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Draft of Educational Note

Subsequent Events

Committee on Property and Casualty Insurance Financial Reporting

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Members should be familiar with educational notes. Educational Notes describe but do not recommend practice in illustrative situations. They do not constitute Standards of Practice and are, therefore, not binding. They are however, intended to illustrate the application (but not necessarily the only application) of the Standards of Practice, so there should be no conflict between them. They are intended to assist actuaries in applying Standards of Practice in respect of specific matters. Responsibility for the manner of application of Standards of Practice in specific circumstances remains that of the members in the property and casualty practice area.

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Memorandum

To: All Fellows, Affiliates, Associates and Correspondents of the Canadian Institute of Actuaries Practising in Property and Casualty Insurance

From: Jacques Tremblay, Chairperson
Practice Council

Kevin Lee, Chairperson
Committee on Property and Casualty Insurance Financial Reporting

Date: October 17, 2008

Subject: **Draft of Educational Note – Subsequent Events**

The Committee on Property and Casualty Insurance Financial Reporting of the Canadian Institute of Actuaries (CIA) has developed this educational note for use by property and casualty actuaries. The purpose of this educational note is to provide guidance in identifying subsequent events and in understanding appropriate courses of action for such events. In preparing this educational note, input was sought from insurance audit professionals at KPMG LLP and PricewaterhouseCoopers LLP.

In accordance with the Institute's Policy for Due Process for the Approval of Guidance Material other than Standards of Practice, this educational note has been prepared by the Committee on Property and Casualty Insurance Financial Reporting, and has received final approval for distribution by the Practice Council on October 6, 2008. As outlined in subsection 1220 of the Standards of Practice, "The actuary should be familiar with relevant educational notes and other designated educational material." That subsection explains further that a "practice which the notes describe for a situation is not necessarily the only accepted practice for that situation and is not necessarily accepted actuarial practice for a different situation." As well, "educational notes are intended to illustrate the application (but not necessarily the only application) of the standards, so there should be no conflict between them."

If you have any questions or comments regarding this draft of educational note, please contact Kevin Lee at his CIA Online Directory address, klee@iao.ca.

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1. INTRODUCTION

The Committee on Property and Casualty Insurance Financial Reporting of the Canadian Institute of Actuaries (CIA) has prepared this educational note to provide guidance to property and casualty (P&C) actuaries in identifying subsequent events and in understanding appropriate courses of action for such events. This educational note focuses on subsequent events that are relevant to the actuary performing an actuarial analysis in support of financial reporting (e.g., policy liabilities valuations supporting year-end and quarterly financial statements). This educational note relies on the CIA's current definitions and Standards of Practice related to subsequent events. This educational note also relies extensively on definitions of the Canadian Institute of Chartered Accountants (CICA) and input from senior audit professionals specializing in insurance organizations.

Federal and provincial insurance acts require that the Annual Return of a P&C insurance company be accompanied by an actuarial report on the policy liabilities. (Policy liabilities refer to both claim liabilities and premium liabilities.) The statement must also be prepared in accordance with generally accepted accounting principles (GAAP). Accordingly, accounting and actuarial standards are relevant when considering the appropriate treatment of subsequent events in financial reporting for P&C insurance companies. Key standards that deal with the treatment of subsequent events are Section 3820 of the *CICA Handbook* and subsection 1520 of the Standards of Practice.

This educational note begins with the CIA definition of a subsequent event and examination of the CICA accounting standards related to subsequent events, particularly the distinction between Type A and Type B events. A decision tree is developed to assist actuaries in determining the appropriate course of action in response to a subsequent event. To demonstrate how the actuary could use the decision tree to determine the required action, if any, the educational note presents the following examples:

- catastrophic event, such as Eastern Canada's January 1998 ice storm,
- judicial decision, such as the February 2008 Alberta court decision related to the 2004 automobile reforms,
- failure of a reinsurance company from the ceding company's perspective,
- change in investment markets,
- knowledge of missing claims,
- late reported claim(s), and
- change in insurance industry benchmarks.

A very important decision point for the actuary is materiality. Consequently, this educational note addresses materiality and refers the reader to the 2007 report from the CIA Task Force on Materiality. The final section of this educational note focuses on communication between the actuary, company management, and the auditor at the individual company level as well as between our organizations at the profession level (i.e., CIA and CICA). The pertinent sections of the CIA Standards of Practice and the CICA Handbook are reproduced as Appendices A and B, respectively.

2. DEFINITIONS AND STANDARDS OF PRACTICE

Subsection 1110 of the Standards of Practice defines a subsequent event as "an event which occurs after a calculation date but before the corresponding report date." The calculation date is defined as 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." The report date is defined as the "date on which the actuary completes the report on his or her work. It usually differs from the calculation date." Finally, the term "report" refers to "an actuary's oral or written communication to users about his or her work."

Subsection 1520 of the Standards of Practice provides guidance regarding the possible impact of subsequent events on the work of actuaries. Paragraph 1520.02 states that

> *the actuary should take a subsequent event into account (other than in a pro forma calculation) if the subsequent event*
>
> > *provides information about the entity as it was at the calculation date,*
> >
> > *retroactively makes the entity a different entity at the calculation date, or*
> >
> > *makes the entity a different entity after the calculation date and a purpose of the work is to report on the entity as it will be as a result of the event.*

Since the scope of this educational note is limited to actuarial analyses supporting financial reporting, particularly in the context of annual and quarterly financial statements, the discussion focuses on the first two circumstances in the above list.

