Actuarial Standards Board
Conseil des normes actuarielles

Exposure Draft

Incorporate changes required by the adoption in Canada of IFRS 17 Insurance Contracts, including Principles of International Standard of Actuarial Practice 4 – Actuarial Practice in Relation to IFRS 17 Insurance Contracts, into the Canadian Standards of Practice (clean)

Actuarial Standards Board

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Conseil des normes actuarielles

Memorandum

To: All Fellows, Affiliates, Associates, and Correspondents of the Canadian Institute of Actuaries and other interested parties

From: Conrad Ferguson, Chair
Actuarial Standards Board

Simon Curtis, Chair
Designated Group on IFRS 17

Date: May 16, 2018

Subject: **Exposure draft to incorporate changes required by the adoption in Canada of IFRS 17 Insurance Contracts, including Principles of International Standard of Actuarial Practice 4 – Actuarial Practice in Relation to IFRS 17 Insurance Contracts, into the Canadian Standards of Practice**

Comment Deadline: **August 31, 2018**

Introduction

This exposure draft (ED) proposes changes to the general standards (part 1000) and the practice-specific standards for insurance (part 2000). It was approved by the Actuarial Standards Board (ASB) on May 15, 2018. Due process has been followed in the development of this ED.

A notice of intent (NOI) to provide the background and general information on these proposed changes was distributed by the ASB on June 22, 2015.

If approved, the changes would become effective concurrent with the implementation date for IFRS 17 (expected to be January 1, 2021).

Background

In May 2017, the International Accounting Standards Board (IASB) issued IFRS 17 for the valuation of insurance contracts under International Financial Reporting Standards (IFRS). The Canadian Accounting Standards Board has indicated its intention that, subject to its due process, IFRS 17 will be adopted without modification for the valuation of insurance contracts in Canadian generally accepted accounting principles (GAAP) financial statements. The effective date is expected to be January 1, 2021.

These developments require changes to the Canadian Standards of Practice (SOP), as the valuation methods under IFRS 17 are significantly different from the current methods of valuation of insurance contracts in Canada.

The International Actuarial Association (IAA) is developing International Standard of Actuarial Practice 4 (ISAP 4) in relation to IFRS 17. ISAP 4 will cover actuarial practice in support of valuation of insurance contract liabilities in accordance with IFRS 17.

The proposed changes align the SOP with the requirements of IFRS 17, and incorporate the guidance of ISAP 4.

While IFRS 17 itself does not require an actuary to value the insurance contract liabilities or provide an opinion on the valuation, an actuary will usually be employed as a professional expert on insurance contract valuation to help perform an IFRS 17 valuation. However, in Canada, where an IFRS 17 valuation is being used for filing of regulatory statements under the Insurance Companies Act (and equivalent provincial laws and regulations for provincially regulated companies) the actuary will be required to value the insurance contract liabilities and provide an opinion on the valuation. The SOP will apply whenever an actuary performs work related to an IFRS 17 valuation.

Proposed Changes

The proposed changes are summarized below.

Part 1000 General Standards

The proposed changes to part 1000 are minimal. They relate primarily to terminology changes and example changes, made to ensure part 1000 and the revised part 2000 (where the substantive changes are made) remain aligned. Importantly, we do not believe any of the changes to part 1000 affect areas of actuarial practice other than those related to IFRS 17 valuation.

Part 2000 Insurance

The changes to part 2000 are substantial. The current sections 2100 (Insurance Contract Valuation: All Insurance), 2200 (P&C valuation), and 2300 (life and health valuation) have all been replaced.

Note that part 2000 covers only valuations intended to comply with IFRS 17 – it is not a general contract valuation standard of practice applicable to other valuation methods.

Section 2100 is a short section that covers the scope of application and the organization of part 2000.

Section 2200 covers general considerations for performing a valuation in compliance with IFRS 17, including how part 2000 integrates with part 1000, a glossary of terms unique to part 2000, and considerations unique to Canada, such as Canadian reporting and opinion requirements.

Section 2300 reflects, with minimal changes, the text of the ISAP 4 exposure draft dated February 27, 2018.

Section 2400 (The Appointed Actuary), 2500 (Dynamic Capital Adequacy Testing), 2600 (Ratemaking: Property and Casualty Insurance), and 2700 (Policyholder Dividend Determination) are unchanged.

In addition to the currently proposed changes, it is the intention to introduce a new section 2800 (Public Personal Injury Compensation Plans) that will replace current part 5000. This section is still under development and is not being exposed at this time.

Under the new accounting rules, public personal injury compensation plans will be required to follow the measurement standards of IFRS 17, which apply to all insurance contracts regardless of issuer. Therefore, it is considered appropriate to move the practice-specific requirements related to these plans to a new section 2800 within part 2000, and eliminate part 5000.

The text in section 2800 will be shortened relative to the existing part 5000. The valuation text generally does not need to be repeated from the other sections of part 2000. Key topics on financial reporting requirements, opinion, and funding will all remain in section 2800. Other topics such as more subjective discussions on setting risk adjustment, considerations related to long latency occupational diseases, and funding considerations will be covered in educational notes to be developed by the Committee on Workers' Compensation. Currently, there is a separate designated group reviewing part 5000. Once this group has completed its work, the new section 2800 will incorporate all relevant impacts from that review and be exposed to the membership.

Feedback from Stakeholders

The Designated Group (DG) IFRS 17 solicited input from various stakeholder groups within the CIA in developing this ED. This included the Practice Council, the Committee on Life Insurance Financial Reporting, the Committee on Property and Casualty Insurance Financial Reporting, the Committee on International Insurance Accounting, the IFRS 17 Steering Committee, the Committee on the Appointed/Valuation Actuary, the Committee on Workers' Compensation, and the Committee on Risk Management and Capital Requirements. In addition, the Office of the Superintendent of Financial Institutions (OSFI) was represented on the DG.

The DG IFRS 17 appreciates the feedback received and has taken it into account in the development of the ED.

Summary of Major Issues Raised by Stakeholders and Proposed Responses

The following paragraphs summarize the key issues raised and the rationale for the response to each of these issues within the ED.

Method of Incorporation of ISAP 4 into the SOP

The draft incorporates ISAP 4 into the SOP with minimal changes. Alternative approaches would have been to adopt ISAP 4 with absolutely no changes, or to develop more unique standards for Canada that cover the general requirements of ISAP 4 but are more uniquely developed for Canada.

The approach of developing more unique standards for Canada that reflect only more generally the requirements of ISAP 4 was rejected. This approach would increase the potential for unintended “in Canada” interpretations of the requirements of ISAP 4, and would make it more difficult to maintain the SOP if and when ISAP 4 and IFRS 17 change in the future. To the extent that additional requirements beyond ISAP 4 are identified for practice in Canada, these would be included in section 2200. We have not identified any such additional requirements to date.

The approach of using ISAP 4 unaltered was also rejected, primarily because ISAP 4 assumes that ISAP 1 has also been adopted in unaltered form. In Canada, the ASB has reviewed part 1000 of the SOP to ensure it incorporates the requirements of ISAP 1. The changes that were made to the ISAP 4 text are therefore limited to removing references to ISAP 1 and eliminating redundancy for topics fully covered in part 1000.

ISAP 4 is currently in exposure draft form, and changes to it will necessarily trigger changes to our proposed section 2300. However, we are exposing our draft changes to the SOP in parallel with the development of ISAP 4 rather than waiting for it to be finalized, for the reasons mentioned earlier. If significant changes are made in the final ISAP 4, section 2300 will be re-exposed.

Level of Detail of Practice-Specific Standards

Some stakeholders have questioned that the new practice-specific SOP is at a higher level of detail (i.e., less detailed) than the sections it is replacing. This is an accurate observation. The basic valuation method is now described in the accounting literature (IFRS 17), and not in our SOP, as was the case previously. It also reflects a conscious effort not to unduly limit the range of practice in Canada versus what is permitted in the international standards by introducing additional detailed standards.

The DG IFRS 17 has also recognized that this may lead to the need for additional educational material on a number of topics, and we are liaising closely with the relevant CIA committees and the Practice Council to ensure that the appropriate additional educational material is identified and then developed by the CIA in a timely manner.

Current Promulgations in Current Section 2300 of ASB Standards

Stakeholders have asked whether promulgations in current section 2300 regarding mortality and ultimate reinvestment rates should be continued in the new part 2000, eliminated entirely, or, if still relevant, be provided in educational notes. The DG IFRS 17 believes that such guidance, if still considered relevant, should be provided in educational notes and not included in part 2000. As a general principle, the DG IFRS 17 does not want to narrow the range of practice for actuaries performing work in Canada beyond international requirements unless there is a strong indication that the requirements of IFRS 17 and ISAP 4 and implementation practice will lead to an inappropriate result, particularly for Canadian business.

Continued Existence in Part 1000 of Subsection 1630 on Provision for Adverse Deviations

For an IFRS 17 valuation, there is no provision for adverse deviations. For an IFRS 17 valuation, there is a risk adjustment; however, this is built on fundamentally different principles. Because of this, part 2000 explicitly states that subsection 1630 is not applicable for work on an IFRS 17 valuation. Consequently, some stakeholders have asked why we have not eliminated subsection 1630 entirely from the SOP. The DG IFRS 17 notes that, while not applicable for an IFRS 17 valuation, margins for adverse deviations may be appropriate for other assignments undertaken by actuaries for work in Canada, and subsection 1630 remains applicable in these cases.

