Actuarial Standards Board
Conseil des normes actuarielles

Revised Exposure Draft

Revised Exposure Draft for Standards of Practice – Ratemaking: Property and Casualty Insurance (Section 2600)

Actuarial Standards Board

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Actuarial Standards Board
Conseil des normes actuarielles

Memorandum

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

From: A. David Pelletier, Chair
Actuarial Standards Board

Shams Munir, Chair
Committee on Property & Casualty Insurance Pricing (ASB Designated Group)

Date: September 21, 2011

Subject: **Revised Exposure Draft for Standards of Practice – Ratemaking: Property and Casualty Insurance (Section 2600)**

Comment deadline: **October 31, 2011**

INTRODUCTION

The revised exposure draft for Standards of Practice – Ratemaking: Property and Casualty Insurance (section 2600) was approved for distribution by the Actuarial Standards Board (ASB) on September 20, 2011.

These Standards of Practice are being re-exposed for comment because a number of changes were made to the initial exposure draft in response to the comments received. The changes include, but are not limited to, the following:

the Standards of Practice were modified radically to shift and focus the emphasis to standards based on principles,

the Standards of Practice were modified to eliminate overlaps with the General Standards of Practice,

the definitions to be added to the General Standards of Practice were modified for clarity and consistency with the scope and remainder of the Standards of Practice,

the subsections on Scope were modified for clarity and consistency with the definitions and the remainder of the Standards of Practice,

a section on the time value of money was added, and

the other subsections were also modified for consistency across these themes.

BACKGROUND

Until the development of this section, there were no Standards of Practice that specifically addressed property and casualty insurance ratemaking. A notice of intent on this topic was issued on June 25, 2008. A Designated Group consisting of Blair Manktelow (Chair), Shams Munir (Vice-chair, later Chair), Hany Rifai, Ron Miller, Mylène Labelle and Jean-François Larochelle was assembled on June 7, 2006. Betty-Jo Walke and Ted Zubulake joined the group in 2006 and 2008, respectively. An exposure draft was published on September 21, 2009. Several comments were received from the membership during October and November 2009. Various members subsequently left the Designated Group in October 2010 and as of December 2010 the group consisted of Shams Munir (Chair), Erika Schurr (Vice-chair), Ron Miller and Ted Zubulake. Richard Gauthier, also an ASB member, joined the group in February 2011.

In addition to comments received from the membership on the first exposure draft, the Designated Group also had informal discussions with various members prior to the date of this memo.

The Designated Group gave careful consideration to each comment and modified the draft Standards of Practice as it deemed appropriate.

The Designated Group realised that the first exposure draft was fairly detailed with extensive lists. Consideration was given to the burden and potential for legal liability to the profession arising from the level of detail in the first exposure draft. Consideration was also given to the consistency with a less detailed version, similar to the current Standards of Practice's section 2200, Insurance Contract Valuation: Property and Casualty Insurance. After considerable discussion, the Designated Group came to the position that

- the Ratemaking Standards should be mainly "principles-based",
- explanation of actuarial concepts or techniques are most appropriate for specific Educational Notes where further guidance is felt to be needed, and
- items covered under either Definitions (subsection 1110) or within other sections of the General Standards of Practice should not be repeated in these Ratemaking Standards.

Consistent with this position, there is significant change in the substance and amount of guidance compared to the original exposure draft.

The member comments and Designated Group's responses are attached in the appendix and are summarized by major section below.

SUMMARY OF COMMENTS RECEIVED ON AND PROPOSED CHANGES TO THE FIRST EXPOSURE DRAFT

1. Rationale for the Standards of Practice

Member Comments

Although pricing is essential to a company's strategy for growth and profitability, Standards of Practice for ratemaking would serve no purpose. As well, the content of the exposure draft is better suited to an educational note, as opposed to Standards of Practice.

In Québec, there is no requirement to submit rates, so subsection 2630 would not be necessary.

Designated Group Response

The notice of intent addressed the rationale for developing Standards of Practice for ratemaking. It should be noted that the Standards of Practice specifically cover the determination of rate level needs, not the determination of the rates (premiums) that will ultimately be charged. It is recognized that the latter may be outside the control of the actuary. To address various concerns, including this concern relating to jurisdictions such as Québec, the reporting language was modified.

2. Indicated Rates

Member Comments

The focus on indicated rates is problematic, since new techniques are being used in non-regulated markets that do not require the calculation of indicated rates. The range of practice would be unreasonably narrowed by the imposition of a requirement to calculate indicated rates. Actuaries are called on to opine on other aspects of rate selection, and the Standards of Practice run the risk of reducing the actuarial role to a technical one. As well, the definition and calculation of indicated rates, such as in subsection 2620, is too restrictive. If actuaries from different entities calculate different indicated rates, this could potentially create disciplinary issues.

Designated Group Response

The scope and definitions of the Standards of Practice were revised to make it clearer that the Standards of Practice apply for the derivation of indicated rates, without restricting the role of the actuary in other functions. The derivation of indicated rates requires some judgment on the part of the actuary, so it is expected that different indicated rates may be derived.

3. Provincial Rate Agencies

Member Comments

The Standards of Practice should address issues that arise with some of the provincial regulatory authorities (such as minimum capital requirements, maximum expense ratios, limits on ROE, and restrictions on trends).

Designated Group Response

The General Standards of Practice allow for deviations to accommodate regulatory restrictions (section 1300). If the actuary believes these are not reasonable, he/she may comment on this in accordance with the General Standards of Practice (section 1300).