The CICA Accounting Handbook, Section 3820, Subsequent Events, states:

> .01 Financial statements are prepared to reflect the financial position at a particular date and the operating results and cash flows for a period ended on that date. However, events occurring after the financial statement date may indicate a need to adjust items or to make specific disclosures in those statements. Therefore, in preparing financial statements, the implications and financial effects of subsequent events would be considered.
>
> .02 The period during which subsequent events are considered will depend on the management structure and procedures followed in completing the financial statements. The appropriate cut-off point for subsequent events is a matter of judgment taking into account the particular circumstances and reporting requirements.
>
> .03 In general, there are two types of subsequent events:
>
> (a) those which provide further evidence of conditions which existed at the financial statement date; and
>
> (b) those which are indicative of conditions which arose subsequent to the financial statement date.
>
> The extent to which, and the manner in which, the effect of a subsequent event is reflected in the financial statements will depend on its type.

Throughout this educational note, subsequent events are classified as Type A or Type B according to the descriptions in the CICA Handbook, Section 3820, paragraphs 03 a) and b),

respectively. In general, accounting standards require that the balance sheet and income statement take into account Type A subsequent events and that the notes to the financial statements include disclosure of Type B subsequent events.

The CICA accounting treatment of Type A subsequent events requires that "financial statements be adjusted when events occurring between the date of the financial statements and the date of their completion provide additional evidence relating to conditions that existed at the date of the financial statements" (CICA Section 3820, paragraph 06). For Type B events, the CICA accounting treatment states that "financial statements should not be adjusted for, but disclosure should be made of, those events occurring between the date of the financial statements and the date of their completion that do not relate to conditions that existed at the date of the financial statements but: (a) cause significant changes to assets or liabilities in the subsequent period, or (b) will, or may, have a significant effect on the future operations of the enterprise" (CICA Section 3820, paragraph 10).

The actuarial classification is similar to the accounting classification. Paragraph 1520.05 of the Standards of Practice states

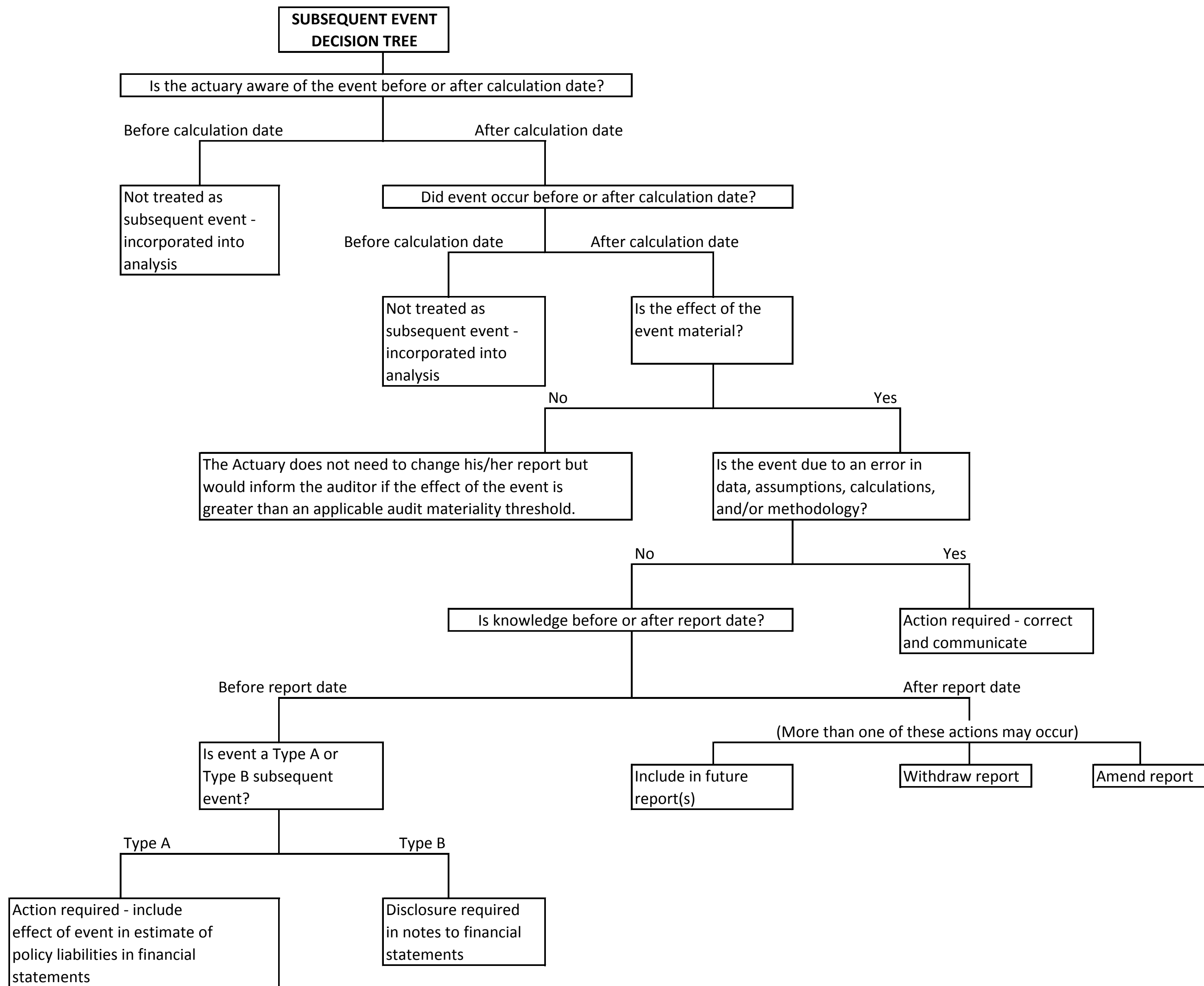
> depending on the classification, the actuary would either
>
> > take that event into account, or
> >
> > report that event, but not take it into account.

