

Exposure Draft

Exposure Draft for Revised Standards of Practice – Part 5000 Practice-Specific Standards for Public Personal Injury Compensation Plans

Actuarial Standards Board

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Memorandum

To: All Fellows, Affiliates, Associates and Correspondents of the Canadian Institute of Actuaries and Other Interested Parties

From: Charles C. McLeod, Chairperson
Actuarial Standards Board
Nicholas Bauer, Chairperson
Designated Group

Date: May 17, 2010

Subject: **Exposure Draft for Revised Standards of Practice – Part 5000 Practice-Specific Standards for Public Personal Injury Compensation Plans**

Comment Deadline: **August 15, 2010**

INTRODUCTION

The attached exposure draft was approved by the Actuarial Standards Board (ASB) on May 6, 2010. This exposure draft is an extensive rewrite of the current Standards of Practice.

A notice of intent on this matter was published on June 19, 2009, with a comment period ending on September 30, 2009 (www.actuaries.ca/members/publications/2009/209055e.pdf).

BACKGROUND

As was noted in the notice of intent, Practice-Specific Standards of Practice for Public Personal Injury Compensation Plans (PPICPs) were first adopted in 1994 to provide additional guidance to members practicing in this area. No significant changes have been made to these Standards of Practice since inception. In view of the visibility of the financial position of PPICPs, evolving practices in the profession, and new developments, the ASB believes it would be in the public interest and the interest of the profession to revise the Practice-Specific Standards for PPICPs (Part 5000).

One important development is the expected decision by at least some, perhaps most, of Canadian PPICPs to prepare financial statements in accordance with International Financial Reporting Standards (IFRS) upon the implementation of IFRS as Generally Accepted Accounting Principles (GAAP) in Canada for publicly accountable entities on January 1, 2011. In the course of its work, however, the Designated Group (DG) has concluded that conversion to IFRS will have minimal immediate impact on the calculation of the benefits liabilities of PPICPs. The reason is that all such benefits liabilities are “insurance contract” liabilities under the current version of IFRS 4 (frequently referred to as IFRS 4 Phase I). IFRS 4 currently requires the continuation of the accounting policy of the PPICP prior to conversion to IFRS 4, which include the current valuation practices.

Revision of IFRS 4 is being actively pursued by the International Accounting Standards Board and an exposure draft setting out the proposed revisions is forecast to be issued mid-2010. Final adoption of the revision of IFRS 4 (frequently referred to as IFRS 4 Phase II) is planned for 2013. It is expected to have a major impact on the calculation of insurance contract liabilities; hence it is more than likely that at that time Part 5000 – Practice-Specific Standards for PPICPs will have to be further revised.

ISSUES, PROPOSED CHANGES AND DESIRED OUTCOMES

The proposed revision of the PPICP Standards of Practice is intended to accomplish the following:

- update the Standards of Practice to reflect evolving practices and new developments (including specifically the forthcoming introduction of IFRS),
- clarify the wording to improve the understanding of the Standards of Practice, and
- expand the Standards of Practice to provide improved guidance to members, to require additional disclosures and to narrow the range of practice.

The proposed changes to the current Standards of Practice are extensive and generally follow the direction indicated in the notice of intent. However, there has been considerable revision of detail in reaction to comments received, which are summarized below together with the ASB's responses. The DG is of the view that the attached exposure draft has substantially benefited from the comments and is grateful for the commentators' time and effort.

An issue the DG and ASB had to grapple with is what to include in the Standard as opposed to in educational notes or other guidance material. In the course of the work a number of areas were identified that it was considered preferable to handle initially by means other than directly in the Standards of Practice. A list of topics was compiled that the ASB considered would be desirable to develop non-binding guidance on, although it is anticipated that as practice evolves some may ultimately find their way into the Standards of Practice. In addition, anticipating the likely substantial revision of Part 5000 pursuant to the anticipated revision of IFRS 4, it was considered desirable to restrict new requirements, particularly in areas where material changes in practice would again be imposed by IFRS 4 Phase II.

COMMENTS RECEIVED

A total of 14 submissions on the notice of intent were received from a variety of stakeholders: eight from individual CIA members or groups of members, three by senior executives of PPICPs, and one by each of the Association of Workers' Compensation Boards of Canada, the CIA's Practice Council and the CIA's Committee on Workers' Compensation.

1. General

Comments Received

In general, there was broad support for the objectives and many of the features proposed in the notice of intent. Nevertheless, some issues raised in the notice of intent were controversial and resulted in a wide range of comments.

ASB Response

The ASB appreciated the quality and range of comments received, and found much of the input useful in its deliberations. This constructive feedback resulted in the revision of a number of aspects of the proposed Standard, as reflected in the exposure draft.

Comments Received

Many of the submissions highlighted the importance of recognizing the nature of a PPICP (as illustrated by the considerations in the notice of intent), and distinctions between PPICPs and other entities (such as insurance companies and pension plans). Further, many comments pointed out that flexibility in the Standard would be important in view of the evolving features of PPICPs and the wide range of governing statutes and other factors across the country.

ASB Response

As indicated in the notice of intent, the exposure draft has been prepared taking these considerations into account, and recognizing distinctions, as appropriate, between PPICPs and other entities. Further, the exposure draft allows for flexibility in a number of areas.

