AUTORITÉ DES MARCHÉS FINANCIERS

Actuary's Guide Regarding the Liability Report for Insurers of Persons

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Introduction

This Guide is intended for actuaries of Quebec chartered insurers of persons. Actuaries are persons[1] who were charged with their functions by the board of directors under sections 115 and 278 of the *Insurers Act*, CQLR, c. A-32.1 (the "Act").

It sets out the requirements of the Autorité des marchés financiers (the "AMF") for the content and presentation of the report required under section 128 of the Act (hereinafter referred to as the "Report"). The Guide does not limit in any way the information the Report may contain. The actuary should include all information—in addition to that required in this Guide—to assist in understanding the actuary's work.

Although the actuary is responsible for the Report and it deals primarily with the liabilities (or assets) of the insurer's insurance contracts, the Report must also contain other information the AMF deems relevant to its regulatory role. Liabilities are directly related to the insurer's financial position and also serve as an input for capital adequacy requirements in insurance of persons (hereinafter referred to as "life and health insurance"). Therefore, the content is not strictly limited to the insurer's IFRS 17 calculations.

As required under section 129 of the Act, the actuary must apply generally accepted actuarial standards. However, any amendments, clarifications or requirements made or added by the AMF must also be taken into account by the actuary. Consequently, the actuary must comply with accepted actuarial practice established by the Standards of Practice of the Canadian Institute of Actuaries (CIA).

The AMF also expects the actuary to follow the guidance provided in the following CIA educational notes:

- "Guidance for the 20AA Valuation of *Insurance Contract* Liabilities of Life Insurers" Educational Note of the Committee on Life Insurance Financial Reporting (CLIFR);
- All educational notes related to the International Financial Reporting Standard "IFRS 17 *Insurance Contracts*";
- All other Educational Notes related to the actuary's valuation of liabilities.

Otherwise, the actuary must justify any deviations from the previous guidance material.

The actuary's opinion relates to the insurer's consolidated business.

Some tables in the actuary's Report are intended, in particular, for reconciliation with the

[1] In this Guide, the masculine gender has been used to simplify the text.

"LIFE returns[2]", either on a consolidated or non-consolidated basis. The title of the tables in the Excel file clearly indicates the basis requested. The other information required by this Guide, must pertain to the non-consolidated business only, unless otherwise indicated.

The AMF expects the valuation methods and assumptions used to be clearly justified. Among other things, the source of the assumptions must be clearly disclosed.

Accordingly, the actuary may be required to produce additional explanations where the annual financial returns or the actuary's Report do not allow the appropriateness of the methods and assumptions used to be gauged.

To that end and for the purpose of on-site examination, the actuary must collect and keep:

- The tests, studies and other analyses carried out by the actuary;
- The documents that could provide clear and complete justification of the choice of methods and assumptions used; and
- The control procedures for data, assumptions and calculations.

Definitions

The actuary must consider the following definitions when preparing the actuary's Report and the tables in the Excel file required by the AMF:

- **"*Insurance contract* liabilities"** include the liabilities of reinsurance contracts issued and represents the net amount of insurance contract assets, as defined in the LIFE returns;
- **"*Reinsurance contract* held assets"** include insurance ceded or retroceded to reinsurers and represents the net amount of reinsurance contract held, as defined in the LIFE returns;
- **"Net contract liabilities"** mean insurance contract liabilities net of *reinsurance contract* held assets;
- **"Contracts"** mean *insurance contracts* AND *reinsurance contracts* held;

[2] "LIFE returns" refer to the following returns and related instructions: "Life Core Financial Statement Quarterly Return (LF1)", "Life Supervisory Quarterly Return (LF2)", "Life Supervisory Annual Supplement Return" and "Life Provincial Return".

- The **"Group of Contracts"** refer to the **"*Group of insurance contracts*"** or ***"Group of contracts"*** defined in IFRS 17 without taking into account the notion of annual cohorts;
- **"Period"** means the current fiscal year.

Note that the AMF expects investment contracts with discretionary participation features measured in accordance with IFRS 17 to be included in *insurance contract* liabilities.

In addition, when the following terms defined in IFRS 17[3] are used in this Guide and in the required tables, they have the same definitions in IFRS 17:

- ***"Insurance contract"***;
- **"*Reinsurance contract*"**;
- **"*Portfolio* of *insurance contracts"*** *or* ***"portfolio"***;
- ***"Contractual service margin"*** (***"CSM"***);
- ***"Risk adjustment for non-financial risk"***;
- ***"Fulfilment cash flows"*** (***"FCF"***);
- "***Liability for remaining coverage"*** (***"LRC"***) or "*Asset for remaining coverage*" ("*ARC*");
- ***"Liability for incurred claims"*** (***"LIC"***) or "*Asset for incurred claims*" ("*AIC*").

[3] These terms will be presented in italics in the Guide.

Excel file required by the AMF:

The actuary must complete and submit the "*Report on policy liabilities.xlsx*" file (the "Excel file") available under the "*Report on policy liabilities*" section of the AMF's website at the following address:

https://lautorite.qc.ca/en/professionals/insurers/disclosures/insurance-of-persons-life-and-health

The actuary must follow the instructions provided on the first worksheet of the Excel file. In particular, the tables in the Excel file required by the AMF must not be modified by adding rows or columns. The actuary must ensure to include in these tables all the information required by the Guide.

The tables required in this Guide refer to the Excel file. The tables may be modified in the Report, if necessary, **but not in the Excel file**. In particular, the insurer can add additional rows or columns and/or subtotals directly into the Report for certain tables. It can also add its own internally used classification.

Summary of tables

Here is the list of the tables in the Excel file required by the AMF that the actuary must include in the report in the appropriate sections:

Table	Title
2.1 a	*Insurance Contract* Liabilities (Assets)
2.1 b	*Insurance Contract* Liabilities (Assets) by Line of Business
2.2 a	*Reinsurance Contract* Held Assets (Liabilities)
2.2 b	*Reinsurance Contract* Held Assets (Liabilities) by Line of Business
2.3 a	Mapping of Groups of Contracts
2.3 b	Product Type by Portfolio
4.2.1.1 a	Mortality Experience Study (Individual Life) - Calculation of the Experience Ratio
4.2.1.1 b	Mortality Experience Study (Individual Life) - Credibility and Assumptions Used
4.2.1.3 a	Expenses by Line of Business
4.2.1.3 b	History of Actual Expenses by Line of Business
4.2.2 a	Spot Discount Curves - Canadian Business
4.2.2 b	Interest Rate Sensitivity Testing
4.2.3	History of the *Risk Adjustment for Non-Financial Risk*
5	Other Liabilities
7.1.1	Change in Net Contract Liabilities Not Measured Using PAA
7.1.2	Change in Net Contract Liabilities Not Measured Using PAA - Contracts at Transition
7.2	Experience Gains/Losses and Changes in Assumptions by Type and Line of Business
7.3	Comprehensive Income Analysis
8 a	*Reinsurance Contracts* Held
8 b	New *Reinsurance Contracts* Held and Modifications to Existing Contracts
9.2.1 a to e	Guarantees of Variable *Insurance Contracts Relating to Segregated Funds*
9.2.2	Financial Guarantees Relating to Universal Life *Insurance Contracts*
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A5	Lapse Supported Products
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A7.2	Participating Account
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A8.2	CARLI - Credits for Participating Products and Contractually Adjustable Products

Format of Report

Table of contents

The Report must include a detailed table of contents and must follow the same order of sections as set out in this Guide. If the actuary deems it appropriate to add sections to the Report, they may be inserted after the prescribed appendices. Furthermore, the various sections must be identified and all pages must be numbered so that a reference can be made to the table of contents.