Feedback

Feedback on all aspects of the proposed changes, as well as suggestions for other changes not presented in this ED, are encouraged.

Comments

Interested parties are invited to formally submit their feedback on these proposed revisions **by August 31, 2018**.

Parties wishing to comment on this ED should direct those comments to Simon Curtis at scurtis@munichre.com with a copy to Chris Fievoli at chris.fievoli@cia-ica.ca. Queries may also be directed to any member of the DG, as listed below.

Members of the DG IFRS 17

The group responsible for the development of the revisions to the SOP consists of the following 11 members: Hélène Baril, Simon Curtis (Chair), Micheline Dionne, Stéphanie Fadous, Conrad Ferguson, Marco Fillion, Cynthia Potts, Warren Rodericks, Rebecca Rycroft, Lesley Thomson, and Jacques Tremblay. Members of the DG may all be contacted at their membership directory addresses.

CF, SC

1100 Introduction

1110 Application

.01 These Standards of Practice apply to actuarial work in Canada. Responsibility for these Standards of Practice vests in the Actuarial Standards Board (Canada) and approval of standards and changes to standards are made through a process that includes consultation with the actuarial profession and other interested parties. They are intended for the benefit of the public. The work in Canada of a member of a professional actuarial organization is expected to conform to these Standards of Practice.

.02 The existence of standards is not a substitute for professional judgment or consideration for the needs of the user(s) when performing specific work.

.03 The authority of these Standards of Practice derives from the powers of those bodies that recognize them for actuarial work in Canada. Among others, these include professional actuarial bodies and relevant laws such as those regulating pensions and insurance. Compliance with these Standards of Practice is also likely to be taken into account when the quality of actuarial work is being considered in a court of law or in other contested situations. However, in such circumstances, deviation from any provision of these Standards of Practice should not, in and of itself, be presumed to be malpractice.

1120 Definitions

.01 Each term set over dotted underlining has the meaning given in this subsection. A term that is not set over dotted underlining has its ordinary meaning.

.02 Accepted actuarial practice is the manner of performing work in accordance with these Standards of Practice. Unless the context requires otherwise, it refers to work in Canada. [*pratique actuarielle reconnue*]

.03 Actuarial cost method is a method to allocate the present value of a benefit plan's obligations to time periods, usually in the form of a service cost and an accrued liability. [*méthode d'évaluation actuarielle*]

.04 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*]

.05 Actuarial present value method 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, where appropriate, contingent events. [*méthode de la valeur présente actuarielle*]

.06 Actuary, as it is used in these standards, means a member of a professional actuarial organization whose work in Canada is expected to conform to these standards. [*actuaire*]

.07 Anti-selection 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*]

.08 Appointed actuary of an entity is an actuary formally appointed, pursuant to legislation, by the entity to monitor the financial condition of that entity. [*actuaire désigné*]

.09 Appropriate engagement is one that does not impair the actuary's ability to conform to the precepts of ethical and professional conduct such as those that may be found in the Rules of Professional Conduct of the Canadian Institute of Actuaries or relevant law or regulation. Unless the context otherwise requires, wherever the word "engagement" is used in these standards it refers to an appropriate engagement. [*mandat approprié*]

.10 Automatic balancing mechanisms automatically adjust contributions, benefits, and/or parameters of a plan in order to restore the balance between its source of financing and its benefits. The mechanism is prescribed by a set of predetermined measures to be taken, either immediately or later as prescribed, upon being triggered by certain demographic, economic, or financial indicators. [*mécanismes automatiques de compensation*]

.11 Benefits liabilities are the liabilities of a plan in respect of claims incurred on or before a calculation date. [*obligations liées aux prestations*]

.12 Best estimate means without bias. [*meilleure estimation*]

.13 Calculation date is the effective date of a calculation; e.g., the calculation date in the case of a valuation for financial statements. It usually differs from the report date. [*date de calcul*]

.14 Case estimate at a calculation date is the unpaid amount of one of, or a group of, an insurer's reported claims (perhaps including the amount of claim adjustment expenses), as estimated by a claims professional according to the information available at that date. [*évaluation du dossier*]

.15 Claim adjustment expenses are internal and external expenses in connection with settlement and administration of claims. [*frais de règlement des sinistres*]

.16 Claim liabilities are the portion of insurance contract liabilities in respect of claims incurred on or before the calculation date. [*passif des sinistres*]

.17 Contingent event is an event that may or may not happen, or that may happen in more than one way or that may happen at different times. [*éventualité*]

.18 Contribution is a contribution by a participating employer or a plan member to fund a benefit plan. [*cotisation*]

.19 Contribution principle is a principle of policyholder 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*]

.20 Credibility is a measure of the predictive value attached to an estimate based on a particular body of data. [*crédibilité*]

.21 Credit spread, 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*]

.22 Definitive refers to a matter that is final and permanent rather than tentative, provisional, or unsettled. [*décision définitive*]

.23 Development 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*]

.24 Explanatory text is text that appears outside of a box in these standards. [*texte explicatif*]

.25 External user is a user other than the actuary's client or employer. Internal user and external user are mutually exclusive. [*utilisateur externe*]

.26 External user report is a report whose users include an external user. [*rapport destiné à un utilisateur externe*]

.27 Financial condition of an entity at a date refers to its prospective ability at that date to meet its future obligations, especially obligations to policyholders, members, and those to whom it owes benefits. Financial condition is sometimes called "future financial condition". [*santé financière*]

.28 Financial position 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*]

.29 To fund a plan is to dedicate assets to its future benefits and expenses. Similarly for "funded" and "funding". [*provisionner*]

.30 Funded status is the difference between the value of assets and the actuarial present value of benefits allocated to periods up to the calculation date by the actuarial cost method, based on a valuation of a pension plan, post-employment benefit plan, or social security program. [*niveau de provisionnement*]

.31 Going concern valuation is a valuation that assumes that the entity to which the valuation applies continues indefinitely beyond the calculation date. [*évaluation en continuité*]

.32 Indexed benefit is a benefit whose amount depends on the movement of an index such as the consumer price index. [*prestation indexée*]

.33 Indicated rate is the best estimate of the premium required to provide for the corresponding expected claims costs, expenses, and provision for profit. [*taux indiqué*]

.34 Insurance contract is a contract under which one party (the issuer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder. Insurance contract includes group insurance, third-party contracts where the owner of the contract and the person who is compensated (the policyholder) differ, and all like arrangements substantively in the nature of insurance. [*contrat d'assurance*]

.35 Insurance contract liabilities in an issuer's statement of financial position are the liabilities at the date of the statement of financial position on account of the issuer's insurance contracts, including commitments, that are in force at that date or that were in force before that date. [*passif des contrats d'assurance*]

.36 Insurer is a federally or provincially licensed insurance company that is an issuer of insurance contracts. Insurer includes a fraternal benefit society and the Canadian branch of a foreign insurer, but does not include a public personal injury compensation plan or a post-employment benefit plan. [*assureur*]

.37 Internal user is the actuary's client or employer. Internal user and external user are mutually exclusive. [*utilisateur interne*]

.38 Internal user report is a report all of whose users are internal users. [*rapport destiné à un utilisateur interne*]

.39 Issuer is the party under an insurance contract that accepts significant insurance risk. [*émetteur*]

.40 Margin for adverse deviations is the difference between the assumption for a calculation and the corresponding best estimate assumption. [*marge pour écarts défavorables*]

.41 Model is a practical representation of relationships among entities or events using statistical, financial, economic, or mathematical concepts. A model uses methods, assumptions, and data that simplify a more complex system, and produces results that are intended to provide useful information on that system. A model is composed of a model specification, a model implementation, and one or more model runs. Similarly for “to model”. [*modèle*]

.42 Model implementation is one or more systems developed to perform the calculations for a model specification. For this purpose “systems” include computer programs, spreadsheets, and database programs. [*implémentation du modèle*]

.43 Model risk is the risk that, due to flaws or limitations in the model or in its use, the actuary or a user of the results of the model will draw an inappropriate conclusion from those results. [*risque de modélisation*]

.44 Model run is a set of inputs and the corresponding results produced by a model implementation. [*exécution d’un modèle*]

.45 Model specification is the description of the components of a model and the interrelationship of those components with each other, including the types of data, assumptions, methods, entities, and events. [*spécifications du modèle*]

.46 New standards means new standards, or amendment or rescission of existing standards. [*nouvelles normes*]

.47 Periodic report is a report that is repeated at regular intervals. [*rapport périodique*]

.48 Plan administrator is the person or entity with overall responsibility for the operation of a benefit plan. [*administrateur d’un régime*]

.49 Policy liabilities in an insurer’s statement of financial position are the liabilities at the date of the statement of financial position on account of the insurer’s policies, including commitments, that are in force at that date or that were in force before that date. Policy liabilities consist of insurance contract liabilities and liabilities for policy contracts other than insurance contracts. [*passif des polices*]

.50 Policyholder is a party that has a right to compensation under an insurance contract if an insured event occurs. [*titulaire de police*]

.51 Premium liabilities are the portions of insurance contract liabilities that are not claim liabilities. [*passif des primes*]

.52 Prescribed means prescribed by these standards. [*prescrit*]

.53 Property and casualty insurance is insurance that insures individuals or legal persons

- Having an interest in tangible or intangible property, for costs arising from loss of or damage to such property (e.g., fire, fidelity, marine hull, warranty, credit, legal expense, and title insurance); or
- For damages to others or costs arising from the actions of such persons (e.g., liability and surety bonds) and for costs arising from injury to such persons (e.g., automobile accident benefits insurance). [*assurances IARD*]

.54 Provision for adverse deviations is the difference between the actual result of a calculation and the corresponding result using best estimate assumptions. [*provision pour écarts défavorables*]

.55 Public personal injury compensation plan means a public plan

- Whose primary purpose is to provide benefits and compensation for personal injuries;
- Whose mandate may include health and safety objectives and other objectives ancillary to the provision of benefits and compensation for personal injuries; and
- That has no other substantive commitments.