These two options for action are similar to the accounting guidelines for Type A subsequent events (i.e., take the event into account) and Type B subsequent events (i.e., disclosure only). Furthermore, paragraph 1520.03 states that "*The actuary should not take the subsequent event into account if it makes the entity a different entity after the calculation date and a purpose of the work is to report on the entity as it was at the calculation date, but the actuary should report that event.*" This is similar to the accounting requirement for Type B subsequent events.

In the following section, a decision tree is used to assist the actuary in determining the appropriate course of action; i.e. whether to take the event into account or to report (i.e., disclose) the event but not to take it into account.

3. DECISION TREE

The next page presents a decision tree that actuaries can use when determining the appropriate course of action in respect of a subsequent event. Actuaries can use this decision tree in the analysis of subsequent events for both claim liabilities and premium liabilities.


SUBSEQUENT EVENT DECISION TREE
Is the actuary aware of the event before or after calculation date?
Before calculation date
After calculation date
Not treated as subsequent event - incorporated into analysis
Did event occur before or after calculation date?
Before calculation date
After calculation date
Not treated as subsequent event - incorporated into analysis
Is the effect of the event material?
No
Yes
The Actuary does not need to change his/her report but would inform the auditor if the effect of the event is greater than an applicable audit materiality threshold.
Is the event due to an error in data, assumptions, calculations, and/or methodology?
No
Yes
Is knowledge before or after report date?
Action required - correct and communicate
Before report date
After report date
(More than one of these actions may occur)
Is event a Type A or Type B subsequent event?
Include in future report(s)
Withdraw report
Amend report
Type A
Type B
Action required - include effect of event in estimate of policy liabilities in financial statements
Disclosure required in notes to financial statements

3.1 Is the Actuary Aware of the Event Before or After the Calculation Date?

Upon discovery of a potential subsequent event, the first question that the actuary would consider is whether or not his or her knowledge of the event was obtained before or after the calculation date. If the actuary was aware of the event before the calculation date, then the event is not considered a subsequent event. According to the CIA definition, a subsequent event is an event that occurs after a calculation date but before the corresponding report date. Thus, if the actuary becomes aware of the event before the calculation date, the actuary treats the event similarly to other information used in the valuation process.

3.2 Did the Event Occur Before or After the Calculation Date?

If the event meets the CIA definition of a subsequent event (i.e., the actuary becomes aware of the event after the calculation date and before the report date) and the event occurred before the calculation date, then the suggested action is to treat the event as if the knowledge was obtained prior to the calculation date (see the table contained in paragraph 1520.17 of the Standards of Practice). If the event occurred after the calculation date, then the actuary would continue down the decision tree.

3.3 Is the Effect of the Event Material?

If the actuary became aware of the event after the calculation date and the event occurred after the calculation date, then he or she would determine whether or not the effect of the event is material to the actuarial analysis. Thus, the next step for the actuary is to compare the effect of the subsequent event both to the actuarial materiality and also to the audit materiality.

Paragraph 1340.03 of the Standards of Practice addresses the concept of materiality, in a general fashion, by stating that "an omission, understatement, or overstatement is material if the actuary expects it materially to affect either the user's decision making or the user's reasonable expectations."

As part of an actuarial valuation of policy liabilities, the actuary would determine a materiality standard. Subsection 1630 of the Standards of Practice, CIA/CICA Joint Policy Statement, requires communication regarding the materiality standard between the actuary and the auditor. Paragraph 1630.10 states, in part,

> The enquiring professional would
>
> e) make the responding professional aware of the enquiring professional's needs. This would include a discussion of
>
> i) the application of the concept of materiality to determine that the responding professional will be using a materiality level that is appropriate in relation to the enquiring professional's materiality level in accordance with applicable professional standards,

While the actuarial materiality may differ from the materiality level selected by the auditor, the actuary would be aware of the audit materiality threshold.

If the actuary determines that the event is not material to the actuarial policy liabilities valuation, then the situation does not require changing the actuarial analysis. However, since the auditor maintains various materiality thresholds, the actuary would communicate to the auditor the

details of such an event. While actuarial standards may not require the actuary to change his or her analysis, the auditor may still have to include the effect of the event in reporting to the insurer.

3.4 Is the Event Due to an Error?

Once the actuary determines that the effect of the event is material, the next question is whether or not the circumstances of the event are due to an error. Errors can arise in the data provided by the insurer for the analysis or in the actuary's assumptions, calculations, and/or methodology. If it is determined that the event that exceeds the materiality threshold is the result of an error, then the actuary would make the appropriate correction and communicate the revised policy liabilities estimate to both the management of the insurer and the auditor. Correction and communication are required regardless of whether the error was discovered before or after the report date.

Paragraph 1520.01 of the Standards of Practice states, "*The actuary should correct any data defect or calculation error which a subsequent event reveals.*" As part of the Classification portion of subsection 1520, the Standards of Practice reiterates that it is the actuary's responsibility to correct errors. Paragraph 1520.05 states, "The actuary would correct an error revealed by a subsequent event. The actuary would classify each subsequent event other than those which reveal errors…"

3.5 Is Knowledge Before or After the Report Date?

If the actuary determines that the event is not due to an error, then the next question in the decision-making process is when the actuary became aware of the event in relation to the report date. It is important to recognize that according to the definition in paragraph 1110.49 of the Standards of Practice, a subsequent event is an event that occurs after a calculation date but before the corresponding report date. Thus, an event that occurs after the report date is not a subsequent event.

If the actuary became aware of the event after the report date, then the event could trigger three possible actions depending on the type of event and the magnitude of the effect of the event; to include in future report(s), to withdraw the report, or to amend the report. The actuary may take more than one of these actions. The course of action is a matter of professional judgment and will depend on the discussions between the actuary, company management, and the auditor.

3.6 Is the Event a Type A or Type B Subsequent Event?

Assuming that the actuary becomes aware of the subsequent event prior to the report date, the final question relates to the classification of the event as either a Type A or Type B subsequent event.