Contact person

The Report must provide the contact information for the contact person appointed by the actuary to answer disclosure questions relating to the Report. Such contact information must be clearly indicated on the first page of the Report and include the:

- Contact person's name;
- Company's name;
- Telephone number;
- E-mail address.

Outline of Report

The actuary must ensure that a clear and complete report, containing all the sections, subsections and appendices set out in this Guide, as well as all the tables required in the "Summary of tables". **All the sections, appendices and tables are required for monitoring purposes by the AMF.** Accordingly, even if a section does not apply to an insurer, it must still be included in the Report.

Smart PDF

The AMF expects the searchable PDF format to be adhered to, as indicated in the "E-Services – Disclosure Guide – Insurers" document available on the AMF website at the following address: https://lautorite.qc.ca/en/professionals/insurers/disclosures/insurance-of-persons-life-and-health.

Searchable PDFs are interactive PDFs. For example, the table of contents must contain clickable links to the various sections, and the file must contain bookmarks for ease of navigation. A scanned version will not be accepted.

Section 1 – Executive summary

This section of the Report describes the context that prevailed when the actuarial valuation of the net contract liabilities was performed.

In this section, the actuary must include the following:

- A brief presentation of the insurer:
  - An overview of the insurer's structure;
  - Changes made to the structure;
  - The insurer's lines of business, etc.
- Recent years' significant developments materially affecting the insurer's net contract liabilities or results:
  - The introduction or termination of an important product or line of business;
  - The implementation or termination of a material *reinsurance contract*;
  - A portfolio transfer, partnership, merger, or acquisition;
  - A brief description of all material changes arising from the implementation of new accounting or actuarial standards, etc.
- A description of the material risks the insurer is facing:
  - Material risks identified in the insurer's last Financial Condition Testing ("FCT") report, ORSA, stress testing or contingency plan;
  - Any other risk deemed material by the insurer when monitoring sound and prudent management practices.[4]
- Material changes to methods, assumptions, data sources etc., and justification of those changes;
- Any other element required to assist in understanding the valuation of net contract liabilities, such as:
  - Material issues or concerns identified by the actuary and how they were resolved;
  - Any unusual situation identified in the course of the valuation, etc.;

[4] According to the AMF's *Integrated Risk Management Guideline*: https://lautorite.qc.ca/fileadmin/lautorite/reglementation/lignes-directrices-toutes-institutions/g_risk_management_final.pdf

- Changes to accounting choices and the justification of those changes when they have a material impact on present or future results (net income and/or comprehensive income).

Section 2 - Summary of insurance contract liabilities and reinsurance contract held assets

To complete the various tables in section 2, the AMF expects the groups of contracts to be sufficiently granular as to be classified, at a minimum, as follows:

- By country;
- By portfolio/subsidiary;
- According to the following lines of business defined in the LIFE returns:
    - Individual Insurance;
    - Group Insurance;
    - Individual Annuity;
    - Group Annuity;
    - Participating;
    - Property & Casualty;
    - Deposit Taking;
    - Other.

2.1 Insurance contract liabilities

In this section of the Report, the actuary must present tables 2.1a and 2.1b in order to reproduce consolidated insurance contract liabilities. These liabilities must represent the sum of the *LRC* and the *LIC*, as shown in the tables. In addition, in LIFE returns, these liabilities must correspond to the amount disclosed on pages 20014 and 20015, line 799, column 19.

The actuary must also disclose the contractual service margin recognized for services provided and premiums received for insurance contracts during the period related to those contracts. The total of these amounts must equal the amounts disclosed in the LIFE returns on pages 20012 and 20013, lines 110 and 510, column 29. The actuary must also disclose the loss component of onerous contracts. This loss component must be equal to the closing balance disclosed on the LIFE returns on pages 20014 and 20015, line 799, column 06.

For the various groups of contracts contained in the *portfolios*, the actuary must provide the information in Table 2.1a. The various *portfolios* and groups of contracts must be described in section 4.1 of the Report. For the various lines of business in the LIFE returns, the actuary must provide the information in Table 2.1b.

In order to complete Table 2.1a, the actuary must consider the following:

- For subsidiary business, the required information must be presented following the non-consolidated business (enter "Subsidiary" in the "*Portfolio* or Subsidiary" column, and the name of the subsidiary in the "Group of Contracts or Subsidiary Name " column);
- If the insurer does business outside of Canada, the information must be provided first for business issued in Canada, then for business issued in the United States and, lastly, for business issued in other countries.

In addition, for each *portfolio*/group of contracts in Table 2.1a, the columns "Portfolio or Subsidiary" and "Group of Contracts or Subsidiary Name" must include:

- A numbering and naming system that would make it possible to understand the classifications that the group represents.
- A searchable PDF link to section 4.1 of the Report, where the description for the group is set out.

2.2 Reinsurance Contract Held Assets

In this section of the Report, the actuary must present tables 2.2a and 2.2b in order to reflect the consolidated assets of the *reinsurance contracts* held. These assets should be the sum of the *ARC* and the *AIC*, as shown in the tables. In addition, in the LIFE returns, these assets must correspond to the amount disclosed on pages 20018 and 20019, line 599, column 19.

The actuary must also disclose the contractual service margin recognized for service provided and premiums paid for reinsurance contracts (i.e. those ceded or retroceded) during the period. The total of these amounts must equal the amounts disclosed in the LIFE returns on pages 20016 and 20017, lines 110 and 510, column 29, The actuary must also disclose the loss recovery component attributable to the onerous *insurance contracts* via proportional reinsurance through the proportional *reinsurance contract* held.

For the various groups of contracts contained in the *portfolios*, the actuary must provide the information in Table 2.2a. The various *portfolios* and groups of contracts must be described in section 4.1 of the report. For the lines of business of the LIFE returns, the actuary must provide the information in Table 2.2b.

To complete tables 2.2a and 2.2b, the actuary must take into account the instructions (above) for completing tables 2.1a and 2.1b.

2.3 Mapping of groups of contracts

In this section of the Report, the actuary must present tables 2.3a and 2.3b pertaining to the following information related to each of the group of contracts.