4. Mandate

Member Comments

The reference to “terms of the engagement” implies an external consulting arrangement, as opposed to an actuary employed by the company in question.

Designated Group Response

The phrase was changed to “terms of an appropriate engagement,” where “appropriate engagement” is defined in the General Standards of Practice. Hence not solely an external consulting arrangement is implied.

5. Level of Detail

Member Comments

The proposed Standards of Practice are too prescriptive, do not reflect the wide range of current practice, would place undue burdens on actuaries working in the area of pricing in Canada, and have significant potential for legal liability. The Standards of Practice should be more principles-based and the bulleted lists should be in Educational Notes.

Designated Group Response

The second exposure draft is consistent with this position. There is a significant change in the substance and amount of guidance from the original exposure draft. The changes are intended to clarify and shift the emphasis to principles.

6. Lack of Consistency

Member Comments

The P&C Valuation Standards would not necessarily apply when conducting a ratemaking analysis. Hence, discussion on claim development and related considerations is appropriate for the Ratemaking Standards. However, the wording on claim development and other considerations in the Ratemaking Standards is not consistent with the related wording in the P&C Valuation Standards. Also, the description of P&C insurance in 2610.01 differs from that in paragraph 2110.02.1.

Designated Group Response

The Standards of Practice should be principles-based and as such should not include details about the claim development process or about the other ratemaking considerations identified in the standards, which are more appropriate for Educational Notes. Paragraphs 2220.02 to 2220.05 of the P&C Valuation Standards to which reference is made are essentially definitions of terms. Paragraph 2620.06 differs from 2220.07 because 2620.06 is intended to apply to ratemaking and, as such, includes additional ratemaking considerations.

The Designated Group is aware of the differences in the definition of P&C insurance. The Designated Group believes it has improved upon the current definition and this exposure includes the necessary modifications and relocation of definition of “Property and Casualty Insurance” to the general definitions in subsection 1110.

7. Comments on Specific Sections

Several comments were received on the wording within specific sections of the Standards of Practice. The Designated Group considered all comments and made adjustments to the wording as warranted.

COMMENTS ON THE REVISED EXPOSURE DRAFT

The Actuarial Standards Board (ASB) is soliciting comments on the changes from the original exposure draft from members of the CIA and from other stakeholders.

Comments should be directed to Shams Munir, at shams.munir@ca.ey.com, with a copy to Chris Fievoli, CIA resident actuary, at chris.fievoli@actuaries.ca, **by October 31, 2011**. No specific fora for expressing comments, other than through submission of written comments, are planned regarding this revised exposure draft.

DUE PROCESS

The Actuarial Standards Board's Policy on Due Process for the Adoption of Standards of Practice was followed in the development of the revised exposure draft.

TIMELINE AND EFFECTIVE DATE

The Actuarial Standards Board hopes to make final decisions regarding the revised Standards of Practice in November, 2011 or December, 2011, with a target effective date of April 1, 2012.

EARLY IMPLEMENTATION

The recommended changes do not introduce any conflicts with existing Standards of Practice. Therefore, it is expected that early implementation of the revised Standards of Practice will be permitted.

ADP, SM

APPENDIX

SUMMARY OF COMMENTS RECEIVED AND RESPONSES ON THE EXPOSURE DRAFT – RATEMAKING: PROPERTY AND CASUALTY INSURANCE – SECTION 2600

This appendix summarizes comments received on the Exposure Draft on Standards of Practice for Property and Casualty Insurance Ratemaking, which was released on September 21, 2009.

A total of 11 responses were received. Ten were from members, with one signed by two members and a second signed by seven members. The eleventh was from the Committee on Property and Casualty Insurance Financial Reporting (PCFRC).

Comments are summarized below by major theme.

Rationale for Standards of Practice

Some members questioned the need for Standards of Practice to cover ratemaking, for the following reasons.

Member Comments

The General Standards of Practice provide sufficient guidance; only Educational Notes are needed. The opinion of the actuary on premium adequacy in the Appointed Actuary's report, along with the General Standards of Practice, are sufficient. Only reserving and DCAT should require rules of conduct, due to the legal nature of the work. This should not apply to pricing.

Designated Group Response

For reasons described in the notice of intent that was published on June 25, 2008, the Actuarial Standards Board (ASB) believes that it is appropriate to have Standards of Practice specific to ratemaking and has directed the Designated Group to develop Standards of Practice. There may be a need for additional Educational Notes, but this is the responsibility of the Practice Council and it has been notified.

Member Comments

The wording of the Standards of Practice and the level of detail are more appropriate for Educational Notes, since they simply build on elements currently in the General Standards of Practice.

Designated Group Response

Significant modifications were made. The Designated Group believes the revised wording is appropriate for these Standards of Practice.

Member Comments

Pricing is at the heart of a company's strategy for growth and profitability, so it is extremely difficult to set Standards of Practice for it. There is no law that requires actuaries to establish rates, so a non-Fellow who sets rates would not be bound by the Standards of Practice. This would create a double standard.

Designated Group Response

The Designated Group distinguishes between the determination of rate level needs (rate indications) and the determination of rates to be charged (pricing). The Standards of Practice apply to developing rate indications, not to pricing. The Designated Group assumes that the reference to non-Fellow is to be interpreted as a non-actuary. As is the case with all CIA Standards of Practice, a non-actuary is not bound by them. Hence, if a non-actuary derives a rate indication, he/she would not be subject to these Standards of Practice.