Type A subsequent events, which the CICA accounting standards define as events that provide further evidence of conditions that existed at the financial statement date, require the actuary to recalculate the policy liabilities, both claim liabilities and premium liabilities, at the calculation date. The actuary would then report the recalculated policy liabilities to management and the auditor for incorporation into the key financial statements (i.e., balance sheet and income statement).

Type B subsequent events, which the CICA accounting standards define as events that are indicative of conditions that arose subsequent to the financial statement date, require disclosure

rather than change to the balance sheet and income statement. An actuary would still recalculate the policy liabilities so that management can include appropriate values in the necessary disclosures; however, the policy liabilities reported in the financial statements would remain unchanged.

4. DISCLOSURE REQUIREMENTS

Company management is ultimately responsible for the notes to the financial statements. However, following a Type B subsequent event, the actuary often plays an important role in determining the estimates of policy liabilities that are contained in such notes.

The actuary's responsibility for disclosure with respect to subsequent events, both Types A and B, extends beyond simply the financial statements. Depending on the circumstances of the subsequent event, the actuary has varied means of communication. The actuary may present his or her findings orally through meetings with company management and/or presentations to the audit committee or the board of directors. The actuary will also likely include commentary regarding the subsequent event in written communication either in the Appointed Actuary's policy liabilities valuation report or separate communication specifically addressing the subsequent event.

The February 1998 CIA educational note, "The Eastern Canada Ice Storm – Treatment in Financial Reporting" (Ice Storm Educational Note) included the following points for consideration for actuarial disclosure:

- a description of the nature of the event,
- an estimate of the financial effect, when possible, or a statement that such an estimate cannot be made, including
  - an estimate of the gross amount of claims (indemnities and loss adjustment expenses),
  - an estimate of the reinsurance recoveries, and
  - an estimate of the reinsurance reinstatement premiums,
- a discussion about the impact of the event
  - on future insurance results of the entity,
  - on reinsurance risk of non recovery from reinsurers, and
  - other related events.

5. EXAMPLES

In order to illustrate the concepts described above, the following examples are analyzed using the decision tree:

- catastrophic event, such as Eastern Canada's January 1998 ice storm,
- judicial decision, such as the February 2008 Alberta court decision related to the 2004 automobile reforms,
- failure of a reinsurance company from a ceding company's perspective,

change in investment markets,

knowledge of missing claims,

late reported claim(s), and

change in insurance industry benchmarks.

These examples are for illustrative purposes only. This list is not meant to be exhaustive. It is important to recognize that other types of subsequent events could affect policy liabilities. The course of action following an actual event will depend on each insurer's circumstances and the particular characteristics of the event itself.

5.1 Catastrophic Event

The first example refers to the January 1998 ice storm in Eastern Canada.

Is the actuary aware of the event before or after the calculation date?

Beginning at the top of the decision tree, the actuary would compare the date of the event to the calculation date. For this example, the calculation date was December 31, 1997 for most insurers. Since the ice storm did not begin until January 5, 1998, actuaries did not know of the event before the calculation date (i.e., December 31, 1997).

Did the event occur before or after the calculation date?

The ice storm occurred in early January 1998 which is after the calculation date of December 31, 1997.

Is the effect of the event material?

Depending on the geographical distribution of exposures, the ice storm may or may not have been material. For many insurers with exposures in Eastern Canada, the effect of the ice storm was greater than the selected actuarial materiality level for the December 31, 1997 policy liabilities valuation.

Is the event due to an error?

For the ice storm, the answer to this question is no.

Is knowledge before or after the report date?

The actuary continues down the left-hand path of the decision tree asking, "Did the actuary know of the event before or after the report date?" Since the ice storm occurred so early in January, for most actuaries knowledge of the event was before the report date.

Is the event a Type A or Type B subsequent event?

The final question in the decision tree is whether or not the ice storm is a Type A or Type B subsequent event. The Ice Storm Educational Note concluded that

> The ice storm clearly does not retroactively make the insurance company different … accordingly, the ice storm is an event that makes an entity different after the balance sheet date.
>
> … if the purpose is to report on the entity as it was, then the actuary would not take the event into account in the selection of methods and assumptions …

> … the actuary should report the event, making no further distinction on the nature and amount of the event, once the materiality hurdle has been passed, and it has been determined that it is not appropriate to amend methods and assumptions.

Both actuarial and accounting guidance are consistent in indicating that the appropriate course of action is to disclose the impact of the ice storm in the notes to the financial statements, but to make no changes to the calculations underlying the 1997 results.

The Ice Storm Educational Note also addressed the issue of premium liability.

> It is clear that the actual premium liability will likely be larger than the premium liability anticipated as at December 31, 1997. However, this is not the key issue in the context of financial reporting under GAAP. The key issue is the purpose of the work, which is to report on the insurance company as it was on December 31, 1997.

5.2 Judicial Decision

This example uses the 2008 judicial decision related to automobile insurance reforms in Alberta. In February 2008, Alberta's Court of Queen's Bench struck down the $4,000 cap on non-pecuniary damages for people who suffer soft-tissue injuries in car accidents.

Is the actuary aware of the event before or after the calculation date?

For most insurers, the calculation date in this example was December 31, 2007. Thus, since the court decision occurred on February 8, 2008, the answer to the first question is that actuaries became aware of the event after the calculation date.

Did the event occur before or after the calculation date?

The judicial decision was issued on February 8, 2008 which is after the calculation date of December 31, 2007.

Is the effect of the event material?

The next question in the decision tree considers materiality. For insurers doing business in Canada but without a significant portfolio of Alberta automobile insurance, the court decision was not material and no action was required. For some insurers with significant exposures in Alberta, the court decision was still not material due to the methods for setting individual case reserves, the proportion of bodily injury claims in their current portfolio of outstanding claims, or because a provision had already been established. (Even if there were no changes in actuarial calculations, many auditors required an affirmative statement from the actuary regarding the non-material impact of the Alberta court decision.) For many insurers, however, the effect of the court decision was greater than the actuarial materiality level.