The first table contains the following information:

- The country related to the group of contracts;
- The *portfolio* to which the group of contracts belongs;
- The number/name of the group of contracts from tables 2.1a and 2.2a;
- The line of business of the LIFE returns (see section 2.1 of the Guide) to which the group of contracts belongs;
- The type of contract (i.e., an insurance contract or a reinsurance contract held);
- Whether or not the group of contracts contains new contracts each year;
- Whether or not it contains adjustable products;
- Whether or not it contains participating products;
- Whether the contracts include or not financial guarantees;
- The modeling used for contracts that includes financial guarantees;
- Whether or not it contains contracts with cash flows that vary based on the returns on any underlying financial items;
- Whether or not it contains contracts with investment/service components;
- The transition approach for contracts issued before IFRS 17 came into effect;
- The valuation method used to measure the *LRC/ARC*.

The second table contains details of the product types in each portfolio. Product types must be presented in order of significance. The actuary must describe the measure of importance used.

Section 3 – Responsibilities and verification of data and calculations

This section of the Report is divided into two parts. First, the actuary must summarize the responsibilities within the company in relation to the calculation of contract liabilities:

- A description of the responsibilities of the actuary in the valuation of net contract liabilities, including:
    - Its role regarding the assumptions and methods in general;
    - Its role regarding the establishment of the risk adjustment for non-financial risk;
    - Its role regarding the establishment of the interest rate curves;
- A general description of the internal responsibilities with regards to the calculation of net contract liabilities supervised by the actuary, which are the responsibility of the actuarial teams, accountants, investment teams, etc.

Subsequently, the actuary must disclose the procedures used to verify the data used in the valuation of net contract liabilities for both completeness and validity. In particular, the procedures must cover the inputs (including underlying financial items) used in the calculation of net contract liabilities.

The actuary must also summarize the process used to ensure that the data used and calculations, made to determine net contract liabilities reflect the provisions of the contracts and are in line with the actuarial and accounting assumptions and methods used.

The extent to which the actuary used and verified data and calculations produced by a third party must be specified.

Section 4 – Valuation of contracts

This section of the Report is divided into two separate parts, the details regarding the aggregation of contracts, which include *portfolios* and groups of contracts, and the determination of valuation assumptions and methods, including valuation systems.

As mentioned in the introduction to this Guide, the information required in this section must be presented on a non-consolidated basis, with the exception of certain tables for which the total must be presented on a consolidated basis.

Any approximations used must be covered in section 6 of the Report.

4.1 Details regarding contract aggregation

4.1.1 Determination of *portfolios and* groups of contracts

The actuary must elaborate on how the *portfolios* are determined and explain how the allocation of various contracts in these *portfolios* is consistent with the concept of similar risks being managed together.

The actuary must describe and justify any changes made to the *portfolios* since the preceding period.

The actuary must describe at a high-level how the allocation of contracts to different groups of contracts is done. In particular, the actuary must give some explanation on how contracts are assigned to the two non-onerous groups for the general measurement approach ("GMA") and the variable fee approach (“VFA”), and how this exercise is done for identifying onerous contracts under the Premium Allocation Approach (“PAA”).

4.1.2 Detail of the Portfolios and Groups of Contracts

In this section, the actuary does not have to repeat information that is common to several *portfolios*/groups of contracts. Instead, the actuary may specify where the relevant information is located.

By *portfolio*, the actuary must disclose the following information in the same order as in tables 2.1a and 2.2a:

- The number/name of the group of contracts (to be referenced in this section by tables 2.1a and 2.2a required by the Guide);

- For contracts issued before the IFRS 17 effective date, the method used to transition to the IFRS 17 standard, i.e. namely the full retrospective approach, the modified retrospective approach or the fair value approach. The actuary must demonstrate compliance with the requirements in Appendix C of IFRS 17. For the modified retrospective approach or fair value approach, see section 4.2.5 of the Guide;
- The valuation method from among the following:
    1. GMA;
    2. VFA;
        - Where the VFA is chosen, describe whether a risk mitigation technique is used, and how it is reflected;
        - Describe how a substantial share of the return from the fair value of the underlying items is achieved;
    3. The PAA;
        - Where the PAA is chosen to determine the *LRC* for contracts with a boundary of more than one year, the actuary must elaborate on how it meets the eligibility requirements of paragraph 53 (a)[5] of IFRS 17;
- The method used to classify contracts into the following categories as at the date of initial recognition:
    1. Onerous contracts;
    2. Contracts that have no significant possibility of becoming onerous; and
    3. The other contracts;
- Any additional separations that the actuary has used to classify contracts beyond the minimum portfolio separation under IFRS 17.
- A description of each product contained, including:
    - The years in which the contracts were sold;
    - High-level information on contracts (average age; average face amount; number of contracts; contract amounts in force; etc.);
    - Contract liabilities or assets, excluding the CSM;

[5] That is, if on the date the group is created, the entity reasonably expects that the measurement of the liability for the remaining coverage resulting from this simplified method will not differ from significantly than that of applying the provisions of paragraphs 32 to 52 (i.e. to accurately assess)

- Contracts boundaries, and how they complies with paragraph 34 of the IFRS 17 standard;
- A list of all the assumptions that were used (with reference to section 4.2 of the Guide):
    - The actuary must disclose and justify situations in which certain valuation assumptions for calculating *reinsurance contract* held assets differ from the valuation assumptions for calculating the liabilities of the associated *insurance contract*;

- For groups of contracts containing *insurance contracts*, the groups of contracts containing the *reinsurance contracts* held associated with them;
- For the groups of contracts containing *reinsurance contracts held*, the reinsurance contract(s) (with reference to section 8 of the Guide);
- For portfolios / groups of contracts with future cash flows that vary based on financial underlying items, the actuary must disclose whether these cash flows have been separated from future cash flows that do not vary based on financial underlying items:
    - If they were separated, describe the method used;
    - If they were not separated, describe and justify the reasoning;
    - The actuary must give the reference to section 9.1 when these are evaluated using a stochastic approach. If a deterministic approach is used, the actuary will need to explain how his approach meets the criteria for a market-consistent valuation.
- Other relevant contract information, including whether the group of contracts contains investment contracts with discretionary participation features measured under IFRS 17, whether the contracts are part of segregated funds on the LIFE returns, or whether certain components of the contracts have been separated or valued under other accounting standards (e.g., investment/service components);
- The main risks to which the portfolio/group of contracts is sensitive;
- The actuary must disclose the valuation system used for the *portfolios and* whether the system was developed internally or whether it was provided by an external supplier. Any changes in valuation systems must be disclosed and the effects quantified. The actuary must disclose whether audits were performed whenever changes were made to the valuation system. If no audit were performed, the actuary must disclose this;
- The approximations used (in reference to section 6 of the Guide).

4.2 Determination of deterministic assumptions and valuation methods

The actuary must justify the application of judgment at all stages of the net contract liability measurement process, including the estimation of future cash flows, the adjustment to reflect the time value of money, the *risk adjustment for non-financial risk* or for other purposes.

The actuary must clearly describe any instances where the judgment of a third party was used. In such instances, the actuary must disclose the identity of the third party and explain how the actuary ensured that the assumptions and methods used are suitably appropriate.

4.2.1 Estimates of future cash flows

For each assumption used in estimating future cash flows, the actuary must state the reasons why the actuary considers the assumptions to be appropriate while referring to any test, study (internal, industry or reinsurer) or other analyses supporting them. These references must be clearly described.