Comments Received

The submissions highlighted the uncertainty surrounding the accounting standards that may be applicable to a particular PPICP in the future and the potential impact on a PPICP's financial results of complying with IFRS (and with IFRS 4 Phase II in particular). It was also noted that many financial aspects of a PPICP are the responsibility of either PPICP management or the accounting profession, and that these existing responsibilities must be respected.

ASB Response

The ASB acknowledged this uncertainty in respect of the accounting standards when preparing the exposure draft, and is proposing a standard that can be readily applied under any of the accounting standards currently applicable to a PPICP. Further, a number of provisions in the exposure draft are subject to being in accordance with the circumstances of the actuary's work (e.g., the applicable statute, accounting standard determined to be applicable, or the PPICP's policies).

Comments Received

Several submissions noted that PPICPs are operated on a going concern basis, with a long-term perspective; hence the concepts of wind-up or solvency are not relevant.

ASB Response

The exposure draft requires that the actuary select assumptions and methods reflecting the expectation that the PPICP will continue indefinitely as a going concern entity. Adjustments may be made for short-term considerations, where appropriate.

2. Scope

Comments Received

Several comments questioned the entities that should be included as PPICPs, and whether such entities should be specifically named in the Standards of Practice. It was suggested that the rationale for including or excluding an entity should be clearly stated. There was

a range of opinions as to whether all or some of the provincial auto insurance plans should be covered by Part 5000 of the Standards of Practice. One submission suggested that all personal injury plans in Canada (including public plans and P&C insurer arrangements) be covered by the same standard.

ASB Response

The exposure draft includes a revised definition of a public personal injury compensation plan that clearly describes the characteristics of the plans to be included, without naming specific entities. It is expected that currently all workers' compensation systems in Canada and the Société de l'assurance automobile du Québec (SAAQ) would meet this definition of a PPICP, but that no other entity would meet the definition.

Comments Received

A number of submissions suggested the Standards of Practice should apply to the valuation of liabilities for funding purposes, as well as for the purpose of financial statements. It was also suggested that they be flexible enough to apply, regardless of the particular accounting standards followed by the public personal injury compensation plan.

ASB Response

The exposure draft indicates the Standards of Practice apply to the actuary's work on the valuation of benefits liabilities for a PPICP, both for the purpose of its financial statements and providing input into its funding arrangements. Further, the exposure draft has been prepared independent of the specific accounting standards applicable to the entity.

3. Methods

There was general agreement with the contents of this section of the notice of intent.

Comments Received

A number of submissions suggested additional guidance on the valuation of benefits liabilities for occupational disease claims would be useful, and noted many of the challenges with valuing such claims. It was also noted that flexibility would be important. For example, it was pointed out that for some public personal injury compensation plans the recognition of costs for future occupational disease claims may fall under the jurisdiction of the accountants who may set up reserves for such costs. It was also noted that the funding policy for a public personal injury compensation plan may specify the treatment of liabilities for occupational disease claims.

ASB Response

The exposure draft requires that the benefits liabilities recognize all occupational disease claims reported prior to the calculation date. Further, for all calculation dates on or after December 31, 2012, an appropriate allowance must be included in the benefits liabilities for all occupational disease claims expected to arise after the calculation date as a result of exposures incurred in the workplace prior to the calculation date in respect of occupational diseases recognized as such under the policy of the public personal injury compensation plan. The ASB will encourage the CIA to prepare an Educational Note to provide additional guidance on the calculation of liabilities in respect of occupational disease claims.

Comments Received

One submission noted that self-insured employers should be excluded from the benefits liabilities only where there is a good reason.

ASB Response

The exposure draft requires that the benefits liabilities include an amount in respect of self-insured employers, except where certain defined conditions are met.

Comments Received

Clarification was requested on the section of the notice of intent dealing with “...consideration of the cash flows, if any, arising from future premiums that are available from employers, and have been earmarked by the PPICP, to amortize the PPICP’s current deficit ...” It was noted that the value of future cash flows may be an accounting item, and it was suggested that, if future surcharges are to be used as an offset, then guidance should be strict.

ASB Response

The exposure draft calls for computation of the present value of future assessments specifically earmarked for deficit or surplus reduction. Such calculation should be prepared in accordance with the circumstances of the work. The provisions related to this calculation are in a section of the exposure draft separate from that related to determination of benefits liabilities.

4. Assumptions for Valuation of Benefits Liabilities

Comments Received

Some comments were critical of the notice of intent’s use of the term “smoothing”, pointing out that several years of data may be required to determine a best estimate assumption, and use of data from several years is typically not for the purpose of smoothing valuation results.

ASB Response

The exposure draft permits use of historical data from a number of years when setting assumptions, as appropriate, and does not use the term “smoothing” in this respect.

Comments Received

Most submissions noted that the use of best estimate assumptions, with a zero margin, is appropriate in many cases and may be required for some plans. Hence, the use of a zero margin should be permitted, and recognized as common practice for a PPICP. It was pointed out that additional guidance is needed regarding the use and size of margins.

ASB Response

The exposure draft allows the actuary to use best estimate assumptions, or best estimate assumptions plus a margin, depending on the circumstances of the work or applicable law. Further, the actuary must justify the decision as to margins. The ASB will encourage the CIA to prepare Educational Notes on margins and best estimate assumptions.