Member Comments

In Québec, there is no requirement to submit rates to a regulatory body, so the Standards of Practice would not apply. There is no audience for the reports detailed in subsection 2630.

Designated Group Response

The Standards of Practice would apply to all members that derive rate indications, irrespective of any requirement to report. Subsection 2630 has been modified to make clear the applicability of the Standards of Practice for reporting, if required. Otherwise, the reporting language is not essential or mandated.

Member Comments

The proposed Standards of Practice will do little to narrow the range of results.

Designated Group Response

Since the derivation of rate indications requires the application of judgment (as do many aspects of actuarial work), actuaries following the Standards of Practice and considering the same data and information may very well derive different rate indications.

Indicated Rates

Member Comments

Concern was expressed over the focus on indicated rates in the exposure draft. The approach in the exposure draft appears to be based on the requirements to prepare a rate filing in regulated markets. New techniques are being used in non-regulated markets which do not require the calculation of indicated rates. This requirement would be viewed by some as detrimental or outdated, and a broader perspective should be considered. The proposed Standards of Practice considerably restrict the range of practice by imposing a very rigid definition of an indicated rate. The difference between an “indicated rate” and the “selected rate” could be construed as not being accepted actuarial practice. Imposing Standards of Practice on this part of the ratemaking process alone could discredit the other portions which are not covered. Subsection 2610 implies that the selection of rates is not the responsibility of the actuary. Actuaries are often called on to opine on other aspects of the rate selection, and the Standards of Practice may reduce the role of the actuary to that of a technical function.

Designated Group Response

The Designated Group has modified subsection 2610 to clarify the scope of the Standards of Practice. The intent of the Standards of Practice is not to restrict the actuary's role, but to establish Standards of Practice for an important role of the actuary, i.e., the derivation of indicated rates.

Member Comments

The definition of indicated rates is too restrictive, as it is required to be a present value of cash flows. For several lines of business, the concept of the time value of money is not a material consideration. Compliance with this is implied by paragraph 1120.02 and subsection 2620.

Paragraph 2620.01 reads that "*For an insurance coverage to be provided over a specified period of time, the actuary should derive an indicated rate such that* . . ." According to this excerpt and the definition of indicated rate, we understand that any premium charged must have been determined according to the text of the exposure draft. We consider that to be generally too restrictive and sometimes even impractical.

Designated Group Response

The Designated Group believes the revised definition is appropriate. Materiality is covered in the General Standards of Practice. Paragraph 2620.01 has been modified, but the intent has not changed. The Standards of Practice deal with the indicated rate and not the rate to be charged.

Member Comments

If actuaries from different entities produce indicated rates that are different, then does that have any disciplinary implications?

Designated Group Response

Since the derivation of rate indications require the application of judgment (as do many aspects of actuarial work), actuaries following the Standards of Practice and considering the same information may very well derive different rate level indications. Therefore, differences among actuaries would not necessarily have disciplinary implications.

Provincial Rate Agency Issues

Member Comments

The Standards of Practice should address a number of issues currently seen with some of the provincial rate approval organizations. These include additional minimum capital requirements, imposition of maximum expense ratios, limits on ROE, and restrictions on trends. The Standards of Practice should either allow for these restrictions or compel the agencies to remove restrictions that are not in line with the Standards of Practice.

Designated Group Response

Section 1300 of the General Standards of Practice allows deviations to accommodate regulatory restrictions. If the actuary is of the opinion that a particular regulatory guideline is not reasonable in a given situation, then he/she may comment on this in accordance with the General Standards of Practice.

Further, in a situation where a regulator has a guideline, but not a mandated assumption, under section 1600 of the General Standards of Practice, an actuary may use another person's work. If the actuary uses but does not take responsibility for the other person's work, then he/she would so report.

Scope

Member Comments

The scope is limited to insurance. Self-insured entities may also rely on the work of an actuary, and the Standards of Practice could be interpreted not to apply in that case. The Designated Group should consider whether this represents a loophole.

Designated Group Response

Subsection 2610 has been modified to address this and to clarify the scope.

Member Comments

We suggest the following addition as an "Extension of Scope" section:

"The Standards in section 2600 also apply to ratemaking analysis conducted for quasi-insurers if the intent is that such analyses be in accordance with generally accepted actuarial practice. The actuary would modify the Standards to take account of any substantive difference between that quasi-insurer and an insurer; for example, the quasi-insurer's liabilities may be permitted to be less than fully funded, which may affect the ratemaking analysis. That report would describe the modifications to the Standards and their implications.

"The Standards in section 2600 may also provide useful guidance for an actuary's analysis on prospective funding requirements for an enterprise which is not an insurer but whose operations include benefits which an insurer may provide."

Designated Group Response

The Designated Group believes that the Standards of Practice should be mandatory (except, of course, in those rare instances where to follow the Standards of Practice would be illegal or inappropriate to the specific circumstances) for actuaries deriving indicated rates for quasi insurers, and that the Ratemaking Standards of Practice should apply to an actuary's work whether it is for an insurer or a quasi insurer.

Paragraphs 2610.01, 2610.03 and 2610.05 of the proposed Standards of Practice cover elements raised in these comments.

Mandate

Member Comments

The references to "terms of the engagement" imply an external consulting actuary arrangement, as opposed to an actuary employed by the company in question. The Standards of Practice should remain neutral in this aspect.