Is the event due to an error?

The Alberta court decision was not related to an error in data, actuarial assumptions, calculations, and/or methodology.

Is knowledge before or after the report date?

Unlike the Eastern Canada ice storm, the court decision occurred in early February not early January. Some insurers had already held their audit committee meetings. Some actuaries had

already prepared their actuarial statements of opinion regarding policy liabilities even though their actuarial report on policy liabilities had not yet been issued.

There was extensive discussion between actuaries and auditors, both at the individual company level and at the industry level, as to what constitutes a report date. Is the report date

the date of the audit committee meeting to approve the financial statements,

the date of the actuarial statement of opinion,

the date of the actuarial policy liabilities report, or

the date of the auditor's report on the financial statements (auditor's report date)?

The general consensus of the auditors was that the report date was the date of the auditor's report on the financial statements. According to the Standards of Practice, the actuarial report date is defined as the "date on which the actuary completes the report on his or her work." There may be situations, such as Canadian branches, where the actuary's report date is prior to the auditor's report date. In the unusual circumstance of a significant event occurring after the actuary's report date and before the auditor's report date, the actuary and auditor would be required to coordinate and decide upon necessary action.

For actuaries who became aware of the Alberta court decision after the report date, the event is not classified as a subsequent event (according to paragraph 1110.49 of the Standards of Practice). These actuaries had three potential courses of action: 1) to include in future report(s), 2) to withdraw the December 31, 2007 policy liabilities valuation report, and/or 3) to amend the December 31, 2007 policy liabilities valuation report. The decision-making process was based on discussions between the actuary, the company management, and the auditor and depended upon the specific circumstances of each company.

Is the event a Type A or Type B subsequent event?

Actuaries who became aware of the court decision prior to the report date had to determine how to classify the event, (i.e., either as a Type A or a Type B subsequent event). While the decisions were not consistent among all auditing firms and all insurers, most classified the Alberta court decision as a Type A event, an event that provided further evidence of conditions that existed at the December 31, 2007 financial statement date. For a Type A subsequent event, the actuary would take into account the effect of such an event in the calculation of the policy liabilities at the calculation date.

5.3 Failure of a Reinsurance Company from the Ceding Company's Perspective

The failure of an insurer's reinsurer is cited in subsection 1520, Subsequent Events, of the Standards of Practice as an example of a situation where the classification is not clear. Paragraph 1520.16 states,

> If the insolvency was the culmination of a gradual deterioration in the reinsurer's financial condition, most of which had occurred before the calculation date but which was not apparent until revealed by the insolvency, then the insolvency provides information about the entity as it was at the calculation date. If the insolvency was precipitated by a catastrophe, then it provides information about a change in conditions which makes the entity a different entity after the calculation date.

The example in this educational note assumes that the failure of the reinsurer is not due to the occurrence of a catastrophe but instead the gradual deterioration in the entity's financial condition.

Is the actuary aware of the event before or after the calculation date?

This example assumes that the actuary becomes aware of the failure on January 15 which is after the calculation date of December 31.

Did the event occur before or after the calculation date?

Assume that the failure of the reinsurer occurred the first week of January. (Note, if the assumption was that the reinsurer failure occurred the last week of December, the actuary would not treat the failure as a subsequent event and would incorporate the effect of the failure into his or her analysis.)

Is the effect of the event material?

This example assumes that the ceded liabilities to this particular reinsurer are greater than the selected actuarial materiality level.

Is the event due to an error?

The failure of the reinsurer is not considered an error in data, assumptions, calculations, and/or methodology.

Is knowledge before or after the report date?

January 15, the date at which the actuary became aware of the reinsurer's failure, is before the report date.

Is the event a Type A or Type B subsequent event?

The final question is whether the event is classified as a Type A or Type B subsequent event. Based on a review of the above excerpt from the Standards of Practice as well as the CICA definition of a Type A subsequent event, which is an event that provides further evidence of conditions that existed at the financial statement date, the failure of the reinsurer is classified as a Type A event and is taken into account in the policy liabilities valuation.

5.4 Change in Investment Markets

This example assumes a precipitate drop in the stock market that occurs during the first week of January along with a reduction in fixed income yields. Paragraph 1520.16 of the Standards of Practice also cites this example as a situation in which the classification is not clear. It states, in part,

> For financial reporting, one can argue that the stock market crash provides additional information about the entity as it was at the calculation date, because the crash is an indicator of the outlook for common share investments at that date; alternatively, one can argue that the crash makes the entity a different entity only after the calculation date as it creates a new situation. The new situation would be reflected in the financial statements for the subsequent accounting period.

While the Standards of Practice already provide clear guidance regarding the preferred course of action in this situation, the decision tree is used to demonstrate how to arrive at the same conclusion.

Is the actuary aware of the event before or after the calculation date?

The drop in the stock market and investment yields occurs during the first week of January which is after the calculation date of December 31. Thus, the actuary becomes aware of the event after the calculation date.

Did the event occur before or after the calculation date?

The drop in the stock market and investment yields occurs during the first week of January which is after the calculation date of December 31.

Is the effect of the event material?

For demonstration purposes, this example assumes that the effect on the selection of discount rate and thus discounted claim liabilities is material.

Is the event due to an error?

The drop in the stock market and investment yields is not an error in data, assumptions, calculations, and/or methodology.

Is knowledge before or after the report date?

Since the change in the investment environment occurred in the first week of January, the assumption is that the knowledge is before the report date.

Is the event a Type A or Type B subsequent event?