Comments Received

Some submissions suggested the Standard should not require that the inflation rate and other economic assumptions be changed each year.

ASB Response

The exposure draft requires that assumptions be set with a long-term perspective, with adjustments for short-term considerations, where appropriate.

Comments Received

Some submissions suggested that required sensitivity testing would be useful, whereas others noted that testing should be determined by the entity, with guidance contained in an Educational Note. Some suggested it might be more useful if results of sensitivity testing were disclosed separately from the actuary's valuation report. One noted that a stochastic analysis should be allowed for this testing.

ASB Response

The ASB decided there was value in including minimal prescribed sensitivities, and the results of such testing could be disclosed to PPICP management separately from the actuary's valuation report. The exposure draft encourages the actuary to undertake additional sensitivity analysis, which could include stochastic modeling.

Comments Received

Clarification was requested regarding the meaning of consistency between assumptions and between methods and assumptions.

ASB Response

The ASB concluded that the General Standards provided sufficient guidance in this respect, and no specific reference to consistency was needed in Part 5000.

Comments Received

Many submissions disagreed with the following wording from the notice of intent: "... the requirement for an insurance company to remain solvent is similar to a legislated requirement for a PPICP to remain fully funded."

ASB Response

This wording is not included in the exposure draft and did not impact its preparation.

5. Discount Rate Assumption

Comments Received

Several submissions mentioned that the Standards of Practice should permit the continuation of current practice, where the assumed discount rate is based on long-term expectations. One recommended that the Standards of Practice require that the discount rate be based on the current risk-free interest rate, regardless of the plan's investment policy.

ASB Response

The exposure draft does not mandate an interest rate assumption, but does identify items to consider in the setting of this assumption. When setting the best estimate assumption

for the expected rate of investment return, the actuary would take into account risk-free rates of return and any expected additional returns based on the plan's assets and investment policy.

To be consistent with the February 2010 revised exposure draft on the Practice-Specific Standards for Pension Plans, the ASB has included a reference to active management. In particular, the exposure draft provides that in establishing the assumption for the expected rate of investment income, the actuary would not assume there would be any additional returns achieved, net of investment expenses, from an active investment management strategy compared to a passive investment management strategy. This issue is being reviewed for the pension Standards of Practice, and will be considered further for the PPICP Standards of Practice.

Comments Received

The proposal in the notice of intent to provide for sensitivity testing on an immunized basis was criticized as being too impractical and not appropriate for a PPICP where most benefits are indexed and where there are other risks that cannot be immunized.

ASB Response

The immunized sensitivity test suggested in the notice of intent has been replaced with a sensitivity test based on a prescribed rate of return. As noted earlier, the exposure draft permits the disclosure of sensitivity testing results to PPICP management in a separate report.

6. Gain and Loss

Comments Received

There was agreement on the need for a gain and loss analysis and the related disclosures. Nevertheless, some submissions suggested the scope of the analysis should be limited to the benefits liabilities only, and not include a reconciliation of the surplus/deficit position given the actuary's limited role in some jurisdictions.

ASB Response

The exposure draft requires that a gain and loss analysis be conducted and the results disclosed. It also requires a reconciliation of the surplus/deficit position if in accordance with the terms of the engagement.

7. Reporting and Disclosure

Comments Received

There was general support for this section. It was noted, however, that standard wording would be appropriate for only part of the actuary's report, and flexibility in reporting would be needed, given the differences between plans.

ASB Response

The exposure draft requires a number of disclosures, and does contain some prescribed wording. The majority of the disclosure requirements describe what should be included in the actuary's report, and not the exact wording to be used.

8. Timing

Comments Received

Many submissions requested that any major changes with a significant impact on benefits liabilities be deferred to coincide with the adoption of IFRS 4 Phase II.

ASB Response

The exposure draft does not propose any significant changes related to specific accounting standards or the IFRS initiatives. It is highly likely that the standard will be reviewed and revised as appropriate when IFRS 4 Phase II is introduced.

YOUR FEEDBACK

Comments on this exposure draft are invited by August 15, 2010. Please send them, preferably in an electronic format, to Nicholas Bauer at nbauer@eckler.ca, with a copy to Chris Fievoli at Chris.Fievoli@actuaries.ca.

No specific forums for submitting comments are planned regarding this exposure draft other than the receipt of written comments at the above addresses. The notice of intent indicated, however, that such a forum would be arranged. Should feedback to the exposure draft indicate such a forum would be desirable, the ASB will arrange for one to be held.

Feedback is invited particularly on the following issues:

1. Do the proposed Standards of Practice succeed in narrowing the range of practice without being unduly restrictive?
2. Do you anticipate any difficulties in complying with the proposed Standards of Practice? For this purpose the need for additional work, for example for complying with the more detailed disclosure requirements, is not considered a difficulty.
3. Do you concur that the proposed Standards of Practice are unambiguous and reasonably reflects current best practice?

PROPOSED TIMELINE AND EARLY IMPLEMENTATION

As communicated in the notice of intent, the ASB hopes to adopt the final Standard by the end of 2010. The effective date of the new final Standard would be for calculation dates after January 1, 2011, except that paragraph 5410.08 would only apply to calculations dated as of December 31, 2012 or later, to enable practitioners to prepare for it.