Designated Group Response

The revised expression "appropriate engagement" is a defined term. The Standards of Practice on ratemaking in section 2600 are not intended to be restricted to an external consulting arrangement and would apply equally to any actuary, including those employed by an insurance company.

Comments on Specific Sections

Definitions

Member Comments

Related experience — I'm not sure why the definition for related experience doesn't include "exposures" in the listed elements, as is done for subject experience.

Designated Group Response

The definition of "related experience" has been modified.

Member Comments

Subject experience — as presently worded, anything not included as subject experience would by definition not be relevant to the coverage under consideration, which begs the question how any related experience could still be relevant. Perhaps the addition of words like "primary" and "secondary" to this and the preceding definition would fix this.

Designated Group Response

The definition of "subject experience" has been modified.

Member Comments

Trending — I think adding "consistent with estimating an indicated rate" at the end of this definition would clarify that "anticipated" as used here means "best estimate".

Designated Group Response

The definition of "trending" was replaced with a definition of "trend".

2610 (General)

Member Comments

It is not clear under which circumstances the Standards of Practice will need to apply (i.e., every pricing exercise, every time a differential is reviewed, on a non-significant guarantee or endorsement).

Designated Group Response

Subsection 2610 has been modified to clarify the scope. The Standards of Practice apply to the derivation of all indicated rates.

The Designated Group distinguishes between the derivation of an indicated rate (whether it is for an insurance coverage or an endorsement) and the derivation of a rate differential. Further, the Designated Group distinguishes between the derivation of an indicated rate based on analysis of subject or relevant experience and the pure application of professional judgment without any analysis of experience. The Standards of Practice apply whenever an actuary is deriving an indicated rate for an insurance coverage or endorsement that involves the analysis of experience. If, due to data limitations, the actuary is unable to apply considerations set forth in the Standards of Practice, then the actuary would not be viewed as deriving an indicated rate and the Standards of Practice would not apply.

While the Standards of Practice may provide useful guidance for other purposes, such as the derivation of a rate differential without the derivation of any indicated rates, the Standards of Practice do not apply in such cases. The Standards of Practice are restricted to the derivation of an indicated rate.

Paragraph 2610.04

Member Comments

While the "selection of rates" is not within the scope of this set of Standards of Practice, some conceptual difficulties may arise. In the example of "rates (or proposed rates if subject to regulatory approval)", the question could arise as to whether two materially different rates both meet actuarial Standards of Practice. Presumably, both the "rate regulator" and the "rate filer" would be subject to the same set of Standards of Practice, yet perhaps deriving different answers dependent on different sets of assumptions. In the context where the "selected rate" is arrived at as a result of rate regulation and the regulator's indicators, the selected rate is also the indicated rate, governed by the Standards of Practice. Would the promulgation of the Standards of Practice change the perspectives and interactions in the future (i.e., between "rate regulator" and "rate filer")? Also applies to 2620.14.

Designated Group Response

Actuaries deriving an indicated rate, whether for a regulator or an insurance company, would be subject to the Standards of Practice. However, as noted earlier, due to the application of judgment the existence of these Standards of Practice on ratemaking in section 2600 will not mean that all actuaries will conclude with the same indicated rate.

Paragraph 2610.05

Member Comments

"Ratemaking is generally prospective because the indicated rate is usually developed prior to the transfer of risk." It is unclear to me why this statement is there. Does this mean that the Standards of Practice do not apply to retro-rating plans like certain reinsurance contracts? If it does, then I'm not sure that the statement adds anything to the Standards of Practice.

Designated Group Response

This statement was removed from the Standards of Practice.

Paragraph 2610.06

Member Comments

Do we need to reference "revenues" as well as "costs" here (e.g., premium finance fees)? The clause "so that the insurance system is financially sound" seems too vague to me, and as a result doesn't add much. Paragraph .06 states that an indicated rate provides for all costs so that the insurance system is financially sound. In cases where the "expense assumptions" may be "specified under the terms of the engagement", to the extent that the expense assumptions specified are not in accordance with realistic expectations, the indicated rate could not be expected to provide for a sound insurance system. The same consideration could apply in the context of "cost of capital". In a sense, the evaluation of the soundness of an indicated rate (and its meeting of Standards of Practice), as far as providing "for all costs so that the insurance system is financially sound", would have to make allowance for such "specified assumptions", which perhaps in some contexts cannot be tested easily for reasonableness. This is, however, what I understand to be one of the contexts of application for the "modified reporting statements" (paragraph 2630.03).

Designated Group Response

These statements were removed from the Standards of Practice.

Paragraph 2610.07

Member Comments

Some conceptual difficulties may arise when actuaries provide rate indicators in situations where the group of risks for which the indicator is provided includes risk segments that are known not to be similar. For example, this may be the case in situations where the usage of a rating variable is not allowed by rate regulation. So the concept of individual "indicated rate . . . for each individual in the class", and its actuarial merit, takes a slightly different flavour in this context.

Designated Group Response

These statements were removed from the Standards of Practice.

Paragraph 2620.02

Member Comments

I'm wondering if some discussion is needed about expectations of the actuary with respect to taking responsibility for the sufficiency and reliability of data (1530), in the particular context of P&C insurance ratemaking. For example, will modified standard reporting language to reflect a reservation with respect to data be needed if GISA's industry data is used, given today's normal level of disclosure from them about data quality and controls? Also applies to paragraph 2620.03.