For this purpose, the actuary must complete the following table showing the schedule of the experience studies **for each assumption discussed in this section**.

Schedule of the experience study			
Name of the assumption			
Aggregation under study	**The last quarter in which the study results were implemented in the liabilities**	**The quarter in which the next study results will be implemented in the liabilities**	**The frequency of the experience study**

Justification must be provided if the date of the next experience study is unknown or if a scheduled experience study has been postponed. An explanation must be provided if there is no established process for updating the experience study, including the frequency at which an experience study is carried out.

The actuary must indicate the following for each assumption discussed in this section:

- The source of the data;
- Economic assumption data (tags linked to *Bloomberg*; *DataStream*; etc.);
- A justification of data relevance;
- How the data was processed;

- The credibility of the data;
- The results obtained;
- The link between the study results and the assumption used.

In particular, the actuary must describe and justify any trend reflected in the assumption used.

The actuary must also indicate how the actuary determined the assumptions for which the data sources are limited or where third party data was used.

The actuary must indicate whether the most recent studies published by the CIA were taken into account in determining the assumptions. If the actuary did not take them into account, justification must be provided.

The actuary must present the assumptions in the order in which they appear in sections 4.2.1.1 and following of this Guide.

The use of an implicit assumption must be disclosed.

4.2.1.1 Mortality

The actuary must indicate the extent to which the assumptions selected are based on the insurer's own experience and/or the reinsurers' experience. In all cases, the actuary must justify the choices made based on the credibility applied to the insurer's experience, where applicable.

If changes are made to the published mortality tables, they must be explicitly disclosed. Where the mortality table used is not the most recent mortality table published by the CIA or originates from another source, the actuary must provide justification.

Where the insurer's experience is taken into account, the actuary he must provide a detailed description of the experience study and the main results thereof in the Report.

To that end, the actuary must provide a table reflecting this experience over the past few years, using actual to expected experience ratios. For all years indicated, the expected experience must be calculated using 100% of the mortality table used in the selection of the mortality assumption at the valuation date.

For each contract/product aggregation in the study, the actuary must include Table 4.2.1.1a showing the information used to determine the mortality experience ratio.

The actuary must clearly explain the entire determination process for assumptions, from the experience ratios to the valuation assumptions used. All adjustments to the data, in particular to the experience ratios (e.g., for mortality improvement prior to the valuation date) must be described, quantified and justified by the actuary.

The actuary must provide clear and complete explanations as to the expected mortality for the different groups of insureds, such as men/women and smokers/non-smokers.

Also, when a single adjustment factor is applied to a mortality reference table for all ages, the actuary must state how the actuary ensured that the adjustment factor is relevant for older ages where the insurer has little experience for those ages. The actuary must also justify the selection of an identical adjustment factor for the select and ultimate periods, where applicable.

The actuary must explain how the mortality assumption was determined for products priced on a preferential basis or with guaranteed issue. For the various adjustment factors applied to the various preferential classes, the actuary must indicate how the selection effect disappears in the future so as to align the adjustment factors with those used for the other products. The actuary must also explain how the fact that the mortality for non-

preferentially priced products may be influenced by preferentially priced products in the market was taken into account.

The actuary must indicate whether there are products that may be death-supported. The actuary must also clearly explain the treatment applied to the valuation of such products.

i) Future mortality improvement

The actuary must disclose the future mortality improvement assumption that is included in the mortality assumptions for each contract/product aggregation. The actuary's choice must be justified. The actuary must also indicate which factors were taken into account in establishing each contract/product aggregation.

ii) Credibility

The actuary must state how the credibility factor(s) applied to the insurer's experience were calculated, including the years of experience used to determine the number of deaths. The actuary must also justify the use of an overall credibility factor for the insurer or a factor for each of the contract/product aggregation, as applicable. The actuary must indicate whether the normalized method was used and explain its application. If that method was not used, the actuary must justify the use of another method.

For each of the contract/product aggregation in the study, the actuary must include Table 4.2.1.1b showing the ratio calculated using credibility to determine the assumption selected.

iii) Changes made to mortality rates

The actuary must discuss in detail any changes made to mortality rates and disclose the following:

- The impact of selective lapses on mortality, particularly for renewable term insurance;
- The adjustment factors applied to the various preferential classes (as mentioned above);
- The mortality improvement (as mentioned above);
- Mortality for multiple life *insurance contracts*;
- Any other items affected by or influencing how the assumption was determined.

4.2.1.2 Morbidity

Explanations must be provided for incidence rates and recovery (termination) rates with respect to morbidity risk.

The actuary must indicate the extent to which the assumptions used are based on the insurer's own experience and/or industry experience and/or reinsurers' experience. In all cases, the actuary's choices must be justified, particularly by the credibility applied to the insurer's experience, where applicable.

Any changes to published contingency tables must be explicitly disclosed. The actuary must also justify the use of a contingency table that is not a recent table published by the industry, the CIA or the Society of Actuaries ("SOA") (e.g., when the 2011 CIA table for Quebec and non-Quebec group insurance recovery rates is not used) or when it originates from another source.

Where the insurer's experience is taken into account, the actuary must provide a detailed description of the experience study and the main results thereof in the Report.

For this purpose, the actuary must provide a table reflecting such experience over the past several years, using "actual to expected" experience ratios. For all the years indicated, the expected experience must be calculated using 100% of the contingency table used in the selection of morbidity assumption as at the valuation date.

The table must indicate whether the data were collected using the amount of insurance or the number of person on disability.

Specifically, **for recovery rates** (e.g., for waivers of premiums and long-term disability benefits in group insurance), the actuary must present the following table for each contract/product aggregation used in the study.

Morbidity experience and assumptions used Recovery rate						
Duration of disability (or attained age)	**Years of experience 20*XX*-20*YY***				**% change based on *Name of contingency table***	
	Actual termination	**Expected termination**	**Experience ratio (%)**	**Credibility (%)**	**Assumption used (T) (%)**	**Assumption used (T-1) (%)**
<1 an						
1 an						
2 ans						
3 ans						
4 ans						
5 ans						
6-10 ans						
10^{+} ans						

And, specifically for individual insurance **incidence rates** (e.g., for critical illness, and salary insurance products), the actuary must provide a standard table that includes the following information:

- The actual number of incidences;
- The credibility factor;
- The actual to expected experience ratio;
- Industry or reinsurer experience;
- The experience ratio calculated using credibility;
- The assumption selected for the period (t);
- The assumption selected for the previous period (t-1).

The actuary must clearly explain the entire assumption determination process, from the experience ratios to the valuation assumptions selected. All adjustments to the data, including experience ratios (e.g., to reflect morbidity improvement trend prior to the valuation date), must be described and quantified by the actuary.

