

## *Educational Note*

# Valuation of Gross Policy Liabilities and Reinsurance Recoverables

## Committee on Life Insurance Financial Reporting

December 2010

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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 life insurance practice area.*

## Memorandum

**To:** All Life Insurance Practitioners  
**From:** Tyrone G. Faulds, Chair  
Practice Council  
B. Dale Mathews, Chair  
Committee on Life Insurance Financial Reporting  
**Date:** December 1, 2010  
**Subject:** **Educational Note: Valuation of Gross Policy Liabilities and Reinsurance Recoverables**

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International Financial Reporting Standards (IFRS) will be effective in Canada for interim and financial statements relating to fiscal years starting on or after January 1, 2011. IFRS 4 deals with the measurement of liabilities for insurance contracts. It is a preliminary standard (often called “Phase 1”) which allows the continuation of the current accounting policy for the measurement of insurance contract liabilities, provided certain criteria are met.

One of the criteria under IFRS 4 is stated in paragraphs 14 (d)(i). In particular, it states that an insurer shall not offset reinsurance recoverables against the related gross liabilities. While ceded liabilities are currently required to be disclosed for certain financial reporting and regulatory purposes, the changes to the Standards of Practice which have been approved, with an effective date of January 1, 2011, will result in additional responsibilities for the actuary.

The Standards of Practice do not provide guidance on the calculation method or assumptions for the gross liability and the reinsurance recoverable. This educational note describes considerations in the valuation and presentation of the gross liability and the reinsurance recoverables.

In accordance with the Canadian Institute of Actuaries’ (CIA) Policy on Due Process for the Adoption of Guidance Material Other than Standards of Practice, this educational note has been prepared by the Committee on Life Insurance Financial Reporting, and has received approval for distribution from the Practice Council on November 25, 2010.

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 B. Dale Mathews, Chair, Committee on Life Insurance Financial Reporting, at her CIA Online Directory address, [dale\\_mathews@manulife.com](mailto:dale_mathews@manulife.com).

TGF, BDM

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## 1. INTRODUCTION

### 1.1 Notes on Terminology

Throughout this document the following terminology will apply. Some other guidance that is quoted in the document uses different terms, which are referenced in parentheses below for convenience.

**Gross liability** (direct liability) is the liability calculated without reflection of reinsurance arrangements.

**Net liability or liability net of reinsurance recoverable** is the liability calculated with reflection of reinsurance arrangements.

**Reinsurance recoverable** (reinsurance asset) is the excess of the gross liability over the liability net of reinsurance recoverable.

### 1.2 Purpose and Scope

International Financial Reporting Standards (IFRS) will be effective in Canada for interim and financial statements relating to fiscal years starting on or after January 1, 2011. IFRS 4 deals with the measurement of liabilities for insurance contracts. It is a preliminary standard (often called “Phase 1”) which allows the continuation of the current accounting policy for the measurement of insurance contract liabilities, provided certain criteria are met.

One of the criteria under IFRS 4 is stated in paragraphs 14 (d)(i). In particular, it states that an insurer shall not offset reinsurance recoverables against the related gross liabilities. While ceded liabilities are currently required to be disclosed for certain financial reporting and regulatory purposes, the changes to subsection 2140 of the Standards of Practice which have been approved to take effect on January 1, 2011, will result in additional responsibilities for the actuary.

.01 *The actuary's report should describe*

*the valuation and presentation of policy liabilities and reinsurance recoverables for the insurer's balance sheet and income statement,*

*the actuary's opinion on the appropriateness of those liabilities and recoverables and on the fairness of their presentation...*

Here is an illustrative description.

.16 The Appointed Actuary is:

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

required to provide an opinion on the appropriateness of the policy liabilities [net of reinsurance recoverables] at the balance sheet date to meet all policyholder obligations of [the Company]...

As stated in [Canadian Methods for the Valuation of Insurance Contracts \(Life and P&C\) to Satisfy the Requirements of IFRS 4.14](#), there is no proposed change to the net liability for which CALM is prescribed. That document notes that

The net amount of the direct liability together with the reinsurance asset [reinsurance recoverable] would equal the original net CALM liability.

The allocation of the net liability into a direct liability [gross liability] and a reinsurance asset [reinsurance recoverable] would be based on the underlying cash flows, together with a reasonable assumption about the nature of the related assets.

The Standards of Practice do not provide guidance on the calculation method or assumptions for the gross liability and the reinsurance recoverable. This educational note describes considerations in the valuation and presentation of the gross liability and the reinsurance recoverables.

According to the related IFRS, reinsurance contracts, like the direct written contracts, are to be classified into one of the categories,

insurance contracts,  
financial instruments, or  
service contracts.

Section 2 of this educational note assumes that both the direct written contract and the ceded reinsurance contract are classified as insurance contracts according to IFRS 4. Situations may occur where the ceded reinsurance contract is classified differently. Examples might be ceded guaranteed minimum income benefit (GMIB) business or some financial reinsurance arrangements. In those situations, the cash flows associated with the reinsurance contract would be considered separately and valued in a manner consistent with the related IFRS. The resulting reinsurance recoverable would then be added to the net CALM liability to obtain the gross liability.

## 2. CALCULATION OF REINSURANCE RECOVERABLE

References to some applicable existing guidance are set out below.

### 2.1 Existing Guidance

#### a. Methodology

In subsection 2320 of the Standards of Practice that will take effect on January 1, 2011, liabilities net of reinsurance recoverables are to be determined by CALM using all cash flows including those related to reinsurance.