Designated Group Response

The Designated Group takes the view that a change to the standard reporting language is not necessary on this account at this time given the existence of the General Standards of Practice, particularly subsections 1530 and 1610. The actuary could consider including a reservation regarding the Automobile Statistical Plan data either within the body of a report or comment within an opinion paragraph as per modified subsection 2630.

Paragraph 2620.05

Member Comments

I suggest changing this to read, "The changing nature of such factors would be reflected in the indicated rate, to match the insurance coverage for the period for which the indicated rate is being derived."

Designated Group Response

Subsection 2620 has been modified to address this concern. The Designated Group further believes that technical elements such as matching the coverage period are part of appropriate calculations covered under General Standards of Practice and are not appropriate in these Standards of Practice.

Paragraph 2620.06

Member Comments

I suggest using “case estimate” instead of “case reserve” here, to incorporate the defined term. Also, the second time “insurer” appears, it isn’t underlined.

Designated Group Response

To address this concern “case estimate” has been used.

Paragraph 2620.07

Member Comments

I suggest changing this to read “. . . degree to which reported claim costs are subject to development over time . . .” to incorporate the defined term.

Designated Group Response

Subsection 2620 was modified such that this is no longer applicable.

Credibility (general)

Member Comments

For credibility, we suggest wording that is more consistent with U.S. credibility standards:

1. Credibility is a measure of the predictive value in a given application that the actuary attaches to a particular body of data (“predictive” is used here in the statistical sense and not in the sense of predicting the future).
2. Full credibility is the level at which the subject experience is assigned full predictive value based on a selected confidence interval.
3. The purpose of credibility procedures is to blend information from subject experience with information from one or more sets of related experience when the subject experience does not have full credibility in order to improve the estimate of expected values, or to determine when the subject experience should have full credibility and the blending is unnecessary.
4. Credibility procedures should be used in ratemaking and may be used for other purposes.
5. In applying a credibility procedure, the actuary would select

    the basis for measuring credibility,

    the full credibility standard (if applicable),

    the related experience against which the subject experience is weighted, and the respective credibility weights to be assigned to the subject experience and to the related experience.

6. The actuary would be familiar with and consider various methods of determining credibility. The models selected may be different for different applications. The selection process may involve testing the tentatively selected model and possibly revising the model.

7. The actuary would recognize those instances where it may not be cost-effective to perform this selection process. Additional calculations may be made to satisfy applicable regulations and statutes. The actuary would select credibility procedures that do the following:

    produce results that are reasonable in the professional judgment of the actuary,

    do not tend to bias the results in any material way,

    are practical to implement, and

    give consideration to the need to balance responsiveness and stability.

8. Any credibility procedure requires the actuary to exercise informed judgment, using relevant information. The use of credibility procedures is not always a precise mathematical exercise.

Designated Group Response

The Designated Group does not believe the suggested changes are necessary.

First suggestion: this is simply a definition. We have proposed a very similar defined term.

Second suggestion: this is a technical detail. Consistent with our general position that the standards be principles-based, this should not be included with the standards.

Third suggestion: this is covered in paragraph 2620.04.

Fourth suggestion: this is unnecessary in principles-based standards.

Fifth suggestion: this relates to technical details about the process and is therefore unnecessary for principles-based standards.

Sixth, seventh, and eighth suggestions: the first two of these suggestions are covered in paragraph 2620.02: "*The actuary should select appropriate methods, techniques and assumptions recognizing that such elements depend on the circumstances of the case and that a variety of actuarial methods may be appropriate to derive an indicated rate.*" The third of these suggestions is covered in General Standards of Practice, and if the suggested wording were included, similar wording would be required for the other aspects of ratemaking as well.

Claim Development

Paragraph 2620.08

Member Comments

The Standards of Practice should encourage using the Appointed Actuary's work in estimating claim development, and ratemaking actuaries should provide justification when they cannot use the Appointed Actuary's assumptions. This section of the proposed Standards of Practice will exacerbate the problem associated with the disparity of results.

There are situations where the Appointed Actuary for a company, establishing the required levels of claim reserves, is not necessarily the same individual performing the rate indication analysis. Implicitly or otherwise, the ultimate loss levels selected by the Appointed Actuary provide an estimate of losses that could be used in ratemaking. If we assume that the Appointed Actuary is in the best position to estimate the ultimate loss levels, how much "priority" should be given to the AA's assessment in comparison to any alternate estimate? Should reliance on the AA's estimates be part of the "modified" reporting disclosure? Should non-reliance on the AA's estimate be similarly disclosed?

Designated Group Response

The Standards of Practice do not require using the AA's assumptions. However, use of another actuary's work is allowed, and addressed under subsection 1610 of the Standards of Practice.

Member Comments

I believe "may" is the accepted term in Standards of Practice, rather than "might" as appears twice here. I suggest changing this to read ". . . changes in case estimate setting standards and practices . . ." to incorporate the defined term and parallel the wording in 2620.06. I note the use here of "time intervals", to describe accident periods, policy periods, etc., which are described as "exposure periods" in U.S. ASB ASOP 13, which might better distinguish this characteristic from your other use of "time intervals". Also applies to 2620.11.

Designated Group Response

Subsection 2620 was modified such that this is no longer applicable.

Trending

Member Comments

For trending, we suggest the following wording:

"Actuaries frequently use trending procedures in ratemaking analyses to evaluate how changes over time affect items such as claim costs, claim frequencies, expenses, exposures, premiums, retention rates, marketing/solicitation response rates, and economic indices. Trending procedures estimate future values by analyzing changes between exposure periods (for example, accident years or underwriting years). A trending procedure does not encompass the process commonly referred to as 'development,' which estimates changes over time in losses (or other items) within a given exposure period."