Early implementation is expected to be permitted.

CCM, NB

1100 INTRODUCTION

1110 DEFINITIONS

- .01 Each term set over dotted underlining has the meaning given in this section and has its ordinary meaning otherwise (e.g., external user).
- .02 Accepted actuarial practice is the consensus of the actuarial profession on how work should be done. Unless the context requires otherwise, references to accepted actuarial practice refer to accepted actuarial practice for work in Canada. [*pratique actuarielle reconnue*]
- .03 Actuarial cost method is a method to allocate the present value of a plan's obligations to time periods, usually in the form of a service cost and an accrued liability. [*méthode d'évaluation actuarielle*]
- .04 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 contingent events. [*méthode de la valeur actuarielle*]
- .05 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*]
- .06 Appointed actuary of an entity is an actuary formally appointed by the entity to monitor the financial condition of that entity. [*actuaire désigné*]
- .07 Appropriate engagement is one which does not impair the actuary's ability to conform to the rules. [*mandat approprié*]
- .08 Benefits liabilities are the liabilities of a plan in respect of claims incurred on or before a calculation date. [*obligations liées aux prestations*]
- .09 Best estimate means without bias, neither conservative nor unconservative. [*meilleure estimation*]
- .10 Calculation date is the effective date of a calculation; e.g., the balance sheet date in the case of a valuation for financial statements. It usually differs from the report date. [*date de calcul*]
- .11 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*]
- .12 Claim adjustment expenses are internal and external expenses in connection with settlement of claims. [*frais de règlement des sinistres*]
- .13 Claim liabilities are the portion of policy liabilities in respect of claims incurred on or before the balance sheet date. [*passif des sinistres*]

- .14 Contingent event is an event which may or may not happen, or which may happen in more than one way or which may happen at different times. [*éventualité*]
- .15 Contribution is a contribution by a participating employer or a plan member to fund a benefits plan. [*cotisation*]
- .16 Definitive means permanent and final. [*décision définitive*]
- .17 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*]
- .18 Domain of actuarial practice is the measurement of the current financial implications of future contingent events. [*domaine de la pratique actuarielle*]
- .19 Early implementation means the implementation of new standards before their effective date. [*mise en œuvre anticipée*]
- .20 Earnings-related benefit is a benefit whose amount depends on the recipient's earnings. [*régime salaire de carrière*]
- .21 External user is a user who is not an internal user. [*utilisateur externe*]
- .22 External user report is a report whose users include an external user. [*rapport destiné à un utilisateur externe*]
- .23 Financial condition of an entity at a date is 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*]
- .24 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*]
- .25 To fund a plan is to dedicate assets to its future benefits and expenses. Similarly for "funded" and "funding". [*provisionner*]
- .26 Going concern valuation is a valuation which assumes that the entity to which the valuation applies continues indefinitely beyond the calculation date. [*évaluation en continuité*]
- .27 Indexed benefit is a benefit whose amount depends on the movement of an index like the Consumer Price Index. [*prestation indexée*]
- .28 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 government monopoly. [*assureur*]
- .29 Internal user is the actuary's client or employer. Internal user and external user are mutually exclusive. [*utilisateur interne*]
- .30 Internal user report is a report all of whose users are internal users. [*rapport destiné à un utilisateur interne*]

- .31 Margin for adverse deviations is the difference between the assumption for a calculation and the corresponding best estimate assumption. [*marge pour écarts défavorables*]
- .32 New standards means new standards, or amendment or rescission of existing standards. [*nouvelles normes*]
- .33 Periodic report is a report that is repeated at regular intervals. [*rapport périodique*]
- .34 Plan Administrator is the person or entity with overall responsibility for the operation of a benefit plan. [*administrateur d'un régime*]
- .35 Policy liabilities in an insurer's balance sheet are the liabilities at the balance sheet date on account of the insurer's policies, including commitments, which are in force at that date or which were in force before that date. [*passif des polices*]
- .36 Practice committee means the committee or committees, either standing or ad hoc, to which the Practice Council has assigned responsibility for the practice area which particular new standards affect. [*commission de pratique*]
- .37 Premium liabilities are the portion of policy liabilities which are not claim liabilities. [*passif des primes*]
- .38 Prescribed means prescribed by these standards. [*prescrit*]
- .39 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*]
- .40 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.~~The compulsory coverage, monopoly powers, and assured continuity of these plans require the selection of methods and assumptions which differ from those which are appropriate for a comparable benefits plan provided by the private sector or by an insurer. The Canada Pension Plan, the Quebec Pension Plan, and the pension provided by the Federal Old Age Security Act are excluded as their primary purpose is the provision of retirement income.~~ [*régime public d'assurance pour préjudices corporels*]
- .41 Recommendation means an italicized recommendation in these standards. Similarly for “recommend”. [*recommandation*]
- .42 Report is an actuary's oral or written communication to users about his or her work. Similarly for “to report”. [*rapport*]
- .43 Report date is the date on which the actuary completes the report on his or her work. It usually differs from the calculation date. [*date du rapport*]