The actuary must provide accurate and complete explanations regarding the expected morbidity for the various groups of insureds, notably based on gender, durations of disability, attained ages (in particular for the ultimate disability recovery rates), Quebec/non-Quebec insureds, and based on whether or not the definition of disability

changes (e.g., for groups whose definition of disability changes from "regular or own occupation" to "any occupation" after a certain disability period).

i) Future improvement trend in morbidity

The actuary must disclose whether the morbidity assumptions include a future morbidity improvement trend. The rationale for the choices made by the actuary must be provided.

ii) Credibility

The actuary must indicate how the credibility factor or factors applied to the insurer's experience was or were calculated and for each factor, specify the following:

- The group of insureds used (all or a subset of insureds);
- The basis used for calculating the factor (expected or actual disabilities);
- The years of experience used.

iii) Changes made to morbidity rates

The actuary must state in detail any changes made to morbidity rates and disclose the following:

- The possibility of anti-selection by insureds;
- The future morbidity improvement trend (as mentioned above);
- Any other item affected by or influencing how the assumption was determined.

4.2.1.3 Expenses

Expense assumptions must be determined based on an experience study of the insurer. A detailed description of the study and its main findings must be included in the Report.

In particular, the actuary must describe and justify:

- The process used to collect the data required for the experience study (meetings with managers, surveys, etc.);
- The method used to allocate expenses, in particular the method used to allocate expenses between directly attributable and non-attributable expenses, and to allocate expenses between each *portfolio* and *group of contracts*. The actuary must justify any change in method compared to the previous study;
- The method used to allocate expenses in Table 4.1.2.3. The actuary must justify any change from the previous study;
- The treatment of directly attributable acquisition expenses incurred up to the effective date of the contracts are in-force, as well as the recovery tests;
- The manner in which directly attributable maintenance and acquisition expenses are allocated (by contract, per $1,000 of in-force business as a percentage of the premium or any other allocation method), as well as any changes in methodology relative to the previous study;
- A table showing the directly attributable unit expenses over the past two periods (per $1,000 of in-force business; per paid premium contract; per paid-up contract; per rider; etc.).

The actuary must clearly justify any directly attributable unit expense assumptions that reflect a decrease in expenses, which may be related to an increase in productivity or a reduction in expected expenses.

To justify, in particular, the adequacy of the directly attributable expense assumptions, the actuary must include Tables 4.2.1.3a and 4.2.1.3b, the total of which is to be on a consolidated basis.

On the basis of Table 4.2.1.3a, the following must be explained and justified by the actuary:

- “Excluded from directly attributable expenses” are expenses excluded from directly attributable expenses and/or from the estimates of future cash flows as per paragraphs B66 (d)[6] and (e)[7] of the IFRS 17 standard. Note that these expenses must not be included in columns 21 and 23 for non-attributable acquisition expenses and non-attributable maintenance expenses;
- Where the ratio of actual total expenses to total expected expenses (column 57 of Table 4.2.1.3a) is less than 95 % or greater than 105 %.

In these tables, the total expenses must be a portion of "Insurance service and other operating expenses" disclosed on page 23015 of the LIFE returns. In particular, related expenses that are not operating expenses, such as claims and benefits, losses and reversals of losses on onerous contracts, experience rating refunds and amortization and impairment loss on investment/service contracts must not be considered.

In Table 4.2.1.3b, completing the *(T-2)* portion is optional given the new approach to accounting for expenses under IRFS 17. However, the *(T-1)* portion is mandatory and must be completed with the data calculated in the transition year.

In addition, the actuary must set out a table showing the actual and projected directly attributable unit expenses for the past two periods, and the assumption as at December 31, 20*AA*, including the number of units and total directly attributable expenses. Any significant changes in this table, including a decrease in total expected directly attributable expenses, must be explained by the actuary.

i) Inflation

The actuary must describe and justify the “directly attributable expenses” inflation assumptions used in the projection of future cash flows.

ii) Premium taxes

The actuary’s explanation must address the treatment of applicable premium taxes.

[6] Cash flows relating to costs that cannot be directly attributed to the *portfolio* of *insurance contracts* that contains the contract, such as some product development and training costs. Such costs are recognized in profit or loss when incurred.

[7] Cash flows that arise from abnormal amounts of wasted labour or other resources that are used to fulfil the contract. Such costs are recognized in profit or loss when incurred.

The actuary must disclose the “premium taxes” assumptions used to determine net contract liabilities.

iii) Investment income tax

The actuary must address the treatment of the applicable Part XII.3 Tax Return - Tax on Investment Income of Life Insurers (hereinafter referred to as “investment income tax” or “IIT”). The actuary must disclose the IIT assumptions used to determine net contract liabilities.

4.2.1.4 Lapses and Partial Withdrawals

The actuary must indicate the extent to which the assumptions chosen are based on the insurer's own experience and/or industry experience and/or reinsurers' experience. In all cases, the actuary must justify the choices made, including the credibility applied to the insurer's experience, where applicable.

When the insurer's experience is taken into account, the actuary must provide a detailed description of the experience study and the key findings that arose from it. To that end, the actuary must provide summary tables of the key findings of the study to support the selected assumptions.

In particular, the actuary must describe and justify the lapse rates applied to lapse-supported products, such as universal life with level cost of insurance products and individual T100 life insurance products with no cash value. Where the insurer's experience cannot be used for these types of products, the actuary must justify any use of ultimate (expected) lapse rates higher than those of the CIA's most recent studies. Appendix 5 requires additional disclosures about lapse-supported products.

The additional and selective lapse rates or renewable term insurance must also be described and justified.

In addition, the dynamic lapse and partial withdrawal assumptions for products where lapses or partial withdrawals vary with the performance of underlying financial items or external factors would also be explained in detail in this section of the Report.

4.2.1.5 Other assumptions and provisions

i) Other assumptions

The actuary must describe and justify the other deterministic assumptions used to determine net contract liabilities, including:

- Deterministic economic assumptions (risk-free interest rate, bond yields, equity returns, inflation rates (excluding the expense inflation rate which must be set out in section 4.2.1.3i) of the Report) , exchange rates, implied volatility, etc.) and their data tags (*Bloomberg*; *DataStream*; etc.), when used;
- Projected dividends for participating insurance products (for stochastic modeling, see section 9.1.3 of the Guide), including the way in which the period between the deterioration in experience and the reduction in dividends was taken into account;
- Premiums, benefits, future deposits, fund transfers, cash values or other components of contractually adjustable products or universal life insurance contracts (for stochastic modeling, see sections 9.1.2 and 9.1.3 of the Guide);
- Future deposits, payout options, fund transfers, guarantee resets or other items related to variable insurance contract guarantees (for stochastic modeling, see section 9.1.1 of the Guide);
- Integration with public plans (QPP/CPP);
- Remuneration paid to representatives;
- Advances on contracts/future contracts;
- Any other information deemed relevant by the actuary.

Stochastic economic assumptions are to be detailed in section 9.1 of the Report.

ii) Other provisions

The actuary must describe the other provisions reflected in net contract liabilities, including but not limited to:

  - Manual adjustment reserves that are the result of the absence, or the inadequacies, of a valuation system;
  - A bulk reserve to cover potential data problems;
  - Liabilities held to cover cyclical fluctuations;
  - A manual adjustment to offset experience fluctuations.

The actuary must describe the other provisions and state how they have been allocated within the *portfolios/groups of contracts* and how they will be accounted for in the future.