The CICA standards define Type B as those events which are indicative of conditions that arose subsequent to the financial statement date. Paragraph 09 of the CICA Accounting Handbook, Section 3820 Subsequent Events, states, "examples of subsequent events which would not require adjustment of the financial statements but, if significant in their effect, would require disclosure in notes to the financial statements." The list of examples includes a decline in the market value of investments. The change in the stock market arose after the financial statement date. Thus, the appropriate course of action, according to both the CIA and CICA standards, is to disclose the effect of the drop in the stock market but not to take account of the event in the calculation of policy liabilities at December 31.

5.5 Knowledge of Missing Claims

This example assumes that the actuary receives notice on August 5 that the June 30 claims database, which the actuary is using to perform a second-quarter policy liabilities valuation, does not include data from a particular group of claims.

Is the actuary aware of the event before or after the calculation date?

Since August 5 (the date on which the actuary was informed of the missing claims) is after the calculation date of June 30, the actuary proceeds down the right-hand side of the decision tree.

<u>Did the event occur before or after the calculation date?</u>

It is unclear as to whether the event is the late notice of the missing claims, which occurred in August, or the actual claims themselves which occurred prior to the calculation date of June 30. Assuming that the missing claims are material, the conclusion that the data must be incorporated into the June 30 analysis is reached regardless of whether the actuary concludes that the event occurred before or after the calculation date.

- If the event refers to the dates of the missing claims that occurred before the calculation date then, according to the decision tree, the missing data are not treated as a subsequent event and the claims data are incorporated into the analysis.
- If the event refers to the actuary's knowledge of the missing claims, then the actuary proceeds to the next question, that of materiality.

<u>Is the effect of the event material?</u>

For demonstration purposes, this example assumes that the potential claim liabilities associated with the missing claims are greater than the materiality level selected by the actuary.

<u>Is the event due to an error?</u>

This event represents an omission (i.e., an error) in the data provided by the insurer. Since the answer to this question is yes, there is only one course of action – a corrected analysis. It does not matter whether or not the actuary became aware of the subsequent event before or after the report date. As stated in paragraph 1520.01 of the Standards of Practice, "*The actuary should correct any data defect or calculation error which a subsequent event reveals*."

The November 2007 report from the Task Force on Materiality notes that it is important to recognize what materiality is not. The report emphasizes that the concept of materiality is different from the concepts of

the range of reasonable values in an actuarial estimate, and

the inherent uncertainty associated with actuarial estimates.

It is important for the actuary to recognize that an error in data, assumptions, calculations, and/or methodology that is greater than the materiality level must be corrected even if the error is less than the range of reasonable values in the actuarial estimate or less than the inherent uncertainty associated with actuarial estimates of policy liabilities.

5.6 Late Reported Claim(s)

Lags in reporting of claims activity often occur for reinsurers. Several weeks, and sometimes months, can elapse between the time the ceding company increases a case reserve and the excess notice is received by the reinsurer. This example assumes that for year-end reserving purposes, the reinsurer's actuary relies on all notices received by December 29 from its ceding companies. Furthermore, assume that the reinsurer receives notice on January 12 of a November 20 increase in case reserve from a three-year old claim that now exceeds the primary retention by more than $10 million.

<u>Is the actuary aware of the event before or after the calculation date?</u>

The actuary became aware of the event on January 12, which is after the calculation date of December 31.

Did the event occur before or after the calculation date?

The increase in case reserve occurred on November 20 which is before the calculation date of December 31. According to the decision tree, since the event (i.e., the increase in case reserve) occurred before the calculation date, it is not treated as a subsequent event and is incorporated into the analysis.

It is important to recognize that the late reported claim in this example differs from the missing claims in the previous example. The late reported claim of the reinsurer is not classified as an error. Reinsurers routinely rely on data as of December 31 and receive updated claims information from brokers or ceding companies on new claims or case reserve changes occurring in December in early to mid-January. Thus, this example differs from the group of claims that were inadvertently excluded from the claims database in the missing claims example.

5.7 Change in Insurance Industry Benchmarks

Paragraphs 1520.07 and 1520.08 of the Standards of Practice state, in part,

> .07 Examples of a subsequent event that provides information about an entity as it was at the calculation date are
>
> > publication of an experience study which provides information for selection of assumptions, …
>
> .08 In such a case, the effect of the subsequent event on the work is the same as if it had occurred on or before the calculation date.

This final example assumes that the actuary is working for a relatively new company that does not yet have a reliable, credible database for development of actuarial assumptions for reserving purposes. Thus, the actuary relies on insurance industry benchmark information for the selection of loss development patterns and expected loss ratios for this company. Furthermore, the example assumes that the industry's statistical agency releases new industry development data on July 15. The question then becomes, "Is the actuary required to analyze the new industry data for the purpose of conducting a June 30 reserve valuation, which the company uses for financial reporting purposes?"

Is the actuary aware of the event before or after the calculation date?

July 15, the date at which the actuary became aware of the new industry data, is after the June 30 calculation date.

Did the event occur before or after the calculation date?

The event is the availability of new industry data. The new data became available July 15 which is after the June 30 calculation date.

Is the effect of the event material?

Generally, industry benchmark patterns, particularly loss development patterns, do not change dramatically from release to release. Since actuaries review the experience of multiple years when selecting benchmarks based on industry data, the addition of one year is not usually expected to drastically change the actuary's assumptions. However, if the industry data are used for the selection of trend rates or expected loss ratios, changes in industry experience could be more significant, and the effect on selected assumptions could be material. It is incumbent upon

the actuary to verify that the new industry information would not have a material impact on the estimate of policy liabilities for the company.

It is expected that in most circumstances, the actuary would end the decision tree at this point since the effect of the subsequent event is unlikely to be material. Thus, in many situations, the actuary would not likely incorporate the latest industry data. Note that this is a somewhat different conclusion than that indicated by the Standards of Practice which state that the effect of such an event (i.e., the publication of new insurance industry information used for selection of assumptions) on the work is the same as if it had occurred on or before the calculation date.