- .44 Report pursuant to law is a report for which the law requires an actuary's opinion. [*rapport en vertu de la loi*]
- .45 Rule means a rule in the Institute's Rules of Professional Conduct. [*règle*]
- .46 Scenario is a set of consistent assumptions. [*scénario*]
- .47 Service cost is that portion of the present value of a plan's obligations which an actuarial cost method allocates to a time period, excluding any payment for that period in respect of unfunded accrued liability. [*cotisation d'exercice*]
- .48 Standard reporting language is standard language for an external user report. [*libellé du rapport type*]
- .49 Subsequent event is an event which occurs after a calculation date but before the corresponding report date. [*événement subséquent*]
- .50 Use means use by the actuary, usually in the context of use of another person's work. [*utilisation*]
- .51 User means an intended user of the actuary's work. [*utilisateur*]
- .52 Virtually definitive means to become definitive upon completion of one or more actions which are seen as formalities. [*pratiquement définitive*]
- .53 Work means the actuary's work within the domain of actuarial practice and usually includes
acquisition of knowledge of the circumstances of the case,
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*]

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5000—PUBLIC PERSONAL INJURY COMPENSATION PLANS

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5100 SCOPE

- .01 The standards in this part apply to an actuary's work on the valuation of benefits liabilities of a public personal injury compensation plan, including its benefits liabilities in respect of a self-insured employer, and to any other items required under the terms of an appropriate engagement for a public personal injury compensation plan, for the purpose of its financial statements and for the purpose of providing input into its funding arrangements.
- .02 The standards in this part do not apply to an actuary's work for an employer on the valuation of benefits liabilities and other related items in respect of its employees who are covered by a self-insured element of a public personal injury compensation plan, where such work is covered by the Practice-Specific Standards for Post-Employment Benefit Plans.

5200 EXTENSION OF SCOPE

- .01 The standards in this part may also provide useful guidance for other work of an actuary for a public personal injury compensation plan, such as work on the development of assessment rates, the costing of benefits or policy changes, or work on experience-rating programs.
- .02 The standards in this part may also provide useful guidance for the work of an actuary for an employer whose employees are covered by a self-insured element of a public personal injury compensation plan. For example, such work may relate to the valuation of the benefits liabilities for such employees for the purpose of the employer's financial statements or the funding of the benefits.
- .03 The standards in this part do not, however, provide useful guidance in the case of an entity merely because it is a monopoly, such as a monopoly of benefits that are optional or a government monopoly that is required to operate like a private sector entity.

5300 GENERAL**5310 CIRCUMSTANCES OF THE WORK**

- .01 *The actuary's work on the valuation of the benefits liabilities or other items for the purpose of the financial statement of a public personal injury compensation plan or for the purpose of providing input into its funding arrangements should take into account the circumstances of the work. [Effective Month XX, 20XX]*
- .02 The circumstances of the work would include
- the terms of the relevant statute,
 - the relevant accounting standards and policies, and
 - the terms of an appropriate engagement under which the work is being performed.
- .03 The terms of an appropriate engagement would define the role of the actuary and the purpose of the work. The work of the actuary may be limited to the valuation of the benefits liabilities, or the work may also include the provision of advice on the funded status or the funding of the public personal injury compensation plan, its financial position, its financial condition and any other actuarial item required under the terms of an appropriate engagement.
- .04 The terms of an appropriate engagement may specify applicable policies of the public personal injury compensation plan relevant to the work of the actuary. These policies may include a formal or informal funding policy, an accounting policy and an investment policy.
- .05 Significant terms of an appropriate engagement may stipulate one or more of
- the use of a specified asset value or method of asset valuation on the balance sheet date, and
 - depending on the circumstances of the work, the treatment of definitive amendments and other pending changes.
- .06 Objectives of funding specified by the terms of an appropriate engagement may include, but are not limited to, a specific funding target, the security of benefits, a principle of equity among various groups of employers or among generations, or a funding approach for occupational disease claims.

5320 DATA

- .01 *Where sufficient, reliable and relevant data are not available for the valuation of a specific benefit, the actuary should make appropriate assumptions or introduce appropriate methods to compensate for any perceived deficiencies in the data. [Effective Month XX, 2010]*
- .02 Sufficient, reliable and relevant data may not be available to the actuary in various circumstances, for example,
- the relevant statute may have been amended to provide a new or revised benefit,
 - an applicable policy of the public personal injury compensation plan may have been revised recently,
 - the public personal injury compensation plan's claim adjudication practices or administration practices may have changed recently,
 - a recent appeal decision may be expected to have a material effect on future benefit payments, or
 - economic conditions or health care practices in the relevant jurisdiction may have changed, which may be expected to have a material effect on benefits.
- .03 Where the data are not sufficient, not fully reliable or not sufficiently relevant to expected future experience for a specific benefit, the actuary may consider taking one or more of the following actions,
- introducing appropriate assumptions regarding missing, incomplete or unreliable data, and
 - adjusting data and historic claim settlement patterns for the purpose of the work, as appropriate, to remove any perceived distortions, such as the effect of historical inflation or one-time benefit changes.

