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## Educational Note

# Guidance for the 2009 Valuation of Policy Liabilities and DCAT for Property and Casualty Insurers

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## *Educational Note*

# Guidance for the 2009 Valuation of Policy Liabilities and DCAI for Property and Casualty Insurers

Committee on Property and Casualty Insurance Financial Reporting

November 2009

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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 member in the property and casualty insurance practice area.*

## Memorandum

**To:** Members in the Property and Casualty Insurance Practice Area

**From:** Tyrone G. Faulds, Chairperson  
Practice Council

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

**Date:** November 4, 2009

**Subject:** **Educational Note: Guidance for the 2009 Valuation of Policy Liabilities and DCAT for Property and Casualty Insurers**

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In accordance with the Institute's Policy on 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 November 3, 2009.

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 Educational 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 educational note, please contact Kevin A. Lee at his CIPF online Directory address, [kevin.lee@iao.aon.ca](mailto:kevin.lee@iao.aon.ca).

TGF, KAL

The Committee on Property and Casualty Insurance Financial Reporting (PCFRC) of the Canadian Institute of Actuaries (CIA) has prepared this educational note to provide guidance to actuaries in several areas affecting the valuation of policy liabilities and Dynamic Capital Adequacy Testing (DCAT) reporting for property and casualty (P&C) insurers. This note reviews relevant Standards of Practice and educational notes and addresses some current issues affecting the work of the appointed actuary (AA). Links to all the documents referenced in this educational note are provided in the appendix.

### Standards of Practice

While all of the Rules of Professional Conduct (Rules) and Standards of Practice are important, we would like to direct your attention to the following that are particularly relevant for AAs:

Section 1600 – Another Person’s Work

Section 1700 – Assumptions

Section 1800 – Reporting

Section 2100 – Valuation of Policy Liabilities: All Insurance

Section 2200 – Valuation of Policy Liabilities: P&C Insurance

Section 2400 – The Appointed Actuary

Section 2500 – Dynamic Capital Adequacy Testing

Special attention would be given to the fact that effective April 1, 2009 revisions to Standards of Practice for the “Clear Specification of Accepted Actuarial Practice in the Actuary’s Report” were published. These revisions clarify that the Standards of Practice only give guidance on Accepted Actuarial Practice in Canada as opposed to accepted actuarial practice in other countries.

It is expected that by the end of this year, revised Standards of Practice regarding Margins for Adverse Deviations (MfADs) will be published. A notice of intent on these changes was published June 5, 2009 and a formal exposure draft of the proposed Standards was issued for comments September 15, 2009. The proposed changes include,

clarification that the use of stochastic approaches for determining MfADs is within accepted actuarial practice in Canada,

reduction of the low end of the range for the investment rate margin from 50 basis points to 25 basis points, and

increase of the high end of the range for claims development margin from 15% to 20%.

We would also like to reiterate, that according to paragraph 2250.11 of the existing Standards of Practice, “Selection of a margin for adverse deviations above the high margin may be appropriate for unusually high uncertainty – for example, during the transition to new insurance coverages.” The exposure draft for revised Standards of Practice, paragraph 2260.04 (Deterministic Analysis) states

“A selection above the high margin for adverse deviations would be appropriate, however, for unusually high uncertainty or if the resulting

provision for adverse deviations is unreasonably low because the margin for adverse deviations is expressed as a percentage and the best estimate is unusually low.”

### **Educational Notes and other CIA Publications**

In order to provide guidance in the selection of MfADs, the PCFRC is targeting the issuance of a draft educational note “Provision for Adverse Deviations – Property & Casualty Insurers” by year-end 2009 which will address issues similar to those contained in the repealed Standards of Practice of November 1993. This educational note summarizes the purpose of risk margins, reviews considerations in the selection of MfADs, and discusses the development of MfADs using stochastic techniques. At the 2009 Seminar for the Appointed Actuary, session PD-5 dealt with the topic of MfADs. We refer you to the CIA website for copies of the presentation slides from this session.