Designated Group Response

The first sentence does not seem to add any value. While the word "use" is stronger than "recognize", the Standards of Practice address this in paragraph 2620.02: "*The actuary should select appropriate methods, techniques and assumptions recognizing that such elements depend on the circumstances of the case and that a variety of actuarial methods may be appropriate to derive an indicated rate.*"

The second sentence does not seem to be necessary. "Trend" is now a defined term. ("Trend is the tendency of data values to change in a general direction from one coverage period to a later coverage period".)

As proposed, both "development" and "trend" would be distinct defined terms; therefore, it is not necessary to state that trending is different than development.

The Designated Group believes the essential principles have been addressed precisely and there is no additional value in the language used above ("detail") for Standards of Practice.

Paragraph 2620.09

Member Comments

I don't understand the logic of including this idea ("The actuary would select appropriate methods") only in this one place, when it really applies anywhere methods are applied.

Designated Group Response

Subsection 2620 was modified and the concept was moved earlier in the subsection (paragraph 2620.02).

Paragraph 2620.11

Member Comments

I doubt it is easily done, but I would like to see more discussion, perhaps via illustration, around some of these factors, in particular the length of the experience period, past/future trend patterns, and the interplay between credibility/fluctuation in data points/the use of mathematical models.

Designated Group Response

The Designated Group believes that such discussion is appropriate for an Educational Note.

Paragraph 2620.12

Member Comments

I suggest changing this to read ". . . shifts in the distribution across rating variables . . ."

Designated Group Response

Subsection 2620 was modified and this was covered in paragraph 2620.06.

Member Comments

The context of the Standards of Practice no doubt applies to situations that I do not envision at this time. However, while I could see the occurrence of unusual large losses affecting the ratemaking of insurance products from a “direct” perspective, and also how the knowledge of some reinsurance recoveries could perhaps affect the ratemaking of a product, the intended applicability of this item in the context is not totally clear to me.

Designated Group Response

The Standards of Practice apply to indicated rates regardless of whether they are on a direct or net of reinsurance basis.

Paragraph 2620.14

Member Comments

The Standards of Practice need to remain flexible enough to allow sound but creative ways of resolving estimation problems. They should seek to provide guidance such that they do not lead to the rote application of actuarial methodologies “meeting actuarial standards”, yet totally missing the mark from an estimation point of view. This is not a statement for or against the current Standards of Practice as drafted, but an objective to keep in mind. As well, keep in mind that what at first seems unreasonable may sometimes be closer to the truth.

Designated Group Response

The Designated Group does not believe that the proposed Standards of Practice are restrictive.

Member Comments

Practically speaking, the choice of a credibility complement is sometimes affected by the trade-off between “independence” from the “subject experience” and “applicability” in the given context. There can be situations where it may be preferable to use a “not completely independent” complement of credibility that may, however, have better suitability to the ratemaking context at hand. The indication result could therefore be more reflective of the underlying forces truly at work. In the end, the objective is to get as close to the “correct answer” as possible.

Designated Group Response

Such detail is not required in principles-based Standards of Practice. It may be appropriate for an Educational Note.

Paragraph 2620.15

Member Comments

“Expenses comprise all costs other than claim costs, profit provision, and contingency margins . . .” Although profit provisions are considered in the next paragraph, there is no other mention of contingency margins. Was that on purpose or an oversight? Should there be a paragraph on that?

Designated Group Response

Reference to contingency margins has been removed. The Designated Group's view is that they would be a part of the provision for profit.

Paragraph 2620.16

Member Comments

I don't understand the logic of including this idea "may be specified under the terms of the engagement" only in these two places, when it could presumably also apply elsewhere. Also applies to 2620.19.

Designated Group Response

The Designated Group distinguishes among the provisions for claim costs, expenses, and profit and is of the view that the determination of appropriate expense and profit provisions may or may not be within the actuary's responsibility.

Paragraph 2620.18

Member Comments

Something is needed in this section to address the considerations in selecting the rate of return on invested assets in determining the profit provision.

Concern was expressed over the lack of guidance concerning interest rate assumptions. Although there is guidance in the insurance section, it does not adequately deal with how to handle cash flows associated with future business. Guidance should be provided on the use of new money rates, and whether separate assumptions are warranted for assets associated with capital and surplus. Paragraph 2620.01 clearly refers to the present value of cash flows and we believe that guidance on this issue should be included in the document.

Designated Group Response

A section on the Time Value of Money has been added.

The consensus of the Designated Group and the ASB is that the Standards of Practice would not include further guidance on the provision for profit.

2630 (General)

Member Comments

Proposed subsection 2630 allows the actuary to provide an opinion on a range of rates. This is inconsistent with standard reporting language for other tasks, which require a point estimate. This language may have been introduced to allow for different outcomes as a result of a highly uncertain event (such as a court case). In this case, there should be distinct best estimates under divergent assumptions, as opposed to a range of indicated rates.

If reference to a "range of indicated rates" is going to be a part of the standard reporting language, I think the "range" concept needs to be fleshed out somewhere up front in the context of the best estimate focus of the definition of indicated rate.