5400 BENEFITS LIABILITIES**5410 METHODS**

- .01 *The actuary should value the benefits liabilities assuming that the public personal injury compensation plan continues indefinitely as a going concern entity.*
- .02 *The value of the benefits liabilities is the value, by the actuarial present value method, of cash flows after the calculation date with respect to all claims incurred before that date and not fully discharged as of that date, whether reported or not, and for calculation dates on and after December 31, 2012, the value, by the actuarial present value method, of cash flows after the calculation date with respect to workplace exposures that have occurred prior to that date. The workplace exposures should include those which may potentially lead to occupational disease claims, in accordance with the policy of the plan.*
- .03 *The cash flows after the calculation date on account of all claims incurred before that date should include all expenses expected to be incurred after the calculation date which are related to those claims, including relevant administration expenses.*
- .04 *The actuary's work should take into account the benefits, relevant policies and administration practices of the public personal injury compensation plan as of the calculation date, and should take into account the effect of any definitive amendment, unless the circumstances of the work require otherwise.*
- .05 *The benefits liabilities should include an amount in respect of benefits for employees of a self-insured employer, unless the risk retained by the public personal injury compensation plan in respect of such benefits is not material and the exclusion of such benefits is in accordance with the circumstances of the work.*
- .06 *When estimating the benefits liabilities, the actuary should consider all claims, whether reported or not, until the claims are fully discharged or closed, with no or minimal chance of re-opening. [Effective Month XX, 20XX]*

Occupational disease

- .07 *The actuary would value the benefits liabilities in respect of occupational disease claims, and would include the benefits liabilities for all occupational disease claims reported prior to the calculation date.*

- .08 For calculation dates on or after December 31, 2012, the actuary would also include in the benefits liabilities an appropriate allowance for all occupational disease claims expected to arise after the calculation date as a result of exposures incurred in the workplace prior to the calculation date in respect of occupational diseases with a long latency period that are recognized as such by the public personal injury compensation plan, by legislation, by regulation, or by appeal. For calculation dates preceding December 31, 2012, the actuary may include in the benefits liabilities an appropriate allowance for such potential occupational disease claims.
- .09 When reporting the benefits liabilities, the actuary would describe the treatment of potential occupational disease claims that had not been reported as of the calculation date and that relate to exposures incurred in the workplace prior to the calculation date.

Amendments and subsequent events

- .10 The actuary's valuation of the benefits liabilities would normally reflect all definitive amendments of which the actuary is aware on the calculation date, including those amendments with an effective date after the calculation date. Where the circumstances of the work require otherwise, the actuary may exclude the effect of a known definitive amendment, but the actuary would disclose the effect of such amendment. Other definitive amendments may be subsequent events to which subsection 1520 applies.

1520

Self-insured employers

- .11 Where the public personal injury compensation plan assumes little, if any, of the risk in respect of benefits for the employees of a self-insured employer, the actuary may exclude from the benefits liabilities the benefit obligations in respect of the employees for such employer. In such case, the actuary would consider the inclusion in the benefits liabilities of an appropriate amount to recognize the possibility of non-payment by the self-insured employers.

5420 ASSUMPTIONS

- .01 *The actuary should set assumptions that reflect the expectation that the public personal injury compensation plan will continue indefinitely as a going concern entity, but may make adjustment for short-term considerations, where appropriate.*
- .02 *Consistently with subsection 1740, the actuary should select either best estimate assumptions or best estimate assumptions modified to incorporate margins for adverse deviations to the extent, if any, required by law or by the circumstances of the work, and should justify the decisions made with respect to margins.*

1740

- .03 *Where a public personal injury compensation plan has an established practice of providing ad hoc increases to benefits, or a periodic update to rates or tables used in the administration of the plan, the actuary should recognize such established practice when valuing the benefits liabilities by assuming the continuation of such practice, unless a definitive policy decision to discontinue such established practice has been taken by the plan. [Effective Month XX, 20XX]*

5430 ECONOMIC ASSUMPTIONS

- .01 The needed economic assumptions include the expected rate of investment income, the expected investment expenses and, depending on the benefit being valued, one or more of
- expected rate of general inflation,
 - expected rate of health care cost inflation,
 - expected rate of wage inflation, and
 - if different, expected earnings increase specific to wage loss benefits.
- .02 The economic assumptions that are needed would depend on the nature of the benefits that are being valued, and may vary by year.
- .03 Pursuant to paragraph 1720.01, the actuary would develop and disclose separate nominal assumptions, but may prefer to complete the calculations using rates that are net of inflation, net of expenses or net of some other factor. Such calculations are, however, approximations to which subsection 1510 applies.
- .04 When determining the best estimate assumption for the expected rate of investment income, the actuary would take into account the expected pattern of risk-free rates of return, the expected additional investment return on the assets of the public personal injury compensation plan at the calculation date (if any) and the expected investment policy after that date. The expected additional investment return would depend on one or more of
- additional returns over risk-free rates expected to be earned on non-risk-free fixed income assets of the type and quality owned on the reporting date and expected to be acquired pursuant to the investment policy of the plan,
 - additional returns over risk-free interest rates expected to be earned on other types of investments, including publicly traded common or preferred equities, private placements, real estate and private equity, and
 - projected composition of the investment portfolio in future years.

1720.01
1510

In establishing the assumption for the expected rate of investment income, the actuary would assume that there would be no additional returns achieved, net of investment expenses, from an active investment management strategy compared to a passive investment management strategy.