4.2.2 Adjustment to reflect the time value of money

An entity must adjust the estimates of future cash flows to reflect the time value of money and the financial risks related to those cash flows, to the extent that the financial risks are not included in the estimates of cash flows, as set out in paragraph 36 of IFRS 17.

The actuary must describe and justify the approaches/methods and assumptions used to determine all discount curves developed (including for non-Canadian business) to adjust estimates of future cash flows to reflect the above-mentioned risks.

The actuary must provide the following information depending on the approach used:

Bottom-up approach :

- Describe the approach used, as well as the source of information and observable market data points, to construct the risk-free discount rate curve for the observable period;
- Justify the last observable market data point;
- Describe the interpolation between observable market data points;
- Describe and justify the methodology used to construct the risk-free rate curve beyond the observable period, including (but not limited to):
    - The value of the ultimate risk-free rate, and whether it is a forward or spot rate;
    - The year in which the ultimate risk-free rate is reached;
    - The interpolation method between the last observable rate and the ultimate risk-free rate;
    - The method of extrapolation beyond the ultimate risk-free rate;
- The liquidity premium to determine discount rates:
    - Describe and justify the level aggregation at which the level or levels of liquidity was or where determined (by group, product, line of business, portfolio, entity, etc.);
    - The level or various levels of liquidity premiums used. If the insurer has defined multiple levels of liquidity, the liquidity hierarchy (from least liquid to most liquid) must be disclosed;
    - The list of groups of contracts/*portfolios* for each level of liquidity used;
    - Justify the choice of level of liquidity in relation to the list of groups of contracts /*portfolios*. The AMF, as a minimum, the criteria of exit value, inherent value

and exit cost to be considered, as defined in section 3 of the CIA Educational Note "IFRS 17 Discount Rates for Life and Health Insurance Contracts";

- Describe and justify the approach used (either the hybrid approach or the market-based approach) to develop the liquidity premium in the observable period;
- Describe the interpolation between observable points for the period;
- If the liquidity premium is developed using a "top-down" analysis (as described in section 4.3 of CIA Educational note "IFRS 17 Discount Rates for Life and Health Insurance Contracts", referred to as the hybrid approach), explain how the factor "r" (applied to the asset reference portfolio spread over the risk-free rate) and the constant (adjustment to reflect the difference between the liquidity characteristics of the insurance contract and the assets in the reference portfolio (asset spread)) are calculated and describe the asset reference portfolio (with reference to section 10 of the Guide);
- Describe and justify the approach used to develop the premium beyond the observable period, including (but not limited to):
  - The value of the ultimate liquidity premium and whether it applies to the spot or forward rate(s);
  - The year when the ultimate liquidity premium is reached;
  - The interpolation method between the last observable liquidity premium and the ultimate liquidity premium; and
  - The extrapolation method beyond the ultimate liquidity premium.

Top-down approach :

- Describe the asset reference portfolio(s) (with reference to section 10 of the Guide) and justify the choice of those portfolios;
- Describe and justify the methodology used for all adjustments made to the yield curve of the asset reference portfolio(s) to eliminate risks not applicable to *insurance contracts* (i.e. credit, market risks, etc.), providing details by asset type:
  - Bonds;
  - Equity;
  - Real estate;
  - Other non-fixed income assets (please specify);

- Other (please specify).

Reference curve for future cash flows that do not vary based on the returns on any financial underlying financial items (Canadian business only):

The AMF expects the actuary to compare the discount curves to the reference curves defined in Chapter 2 of the CIA Draft Educational Note “IFRS 17 Discount Rates for Life and Health Insurance Contracts”. This chapter presents reference curves for *insurance contracts* that are deemed to be liquid, illiquid or in between. Where the actuary has defined a level or levels of liquidity between these two categories, resulting in more than two discount curves, the actuary would use judgment to derive the reference curve or curves and explain the methodology in this section.

For the observable period, the actuary must describe and justify the data sources used and the reference assets and disclose the data tags used (*Bloomberg*; *DataStream*; etc.).

For both the observable and unobservable period, the actuary must describe and justify any differences between the insurer’s discount curve and the reference curve.

The actuary must include Table and Chart 4.2.2 a, presenting the **spot** discount curves for Canadian business.

Moreover, if the entity’s discount rate curves are higher than the reference curves at any duration, the actuary must demonstrate that the discounted value of the estimates of future cash flows calculated using the parameters of the entity’s discount curves beyond the observable period **is not lower** than the value obtained using the parameters of the reference curves beyond the observable period.

Interest rate sensitivity testing

The actuary must include Table 4.2.2b, the total of which is on a consolidated basis, to disclose the net contracts liabilities excluding the CSM, by line of business of the LIFE returns using the following scenarios:

1. A 25 bps decrease in the interest rates for the observable period;
2. A 100 bps decrease in the interest rates for the observable period;
3. A 25 bps decrease in the ultimate interest rate for the non-observable period;
4. A 100 bps decrease in the ultimate interest rate for the non-observable period;
5. A 25 bps increase in the interest rates for the observable period;
6. A 100 bps increase in the interest rates for the observable period;
7. A 25 bps increase in the ultimate interest rate for the non-observable period;
8. A 100 bps increase in the ultimate interest rate for the non-observable period.

For the tests above, the actuary must also consider the impact on the interpolation in both the observable and the non-observable period. Also, the actuary can use approximations if their impact is not significant when compared to the actual results. The actuary must explain and justify the reliability of the approximations used.

Then, an additional test consists in:

9. Replace all the interest curves with the CIA accounting discount rate curve (CIA Accounting Curve) as of September 30, 20*YY* used in the context of the accounting valuation of pension plans. The effective annual spot rates beyond the observable period must be equal to the rate at the 30-year term.

Finally, the actuary must perform the following additional tests if there are groups of contracts valued stochastically:

10. An absolute increase of 5% across the implied volatility curve of in risk-neutral models;
11. An absolute increase of 10% across the implied volatility curve in risk-neutral models.

In Table 4.2.2b, the net contract liabilities for tests 10 and 11 must also include the non-stochastically valued groups of contracts, as the impact is calculated in terms of the insurer's total net contracts liabilities of the insurer.

For all tests, the actuary must consider both the discounting and the projections of cash flows. In particular, the actuary must reflect the effects of these scenarios in the projections, such as on participating product dividends/bonuses (including the way in

which the period between the deterioration in experience and the reduction in dividends was taken into account, as required in section 4.2.1.5 of the Guide), contractually adjustable products, inflation rates, financial guarantees, taxes on investment income and adjustments made for future cash flows that vary based on the yields of underlying financial items.

The actuary would also discuss how the change in interest rate and volatility impact the risk adjustment, and how much of this change would flow through the net insurance financial result.

4.2.3 Risk adjustment for non-financial risks

The actuary must describe and justify any adjustments made to the estimate of the present value of the future cash flows to reflect the compensation that the entity requires for bearing the uncertainty about the amount and timing of the cash flows that arises from non-financial risk, as provided for in paragraph 37 of IFRS 17.