The benefits and compensation provided under such public plans are defined by statute. In addition, such public plans have monopoly powers, require compulsory coverage except for those groups excepted by legislation or regulation, and have the authority to set assessment rates or premiums. [*régime public d'assurance pour préjudices corporels*]

.56 Recommendation means text that appears in a box in these standards. Similarly for "recommend". [*recommandation*]

.57 Related experience includes premiums, claims, exposures, expenses, and other relevant data for events analogous to the insured events under consideration other than the subject experience and may include established rate levels or rate differentials or external data. [*expérience connexe*]

.58 Report is an actuary's oral or written communication to users about his or her work. Similarly for "to report". [*rapport*]

.59 Report date is the date the actuary specifies as such in the report. It usually differs from the calculation date. [*date du rapport*]

.60 Scenario is a set of consistent assumptions. [*scénario*]

.61 Service cost is that portion of the present value of a plan's obligations that an actuarial cost method allocates to a time period, excluding any amount for that period in respect of unfunded accrued liabilities. [*cotisation d'exercice*]

.62 Social security program means a program with all the following attributes regardless of how it is financed and administered:

- Coverage is of a broad segment, or all, of the population, often on a compulsory or automatic basis;
- Benefits are provided to, or on behalf of, individuals;
- The program, including benefits and financing method, is mandated by law;
- The program is not financed through private insurance; and
- Program benefits are principally provided or delivered in the form of periodic payments upon old age, retirement, death, disability, and/or survivorship. [*programme de sécurité sociale*]

.63 Subject experience includes premiums, claims, exposures, expenses, and other data for the insurance categories under consideration. [*expérience visée*]

.64 Subsequent event is an event of which an actuary first becomes aware after a calculation date but before the corresponding report date. [*événement subséquent*]

.65 Trend is the tendency of data values to change in a general direction from one coverage period to a later coverage period. [*tendance*]

.66 User means an intended user of the actuary's work. [*utilisateur*]

.67 Virtually definitive refers to a matter that is almost certain, but that lacks one or more formalities like ratification, due diligence, regulatory approval, third reading, royal assent, or proclamation. However, a decision that still involves discretion at an executive or administrative level is not virtually definitive. [*pratiquement définitive*]

.68 Work means work that is commonly, but not necessarily exclusively, performed by actuaries in assessing, measuring, and evaluating risks and contingencies and usually includes

- Acquisition of knowledge of the circumstances affecting the work that the actuary is undertaking;
- Obtaining sufficient and reliable data;
- Selection of assumptions and methods;
- Calculations and examination of the reasonableness of their result;
- Use of other persons' work;
- Formulation of opinion and advice;
- Reporting; and
- Documentation. [*travail*]

1130 Interpretation

Recommendations

.01 These standards consist of recommendations and explanatory text.

.02 A recommendation is the highest order of guidance in these standards.

.03 Each recommendation is in boxed text where it is accompanied by its effective date, shown in square brackets.

Explanatory text

.04 The explanatory text supports and expands upon the recommendations. The explanatory text consists of definitions, explanations, examples, and useful practices.

Effective date of recommendations

.05 The notice of adoption for new standards would indicate their effective date and whether early implementation is permitted and may provide additional direction regarding the application of new standards.

.06 Subject to the notice of adoption, a recommendation applies to work with a calculation date that is on or after the recommendation's effective date. Superseded recommendations that were in effect at the calculation date would apply to work with a calculation date prior to the effective date of new standards unless early implementation is permitted and applied to the work.

General standards and practice-specific standards

.07 These standards consist of general standards and practice-specific standards. With the exception noted below, the general standards apply to all areas of actuarial practice. In addition, the standards in part 4000 apply to all areas of actuarial practice if the actuary's work in an area meets the definition of actuarial evidence work.

.08 Usually, the intent of the practice-specific standards is to narrow the range of practice considered acceptable under the general standards.

.02 Usually, the actuary is responsible for all aspects of his or her work and performs it in accordance with accepted actuarial practice. The engagement to which the recommendation applies is usually one in which one or more aspects of work are omitted or are stipulated by the client or employer or the terms of a benefit plan. Examples include situations where

- The actuary uses, but does not take responsibility for, the software system, or the work, of the staff of the client or employer; and
- The client or employer or the terms of a benefits plan stipulates an assumption or a method that is not in accordance with accepted actuarial practice.

.03 Conflict between accepted actuarial practice and the law is not the same as conflict between accepted actuarial practice and the terms of an engagement. In the case of an engagement whose terms call for deviation from accepted actuarial practice, the actuary has discretion to accept or not to accept the engagement.

.04 The practicality and usefulness of reporting a result in accordance with accepted actuarial practice are the same as for subsection 1210, Conflict with law.

1230 Unusual and unforeseen situations

.01 Deviation from a particular recommendation or other guidance in these standards is accepted actuarial practice for an unusual or unforeseen situation for which the standards are inappropriate[1]. [Effective February 1, 2018]

.02 The actuary would report without reservation when deviating from a particular recommendation or other guidance in these standards in accordance with this subsection 1230, but it may sometimes be appropriate to describe and justify the deviation in the report.

1240 Materiality

.01 Deviation from a particular recommendation or explanatory text in these standards is accepted actuarial practice if the effect of so doing is not material. [Effective February 1, 2018]

[1] Actuaries are encouraged to bring such situations to the attention of the Actuarial Standards Board, who may wish to consider how standards might be improved so that they do contemplate such situations.

.02 "Material" has its ordinary meaning, but is judged from the point of view of a user, having regard for the purpose of the work. Thus, an omission, understatement, or overstatement is material if the actuary expects it to affect either the user's decision-making or the user's reasonable expectations. When the user does not specify a standard of materiality, judgment falls to the actuary. That judgment may be difficult for one or more of these reasons:

- The standard of materiality depends on how the user uses the actuary's work, which the actuary may be unable to foresee. If practical, the actuary would discuss the standard of materiality with the user. Alternatively, the actuary would report the purpose of the work as precisely as possible, so that the user is warned of the risk of using the work for a different purpose with a more rigorous standard of materiality.
- The standard of materiality may vary among users. The actuary would choose the most rigorous standard of materiality among the users.
- The standard of materiality may vary among uses. For example, the same accounting calculations may be used for a pension plan's financial statements and the financial statements of its participating employer. The actuary would choose the more rigorous standard of materiality between those two uses.
- The standard of materiality depends on the user's reasonable expectations, consistent with the purpose of the work. For example, advice on winding-up a pension plan may affect each participant's share of its assets, so there is a conflict between equity and practicality. The same is true for advice on a policy dividend scale.

.03 The standard of materiality also depends on the work and the entity that is the subject of that work. For example,

- A given dollar standard of materiality is more rigorous for a large than for a small entity;
- The standard of materiality for valuation of an insurer's policy liabilities is usually more rigorous for those in its financial statements than for those in a forecast in dynamic capital adequacy testing;
- The standard of materiality for data is more rigorous for calculating an individual benefit (such as in a pension plan wind-up) than for a valuation of a group benefit plan (such as a going concern valuation of a pension plan); and
- The standard of materiality for work involving a threshold, such as a regulatory capital adequacy requirement calculation of an insurer or a statutory minimum or maximum funding level for a pension plan would become more rigorous as the entity approaches that threshold.

.04 The actuary would not report an immaterial deviation from a particular recommendation or other guidance in these standards except if doing so assists a user to decide whether the standard of materiality is appropriate for that user.

.05 The recommendation applies to both calculation and reporting standards.

Calculation standards

.06 The result of applying a recommendation may not differ materially from the result of a simpler practice requiring less time and expense. For example, the practice-specific recommendations for valuation of insurance contract liabilities for term life insurance have little effect on an issuer whose volume of term life insurance is trivial. To ignore them in that situation is accepted actuarial practice if it helps the actuary to concentrate time and resources on material items.

.07 In considering materiality, it is not appropriate to net items that are reported separately. For example, if simple practices requiring less time and expense than those in the recommendations materially overstate the premium liabilities and materially understate its claim liabilities, but do not materially affect their sum, the understatement and overstatement are each material if the two items are reported separately. In considering materiality, it is, however, appropriate to net components within a separately reported item. To continue the example, it would be appropriate to net the overstatement of premium liabilities with the understatement of claim liabilities if only the sum of the two (i.e., the insurance contract liabilities) is reported.