To assist you in your fiscal year-end valuation or Dynamic Capital Adequacy Testing (DCAT) work, the following educational notes and documents are valuable sources of information:

Educational Note: [Classification of Insurance Contracts under International Financial Reporting Standards](#) (June 2009)

Draft of Educational Note: [Subsequent Events](#) (October 2008)

Educational Note: [Dynamic Capital Adequacy Testing](#) (November 2007)

Report of CIA Task Force on Materiality: [Materiality](#) (November 2007)

[Report of the CIA Task Force on the Appropriate Treatment of Reinsurance](#) (October 2007)

Educational Note: [Discounting](#) (July 2005)

Educational Note: [Consideration of Future Income Taxes in the Valuation of Policy Liabilities](#) (July 2005)

Educational Note: [Valuation of Policy Liabilities P&C Insurance Considerations Regarding Claim Liabilities and Premium Liabilities](#) (June 2003)

Educational Note: [Evaluation of the Runoff of Claims Liabilities When the Liabilities are Discounted in Accordance with Accepted Actuarial Practice](#) (March 2003)

### **Regulatory Guidance**

We remind the appointed actuary to refer to updated communication from provincial and/or federal insurance regulators regarding policy liabilities valuation and DCAT reporting.

#### ***Changes in Reporting Requirements for Federally-Regulated Reinsurers***

In a letter dated May 11, 2009, the Office of the Superintendent of Financial Institutions (OSFI) informed federally-regulated reinsurers that effective for Q4 2009 filings, the annual return reporting requirements will be changed from 105 days to 60 days. This change significantly affects the timeline of the preparation of the Appointed Actuary’s Report (AA Report) for federally-regulated reinsurers.

### **Changes in Federal Reporting Requirements for DCAT**

In the fall of 2009, OSFI will conduct information sessions with companies on risk management and stress testing, including DCAT. Although the details of OSFI's proposals are not finalized, we expect that,

for most companies, DCAT reports will have to be presented to the Board no later than six months after year-end (compared to twelve months currently), and

insurers will need to be able to respond to a request by OSFI to prepare interim "what if" stress tests; however, complete DCAT analyses will not be required more frequently than once a year. On this topic, OSFI published draft guideline E-18 titled "Stress-testing" in August 2009.

### **Judicial Decision on Canadian Automobile Cap on Damages**

Over the last few years, judicial challenges on damage caps for automobile accident benefits have been an issue in Alberta and the Maritimes.

In February 2008, Alberta's Court of Queen's Bench struck down the \$4,000 cap on non-pecuniary damages for people who suffer minor injuries in car accidents. The Alberta government appealed this decision. On June 15, 2009, the Alberta Court of Appeal released its decision: the court overturned the first decision and upheld the validity of the minor injury pain and suffering damages cap.

At the time of writing this educational note, we know that the plaintiffs are seeking leave to appeal this case to the Supreme Court of Canada. However, we do not know whether or not the Supreme Court of Canada will hear this case. Therefore, while the recent decision increases the probability that the damages cap on non-pecuniary damages for minor injuries will be maintained, uncertainty still exists about the insurer's exposure to such challenges.

To evaluate the insurer's potential liability to the legal challenges, the AA may use a variety of approaches, including, but not limited to,

a market share approach based on estimates of the industry-wide impact of the cap in each province (e.g. see Miller's analysis, KPMG analysis or individual company's analysis),

a detailed review of the individual company's open and/or closed claim files, and

traditional actuarial methods based on a review of loss development experience pre- and post-reform.

The AA may also want to consider the potential for reopened claims and a backlog of late reported claims. The selection of approach will vary depending on the size of the company's portfolio in each province as well as the availability of data pre- and post-reform.