The actuary must describe and justify the method(s)/technique(s) used (quantile method such as confidence level or conditional tail expectation ("CTE"), cost of capital techniques, direct addition of margins to assumptions or scenario modelling, testing of extreme scenarios, etc.), including the confidence level used in determining the *risk adjustment for non-financial risk*. If a technique other than a quantile method is used, the actuary must disclose how the confidence level of the *risk adjustment for non-financial risk* was calculated.

Guidance on quantifying the confidence level is available in section 7 of the CIA Educational Note "*IFRS 17 Risk Adjustment for Non-Financial Risk for Life and Health Insurance Contracts*". Regarding the confidence level, the actuary must discuss:

- The confidence level(s) that applies for the calculation of the gross risk adjustment and risk adjustment for reinsurance held;
- The granularity chosen for presentation purposes, when more granular than the entity level.

In connection with the method/technique used to determine the risk adjustment for non-financial risk, the actuary must explain:

- How the actuary ensured that the potential compensation for bearing the risk appropriately captures the nature of the uncertainty, the materiality of the uncertainty, and the structure of the underlying modelling available, particularly for qualitative and unknown risks;

- How the insurer's risk aversion has been assessed and incorporated in considering the compensation for bearing the risk, including how risk aversion interacts with variability and uncertainty in the determination of the *risk adjustment for non-financial risk* (if necessary, the actuary may refer to the insurer's risk management policy, and the insurer's risk appetite and tolerance statement);
- How the five criteria described in paragraph B91[8] of IFRS 17 were met;
- What allowance was made for infrequent and atypical events in the tail of the distribution of the outcomes used or, where such events are not represented, how they were modelled (if applicable);
- How allowance was made for the impact of reinsurance held and the effect of other risk transfer or mitigation mechanisms (including any uncertainty in relation to recoverability of ceded amounts), if any;
- The insurer's net risk profile and how this is reflected in the difference between the gross risk adjustment and the risk adjustment for reinsurance held;
- The level of aggregation at which the *risk adjustment for non-financial risk* is determined. Whether it is determined at a higher or lower level than the *group of contracts*, the actuary must describe and justify the method for allocating the adjustment based on the level of granularity chosen;
- If the actuary chooses to reflect risk diversification in the *risk adjustment for non-financial risk*, the actuary must describe and justify the level of diversification benefit that the entity includes when determining the compensation for the uncertainty of cash flows arising from non-financial risk, as required under paragraph B88(a) of IFRS 17, including (but not limited to):
    - The technique used;

[8] IFRS 17 does not specify the estimation technique(s) used to determine the *risk adjustment for non-financial risk*. However, to reflect the entity's required compensation for bearing the non-financial risk, the *risk adjustment for non-financial risk* must have the following characteristics: (a) risks with low frequency and high severity will result in higher *risk adjustments for non-financial risk* than risks with high frequency and low severity; (b) for similar risks, contracts with a longer duration will result in higher *risk adjustments for non-financial risk* than contracts with a shorter duration; (c) risks with a wider probability distribution will result in higher *risk adjustments for non-financial risk* than risks with a narrower distribution; (d) the less that is known about the current estimate and its trend, the higher will be the *risk adjustment for non financial risk*; and (e) to the extent that emerging experience reduces uncertainty about the amount and timing of cash flows, *risk adjustments for non-financial risk* will decrease and vice versa.

- How the determination of the compensation is based on the gross and/or the net risk taking into account the reinsurance held;
- The correlation matrix(es) or diversification factor(s), if used;
- Diversification between entities for the disclosure of compensation at the group and subsidiary level, where applicable.

The actuary must also describe and justify the discount rates used, if they differ from those used in estimating the present value of future cash flows, and for the rates used to develop the *risk adjustment for non-financial risk* over time, if applicable.

The actuary must present two summary tables, which have totals on a consolidated basis, in this section of the Report:

1. A table representing the calculation of the *risk adjustment for non-financial risk* by *portfolio*. For example, where the *risk adjustment for non-financial risk* is determined by directly applying margins to the assumptions, the actuary would include a standard table with the risk categories in the columns (lapse; mortality; morbidity; etc.) and the *portfolios* used in the rows. Where a cost of capital technique, or different confidence levels are used instead, the actuary would include a table with columns according to the various costs of capital/confidence levels chosen and the *portfolios* used in the rows. A diversification column may be presented, provided it is explicit;
2. Table 4.2.3 shows the history of the *risk adjustment for non-financial risk* amount by *portfolio* for a three-year period. Any significant changes must be explained by the actuary in this section of the Report.

4.2.4 Contractual Service Margin

The insurer must measure the *CSM* on initial recognition of the *group of contracts*, as required under paragraph 38 of IFRS 17.

For a *group of contracts*, the actuary must describe and justify:

- How the interest rate was determined for *CSM* roll forward year after year;
- The method of accounting for the *CSM* in net income to represent the services provided to the group during the period, including, the various coverage units used;
- The discount rates used, where the actuary chooses to reflect the time value of money in the calculation of the coverage units for the group. Where the actuary chooses not to reflect it, justification must be provided.

4.2.5 Transition of contracts issued before IFRS 17 effective date

For groups of contracts issued before IFRS 17 takes effect for which the modified retrospective or fair value approach was used, the actuary must describe and justify the following:

- Under the modified retrospective approach, the items changed relative to the full retrospective approavch;
- Under the fair value approach, the approach(es) use to determine the *CSM* or loss component of onerous contracts as at the transition date based on the difference between the fair value of the *group of contracts* as at that date and the FCF then measured. The AMF expects the actuary to follow the guidelines set out in CIA Educational Note "IFRS 17 – Fair Value of Insurance Contracts".

  In particular, the description(s) and justification(s) of the approach(es) must include the following:

  - The observable market data considered (including the market participants considered) and how the actuary maximized its use by considering multiple approaches rather than only one;
  - The calculation of the main components of the approach(es) used (e.g., cost of capital);
  - Any adjustments made to the insurer's input to reflect the market's view rather than the insurer's view in calculating fair value, including in particular:
    - Estimates of future cash flows;
    - The risk adjustment for non-financial risk;
    - The regulatory capital;
    - The cost of capital;
    - The degree of risk aversion;
    - The degree of diversification benefit (detailing the approach used);
    - The cost of capital for risks not covered in *FCF* (such as concentration, reputational, model, operational or mismatch risk, etc.);
    - The discount rate/liquidity premium;
    - The insurer's credit risk;
    - The required profit margin;
    - Tax impacts;

- The level of aggregation of contracts;
- The expected return on assets;
- Parameters of risk-neutral models;
- Hedge programs;
- Other.

Section 5 - Other liabilities

In this section of the Report, the actuary must disclose the history of other liabilities included in the LIFE returns.

For this purpose, the actuary must complete Table 5 by setting the amounts of these other liabilities. The amounts must match those reported on page 70004 of the LIFE returns.

The actuary must explain significant changes in other liabilities from period to period.

Any use of actuarial assumptions or methods in calculating other liabilities must be disclosed and justified.

The actuary is expected to discuss any other items to assist in understanding Table 5.