It may be helpful to have some guidance with respect to reporting in situations where the actuary is required to sign a regulatory opinion when filing a ratemaking analysis, which wording is not consistent with the standard reporting language. It would also be helpful to have some guidance (via illustrations?) of situations where an actuary would not take responsibility for an assumption. An obvious case is an assumption prescribed by the regulator, but what about the assumption for a company's target ROE, for example? How can one assess that such an assumption is independently reasonable (1720), particularly if a new target has been set by the company? The reporting requirements would only be necessary for an external user report, but the Designated Group should indicate whether this is their understanding as well. Actuarial work is more than just determining rates. The reports in this section ignore the value-added aspect, and it is not clear how they will be received.

Designated Group Response

Subsection 2630 has been modified.

A standard reporting language is proposed for external user reports, which is a defined term. This would be a scope paragraph, similar to that in paragraph 2140.02.

In addition, the actuary may include comments within an opinion paragraph and/or the actuary may report with reservation.

1100 INTRODUCTION

1110 DEFINITIONS

.01 Each term set over dotted underlining has the meaning given in this section and has its ordinary meaning otherwise (e.g., external user).

.02 Accepted actuarial practice is the manner of performing work in Canada in accordance with the Rules and these Standards of Practice. Standards of Practice are the responsibility of the Actuarial Standards Board and approval of standards and changes to standards is made through a process that involves consultation with the actuarial profession and other interested parties. Unless the context requires otherwise, references to accepted actuarial practice refer to accepted actuarial practice for work in Canada. [*pratique actuarielle reconnue*]

.03 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*]

.04.1 Actuary, as it is used in these standards, means anyone bound by these standards for work in Canada. [*actuaire*]

.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, pursuant to legislation, by the entity to monitor the financial condition of that entity. [*actuaire désigné*]

.07 Appropriate engagement is one that 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*]

.09.1 Bylaws means the bylaws of the Canadian Institute of Actuaries, as amended from time to time. [*Statuts administratifs*]

.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 insurance contract 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*]

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

.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 policy owners, 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*]

.25.1 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. [*niveau de provisionnement*]

.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*]

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

.27.1 Insurance contract is a contract under which one party (the insurer) 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.[1] [*contrat d'assurance*]

.27.2 Insurance contract liabilities in an insurer's balance sheet are the liabilities at the balance sheet date on account of the insurer's insurance contracts, including commitments, which are in force at that date or which were in force before that date. [*passif des contrats d'assurance*]

.28 Insurer is the party that has an obligation under an insurance contract to compensate a policyholder if an insured event occurs. Insurer includes a fraternal benefit society and the Canadian branch of a foreign insurer, but does not include a public personal injury compensation plan.[1] [*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. Policy liabilities consist of insurance contract liabilities and liabilities for policy contracts other than insurance contracts. [*passif des polices*]

.35.1 Policyholder is a party that has a right to compensation under an insurance contract if an insured event occurs.[2] [*titulaire de police*]

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[1] The wording of the first sentence of this definition is identical to the corresponding definition appearing in IFRS 4 Appendix A, as of November 2009. The second sentence is explanatory and not part of that definition.

[2] The wording of this definition is identical to the corresponding definition appearing in IFRS 4 Appendix A, as of November 2009.

.36 Practice committee means the committee or committees of the Canadian Institute of Actuaries, either standing or ad hoc, to which the Practice Council of the Canadian Institute of Actuaries has assigned responsibility for the practice area or areas to which particular Standards of Practice apply. [*commission de pratique*]

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

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

.38.1 Property and casualty insurance is insurance that insures individuals or other 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, and title insurance), or
- for costs or damages to others arising from the actions of such persons (e.g., liability, credit insurance, and surety bonds) and for costs arising from injury to such persons (e.g., automobile accident benefits insurance).

.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 or premiums. [*régime public d'assurance pour préjudices corporels*]

.41 Recommendation means an italicized recommendation in these standards. Similarly for "recommend". [*recommandation*]

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

.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*]

.43.1 Reinsurance recoverables in an insurer's balance sheet are the assets at the balance sheet date on account of reinsurance treaties, including commitments, which are in force at that date or which were in force before that date. [*sommes à recouvrer auprès des réassureurs*]

.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 Canadian Institute of Actuaries' 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 amount for that period in respect of unfunded accrued liabilities. [*cotisation d'exercice*]

.48 Standard reporting language is standard language for an external user report. [*libellé du rapport type*]

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

.49 Subsequent event is an event which occurs after a calculation date but before the corresponding report date. [*événement subséquent*]

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

.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*]

2100 INSURANCE CONTRACT VALUATION: ALL INSURANCE

2110 SCOPE

.01 Sections 2100, 2200 and 2300 apply to the valuation of the insurance contract liabilities and of the reinsurance recoverables in an insurer's financial statements when the intent is that those statements be in accordance with accounting principles generally accepted in Canada. Effective for financial years beginning on or after January 1, 2011, the Canadian Institute of Chartered Accountants Handbook will contain both Canadian generally accepted accounting principles applicable to publicly accountable enterprises (being International Financial Reporting Standards incorporated into the Canadian Institute of Chartered Accountants Handbook) and Canadian generally accepted accounting principles applicable to private enterprises.

.01.1 Part 2000 does not apply to post-employment benefit plans covered by the Practice-Specific Standards for Post-Employment Benefit Plans and does not apply to personal injury compensation plans covered by the Practice-Specific Standards for Public Personal Injury Compensation Plans.

.02 Section 2100 applies to all kinds of insurance.