*.01 The actuary should calculate insurance contract liabilities net of reinsurance recoverables by the Canadian asset liability method.*

As stated in [Accounting for Reinsurance Contracts under International Financial Reporting Standards](#), IFRS 4 does not prescribe how to value the amount to be reported for the reinsurance recoverable, except that the value of the reinsurance recoverable needs to be reduced if the reinsurance recoverable is impaired.

Some preliminary guidance has been provided in [Canadian Methods for the Valuation of Insurance Contracts \(Life and P&C\) to Satisfy the Requirements of IFRS 4.14](#). Specifically,

The allocation of the net liability into a direct liability [gross liability] and a reinsurance asset [reinsurance recoverable] would be based on the underlying cash flows, together with a reasonable assumption about the nature of the related assets.

#### b. Assumptions

The educational note [Accounting for Reinsurance Contracts under International Financial Reporting Standards](#) contains some references to the use of margins. It points out that IFRS 4

does not address prudence (margins) in the reinsurance recoverable, and does not prohibit inclusion. It suggests that using margins in the net liability only and not in the reinsurance recoverable may be in conflict with IFRS 4. Using margins on both produces a measurement that is consistent whether reinsurance has been purchased or not. It is also noted that the reported value of a reinsurance recoverable can therefore be increased by the reflection of margins, but this is not felt to be in conflict with IFRS 4.

It would be expected that the margins would be consistent between the gross liability and the net liability.

## 2.2 Appropriate Methodologies

There may be situations where information is known about the assets which would support the gross liability, such as the existence of a reinsurance trust, and this could be taken into account in the development of the gross liability. However, as the ceding company generally would not have assets in place to support the gross liability it would be expected that an approximation to CALM would be required. CLIFR is of the view that the above existing guidance is consistent with the generally acceptable approximations to CALM (see [Approximations to Canadian Asset Liability Method \(CALM\)](#)). The actuary would ensure that the method chosen for the allocation of the net liability into a gross liability and a reinsurance recoverable would be a reasonable approximation taking into account the assets that might be held to be consistent with the insurer's investment policy.

One approach, but not the only one, consistent with this guidance would involve the following approach.

The gross cash flows would be discounted to determine the gross liability using an interest rate vector that reproduces the CALM net liability when applied to the net cash flows. Companies would generally already have this vector in place for calculating their policy by policy liabilities, including negative liabilities.

These gross cash flows would include margins consistent with those in the net liability.

The reinsurance recoverable would then be determined by deducting the CALM net liability from the gross liability, calculated as described above.

Situations will exist where an appropriate CALM discount vector is not available and the actuary would use judgment to develop an appropriate approach. An example would be a situation where all business is retroceded.

Decisions will need to be made with respect to each element of the net liability and its treatment in the gross liability. Reasonability and materiality would be key considerations in developing an approach. Items where a simple "gross up" of the amount reflected in the net liability may be appropriate include

IBNRs,

impact of the change in fair value of assets backing policy liabilities applied during a roll forward of the net CALM liability<sup>1</sup>,

some manual or bulk liabilities, depending on the purpose, and

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<sup>1</sup> For further information, refer to the educational note on [CALM Implications of AcSB Section 3855 Financial Instruments, Recognition and Measurement](#).

permanent tax differences related to assets (e.g., dividends from Canadian stocks) as these would be related to the asset yield.

For other elements, this approach might not be appropriate since the effect on the gross liability would not be expected to be proportionate and the actuary would consider a different approach. An example would be certain temporary tax timing differences (e.g., difference between GAAP policy liabilities and corresponding tax liabilities).

### 3. IMPAIRMENT OF REINSURANCE RECOVERABLE

Paragraph 14(e) of IFRS 4 requires that an insurer “shall consider whether its reinsurance assets [reinsurance recoverables] are impaired”.

Paragraph 2130.30 of the Standards of Practice states that, “The recovery on account of reinsurance ceded would take account of the financial condition of the reinsurer.” As a result, any extra provision related to recoverability would be included in the net liability but not in the gross liability, thereby reducing the reinsurance recoverable, consistent with IFRS 4. That is,

gross liability (unchanged because it does not reflect reinsurance)  
less  
net liability (increased by provision related to recoverability)  
equals  
reinsurance recoverable (reduced by provision related to recoverability).

### 4. REFERENCES

The following references are included to support the conclusions of this educational note and are recommended reading.

CIA. [Canadian Methods for the Valuation of Insurance Contracts \(Life and P&C\) to Satisfy the Requirements of IFRS 4.14](#). Document 210005. January 2010.

CIA. [Accounting for Reinsurance Contracts under International Financial Reporting Standards](#). Document 209125. December 2009.

Actuarial Standards Board. [Final Standards – Part 1000 Insurance to conform to the adoption of International Financial Reporting Standards \(IFRS\) as Canadian GAAP](#). Document 209116. November 2009.

Actuarial Standards Board. [Final Standards – Part 2000 Insurance to conform to the adoption of International Financial Reporting Standards \(IFRS\) as Canadian GAAP](#). Document 209117. November 2009.

CIA. [Classification of Contracts under International Financial Reporting Standards, Canadian Institute of Actuaries](#). Document 209066. June 2009.

CIA. [Approximations to Canadian Asset Liability Method \(CALM\)](#). Document 206133. November 2006.

CIA Research Paper. IFRS Disclosure Requirements for Life Insurers. This paper is expected to be published in 2010.