- .05 The expected investment expenses would depend on the investment policy of the plan and the types of investments held and projected to be held in future.
- .06 For the valuation of any benefits or other elements that are not funded, the actuary may adopt a discount rate that is different from the assumption for the rate of investment income on invested assets.

5440 NON-ECONOMIC ASSUMPTIONS

- .01 When setting non-economic assumptions, the actuary would reflect all material contingencies.
- .02 The actuary would recognize the effect of varying experience and settlement patterns that result from definitive or virtually definitive revisions to the plan's benefits or claims practices, or from changes in economic conditions, as appropriate, and would consider the relevance of historical claims experience.
- .03 The actuary would include an allowance in the assumptions made in respect of wage loss, disability and pension benefits for all applicable material contingencies, including the possibility of recoveries, relapses, mortality improvements, deteriorating benefits and the intermittence of income replacement and rehabilitation benefits throughout the lifetime of claimants. Further, the actuary would consider the potential effect on future benefit payments of factors such as changing economic conditions, employment levels, the claimant's occupation and industry and seasonal variations.

5450 MARGINS FOR ADVERSE DEVIATIONS

- .01 *The actuary should not include a margin for adverse deviations when the circumstances of the work require a best estimate calculation or an unbiased calculation.*
- .02 *The actuary should include margins for adverse deviations when the circumstances of the work require such margins. A non-zero margin should be sufficient, without being excessive, and should have the effect of increasing the benefits liabilities or reducing those offsetting assets, the computation of which falls within the scope of the work of the actuary. In addition, the provision resulting from the application of all margins for adverse deviations should be appropriate in the aggregate.*

- .03 *If the actuary is required by legislation, regulation, accounting standards, the accounting policy or the funding policy of the plan to use a margin for adverse deviations that is outside the range that the actuary considers appropriate, the actuary may use such imposed assumption, but the actuary should disclose that the margin is outside of the appropriate range and disclose the reason for using such margin. [Effective Month XX, 20XX]*
- .04 Examples of situations where the circumstances of the work might require an unbiased calculation include
- legislation governing the plan may require an unbiased calculation,
 - the relevant accounting standards or the accounting policy of the public personal injury compensation plan may require the use of best estimate assumptions, or
 - the plan's funding policy may recognize the monopoly nature of the plan and place a high priority on equity among generations, employers and other groups, hence require the use of best estimate assumptions.
- .05 Examples of situations where the circumstances of the work might require the inclusion of a margin for adverse deviations include
- where the relevant accounting standards or the accounting policy of the plan, or its funding policy, require inclusion of a margin for adverse deviations, or
 - where the level of uncertainty or volatility may be high, and not considered to be sufficiently mitigated by the ability to increase future assessments.
- .06 Where the actuary includes a margin for adverse deviations, the actuary would justify the rationale for inclusion of the margin and for the selection of the specific amount of the margin. The rationale may include considerations such as
- funding policy or accounting policy of the public personal injury compensation plan,
 - relative importance placed on the balancing of competing interests compared to the achievement of full funding,
 - level of uncertainty inherent in the assumptions,
 - level of reliability or credibility of the data or historical information upon which the assumptions are based,
 - asset/liability mismatch risk,
 - propensity of ad hoc changes made to the plan conditions, and
 - legislative or other restrictions on the ability to mitigate past losses.

5460 SENSITIVITY TESTING

- .01 *The actuary should perform sensitivity testing of adverse scenarios, to illustrate and aid the understanding of the effect of adverse changes to assumptions.*
- .02 *The adverse scenarios that the actuary tests should include at least*
a decrease of 100 basis points in the assumed rate of investment earnings in all future years,
an increase of 100 basis points in the assumed general rate of inflation,
a discount rate that is equal to the expected rate of return earned on a hypothetical fixed income portfolio, where such rate is promulgated from time to time by the Actuarial Standards Board. [Effective Month XX, 20XX]
- .03 *The actuary would consider testing other scenarios, depending on the plausible material risks to which the plan may be exposed.*
- .04 *The actuary may also perform sensitivity testing of favourable scenarios.*
- .05 *When selecting the assumptions and scenarios for sensitivity testing, the actuary would use judgment, would consider the circumstances of the work, and would select those assumptions that have a material impact on the benefits liabilities. The actuary may consider the use of testing of integrated sensitivity scenarios, for example, the effect of a deep and prolonged recession.*

5500 OTHER RELATED ITEMS

- .01 *The actuary should compute, separately from the benefits liabilities, the present value on the reporting date of any future assessments that have been specifically earmarked to amortize a current deficit and any future scheduled reductions to assessments that have been specifically identified to reduce a current surplus, in accordance with the circumstances of the work. [Effective Month XX, 20XX]*
- .02 Where the public personal injury compensation plan has specifically earmarked a defined portion of specified future assessments to amortize a current deficit, the actuary would estimate the actuarial present value of such earmarked assessments, and disclose such amount separately from the benefits liabilities and assets of the plan, provided that such disclosure is in accordance with the terms of the engagement.
- .03 Where the public personal injury compensation plan has specifically identified reductions to future assessments to reduce a current surplus, the actuary would estimate the actuarial present value of such reductions to future assessments, and disclose such amount separately from the benefits liabilities and assets of the plan, provided that such disclosure is in accordance with the terms of the engagement.