.08 The effect of using a simpler practice requiring less time and expense than those in the recommendations may be conservative or not conservative. Usually, the criterion of materiality is the same in both cases.

Reporting standards

.09 The result of applying a recommendation may provide information that is not useful. For example, disclosure of a material change in the basis for valuing the liabilities with respect to a material class of a benefit plan's members is not useful if that class was trivial at the previous valuation. Also, description of immaterial provisions of a benefit plan is not useful. To ignore the recommendation is accepted actuarial practice in that situation.

1430 Subsequent events

.01 The actuary should correct any data defect or calculation error that is revealed by a subsequent event. [Effective February 1, 2018]

.02 For work with respect to an entity, the actuary should take a subsequent event into account (other than in a pro forma calculation) if the subsequent event

- Provides information about the entity as it was at the calculation date;
- Retroactively makes the entity different at the calculation date; or
- Makes the entity different after the calculation date and a purpose of the work is to report on the entity as it will be as a result of the event. [Effective February 1, 2018]

.03 The actuary should not take the subsequent event into account if it makes the entity different after the calculation date and a purpose of the work is to report on the entity as it was at the calculation date. Nevertheless, the actuary should report that subsequent event. [Effective February 1, 2018]

Classification

.04 A subsequent event is relevant to the recommendation if it reveals an error, provides information about the entity, or is a decision that makes the entity different.

.05 The actuary would correct an error revealed by a subsequent event. The actuary would classify each subsequent event other than those that reveal errors and, depending on the classification, the actuary would either

- Take that event into account; or
- Report that event, but not take it into account.

Entity

.06 Examples of entities are

- The pension plan, in the case of an actuary doing a valuation of a pension plan;
- The block of annuity business, in the case of an actuary calculating the insurance contract liabilities for an issuer's annuity business;
- A combination of the pension plan and the member's specific data, in the case of the determination of a member's individual entitlement under a pension plan; and
- The insurance company, in the case of an actuary valuing the insurance contract liabilities of an insurance company.

Event provides information about entity as it was or retroactively makes entity different

.07 Examples of subsequent events that provide information about an entity as it was at the calculation date are

- Publication of an experience study that provides information for selection of assumptions;
- Reporting of a claim that was incurred on or before the calculation date; and
- Adoption of a pension plan amendment prior to the calculation date of which the actuary becomes aware after the calculation date.

.08 Examples of events that retroactively make the entity different at the calculation date are definitive or virtually definitive decisions, made after the calculation date but effective on or before the calculation date, to

- Wind-up a pension plan, partially or fully;
- Sell a portion of a participating employer's business and consequently to spin off the corresponding members from the participating employer's pension plan;
- Amend the benefits of a pension plan;
- Transfer a portion of an insurer's policies to another insurer; or
- Invoke a judicial decision that nullifies or significantly modifies the law affecting insurance claims.

.09 If an event provides information about the entity as it was at the calculation date or provides information that retroactively makes the entity different at the calculation date, the effect of the subsequent event on the work is the same as if the actuary first became aware of the information on or before the calculation date and the actuary would not report the event as a subsequent event. That is, the actuary would report the event only to the extent that the event would have been reported had the actuary first become aware of the information before the calculation date.

Event makes entity different after

.10 If the subsequent event makes the entity different after the calculation date, the purpose of the work determines whether or not the actuary takes the event into account.

.11 If the subsequent event makes the entity different after the calculation date and the purpose of the work is to report on the entity as it will be as a result of the event, the actuary would take that event into account and would describe it in reporting.

.12 If the subsequent event makes the entity different after the calculation date and the purpose of the work is to report on the entity as it was at that date, the actuary would not take that event into account but would report the event since it would affect the entity's future operations and the actuary's subsequent calculations.

Classification not clear

.13 The classification of a subsequent event may be unclear, at least a priori, although the circumstances affecting the work and the actuary's engagement may make it clear. The following are examples of such events:

- A precipitous fall in the stock market. For financial reporting, one can argue that the stock market crash provides additional information about the entity as it was at the calculation date, because the crash is an indicator of the outlook for common share investments at that date; alternatively, one can argue that the crash makes the entity different only after the calculation date since it creates a new situation. The new situation would be reflected in the financial statements for the subsequent financial reporting period.
- A salary freeze for employees who are members of a pension plan. If the salary freeze is a correction of excessive salaries, it provides additional information about the entity as it was at the calculation date, because the freeze is an indicator of the outlook for salaries at the calculation date. If the salary freeze deals with a recent problem, it indicates a change in conditions that makes the entity different after the calculation date. In either case, the actuary would consider the effect of the freeze on the employees' pension benefits. It may be that the freeze will have a lasting effect. Alternatively, it may be that the freeze will be compensated for by higher salaries later on, so that the salary inflation assumption based on historical trends continues to be valid.
- Default on a bond. If the default was the culmination of a gradual deterioration in its issuer's financial circumstances, most of which had occurred before the calculation date but that was not apparent until revealed by the default, the default provides additional information about the entity as it was at the calculation date. If the default was precipitated by a catastrophe, it provides information about a change in conditions that makes the entity different after the calculation date.
- Insolvency of an insurer's reinsurer. This is similar to default on a bond. If the insolvency was the culmination of a gradual deterioration in the reinsurer's financial circumstances, most of which had occurred before the calculation date but that was not apparent until revealed by the insolvency, the insolvency provides information about the entity as it was at the calculation date. If the insolvency was precipitated by a catastrophe, it provides information about a change in conditions that makes the entity different after the calculation date.

Reporting

.14 Sometimes, either because the actuary considers it appropriate or the terms of the work require it, the actuary may report as an alternative the opposite calculation; i.e., one that does not take the subsequent event into account when the main calculation does, or that takes the subsequent event into account when the main calculation does not. For example, in a province for which the calculation date for a pension valuation following marriage breakdown is the date of separation, a subsequent event may be the early retirement of the plan member at some time between the calculation date and the report date. The actuary would consider reporting values assuming that this subsequent event had been an established intention at the calculation date, instead of or in addition to retirement scenarios otherwise recommended in the practice-specific standards. In such cases, the actuary would make the same calculations regardless of the purpose of the work but the reporting thereof would depend on the purpose of the work.

1440 Data

.01 The actuary should apply such procedures as are necessary for the actuary to arrive at a conclusion as to the sufficiency and reliability of the data. [Effective February 1, 2018]

.02 Data relevant to the work may include experience data, membership or policyholder data, census data, claims data, asset and investment data, economic data, operational data, benefit definitions, and policy or contract terms and conditions and other data relevant to the work.

.03 Sources of data may include data obtained from inventory or sampling methods. Data may be obtained directly by the actuary or may be provided to the actuary by the client, by an accountant or auditor, by a government or statistical body, from a financial statement, or by others. Data may be specific to the client. Where data specific to the client are not available or not relevant, the actuary would consider using industry data, population data, or other published data with suitable adjustments where relevant and appropriate.

Sufficiency and reliability

.04 Data are sufficient if they include the needed information for the work. For example, participants’ dates of birth are needed to value the liabilities of a pension plan.

.05 Data are reliable if they are sufficiently complete, consistent, and accurate for the purposes of the work.

1600 Assumptions and Methods

1610 Methods

.01 The actuary should select a method that takes account of the circumstances affecting the work. [Effective February 1, 2018]

.02 The basis for calculating actuarial estimates is comprised of a method and one or more assumptions. Methods represent the underlying manner in which actuarial calculations are undertaken. Methods differ from one area of actuarial practice to another and have differed over time.

.03 In selecting an appropriate method, the actuary would consider whether any method is mandated by law, by practice-specific standards or by the terms of the engagement.

1620 Assumptions

.01 The actuary should identify and select each assumption that is needed for the work, except for those that are prescribed, that are mandated by law or that are stipulated by the terms of the engagement. [Effective February 1, 2018]

.02 The actuary should select an appropriate model or data assumption for a matter as the best estimate assumption relating to that matter, modified, if appropriate, to make provision for adverse deviations. In selecting an assumption, the actuary should take account of the circumstances affecting the work, past experience data, the relationship of past to expected future experience, anti-selection, and the relationship among matters. [Effective February 1, 2018]

.03 The appropriate assumption for a matter, other than a model or data assumption, should be continuation of the status quo, unless there is none or unless there is a reasonable expectation that it will change, and the actuary so reports. [Effective February 1, 2018]

.04 Throughout the standards, the word “calculation” appears, but not as a defined term. It can imply a mathematical operation as simple as adding two numbers or as complex as a scenario of dynamic capital adequacy testing. “Calculation” does not necessarily imply that a model is used. The word “calculation”, when used in the context of a model, emphasizes the result of a model run and to a lesser extent model specification and model implementation.

.05 It may be useful, under the terms of the engagement, to report the result of two assumptions without opining on their relative appropriateness and to recommend that each user select that which meets his or her needs.

Model assumptions

.06 The model assumptions are quantitative assumptions in a model about

- Contingent events;
- Investment return and other economic matters, such as price and wage indices; and
- Numerical parameters of the environment, such as the income tax rate.

