair the <u>actuary</u>'s ability to conform to the rules. [mandat approprié]
- .08 <u>Benefits liabilities</u> are the liabilities of a plan in respect of claims incurred on or before a <u>calculation date</u>. [obligations liées aux prestations]
- .09 <u>Best estimate</u> means without bias, neither conservative nor unconservative. [*meilleure* estimation]
- .09.1 <u>Bylaws</u> means the <u>bylaws</u> of the Canadian Institute of Actuaries, as amended from time to time. [Statuts administratifs]
- .10 <u>Calculation date</u> is the effective date of a calculation; e.g., the balance sheet date in the case of a valuation for financial statements. It usually differs from the <u>report date</u>. [date de calcul]
- .11 <u>Case estimate</u> at a <u>calculation date</u> is the unpaid amount of one of, or a group of, an <u>insurer's</u> reported claims (perhaps including the amount of <u>claim adjustment expenses</u>), as estimated by a claims professional according to the information available at that date. [évaluation du dossier]
- .12 <u>Claim adjustment expenses</u> are internal and external expenses in connection with settlement of claims. [frais de règlement des sinistres]
- .13 <u>Claim liabilities</u> are the portion of <u>insurance contract liabilities</u> in respect of claims incurred on or before the balance sheet date. [passif des sinistres]
- .14 <u>Contingent event</u> is an event which may or may not happen, or which may happen in more than one way or which may happen at different times. [éventualité]
- .15 <u>Contribution</u> is a contribution by a participating employer or a plan member to <u>fund</u> a benefits plan. [cotisation]
- .15.01 <u>Contribution principle</u> is a principle of <u>policyholder</u> dividend determination whereby the amount deemed to be available for distribution to policyholders by the directors of a company is divided among policies in the same proportion as policies are considered to have contributed to that amount. [principe de contribution]
- .15.1 <u>Credibility</u> is a measure of the predictive value attached to an estimate based on a particular body of data. [crédibilité]
- .15.2 <u>Credit spread</u>, for a fixed income asset, is the yield to maturity on that asset minus the yield to maturity on a risk-free fixed income asset with the same cash flow characteristics. [*écart de crédit*]
- .16 Definitive means permanent and final. [décision définitive]
- .17 <u>Development</u> of data with respect to a given coverage period is the change in the value of those data from one calculation date to a later date. [matérialisation]

- .18 <u>Domain of actuarial practice</u> is the measurement of the current financial implications of future contingent events. [domaine de la pratique actuarielle]
- .19 <u>Early implementation</u> means the implementation of <u>new standards</u> before their effective date. [mise en œuvre anticipée]
- .20 <u>Earnings-related benefit</u> is a benefit whose amount depends on the recipient's earnings. [régime salaire de carrière]
- .21 External user is a user who is not an internal user. [utilisateur externe]
- .22 <u>External user report</u> is a <u>report</u> whose <u>users</u> include an <u>external user</u>. [rapport destiné à un utilisateur externe]
- .23 <u>Financial condition</u> of an entity at a date is its prospective ability at that date to meet its future obligations, especially obligations to policy owners, members, and those to whom it owes benefits. <u>Financial condition</u> is sometimes called "future <u>financial condition</u>". [santé financière]
- .24 <u>Financial position</u> of an entity at a date is its financial state as reflected by the amount, nature, and composition of its assets, liabilities, and equity at that date. [situation financière]
- .25 To <u>fund</u> a plan is to dedicate assets to its future benefits and expenses. Similarly for "<u>funded</u>" and "<u>funding</u>". [*provisionner*]
- .25.1 <u>Funded status</u> is the difference between the value of assets and the actuarial present value of benefits allocated to periods up to the <u>calculation date</u> by the <u>actuarial cost method</u>, based on a valuation of a pension plan or post-employment benefit plan. [niveau de provisionnement]
- .26 <u>Going concern valuation</u> is a valuation which assumes that the entity to which the valuation applies continues indefinitely beyond the <u>calculation date</u>. [évaluation en continuité]
- .27 <u>Indexed benefit</u> is a benefit whose amount depends on the movement of an index like the Consumer Price Index. [*prestation indexée*]
- .27.01 <u>Indicated rate</u> is the <u>best estimate</u> of the premium required to provide for the corresponding expected claims costs, expenses, and provision for profit. [taux indiqué]