6. COMMUNICATION BETWEEN ACTUARIES, COMPANY MANAGEMENT, AND AUDITORS

Strong communication between the actuary, company management, and the auditor is critical, particularly with respect to subsequent events. Subsection 1630 of the Standards of Practice, CIA/CICA Joint Policy Statement, requires communication regarding subsequent events between the actuary and the auditor. Paragraph 1630.10 states, in part:

> The enquiring professional would
>
> e) make the responding professional aware of the enquiring professional's needs. This would include a discussion of: …
>
> ii) subsequent events, to determine that the responding professional understands how they are to be treated and that he or she will consider the effect of matters that come to his or her attention up to the date of his or her report.

Therefore, the actuary would review the treatment of subsequent events with the auditor as well as with company management and consider the specific circumstances of the insurance company to ensure that the treatment is appropriate for the entity and that the audit and actuarial approaches are consistent.

The November 2007 report from the CIA Task Force on Materiality states, "An important part of knowing the user in communications between the actuary and the auditor may also be to understand what constitutes a material subsequent event to the accountant user who is also the preparer of general purpose public financial statements."

Following a subsequent event that has the potential to affect many organizations in the insurance industry, the CIA and CICA will also play a role in facilitating discussions and decision-making as to how to classify the event. Two examples of such events are the Eastern Canada ice storm in January 1998 and the Alberta court decision in February 2008. The discussions at the industry level, however, are not a replacement for discussion at the individual company level.

APPENDIX A

CIA STANDARDS OF PRACTICE, 1520 SUBSEQUENT EVENTS

.01 *The actuary should correct any data defect or calculation error which a subsequent event reveals.*

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

> *provides information about the entity as it was at the calculation date,*
>
> *retroactively makes the entity a different entity at the calculation date, or*
>
> *makes the entity a different entity after the calculation date and a purpose of the work is to report on the entity as it will be as a result of the event.*

.03 *The actuary should not take the subsequent event into account if it makes the entity a different entity after the calculation date and a purpose of the work is to report on the entity as it was at the calculation date, but the actuary should report that event.* [Effective December 1, 2002]

Classification

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

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

> take that event into account, or
>
> report that event, but not take it into account.

Definitive and virtually definitive decisions

.06 A definitive decision means a final and permanent decision which is not tentative, provisional, or unsettled. It would be evidenced by an amendment to a benefits plan, a collective bargaining agreement, a binding exchange of letters between two contracting parties, a court order, a legislative bill which has been proclaimed, or the like. A virtually definitive decision is one which is virtually certain to become definitive, but which lacks one or more formalities like ratification, due diligence, regulatory approval, third reading, royal assent, or proclamation. However, a decision which still involves discretion at an executive or administrative level is not virtually definitive.

Event provides information about entity as it was

.07 Examples of a subsequent event that provides information about an entity as it was at the calculation date are

> publication of an experience study which provides information for selection of assumptions,
>
> reporting to an insurer of a claim incurred on or before the balance sheet date, and
>
> adoption of a pension plan amendment that takes effect prior to the calculation date.

.08 In such a case, the effect of the subsequent event on the work is the same as if it had occurred on or before the calculation date.

.09 The actuary would not report the event as being a subsequent event. That is, the actuary would report it only if its importance as an event, whether subsequent or not, warrants reporting.

Event retroactively makes entity different

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

to wind-up a pension plan partially or fully,

to sell a portion of a participating employer's business and consequently to spin-off the corresponding members from the participating employer's pension plan,

to lay off employees who are members of a pension plan,

to report to an insurer a claim incurred after the calculation date,

to amend the benefits of a pension plan, or

to transfer a portion of an insurer's policies to another insurer.

.11 In such a case, the effect of the subsequent event on the work is the same as if it had occurred on or before the calculation date.

.12 The actuary would not report the event as being a subsequent event. That is, the actuary would report it only if its importance as an event, whether subsequent or not, warrants reporting.

Event makes entity different after

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

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

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

Classification not clear

.16 The classification of a subsequent event may be unclear, at least *a priori*, although the circumstances of the case and the actuary's engagement may make it clear. Examples of such events are:

A precipitous fall in the stock market. For financial reporting, one can argue that the stock market crash provides additional information about the entity as it was at the calculation date, because the crash is an indicator of the outlook for common share investments at that date; alternatively, one can argue that the crash makes the entity a different entity only after the calculation date as it creates a new situation. The new situation would be reflected in the financial statements for the subsequent accounting period.

A salary freeze for employees who are members of a pension plan. If the salary freeze is a correction of excessive salaries, then it provides additional information about the entity as it was at the calculation date, because the freeze is an indicator of the outlook for salaries at the calculation date. If the salary freeze deals with a recent problem, then it indicates a change in conditions which makes the entity a different entity after the calculation date. In either case, the actuary would consider the effect of the freeze on the employees' pension benefits. It may be that the freeze will have a lasting effect. Alternatively, it may be that the freeze will be compensated for by higher salaries later on, so that the salary inflation assumption based on historical trends continues to be valid.

Default on a bond. If the default was the culmination of a gradual deterioration in its issuer's financial condition, most of which had occurred before the calculation date but which was not apparent until revealed by the default, then the default provides additional information about the entity as it was at the calculation date. If the default was precipitated by a catastrophe, then it provides information about a change in conditions which makes the entity a different entity after the calculation date.

Insolvency of an insurer's reinsurer. This is similar to default on a bond. If the insolvency was the culmination of a gradual deterioration in the reinsurer's financial condition, most of which had occurred before the calculation date but which was not apparent until revealed by the insolvency, then the insolvency provides information about the entity as it was at the calculation date. If the insolvency was precipitated by a catastrophe, then it provides information about a change in conditions which makes the entity a different entity after the calculation date.