.07 There is a model assumption for each of the matters that the actuary's model takes into account. Those matters would be sufficiently comprehensive for the model reasonably to represent reality.

.08 A model, whether simple or complex, requires model assumptions. The model depends on the purpose of the work and the sensitivity of the model run to the various matters about which assumptions could be made. The actuary would strike a balance between the complexity needed for reasonable representation of reality and the simplicity needed for a practical calculation. If the model specification does not take into account a matter, the result is an implicit assumption about that matter, usually an assumption of zero probability or of zero rate. The actuary may compensate for an inappropriate implicit assumption regarding a matter that the model specification does not take into account by altering the explicit assumption regarding a matter that the model does take into account.

.09 For models with interrelated model assumptions, the actuary would consider the interaction between assumptions.

Data assumptions

.10 Data assumptions are the assumptions, if any, needed to relieve insufficiency or unreliability in the data.

.11 The available data may be not sufficient or not reliable. For example, files of pension plan members may lack the date of birth of the members' spouses. Based on sampling, or on comparison with comparable data, it may be appropriate to assume a relationship between spouse and member ages; for example, that a male spouse's date of birth is three years before the member's, and that a female spouse's date of birth is three years after the member's.

Assumptions other than model and data assumptions

.12 The assumptions other than model and data assumptions are the assumptions about the legal, economic, demographic, and social environment upon which the model and data assumptions depend.

.13 Such other assumptions are usually qualitative, dealing with the environment; for example,

- Legislation, like the Income Tax Act (Canada);
- Student education;
- The medical care system;
- Government social security systems; and
- International treaties.

.14 Those assumptions are needed to the extent that the model assumptions and, in some cases, the data assumptions depend upon them. Such assumptions are numerous and it is not practical to identify all of them.

.15 Continuation of the status quo is usually the appropriate assumption for other than model and data assumptions; for example, an assumption that the fund of a registered pension plan continues not to be taxed or that the capital markets remain more or less as they are. Users may infer that assumption except where the actuary reports otherwise. The actuary would report an assumption

- That is different from continuation of the status quo; and
- Regarding a matter for which there is no status quo, for example, a student's assumed occupation after completion of education.

Acceptable range

.16 There is a reasonable range of assumptions that may be selected by an actuary for particular work and that might produce materially different results. Sometimes, it is desirable that actuaries produce results within a relatively narrow range, in which case the practice-specific standards may prescribe certain methods and/or assumptions to achieve that purpose.

Circumstances affecting the work

.17 Knowledge of the circumstances affecting the work may require consultation with the persons responsible for the functions that affect experience. For example, if the calculation is to value the assets or liabilities of a benefits plan, the actuary would consult the persons responsible for investments, administration, and plan provisions. If the calculation is to value the policy liabilities of an insurer, the actuary would consult the officers responsible for investments, underwriting, claims, marketing, product design, policy dividends, and policy servicing.

.18 An assumption about a matter would take account of the circumstances affecting the work if those circumstances affect that matter. The circumstances affecting the work are relevant for experience in most matters other than economic matters.

Past experience data

.19 The available and pertinent past experience data are helpful in the selection of assumptions.

.20 Other things being the same, pertinent past experience data are data

- Relating to the case itself rather than to similar cases;
- Relating to the recent past rather than to the distant past;
- That are homogeneous rather than heterogeneous; and
- That are statistically credible.

These criteria may conflict with each other.

Expected future experience vs. past experience

.21 To extrapolate pertinent past experience and its trend to the near future is often, but not necessarily, appropriate.

.22 The appropriateness of the extrapolation depends on the matter assumed. For example, pertinent past mortality experience is a better indicator of the outlook than is pertinent past investment return experience.

.23 An extrapolation would take account of a change that affects the outlook. For example,

- Adoption of a subsidized early retirement option in a pension plan may affect retirement rates;
- A change in an issuer's case estimate practices may affect its claims development;
- An issuer's discontinuance of a line of business may affect its expense rates allocable to the remaining lines; and
- A change in judicial practice may affect the settlement of claims.

Anti-selection

.24 Each assumption would normally take account of potential anti-selection.

.25 One party in a relationship may have the right (or the administration of the relationship may give the privilege) to exercise certain options. That party may be, for example, a policyholder, a benefits plan's member, a borrower, a lender, or a shareholder.

.26 Examples are the right or privilege of a

- Pension plan member to select his or her retirement date when the pensions at various retirement ages are not actuarially equivalent;
- Policyholder to renew term life insurance at its expiry for a stipulated premium;
- Mortgagor to prepay principal, or an issuer to call a bond or redeem a preferred share; and
- Shareholder to retract a share.

.27 When considering a single relationship, it is reasonable to expect that party to exercise those options to the detriment of the other party in the relationship if it is to the first party's advantage to do so. However, where a number of such relationships are concerned, such as a portfolio of policyholders or members of a benefit plan, it may not be reasonable to assume that every one of these would exercise such an option in that manner.

.28 The extent of anti-selection depends on

- The size of the advantage from each exercise of the option (for example, anti-selection is dampened if the advantage to each policyholder is small even when the aggregate potential detriment to an issuer is large);
- The concomitance of exercise of the option (for example, election of a favourable early retirement pension may force the plan member into unwanted unemployment, or a policyholder (who is also the life insured) in ill health may be unable to afford to continue an insurance policy with a low premium);
- The policyholder's or plan member's difficulty in making the required judgment (for example, everyone knows his or her age, but a person may be unable to gauge the effect of ill health on longevity); and
- The sophistication of the policyholder, plan member, borrower, lender, or shareholder.

Independently reasonable and appropriate in the aggregate

.29 The assumptions that the actuary selects or for which the actuary takes responsibility, other than alternative assumptions selected for the purpose of sensitivity testing, would be independently reasonable and appropriate in the aggregate.

.30 The actuary would select independently reasonable assumptions. The following is an example:

- For a typical defined benefit pension plan valuation, the actuary would adopt an explicit investment assumption, as well as an explicit expense assumption rather than using implicit assumptions incorporated within a net discount rate. However, for a small defined benefit pension plan, the actuary may choose to use approximations for the investment expenses.

.31 The actuary would avoid the use of independently reasonable assumptions that are inconsistent or biased in the same direction, either of which might result in the assumptions not being reasonable in the aggregate. If an assumption is prescribed, is mandated by law or is stipulated by the terms of the engagement, it would not be appropriate to compensate for this prescription or stipulation by modifying other assumptions. The remaining assumptions would be reasonable in the aggregate and to the extent possible be independently reasonable.

.32 The use of independently reasonable assumptions implies that each assumption is explicitly defined. However, there would be no requirement to use explicit assumptions in the model specification, as long as the result of using that model does not produce a material error. For example, for pension valuations, use of a discount rate net of expenses may produce a value very close to the value obtained by using explicit assumptions. In this case, the actuary would disclose both the gross investment rate assumption and the expense assumption.

Stipulated or mandated assumptions

.33 Use of an assumption stipulated by the terms of the engagement is use of the work of another person.

.34 If the assumption is mandated by law and an amendment to the law is virtually definitive, it may be useful to report a result that reflects the amendment.

Discount rate

.35 The use of a discount rate is inherent in the actuarial present value method. The discount rate may be constant or it may vary over time. In selecting the best estimate assumption for the discount rate, the actuary, consistent with the circumstances affecting the work, may either

- Take into account the expected investment returns of the assets that support the liabilities; or
- Reflect interest rates on relevant fixed income reference securities.

.36 In selecting the best estimate assumption for the discount rate, the actuary, consistent with the circumstances affecting the work, may assume that the yields on fixed income investments at future dates, either

- Remain at levels applicable at the calculation date; or
- Revert in the long term to expected levels.

1630 Provision for adverse deviations

.01 The actuary should include a provision for adverse deviations in calculations only to the extent required by the terms of the actuary's engagement or as mandated by law or as prescribed by practice-specific standards. [Effective February 1, 2018]

1640 Comparison of current and prior assumptions

.01 Unless the actuary reports the inconsistency, the assumptions for a calculation for a periodic report should be consistent with those of the prior calculation. [Effective February 1, 2018]

.02 The definition of consistency for the purpose of this recommendation varies among practice areas. For example,

- For advice on funding a pension plan, the assumption at a calculation date is consistent with the corresponding assumption at the prior calculation date if the two are numerically the same; and
- For valuation of insurance contract liabilities for financial reporting, an assumption at a calculation date is consistent with the corresponding assumption at the prior calculation date if the two assumptions
  - Each reflect the conditions and outlook at their respective calculation dates consistent with the circumstances affecting the work in the case of a best estimate assumption;

- Each reflect the risks at their respective calculation dates consistent with the circumstances affecting the work in the case of a margin for adverse deviations; and
- Are located at the same point within the range of accepted actuarial practice.

.03 If the assumptions are not so consistent, the actuary would report the inconsistency. If practical, useful and appropriate under the terms of the engagement, the report would quantify the effect of the inconsistency.

2100 Insurance Contract Valuation: All Insurance

2110 Scope

.01 Part 1000 applies to work within the scope of part 2000.