5600 GAIN AND LOSS ANALYSIS

- .01 *The actuary should conduct a gain and loss analysis, including a comparison of actual and expected experience for the period between the prior calculation date and the current calculation date.*
- .02 *The actuary should also conduct a reconciliation of the surplus or deficit position of the plan, provided that such reconciliation is in accordance with the terms of the engagement. [Effective Month XX, 20XX]*
- .03 The actuary's analysis would include all material gains and losses. At a minimum, the actuary's gain and loss analysis would consider the impact of any significant changes to the assumptions or methods used, any significant changes to the benefits or policies of the plan, gains or losses due to investment returns on the plan's assets, legislative changes, and any other areas where the difference between actual and expected experience is significant.
- .04 The actuary would report a change in assumption if the current assumption differs nominally from the corresponding prior assumption, unless the change in the nominal amount results from the application of the same calculation method. For example, if certain rates used in the valuation are based on historical claims experience and calculated using the same averaging formula, the difference in assumed rates between the calculation date and the prior calculation date would not normally be considered as a change in assumptions. Nevertheless, the actuary may choose to disclose the effect of the updated rate assumption on the valuation results.

5700 REPORTING

- .01 For work pursuant to this part, the actuary should prepare a report that
- states the calculation date and the prior calculation date,*
 - identifies the legislation or other authority under which the work is completed,*
 - describes any significant terms of the appropriate engagement that are material to the actuary's work, including the purpose of the work,*
 - describes the sources of data, benefit provisions and policies used in the work, and any limitations thereon,*
 - summarizes the data used for the valuation, the data tests conducted to assess the accuracy and completeness of the data used in the work, and issues regarding insufficient or unreliable data,*
 - describes the plan's benefits, significant policies and relevant administration practices, including the identification of any amendments made since the prior calculation date, and the effect of such amendment on the benefits liabilities,*
 - describes any pending definitive or virtually definitive amendment, policy change or change to administration practice, confirms whether or not such change has been reflected in the benefits liabilities, and identifies the effect of such change on the benefits liabilities,*
 - identifies any significant changes to the relevant statute, strategic direction, management policy or appeal processes since the prior calculation date and the consequent effect on the benefits liabilities,*
 - summarizes the benefits liabilities,*
 - describes the method and the assumptions used to determine the benefits liabilities,*
 - provides the rationale for each assumption that is material to the actuary's work,*
 - states that there is no provision for adverse deviations, where that is the case,*

describes the margins for adverse deviations included with respect to each assumption where that is the case, discloses any imposed margins that the actuary has used in accordance with paragraph 5450.03 that in the opinion of the actuary are outside of the appropriate range, the rationale for each margin, and the aggregate provision for adverse deviations included in the benefits liabilities,

describes any significant changes to the assumptions or methods used since the prior calculation date, and the rationale for those changes,

describes the treatment of liabilities for self-insured employers,

discloses subsequent events of which the actuary is aware, whether or not the events are taken into account in the work, or, if there are no significant events of which the actuary is aware, include a statement to that effect,

describes and quantifies the gains and losses between the prior calculation date and the current calculation date, and provides an analysis and explanation of the significant gain and loss items, and

describes the treatment of the liabilities for occupational disease claims, and states either that the amount of the benefits liabilities includes an appropriate allowance for potential occupational disease claims that are expected to arise after the calculation date as a result of exposures in the workplace prior to the calculation date or, if such is the case for calculation dates preceding December 31, 2012, that the amount of the benefits liabilities excludes such an allowance.

.02 Depending on the terms of the engagement, the report should

describe the sources of information on the plan's assets,

describe the plan's assets, including their market value, the methods and assumptions used to value the assets and a summary of the assets by major category,

report the funded status at the calculation date, and

state the actuarial present value of any future assessments earmarked to amortize a current deficit or of any reductions in future assessments intended to reduce a current surplus.

.03 If the report does not include the results of the sensitivity testing that was completed, the actuary should prepare a separate report for the management of the public personal injury compensation plan that does include such sensitivity testing results.

- .04 *Unless such is not the case, the report should provide the following five statements of opinion, all in the same section of the report and in the following order*
- a statement regarding data, which would usually be, “In my opinion, the data on which the valuation is based are sufficient and reliable for the purpose of the valuation.”,*
 - a statement regarding assumptions, which would usually be, “In my opinion, the assumptions are appropriate for the purpose of the valuation.”,*
 - a statement regarding methods, which would usually be, “In my opinion, the methods employed in the valuation are appropriate for the purpose of the valuation.”,*
 - a statement regarding appropriateness, which would usually be “In my opinion the amount of the benefits liabilities makes appropriate provision for all personal injury compensation obligations and the financial statements fairly present the results of the valuation.”, and*
 - a statement regarding conformation, which should be, “This report has been prepared, and my opinions given, in accordance with accepted actuarial practice in Canada.”.*
- .05 *The statements of opinion presented in paragraph 5700.04 should be qualified and the wording modified to explain the reasons for, and the extent to which, the actuary is unable to provide an unqualified opinion. [Effective Month XX, 20XX]* 5700.04
- .06 *The report would be sufficiently detailed to enable another actuary to examine the reasonableness of the valuation.*