.17 The following table may assist in determining when a subsequent event does or does not take place and what action to take:

When does actuary first become aware of event?	When did event occur?	How does event change entity?	What is the purpose of the work?	Suggested Action
Before calculation date	N/A	N/A	N/A	Treat as other information
After report date	N/A	N/A	N/A	Include in subsequent report and/or withdraw or amend report
After calculation date and before report date (a subsequent event)	Before calculation date	N/A	N/A	Treat as if knowledge obtained before calculation date
	After calculation date	Entity become different as of or prior to calculation date	N/A	Take event into account as if it occurred prior to calculation date
		Entity becomes different after calculation date	Report on entity as it was at calculation date	Report event but do not take into account in calculations
			Report on entity as it will be after calculation date	Report event and take into account in calculations
		Unclear	N/A	Gather more information until classification is clear

Reporting

.18 Sometimes it is practical and useful to report an alternative and opposite calculation; i.e., an alternative calculation which does not so take the subsequent event into account when the main calculation does, or which takes the event into account when the main calculation does not. (For example, in a province for which the calculation date for a pension valuation following marriage breakdown is the date of separation, the plan member has elected at some time between the calculation date and the report date to retire with an early retirement penalty. The actuary would consider reporting values assuming that this subsequent event had been an established intention at the calculation date, instead of or in addition to retirement scenarios otherwise recommended in the practice-specific standards.) In those cases, the actuary makes the same calculations regardless of the purpose of the work but their reporting depends on the purpose of the work.

APPENDIX B

CICA HANDBOOK: SUBSEQUENT EVENTS

SPECIFIC ITEMS

SECTION 3820

.01 Financial statements are prepared to reflect the financial position at a particular date and the operating results and cash flows for a period ended on that date. However, events occurring after the financial statement date may indicate a need to adjust items or to make specific disclosures in those statements. Therefore, in preparing financial statements, the implications and financial effects of subsequent events would be considered.

.02 The period during which subsequent events are considered will depend on the management structure and procedures followed in completing the financial statements.[1] The appropriate cut-off point for subsequent events is a matter of judgment taking into account the particular circumstances and reporting requirements.

.03 In general, there are two types of subsequent events:

(a) those which provide further evidence of conditions which existed at the financial statement date; and

(b) those which are indicative of conditions which arose subsequent to the financial statement date.

The extent to which, and the manner in which, the effect of a subsequent event is reflected in the financial statements will depend on its type.

.04 The effect of subsequent events may be so pervasive, however, that the viability of the whole or a part of the business of the enterprise is brought into question. A rapid deterioration in operating results or financial position after the date of the financial statements may indicate a need to consider whether it is proper to use the going concern assumption.

ACCOUNTING TREATMENT

Adjustment to financial statements

.05 Subsequent events may provide additional information relating to items included in the financial statements and may reveal conditions existing at the financial statement date that affect the estimates involved in the preparation of financial statements. All such information that becomes available prior to completion of the financial statements would be used in evaluating the estimates made and the financial statements would be adjusted where necessary. For example, the institution of bankruptcy proceedings against a debtor, subsequent to the date of the financial statements, may be indicative of the underlying financial situation of the debtor at the date of the financial statements. If the provision for that debt were inadequate, adjustment of the financial statements would be required.

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[1] Corporations legislation in some jurisdictions imposes certain responsibilities on the officers of a corporation to provide amended financial statements upon subsequent discovery of facts which could reasonably have been previously determined and, if previously known, would have required a material adjustment to the financial statements presented to the annual meeting of shareholders.

.06 * Financial statements should be adjusted when events occurring between the date of the financial statements and the date of their completion provide additional evidence relating to conditions that existed at the date of the financial statements. [JULY 1979]

Disclosure in financial statements

.07 Adjustment of the financial statements for subsequent events is not appropriate if such events do not relate to conditions existing at the financial statement date. To reflect the effect of such events would not be consistent with the concept that a balance sheet represents the financial position of an enterprise at the financial statement date.

.08 Some events occurring after the financial statement date may have a significant effect, in a subsequent period, on the assets and liabilities or future operations of an enterprise and disclosure could be important to users in their interpretation of the financial statements.

.09 Examples of subsequent events which would not require adjustment of the financial statements but, if significant in their effect, would require disclosure in notes to the financial statements include:

(a) an event such as a fire or flood which results in a loss;

(b) a decline in the market value of investments;

(c) purchase of a business;

(d) commencement of litigation where the cause of action arose subsequent to the date of the financial statements;

(e) changes in foreign currency exchange rates;

(f) the issue of capital stock or long-term debt.

.10 * Financial statements should not be adjusted for, but disclosure should be made of, those events occurring between the date of the financial statements and the date of their completion that do not relate to conditions that existed at the date of the financial statements but:

(a) cause significant changes to assets or liabilities in the subsequent period; or

(b) will, or may, have a significant effect on the future operations of the enterprise. [JULY 1979]

.11 Disclosure of a subsequent event that does not require adjustment of the financial statements would be made by way of a note to the financial statements indicating both the nature of the event and, when practicable, the estimated financial effect.

.12 * Disclosure of a subsequent event that does not require adjustment of the financial statements should include:

(a) a description of the nature of the event; and

(b) an estimate of the financial effect, when practicable, or a statement that such an estimate cannot be made. [AUG. 1978 *]

.13 A subsequent event, such as the sale of a significant segment of the business, may have a pervasive effect on the future activities of the enterprise. A practical method of disclosing such effect may be to provide supplementary pro-forma financial information. Such pro-forma information, incorporating the effect of the event as if it had occurred at the financial statement

date, would be presented in a note to the financial statements which clearly states that the information provided reflects certain subsequent events for which the financial statements have not been adjusted.

* Editorial change – July 1979