.02 Repealed

.03 Sections 2200 and 2300 apply to the valuation of insurance contracts and other obligations in accordance with IFRS 17, even where the reporting entity is not an insurer.

- Section 2200 reflects Canadian-specific considerations. It includes specific exclusions from part 1000, a glossary of terms applicable to IFRS 17, and valuation and reporting requirements.
- Section 2300 reflects the International Standard of Actuarial Practice 4 (ISAP 4), developed by the International Actuarial Association. It provides guidance to actuaries when performing actuarial services related to contracts covered by IFRS 17 to be used for the preparation of an entity's actual or pro-forma IFRS financial statements.

.04 Repealed

.05 Section 2400 applies to actuaries performing the role of appointed actuary as defined in subsection 2420.

.06 Section 2500 applies to the appointed actuary of an insurer when preparing a report on an insurer's financial condition as defined in subsection 2510.

.07 Section 2600 applies to property and casualty ratemaking as defined in subsection 2610.

.08 Section 2700 applies to policyholder dividend determination as defined in subsection 2710.

.09 Section 2800 applies to public personal injury compensation plans for both the valuation of contracts in accordance with IFRS 17 and for purposes other than valuation in accordance with IFRS 17.

2200 Insurance Contract Valuation: Canadian Considerations

2210 General

.01 IFRS 17 Insurance Contracts ("IFRS 17") establishes principles for the recognition, measurement, presentation and disclosure of insurance contracts. The actuary should be familiar with IFRS 17 and apply the requirements in the valuation of insurance contract liabilities. [Effective Month XX, 201X]

.02 The Standards of Practice provide guidance to actuaries when performing actuarial services in connection with IFRS 17. They are intended to supplement and not replace or restate the requirements of IFRS 17 in the valuation of insurance contract liabilities.

.03 Part 1000 and part 2000 of the Standards of Practice are both applicable to the valuation of insurance contract liabilities.

.04 The IFRS 17 risk adjustment for non-financial risk is not considered to be a provision for adverse deviations as defined in section 1600.

2220 Definitions

.01 Part 2000 uses various terms whose specific meanings are defined in the ISAP 4. These terms are highlighted in the text with a dashed underscore and in blue (e.g., Accounting Policies). For the purpose of part 2000, these terms have the meaning given in this subsection and have their ordinary meaning otherwise.

.02 Sections 2200 and 2300 also use key terms found in IFRS 17 Appendix, in which case they have the meaning as used in IFRS 17. These terms are highlighted in the text with a double underscore and in green (e.g., insurance contract).

.03 **Accounting Policies –** As defined by the International Accounting Standards Board (IASB) in paragraph 5 of IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors, "*the specific principles, bases, conventions, rules and practices applied by an [reporting] entity in preparing and presenting financial statements."

.04 **Actuarial Services –** Services based upon actuarial considerations provided to intended users that may include the rendering of advice, recommendations, findings, or opinions.

.05 **Communication –** Any statement (including oral statements) issued or made by an actuary with respect to actuarial services.

.06 **Contract Owner –** The party defined under the terms of insurance contract who has elected to purchase the insurance coverage from an issuer and has a right to dispose of the insurance contract.

.07 **IFRS 17 –** International Financial Reporting Standard 17 – Insurance Contracts, including any interpretations from the International Financial Reporting Interpretations Committee thereon, as issued through [MONTH YEAR].

.08 **Insurance Coverage –** Any portion of an insurance contract providing a coverage specific to one, or more, insured events.

.09 **International Financial Reporting Standards (IFRSs) –** As defined by the IASB in paragraph 7 of IAS 1 Presentation of Financial Statements, as amended in June 2011, by Presentation of Items of Other Comprehensive Income (Amendments to IAS 1): "Standards and Interpretations issued by the International Accounting Standards Board (IASB). They comprise:

a. International Financial Reporting Standards;

b. International Accounting Standards;

c. [International Financial Reporting Interpretations Committee] IFRIC Interpretations; and

d. [The former Standing Interpretations Committee] SIC Interpretations."

.10 **Intended User –** Any legal or natural person (usually including the principal) by whom the use of the report is intended by the actuary at the time the actuary performs actuarial services.

.11 **Law –** Applicable acts, statutes, regulations or any other binding authority (such as accounting standards and any regulatory guidance that is effectively binding).

.12 **Measurement Date –** The date as of which the value of an asset or liability is presented, whether or not the actual calculations have been made as of a different date and rolled forward or back to the measurement date.

.13 **Principal –** The party who engages the provider of actuarial services. The principal will usually be the client or the employer of the actuary.

.14 **Variable Fee Approach –** The measurement approach that, according to IFRS 17, should be applied to a group of insurance contracts with direct participation features.

2230 Reporting

.01 The actuary's report should describe

- The valuation and presentation of policy liabilities for the issuer's statement of financial position and statement of financial performance;
- The actuary's opinion on the appropriateness of those liabilities and on the fairness of their presentation; and
- The actuary's role in the preparation of the issuer's financial statements if that role is not described in those statements or their accompanying management discussion and analysis. [Effective Month XX, 201X]

.02 If the actuary can report without reservation, then the actuary's report should conform to the standard reporting language, consisting of

- A scope paragraph, which describes the actuary's work; and
- An opinion paragraph, which gives the actuary's favourable opinion on the valuation and its presentation;

otherwise the actuary should modify the standard reporting language to report with reservation. [Effective Month XX, 201X]

.03 The actuary's report would conform to relevant Canadian federal and provincial legislation that require the actuary to value the policy liabilities, not only the insurance contract liabilities.

Disclosure of unusual situations

.04 The items that the actuary values for the financial statements may be misleading if the financial statements do not present them fairly. The actuary's report signals to the reader of the financial statements that there is, or is not, fair presentation.

.05 In an unusual situation, fair presentation may require explanation of an item that the actuary values for the financial statements. Usually, the notes to the financial statements would provide that explanation, including, where appropriate, disclosure of the situation's effect on income and capital. In the absence of such explanation, the actuary would provide it by a reservation in reporting.

.06 The question, "Will explanation enhance the user's understanding of the issuer's financial position?" may help the actuary to identify such a situation. Unusual situations may include

- Capital appropriated or repatriated on the actuary's advice;
- Off-balance-sheet obligations (e.g., contingent policy liabilities in connection with market conduct);
- Restatement of items for preceding financial reporting periods;
- Inconsistency among financial reporting periods;
- The impracticality of restating any items that are reported in current period financial statements and that were reported inconsistently in preceding period financial statements;
- An unusual relationship between the items in current period financial statements and the expected corresponding items in future period financial statements;
- A change in the method of valuation that does not have an effect in the current financial reporting period but that is expected to have an effect in future financial reporting periods;
- A difference between the issuer's present practices (e.g., policy for setting dividend scales) and those which the actuary assumed in valuing the policy liabilities; and
- A subsequent event.

Consistency across financial reporting periods

.07 Financial statements usually present results for one or more preceding financial reporting periods in comparison to those for the current period. Meaningful comparability requires the financial statement items for the various periods to be consistent, which can be achieved by the restatement of preceding period items that were previously reported on a basis which was inconsistent with that for the current period. A less desirable alternative to restatement is disclosure of the inconsistency.

.08 A change in the method of valuation creates an inconsistency. A change in the assumptions for valuation reflecting a change in the expected outlook does not constitute an inconsistency although, if its effect is material, then fair presentation would require its disclosure.

.09 A change in assumptions that results from the application of new standards may create an inconsistency.

Communication with the auditor

.10 Communication with the auditor is desirable at various stages of the actuary's work. These include

- Use of work in accordance with the Joint Policy Statement approved by the Actuarial Standards Board (Canada) and by the Auditing and Assurance Standards Board (Canada);
- The drafting of common features in the auditor's report and actuary's report;
- The drafting of a report with reservations;
- The presentation of the insurance contract liabilities and policy liabilities other than insurance contract liabilities; and
- The treatment of subsequent events.

Description of the actuary's role

.11 The actuary would report a description of his or her role in the preparation of the issuer's financial statements only if the financial statements or their accompanying management discussion and analysis do not provide that description.

.12 Here is an illustrative description.

"The Appointed Actuary is

appointed by the [Board of Directors] of [the Company];

responsible for ensuring that the assumptions and methods for the valuation of policy liabilities are in accordance with accepted actuarial practice in Canada, applicable legislation, and associated regulations and directives;

required to provide an opinion on the appropriateness of the policy liabilities at the calculation date; and

required each year to analyze the financial condition of the company and prepare a report for the [Board of Directors]. The analysis tests the capital adequacy of the company until [31 December xxxx] under adverse economic and business conditions."

The wording of the illustrative description conforms to relevant Canadian federal and provincial legislation that require the actuary to value the policy liabilities, not only the insurance contract liabilities.

Standard reporting language

.13 Here is the standard reporting language.

Appointed Actuary's Report

To the policyholders [and shareholders] of [the ABC Insurance Company]:

I have valued the policy liabilities of [the Company] for its [consolidated] [statement of financial position] at [31 December xxxx] and their changes in the [consolidated] [statement of financial performance] for the year then ended in accordance with accepted actuarial practice in Canada including selection of appropriate assumptions and methods.

In my opinion, the amount of policy liabilities is appropriate and the [consolidated] financial statements fairly present the results of the valuation.