- .05 <u>Use</u> of an assumption stipulated by the terms of the engagement is <u>use</u> of the <u>work</u> of another person.
- .06 If the stipulated assumption is appropriate but near the end of the accepted range, then it may be useful, if appropriate under the terms of the engagement, to <u>report</u> the result of an alternative assumption near the other end of the accepted range, especially in an <u>external user report</u>. The same is true for a stipulated assumption that, for example, the federal Income Tax Act continues as is when an amendment to it is <u>virtually definitive</u>.
- .07 In assessing the utility of <u>reporting</u> the result of an alternative to an assumption for which the <u>actuary</u> does not take responsibility, the <u>actuary</u> would consider the dependence of <u>external users</u> on his or her <u>work</u>. For example,

utility in actuarial evidence <u>work</u> would be assessed in the context of the adversarial system in tort litigation, which expects each side to develop its own case without help from the other side, or to identify and expose any flaws in the other side's case; therefore, it is consistent with that system for the <u>actuary</u> engaged by one side not to <u>report</u> the result of an alternative assumption if the lawyer for the other side is able to compel the <u>actuary</u> (or engage his or her own actuary) to calculate the result of a desired alternative, and

if members of a pension plan receive a copy of the <u>actuary</u>'s <u>report</u> that <u>uses</u> an assumption for which the <u>actuary</u> did not take responsibility, and if the members are identified as <u>users</u> in the report, the <u>reporting</u> of the results of using an alternative assumption may be useful to those members.

1730 Appropriate assumptions

.01 The appropriate model or data assumption for a matter should be the <u>best estimate</u> assumption of that matter, modified, if appropriate, to make <u>provision for adverse deviations</u>, and taking account of

the circumstances of the case, past experience data, the relationship of past to expected future experience, <u>anti-selection</u>, the relationship among matters, and

in the case of assumptions on economic matters for calculation of liabilities in a balance sheet, the assets which support those liabilities at the <u>calculation date</u> and the expected policy for asset-liability management after that date, except where the circumstances of the valuation require otherwise.

Dynamic Capital Adequacy Testing 2500

2510 Scope

- .00 Part 1000 applies to work within the scope of this section 2500.
- .01 This section 2500 applies to the appointed actuary of an insurer when preparing a report on the insurer's financial condition pursuant to law.

2520 Investigation

- .01 The appointed actuary should make an investigation at least once during each financial year of the insurer's recent and current financial position, and financial condition, as revealed by dynamic capital adequacy testing for selected scenarios.
- .02 The appointed actuary should make a report of each investigation in writing to the insurer's board of directors (or to their audit committee if they so delegate) or its chief agent for Canada. The report should identify possible actions for dealing with any threats to satisfactory financial condition that the investigation reveals.
- .03 The appointed actuary should also make an interim investigation if there is a material adverse change in the insurer's circumstances.
- .04 The appointed actuary should ensure that the investigation is current. The investigation should take into consideration recent events and recent financial operating results of the insurer. [Effective December 31, 2011]
- .05 The actuary's investigations would be done with a frequency sufficient to support timely corrective actions by management and the board of directors or chief agent for Canada.

Recent and current financial position

.06 The investigation would review operations of recent years (normally at least three years) and the financial position at the end of each of those years.

Dynamic capital adequacy testing

.07 Dynamic capital adequacy testing examines the effect of selected plausible adverse scenarios on the insurer's forecasted capital adequacy. It would be one of the actuary's primary tools for investigation of an insurer's financial condition.

2600 Ratemaking: Property and casualty insurance

2610 Scope

- .00 Part 1000 applies to work within the scope of this section 2500.
- .01 This section 2600 applies to the derivation of <u>indicated rates</u> for an <u>insurance contract</u> of <u>property and casualty insurance</u> written by an <u>insurer</u>, a reciprocal insurance exchange or an underwriting syndicate.
- .02 This section 2600 does not apply to the derivation of <u>indicated rates</u> for <u>public personal</u> <u>injury compensation plans</u> covered by the Practice-Specific Standards for Public Personal Injury Compensation Plans.
- .03 This section 2600 applies to the derivation of <u>indicated rates</u> for any entity, such as a residual market mechanism or an advisory organization, which derives <u>indicated rates</u> for an <u>insurance contract</u> to be written by an <u>insurer</u>, regardless of whether or not that entity is itself an <u>insurer</u>.
- .04 This section 2600 applies to the derivation of <u>indicated rates</u>, but not to the recommendation or selection of rates to be charged. The recommended or selected rates may reflect considerations beyond those set forth in this section 2600.
- .05 This section 2600 also applies to the derivation of <u>indicated rates</u> for insurance risks accepted by a property and casualty quasi-<u>insurer</u>, similar to insurance risks accepted under an <u>insurance contract</u>. In this section 2600, "property and casualty quasi-<u>insurer</u>" means an entity that assumes insurance risks that a property and casualty <u>insurer</u> may assume, without having the legal form of an <u>insurer</u>. Examples of property and casualty quasi-<u>insurers</u> include
 - federal or provincial crown corporations or agencies acting in a capacity similar to a property and casualty insurer,
 - providers of extended warranties, and
 - self-funding mechanisms, such as those created by members of a professional association, or entities that retain some or all of their <u>property and casualty insurance</u> risk.