.02.1 Sections 2200 and 2300, following, apply respectively to

property and casualty insurance;~~ that is, to insurance with respect to property (for example, fire and marine insurance), to insurance with respect to the actions of individuals and corporations (for example, liability and fidelity insurance), and to insurance with respect to both (for example, automobile insurance),~~ and

life and health (accident and sickness) insurance; that is, to insurance with respect to the life and health of persons other than corporations.

.03 Sometimes, however, techniques described in one section may be useful for the insurance to which the other section applies. For example, while a simple technique is usually appropriate for valuation of life and health insurance claim liabilities, the more sophisticated techniques for valuation of property and casualty insurance claim liabilities may be appropriate for life and health insurance whose claim development is complex. Another example is that a simple technique may be appropriate for travel insurance and other short-term policies sold by property and casualty insurers.

2600 RATEMAKING: PROPERTY AND CASUALTY INSURANCE

2610 SCOPE

.01 This section 2600 applies to the derivation of indicated rates for a property and casualty insurance insurance contract written by an insurer, a reciprocal insurance exchange or an underwriting syndicate.

.02 This section 2600 does not apply to public personal injury compensation plans covered by the Practice-specific Standards for Public Personal Injury Compensation Plans.

.03 This section 2600 applies to any entity, such as a residual market mechanism or an advisory organization, which derives indicated rates for an insurance contract to be written by an insurer, regardless of whether or not that entity is itself an insurer.

.04 This section 2600 applies to the derivation of indicated rates, but not to the recommendation or selection of rates to be charged. The recommended or selected rates may reflect considerations beyond those set forth in this section 2600.

.05 This section 2600 also applies to the derivation of indicated rates for insurance risks accepted by a property and casualty quasi-insurer, similar to insurance risks accepted under an insurance contract. In this section 2600, "property and casualty quasi-insurer" means an entity that assumes insurance risks that a property and casualty insurer may assume, without having the legal form of an insurer. Examples of property and casualty quasi-insurers include

> federal or provincial crown corporations or agencies acting in a capacity similar to a property and casualty insurer,
>
> providers of extended warranties, and
>
> self-funding mechanisms, such as those created by members of a professional association, or entities that retain some or all of their property and casualty insurance risk.

2620 METHOD

.01 *For an insurance risk to be accepted over a specified period of time, the best estimate present value of cash flows relating to the revenue at the indicated rate should equal the best estimate present value of cash flows relating to the corresponding claim costs and expense costs, plus the present value of a provision for profit.*

.02 *The actuary should select appropriate methods, techniques and assumptions recognizing that such elements depend on the circumstances of the case and that a variety of actuarial methods may be appropriate to derive an indicated rate.* [Effective Month XX, 20XX]

Data

.03 The actuary would consider the availability and relevance of subject experience and related experience.

Credibility

.04 The actuary would consider the blending of information from subject experience with information from one or more sets of related experience to improve the predictive value of estimates.

Changes in circumstances

.05 The actuary would consider that the subject experience, related experience and future cash flows may be affected by changes in circumstances that may affect expected claim costs, expense costs, and provision for profit.

.06 Relevant circumstances subject to change may include items that are largely under the control of the entity providing insurance, such as

underwriting practice,

distribution system,

claims handling and case estimate setting practice,

reinsurance arrangements,

data processing and accounting systems,

distribution or type of business written,

provisions of the insurance contract(s),

premium rates, and

rating variables,

as well as items that are largely not under the control of the entity providing insurance, such as

legislated coverages or benefits, and

the economic, social and legal environments.

Development

.07 The actuary would consider that historical data may be subject to development over time.

Trend

.08 The actuary would consider that historical data may be subject to trend over time.

Catastrophe

.09 The actuary would consider that historical data may be subject to catastrophes, large losses or unusual events.

Provision for Expense Costs

.10 The actuary would determine the provision for expense costs that is appropriate for the period during which the rates are expected to be in effect.

.11 In selecting a provision for expense costs, the actuary would consider

the various categories of expense costs that are incurred including, as may be applicable, residual market assessments, statutory assessments, policyholder dividends, and reinsurance costs,

that expense costs may not be directly proportional to premium, and

that one-time expense costs may need to be amortized.

.12 The provision for expense costs, or other assumptions that are pertinent to its derivation, may be specified to the actuary under the terms of an appropriate engagement.

Provision for Profit

.13 An indicated rate would include a provision for profit. This provision would usually be greater than zero.

.14 The provision for profit, or other assumptions that are pertinent to its derivation, may be specified to the actuary under the terms of an appropriate engagement.

Time Value of Money

.15 The investment return rate for calculating the present value of cash flows would reflect the expected investment income to be earned on assets that might be acquired with the net cash flows resulting from the revenue at the indicated rate.

.16 Among various possible sets of such assets the actuary would consider

default-free assets of appropriate duration,

fixed income assets of appropriate duration, and

assets which are expected to be acquired.

.17 The actuary would also consider how the selected investment return rate relates to the provision for profit.

2630 REPORTING

.01 *If an external user report is required and the actuary can report without reservation, the actuary's report should include the standard reporting language consisting of the following scope paragraph:*

> I have derived the indicated rate(s) in accordance with accepted actuarial practice in Canada, on behalf of [entity commissioning the work], for the following insurance category(ies): [name of insurance category(ies)], to be effective [Month XX, 20XX] for new business and [Month XX, 20XX] for renewal business.

.02 *Where required to conform with the requirements of an external user, an additional opinion paragraph may be included.*

.03 *If an external user report is required and the actuary cannot report without reservation, the actuary should modify the standard reporting language accordingly.* [Effective Month XX, 20XX]