### **Part XIII of the Insurance Companies Act**

Changes to the Insurance Company Act regarding the definition of insurance of risks in Canada will become effective January 1, 2010. One main change is that marine

insurance will be included with other lines of business and not shown separately. The provincial exhibits will show an out of Canada column similar to the existing P&C 1.

On May 29, 2009, OSFI revised its advisory 2007-01-R1 titled “Insurance in Canada of Risks”. The Advisory provides guidance on key indicia to consider in determining whether a foreign entity is insuring in Canada a risk and how OSFI will apply these indicia to a particular business model. The new definition will focus on the location of the conduct of the insurance business rather than the current focus on the location of the risk itself.

All foreign companies with Canadian branches are required to submit to OSFI in 2009/2010 quarterly progress reports relating the branches’ identification of risks located outside of Canada that are insured in Canada and that will be required to be reported in the branch in 2010. It is OSFI’s expectation that a foreign company will communicate with its auditors and actuaries with respect to this review.

Part XIII will also result in changes to the regulation of Marine insurance. OSFI published a communiqué on July 24, 2009 describing these changes affecting Marine business. In summary,

The Branch Adequacy of Assets Test (BAAT) will be amended to reflect the fact that Marine liabilities will no longer be excluded from the test.

No grandfathering of policies issued prior to January 1, 2010 is contemplated. Therefore, assets will be required to be vested for all Marine risks insured in Canada prior to January 1, 2010 and going forward.

All existing foreign insurers that insure or plan to insure in Canada Marine risks are advised that they should apply to OSFI to have their order to insure in Canada amended to reflect their marine business and the new legislative requirements.

Although the changes will be effective January 1, 2010 and, therefore, do not affect fiscal year 2009 valuations, AAs of branches would be familiar with the new definition of “Insurance in Canada of Risks” and the implications for their companies. If the portfolio of business defined as insured “in Canada” changes substantially, the Branch’s historical experience, including loss development triangles, may be significantly different before and after January 2010. Therefore, AAs may need to restate historical experience according to the new definition. Data consistency issues could arise for future valuation if the AA is not able to adjust historical data according to the new definition. While the restated triangles will be needed for the 2010 valuation and not the 2009 valuation, the branch will have to estimate these provisions before filing their first quarter results (due May 15). Therefore, the AA would consider preparing a second valuation showing the provision on the business according to the new definition, as of year-end 2009. It is OSFI’s expectation that branches will communicate with their AAs before making such estimates.

The projection of years 2010 and subsequent in the DCAT analyses is expected to reflect the new definition of the business insured “in Canada”. If the premium volume is expected to increase or decrease significantly, the DCAT projection would reflect it and vested assets adjusted accordingly. It is our understanding that the margins for marine insurance will be 8% for unearned premium reserves and 15% for claim liabilities.

Finally, the changes to Part XIII may have implications regarding the status of reinsurers of both Canadian insurers and branches; some reinsurers may not be considered registered anymore. The status of current and future reinsurance treaties would be verified by ceding companies.

### **Economic Environment**

The recent financial crisis may pose additional challenges for the AA at year-end 2009. The AA would consider the effect of the current economic environment in the determination of the interest rate and margins for adverse deviations for discounting policy liabilities.

In particular, the risk premiums on corporate bonds have increased significantly. Part of this increase is due to an increase in the expected default rate on these bonds. Paragraph 2240.01 of the Standards of Practice requires that the expected default be considered in the selection of the interest rate (i.e., the selected interest rate would be reduced by the expected default rate). Where corporate bonds are used to support the policy liabilities, the AA would explicitly show the provision for expected default and provide support for the selected interest rate and related margins.

For some bonds the risk premiums have increased dramatically. If they are not needed to support the company's policy liabilities, the AA could exclude these bonds from the calculation of the discount rate.

Regarding the DCAT analysis, the current financial situation may warrant revisions to assumptions underlying certain adverse scenarios, especially those related to investment risk and inflation risk. Where investments in corporate bonds are significant, a scenario relating to a default on some of the bonds would be considered.