[Montréal, Québec] [Mary F. Roe]
[Report date] Fellow, Canadian Institute of Actuaries

.14 The language in square brackets is variable and other language may be adjusted to conform to interim financial statements and to the terminology and presentation in the financial statements.

.15 An auditor's report usually accompanies the financial statements. Uniformity of common features in the two reports will avoid confusion to readers of the financial statements. Those common features include

- Addressees: Usually, the actuary addresses the report to the policyholders of a mutual insurer and to both the policyholders and shareholders of a stock insurer.
- Years referenced: Usually, the actuary's report refers only to the current year, even though financial statements usually present results for both the current and prior years.
- Report date: If the two reports have the same date, then they would take account of the same subsequent events.

Reservations in reporting

.16 The examples that follow are illustrative and not exhaustive.

Self-insured organization that is not obligated to have an appointed actuary

.17 Here is an example of a report prepared for an underfunded self-insured organization that is not obligated to have an appointed actuary.

> I have valued the outstanding claim liabilities of [the Self-Insured Liability Plan] for its statement of financial position at [31 December XXXX] in accordance with accepted actuarial practice in Canada, including selection of appropriate assumptions and methods.
>
> As explained in Note [XX], the [Plan's] self-insured liabilities are not fully funded.
>
> In my opinion, and having regard for Note [XX], the amount of policy liabilities makes appropriate provision for all of the [Plan's] outstanding claims and the financial statements fairly present the results of the valuation.

Note [XX] would quantify and describe the actuary's assumptions with respect to the asset shortfall, describe the plan, if any, for its funding, and explain its implications for the financial security of participants and claimants.

New appointment

.18 A newly appointed actuary who is unable to use the predecessor actuary's work, but who has no reason to doubt its appropriateness, would modify the standard reporting language as follows:

> I have valued the policy liabilities of [the Company] for its [consolidated] statement of financial position at [31 December XXXX] and, except as noted in the following paragraph, their change in the statement of financial performance for the year then ended in accordance with accepted actuarial practice in Canada, including selection of appropriate assumptions and methods.
>
> The policy liabilities at [31 December xxxx-1] were valued by another actuary who expressed a favourable opinion without reservation as to their appropriateness.
>
> In my opinion, the amount of policy liabilities, is appropriate and the [consolidated] financial statements fairly present the results of the valuation. For the reason stated in the previous paragraph, I am unable to say whether or not those results are consistent with those for the preceding year.

.19 If the actuary doubts the appropriateness of the predecessor actuary's work as a result of a review of it, then the actuary would consider a more serious reservation.

Impracticality of restatement

.20 The actuary would, if necessary, restate the preceding year valuation to be consistent with the current year valuation. If it is not practical to restate the preceding year valuation, then the actuary would modify the opinion paragraph in the standard reporting language as follows:

> In my opinion, the amount of policy liabilities is appropriate. As explained in Note [XX], the method of valuation for the current year is inconsistent with that for the previous year. Except for that lack of consistency, in my opinion the [consolidated] financial statements fairly present the results of the valuation.

.21 Note [XX] would usually explain the change in the basis of valuation, explain the impracticality of applying the new basis retroactively, and disclose the effect of the change on the opening equity at the beginning of the preceding year.

Takeover of issuer with insufficient records

.22 If the issuer took over another issuer with records that did not provide sufficient and reliable data for the valuation, then the actuary would modify the standard reporting language as follows:

> I have valued the policy liabilities of [the Company] for its [consolidated] statement of financial position at [31 December xxxx] and their change in the statement of financial performance for the year then ended in accordance with accepted actuarial practice in Canada, including selection of appropriate assumptions and methods, except as described in the following paragraph.
>
> During the year, [the Company] took possession of the assets, liabilities, and policies of [WWW Issuer], whose policy records are, in my opinion, unreliable. [The Company] is implementing but has not completed the necessary improvements. My valuation with respect to the policies taken over from [WWW Issuer] therefore involves an unusual degree of uncertainty. The associated policy liabilities comprise [N]% of [the Company's] total policy liabilities at [31 December xxxx].
>
> In my opinion, except for the reservation in the previous paragraph, the amount of policy liabilities is appropriate and the [consolidated] financial statements fairly present the results of the valuation.

Liabilities greater than those calculated by the actuary

.23 If the financial statements of an issuer report policy liabilities that are greater than those calculated and reported by the actuary, and if the notes to those financial statements do not provide sufficient disclosure of the rationale for doing so, then the actuary would report as follows:

> I have valued the policy liabilities of [the Company] for the statement of financial position at [31 December xxxx] and their change in the statement of financial performance for the year then ended in accordance with accepted actuarial practice in Canada, including selection of appropriate assumptions and methods, except as described in the following paragraph.
>
> In my valuation, the amount of the policy liabilities is $[X]. The corresponding amount in the [consolidated] financial statements is $[Y].
>
> In my opinion, the amount of policy liabilities of $[X] is appropriate and, except as described in the preceding paragraph, the [consolidated] financial statements fairly present the result of the valuation.

2300 Insurance Contract Valuation: International Actuarial Standards of Practice

2310 General

Purpose

.01 Section 2300 provides guidance to actuaries when performing actuarial services in connection with IFRS 17. Its purpose is to increase intended users confidence that

- Actuarial services are carried out 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 (including, but not limited to, models and modelling techniques) used are disclosed appropriately.

Relationship to IFRS

.02 Section 2300 refers to the content of IFRS 17 and other IFRSs, including any interpretations from the International Financial Reporting Interpretations Committee or the Standing Interpretations Committee thereon (IFRIC), as issued through MONTH 20XX [date of final consultation on ISAP]. Compliance with IFRS 17 is a prerequisite to compliance with section 2300. Repetition of IFRS 17 has been deliberately restricted and section 2300 has been constructed as complementary guidance to IFRS 17 guidance.

Effective date

.03 Section 2300 is effective for {actuarial services performed/actuarial services commenced/actuarial services performed with respect to an IFRS financial statement for a reporting period ending}[3] on or after [Date].

[3] [Phrase to be selected and date to be inserted by standard-setter adopting or endorsing this ISAP.]

2320 Appropriate Practices

Relevant knowledge requirements

.01 The actuary would have or obtain sufficient knowledge and understanding of information necessary to perform the assignment, such as:

- IFRS 17, applicable sections of other relevant IFRSs (e.g., IFRS 13 when determining Fair Value), the entity's accounting policies and the relevant processes that are applied in the preparation of IFRS financial statements;
- The entity's appetite for any risk that has an impact on the measurement under IFRS 17;
- The entity's products and operations;
- The methodologies and assumptions used by the entity in other relevant contexts and the rationale for any differences;
- How laws affect the application of IFRS 17; and
- The relevant auditing standards.

Identification, separation, recognition, derecognition and modification

.02 The actuary would treat the processes of

- Identification of insurance contracts;
- Separation of components that would be within the scope of another standard from an insurance contract;
- Recognition and derecognition of insurance contracts; and
- Determination of whether an insurance contract modification is a change that is to be treated as derecognition of the contract and recognition of the modified contract as a new contract, or whether the modification is to be treated as a change in estimates of fulfilment cash flows

as processes to which the general actuarial standards in part 1000 apply.

The actuary would disclose in the actuary's report changes in the above processes, including the rationale for the change and their impact.

Measurement approach

.03 The actuary would treat the processes of selecting the appropriate measurement approach to be applied to each group of insurance contracts, whether it is the general measurement approach, the premium allocation approach (PAA), or the variable fee approach, as a methodology to which the general actuarial standards in part 1000 apply.

The actuary would disclose in the actuary's report changes in the above processes, including the rationale for the change and their impact.

The General Measurement Approach

.04 **General approach for selection of assumptions –** When advising the principal or the entity on actuarial assumptions, the actuary would

- For the purpose of setting assumptions, consider disaggregating contracts into separate coverages and similar risks based on the nature of the insurance obligation;
- Be aware that current pricing assumptions may not be appropriate for IFRS 17 purposes;
- Make links as necessary to ensure consistency between assumptions, (e.g., assumptions related to option exercise patterns would be linked to the economic scenarios);
- Consider the potential asymmetrical distribution of current estimates (e.g., assumptions to deal with extreme events like tail events or options and guarantees that are triggered by market conditions);
- Consider the use of credibility techniques when combining information from various sources or time periods; and
- Consider anti-selection and its effect over time.

Process for updating assumptions

.05 If the actuary considers it appropriate to change the process used to update a recommended assumption, the actuary would discuss the change with the principal, including whether it would constitute a change in accounting policy or just a change in an accounting estimate as defined in IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.

The actuary would disclose in the actuary's report changes in the above processes, the rationale for the changes and their impact.

Specific considerations for insurance risks

.06 When advising the principal or the entity on assumptions to measure insurance risks, the actuary would consider relevant factors including the following:

- Characteristics of the insurance risk;
- Characteristics of the policyholder and the way the contract was sold;
- Past experience of incurred claims including patterns of delays in reporting and payment and the relevance to expected future experience;
- Adjustment to past experience of incurred claims, including claim inflation;
- Allowance for extreme events;
- Practices of the entity; and
- External factors, such as secular trends and seasonal variations, and changes in the legal, economic, legislative, regulatory, supervisory, demographic, technological, and social environments.

Specific considerations for options

.07 When advising the principal or the entity on assumptions for expected option exercise patterns, the actuary would consider relevant factors and changes therein including the following:

- Sophistication of the policyholder, as well as the relative advantages, to the policyholder, of exercising any options;
- Characteristics of how the insurance contracts are sold and serviced;
- Significant scheduled changes in benefits;
- Any short-term spikes in cancellation rates created by the exercise of certain options; and
- External factors such as the market conditions, legal, economic, legislative, regulatory, supervisory, demographic, technological, and social environments.

Specific consideration for maintenance expenses

.08 When advising the principal or the entity on the projection of cash flows for maintenance expenses, the actuary would consider relevant factors including the following:

- The entity's cost-accounting and expense allocation policies;
- Expenses expected to arise from fulfilling obligations existing on the measurement date. This estimate would consider the entity's past expenses and the likelihood of the realization of business plan; and
- Any outsourcing arrangements.

Specific considerations for contracts with participation feature or other variable cash flows

.09 When advising the principal or the entity, the actuary would:

- Select a discount rate used to calculate the present value of the cash flows to measure the fulfilment cash flows that reflect the expected returns anticipated in the projection of the future cash flows. Returns on assets would be projected using prospective expectations consistent with expected future economic conditions; and
- Consider the associated impact, if any, on the estimates of future cash flows, the risk adjustment for non-financial risks and the discount rate in the projection, when the cash flows depending on the underlying items have a floor or a cap.

Entity Discretion

.10 When advising the principal or the entity on assumptions to reflect entity discretion, the actuary would take into account expectations, or limitations that may arise from sources, such as

- The entity's marketing and promotional materials;
- The entity's past practices insofar as relevant for the future;
- The entity's current policy;
- Market practices; and
- Rulings of relevant authorities.

Reinsurance

.11 When advising the principal or the entity on the measurement of reinsurance contracts, the actuary would:

- When estimating amounts recoverable under multiple reinsurance arrangements, consider the order of reinsurance recovery;
- When estimating non-recoverable amounts, consider the financial condition of the reinsurer and the extent to which default by one reinsurer may affect the amounts recoverable from other reinsurers.
- When estimating the fulfilment cash flows of a reinsurance contract issued by the entity, consider relevant circumstances such as:
  - The expected behaviour with respect to the available options of both the policyholders of the underlying insurance contracts and all ceding issuers, including retrocessionaires, if any;
  - The underwriting and management practices, including the underwriting of facultative placements, and the claim management process of the ceding issuers;
  - The impact of reinstatements;
  - Default by ceding issuers, including retrocessionaires, if any.
- When projecting cash flows over future periods, consider the extent to which the issuer of the underlying insurance contract and each reinsurer exercise their control over recapture, cancellation, or commutation to their advantage.

Currency exchange

.12 When advising the principal or the entity on the estimation of fulfilment cash flows in multiple currencies, the actuary would reflect the expected future changes in currency exchange rates and the uncertainty arising from currency fluctuations.

Discount rates

.13 When advising the principal or the entity on the estimation of the fulfilment cash flows in multiple currencies, the actuary would:

- When deriving the discount rates applied to cash flows beyond the period for which observable market data is available, consider how current rates would be expected to evolve over time.
- When deriving the discount rates applied to cash flows of insurance contracts, which depend on the returns of entity's invested assets, consider the entity's investment policy, taking into account the entity's communications to various stakeholders and with due regard for anticipated policyholder behaviour; and
- When deriving the illiquidity adjustment for the discount rate, consider:
  - Approaches that are robust and that would be able to be applied reliably over time and under a variety of market conditions;
  - Available market data (e.g., credit default swap spreads) when deducting a credit or default allowance from observed asset yield rates.

Insurance acquisition cash flows

.14 The actuary would be satisfied that the allocation of insurance acquisition cash flows is made on a consistent basis to each portfolio of insurance contracts. The insurance acquisition cash flows would replicate actual acquisition costs.

Risk adjustment for non-financial risks

.15 When advising the principal or the entity on the risk adjustment for non-financial risks, the actuary would:

- Identify the non-financial risks inherent in the insurance contracts;
- In assessing what the entity requires as compensation for bearing the non-financial risks:
  - Take into account any diversification benefit the entity includes in its compensation risk; and
  - Consider sources of relevant information such as the entity's capital management, risk management and pricing policies;
- Select a methodology that
  - Uses assumptions that are consistent with those used in the determination of the corresponding estimates of future cash flows; and
  - Is granular enough to reflect the risk differences between the portfolios of insurance contracts;
- Make appropriate allowance for mechanisms that result in risk being passed to the policyholder (e.g., contracts with participation adjustment features);
- Consider whether the difference between the total of the calculated gross risk adjustment for non-financial risks and the total of the ceded risk adjustment for non-financial risks fairly reflects the compensation that the entity requires for its net of reinsurance exposure; and
- When advising on the confidence level disclosure required by IFRS 17, where the risk adjustment for non-financial risks has been determined using a technique other than a specified confidence level, consider
  - The entity's ability to diversify non-financial risks over the total business; and
  - The inherent uncertainty in the translation to a confidence level and the need to disclose such uncertainty in the actuary's report.

Aggregation for Contractual Service Margin (CSM)

.16 The actuary would treat the processes of:

- Identification of portfolios of insurance contracts;
- Allocation of individual insurance contracts into portfolios, and each portfolio into groups of insurance contracts;
- Treatment of loss component on onerous contracts; and
- Determination of the coverage units

as processes to which the general actuarial standards in part 1000 apply.

The actuary would disclose in the actuary's report changes in the above process, the rationale for the changes and their impact.

Acquisition of insurance contracts by transfers or business combinations

.17 When advising the principal or the entity, the actuary would

- Follow procedures that are consistent with those for insurance contracts issued; and
- For liabilities for incurred claims, follow the entity's policy regarding deferral of profit, recognize any loss immediately and amortize any excess of consideration over the fulfilment cash flows, akin to a CSM.

The Premium Allocation Approach

.18 When advising the principal in relation to the use of the PAA for a group of insurance contracts, the actuary would

- Be aware of whether the entity has opted to recognize insurance acquisition cash flows as expenses and determine the liability consistently with the entity's approach; and
- If the coverage period is longer than one year, assess whether the PAA is a reasonable simplification to the general measurement approach, by considering whether
  - The pattern of expected incurred insurance service expenses, plus the release of the risk adjustment for non-financial risks, plus the release of the CSM under the general measurement approach is materially different from the expected timing of incurred insurance revenue under the PAA;
  - There is a reasonable expectation that differences between the timing of cash flows under the general measurement approach and the timing of incurred insurance service expenses under the PAA will result in materially different adjustments for the time value of money;
  - There is a reasonable expectation that future assumption changes under the general measurement approach in response to emerging experience will render the simplification invalid in future.
- Review regularly the group of insurance contracts to determine if it is or has become onerous and advise the principal or the entity accordingly.

.19 **The Variable Fee Approach**

In using the variable fee approach, the actuary would determine the fulfilment cash flows in accordance with guidance under general measurement approach, except for 2320.11 (Reinsurance).

Financial statement presentation and disclosure

.20 Where the terms of the assignment are such that the information provided by the actuary may be used in financial statement presentation and disclosure, the actuary would provide all related information needed to comply with the relevant presentation and disclosure requirements of IFRS 17 and the entity's accounting policies.

.21 If the actuary had become aware that presentations and/or disclosures are incorrect or inappropriate, the actuary would disclose that in the actuary's report.

.22 In providing advice on the disclosures of reconciliations where the order of calculation alters the information disclosed, the actuary would apply a consistent order of calculation across all reconciliations and from period to period, or disclose any change, its rationale and its impact in the actuary's report.

Transition

.23 When advising the principal or entity on whether the retrospective approach is impracticable, the actuary would take into consideration relevant factors including:

- The availability and integrity of past policy data that are required to determine the fulfilment cash flows since initial recognition;
- The availability and integrity of information on past products;
- The availability of sufficient data to determine the initial assumptions and subsequent changes that would have been made over the lifetime of the various insurance contracts;
- The method used to adjust past known interest rates to achieve the rates that represent the characteristics of the insurance contracts; and
- The difficulty in evaluating the past risk adjustment for non-financial risks and management discretion without the benefit of hindsight.

2330 Communication

Disclosures in the report

.01 In addition to complying with subsection 1640 and section 1700, the actuary would disclose

- Information regarding a change in assumptions or method, whether arising from a consistent or changed process;
- The rationale and impact of any changes in approaches, including:
  - The identification of insurance contracts, the separation of components, the recognition, derecognition and modification of insurance contracts;
  - The determination of the measurement approach;
  - The assumptions;
  - The identification of portfolios of insurance contracts, the allocation into groups of insurance contracts, the treatment of loss component and the approach to the determination of coverage units; and
  - The order of calculation on reconciliation provided for presentation items.
- When the risk adjustment for non-financial risks is determined using a technique other than a specified confidence level, the uncertainty inherent in the translation to a confidence level; and
- Any concerns about the presentation of any items or of any disclosures.