### **Harmonized Sales Tax (HST) in Ontario**

The 2009 Ontario Budget set out a proposal to harmonize Ontario's provincial sales tax (PST) with the Federal goods and services tax (GST) effective July 1, 2010. It is expected that the implementation of the HST will increase costs for insurers in Ontario as financial institutions (including insurers) will not be allowed to claim input tax credits.

AAs would consider the effect on policy liabilities of the upcoming change in PST. The Insurance Bureau of Canada (IBC) recently published an analysis estimating the impact of the change on Ontario loss reserves to be close to \$300 million (i.e., 1.2% of liabilities). A copy of the publication can be found on the IBC member website or can be obtained by sending a request to IBC.

Many services, such as legal, independent adjusters, expert witness, medical assessment, and labour costs on automobile and property repairs will be subject to PST effective July 1, 2010. (Note that this list is not intended to be exhaustive of all categories of expenses subject to increase.) The AA would discuss these issues with the management of insurers, particularly with claims management.

AAs would also consider in their DCAT analyses the expected increase in future claim costs as a result of the tax changes.



## International Financial Reporting Standards

Since International Financial Reporting Standards (IFRS) are expected to be adopted in Canada on January 1, 2011, AAs would become aware of the effect thereof for their respective companies.

As part of the reporting for fiscal year 2009, companies are required to disclose plans for their IFRS transition and the expected effect on the financial statements of the conversion. IFRS 4, which applies to insurance contracts, is an interim standard that allows insurers to mostly retain their current accounting policies for contracts that meet the standard's definition of insurance.

Phase II of IFRS 4 is intended to result in a single international standard for all insurance contracts; the date for the adoption of Phase II is not yet finalized but the earliest possible date is January 1, 2013. While the current IFRS 4 is concerned mostly with the definition and classification of insurance contracts, the revised standard will introduce some changes in the measurement of policy liabilities and the presentation of the balance sheet.

Although Phase I is expected to have little impact for most P&C companies, two areas of immediate concern to the appointed actuary are,

The January 1, 2011 implementation date means that comparable financial statements will be required for 2010. Therefore, issues must be identified rapidly to be addressed in time for this deadline.

Under IFRS 4, an insurance contract is defined as 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." All insurance contracts would be reviewed to make sure they meet this definition. For most P&C insurance contracts the determination will be straightforward. However, the classification of some contracts may be more complex, for example: mortgage insurance, warranty, fronting, self-insured retentions, etc. The CIA's Practice Council has issued an educational note titled, "Classification of Contracts under International Financial Reporting Standards" that summarizes considerations relevant to the classification of insurance contracts.

Numerous papers have been published on the topic of IFRS. The Committee on Property and Casualty Insurance Financial Reporting (PCFRC) refers you to the following publicly available documents:

Educational Note: Classification of Contracts under International Financial Reporting Standards (June 2009),

Handout from presentation PD-10 at the CIA's 2008 Seminar for the Appointed Actuary,

OSFI's October 7, 2008 communication regarding, "International Financial Reporting Standards",

OSFI's April 25, 2008 communication regarding, "Adoption of International Financial Reporting Standards",

International Actuarial Association's (IAA) International Actuarial Standard of Practice (IASP) – IASP 3 Classification of Contracts,

“Impact of IFRS on Canadian Property & Casualty Insurers”, KPMG LLP (recently added to the syllabus of CAS exam 7C), and

International Accounting Standards Board (IASB) May 2007 paper, “Preliminary Views on Insurance Contracts,” Part 1, Chapters 1 through 3.

### **Guidance to Members on Specific Situations**

From time to time, CIA members seek advice or guidance from the PCFRC. The PCFRC strongly encourages such dialogue. CIA members would be assured that it is proper and appropriate for them to consult with the chairperson or vice-chairperson of the PCFRC.

CIA members are reminded that responses provided by the PCFRC are intended to assist them in interpreting CIA Standards of Practice, educational notes, Rules of Professional Conduct, and in assessing the appropriateness of certain techniques or assumptions. A response from the PCFRC does not constitute a formal opinion as to whether the work in question is in compliance with the CIA Standards of Practice. Guidance provided by the PCFRC is not binding upon the member.

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**APPENDIX**

Following is a list of all documents referenced in this educational note, along with the corresponding hyperlinks.

Rules of Professional Conduct:

<http://www.actuaries.ca/members/publications/2006/206091e.pdf>

Standards of Practice:

[http://www.actuaries.ca/SOP/sop\\_e.cfm](http://www.actuaries.ca/SOP/sop_e.cfm)

Educational Note: Classification of Contracts under International Financial Reporting Standards (June 2009):

<http://www.actuaries.ca/members/publications/2009/209066e.pdf>

Exposure Draft to Revise the Standards of Practice – Practice-Specific Standards for Insurers (P&C Insurance) – Subsection 2250 Margin for Adverse Deviations (September 2009):

<http://www.actuaries.ca/members/publications/2009/209087e.pdf>

Draft of Educational Note: Subsequent Events (October 2008):

<http://www.actuaries.ca/members/publications/2008/208066e.pdf>

Educational Note: Dynamic Capital Adequacy Testing (November 2007):

<http://www.actuaries.ca/members/publications/2007/207108e.pdf>

Task Force Report: Materiality (November 2007):

<http://www.actuaries.ca/members/publications/2007/207099e.pdf>

Task Force Report: Appropriate Treatment of Reinsurance (October 2007):

<http://www.actuaries.ca/members/publications/2007/207081e.pdf>

Educational Note: Discounting (July 2005):

<http://www.actuaries.ca/members/publications/2005/205052e.pdf>

Educational Note: Consideration of Future Income Taxes in the Valuation of Policy Liabilities (July 2005):

<http://www.actuaries.ca/members/publications/2005/205048e.pdf>

Educational Note: Valuation of Policy Liabilities P&C Insurance Considerations Regarding Claim Liabilities and Premium Liabilities (June 2003):

<http://www.actuaries.ca/members/publications/2003/203051e.pdf>

Educational Note: Evaluation of the Runoff of Claims Liabilities When the Liabilities are Discounted in Accordance with Accepted Actuarial Practice (March 2003):

<http://www.actuaries.ca/members/publications/2003/203023e.pdf>

Handout from presentation PD-10 at the CIA's 2008 Seminar for the Appointed Actuary:

[http://meetings.actuaries.ca/Appointed\\_Actuary/2008/PD-10.pdf](http://meetings.actuaries.ca/Appointed_Actuary/2008/PD-10.pdf)

Handout from presentation PD-8 at the CIA's 2008 Seminar for the Appointed Actuary:

[http://meetings.actuaries.ca/Appointed\\_Actuary/2008/PD-8.pdf](http://meetings.actuaries.ca/Appointed_Actuary/2008/PD-8.pdf)

OSFI's advisory: Insurance in Canada of Risks and accompanying letter:

[http://www.osfi-bsif.gc.ca/app/DocRepository/1/eng/guidelines/regulatory/Adv\\_insurance\\_riskr1\\_e.pdf](http://www.osfi-bsif.gc.ca/app/DocRepository/1/eng/guidelines/regulatory/Adv_insurance_riskr1_e.pdf)

[http://www.osfi-bsif.gc.ca/app/DocRepository/1/eng/guidelines/regulatory/Adv\\_insurance\\_risk\\_let\\_e.pdf](http://www.osfi-bsif.gc.ca/app/DocRepository/1/eng/guidelines/regulatory/Adv_insurance_risk_let_e.pdf)

International Actuarial Association: IASP 3 – Classification of Contracts:

[http://www.actuaries.org/STANDARDS/Current/IASP3\\_EN.pdf](http://www.actuaries.org/STANDARDS/Current/IASP3_EN.pdf)

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