Section 6 – Materiality standard and approximations

In this section of the Report, the actuary must discuss the materiality standard (also referred in this section as the "standard"), and approximations used.

i) Materiality Standard

The actuary must provide details regarding the materiality standard used and describe the procedures followed to determine the standard. Accordingly, the actuary must include the following:

- The formulas used to determine the standard;
- The amounts of the standard;
- The conclusions of the interview with the independent auditor regarding the agreement with respect to the standard;
- The conclusions of the interview with the independent auditor regarding the application of the standard for the measurement of net contract liabilities;
- Disclosure and justification of the use of a standard for the valuation of net contract liabilities that is different from the one used by the independent auditor for the financial statements;
- Justifications for the use of multiple standards;
- Any changes to the materiality standard relative to the previous period; and
- Any other item deemed relevant.

ii) Approximations

The use of approximations must be justified. As with any approximation, the result of applying an approximate method must not differ materially from the result of applying an exact method.

The actuary must make reference to the methods and assumptions described in the other sections of the Report for which approximations were used. The actuary must indicate how it was verified was that the difference between the result of applying the approximate methods and the result of applying the exact methods are below the materiality standard. The actuary must justify the appropriateness of using the approximation depending on the circumstances.

Section 7 - Change in net contract liabilities and analysis of comprehensive income

7.1 Summary of the change in net contract liabilities not measured using the PAA

In this section of the Report, the actuary must discuss the change in net contract liabilities not measured using the PAA on a consolidated basis during the period. The section must begin with a table detailing the change in net *LRC* and net *LIC*, as well as the change in the net loss component of onerous contracts. The change in net LRC and net *LIC* must be associated with one of the following:

- The estimates of the present value of the future cash flows;
- The *risk adjustment for non-financial risk*;
- The *CSM*;
- The PAA.

For this purpose, the actuary must include Table 7.1.1 for all of its contracts not measured using the PAA, and Table 7.1.2 for contracts not measured under the PAA in force at the time of transition to IFRS 17.

In both of these tables, the balance – end of prior period must be on an IFRS 17 basis, with the impact of the transition discussed separately in section 7.4.

In addition, for each of the different types of changes defined in items i) to viii), the change in net contract liabilities must be disclosed on a non-consolidated basis. For subsidiary business, only the balance - end of prior period and the total net change in net contract liabilities for all types of changes in the period, including the net adjustment from prior periods, need to be disclosed.

The definitions of the various types of changes are as follows:

i) Prior period net adjustments

The change in net contract liabilities due to a change in valuation method or a correction of a material error must be accounted for by the actuary in prior periods.

Improving systems, refining methods, and changing from an approximation to an exact assumption should not normally have a material impact. If there is a material impact, it means that the situation was not appropriate. It would therefore constitute a correction of an error and the impact should be indicated under this item.

ii) Expected net change during the period

For contracts that had a net liability remaining at the end of the previous period, the actuary must quantify the expected change in net contract liabilities in the period by considering the realization of the expected *FCF* at the beginning of the period and the *CSM* to be recognized for service provided in the period.

For new contracts issued in the period, the actuary must quantify the expected change in net contract liabilities since issue by considering the realization of the expected *FCF* since issue and the *CSM* to be recognized for service provided in the period.

This change is equivalent to calculating, at the beginning of the period or when new contracts are issued, the difference with the net contract liabilities that the insurer expects to hold at the end of the period if no changes in assumptions are made and experience is as expected.

In the LIFE returns, this change must correspond to the amount disclosed on pages 70012 and 70013, lines 110, 120, 140, 410, 510, 520 and 530, column 29 less pages 70016 and 70017, lines 110, 120, 140, 410, 510, 520 and 530, column 29.

iii) Net Experience gains and losses

The actuary must quantify the change in net contract liabilities not attributable to the "Expected net change during the period", i.e., experience gains and losses related to net contract liabilities that will affect the statement of net income or other comprehensive income (“OCI”), both for contracts for which a net liabilities were maintained at the end of the prior period and for new contracts issued in the period.

For example, deaths or lapses that are different than those expected in the period must be quantified.

In the LIFE returns, this change must correspond to the amount disclosed on pages 70012 and 70013, lines 130, 320 and 420, column 29 less pages 70016 and 70017, lines 130, 320 and 430, column 29.

iv) Net change due to issuance of new contracts

For new contracts or new guarantees for which no net liabilities were maintained at the end of the prior period, the actuary must quantify the change in net contract liabilities due to the issuance of such new contracts.

In the LIFE returns, this change must correspond to the amount disclosed on pages 70012 and 70013, line 210, column 29 less pages 70016 and 70017, line 210, column 29.

v) Net change due to assumptions updates

The actuary must quantify the change in net contract liabilities due to assumptions updates for future service yet to be provided, both for contracts for which a net liability was maintained at the end of the prior period and for new contracts issued during the period. Note that the actuary must take into account any assumption updates that affect the components of net contract liabilities, even if total net liability does not change.

For example, it is the AMF's view that net changes due to the following items should treated as an assumption update:

- Discount curve updates;
- Foreign currency exchange rate updates;
- Percentage assumption updates in a contingency table following an experience study;
- Changes resulting from new actuarial or accounting standards that the actuary is required to apply (except situations qualified as adjustments).

vi) Net change due to basis changes

The actuary must quantify the change in net contract liabilities due to rare or unusual basis change for future service yet to be provided, such as new assumption resulting from a different choice by the actuary, a modelling change or refinement, or a deliberate action by the insurer. This change applies to both contracts for which a net liability was maintained at the end of the prior period and new contracts issued during the period. Note that the actuary must take into account any basis changes that the components of net contract liabilities, even where total net liabilities does not change.

For example, the AMF considers changes in net contract liabilities due to the following items must be considered a basis change:

- A change in the methods/techniques used to determine the *risk adjustment for non-financial risk*, and a change in the level used (e.g., for confidence level, CTE level, or the direct margin on the assumption);
- A change in a contingency table (e.g., mortality, morbidity, etc.);

- The use of results of an experience study covering a different number of years;
- A change in the insurer's method of allocating expenses between directly attributable and non-attributable expenses, or expenses reported under IFRS 17 versus other standards;
- A change in the method of allocating expenses between acquisition expenses and maintenance expenses, affecting directly attributable expenses, which would have an impact on net contract liabilities;
- A different allocation of directly attributable maintenance and acquisition expenses to the following categories: per contract, per $1,000 in-force business, as a percentage of the premium (where the allocation results is based on a choice and not a study);
- A change resulting from a policy, such as a dividend scale or contractually adjustable products princing;
- A change in the approaches/methods and assumptions used to develop all discount curves, including a change in the liquidity premium;
- A change in the method of accounting for the *CSM* through profit or loss or in determining the interest to be capitalized on the *CSM*;
- A change made to a stochastic model, when such change does not arise from amendments to actuarial standards of practice;
- A change in *reinsurance contracts* in force without derecognition;
- A change arising from an improvement in valuation systems or a refinement of methodology (except situations qualified as adjustments);
- A change resulting from new actuarial or accounting standards, where application is at the actuary's discretion (except situations qualified as adjustments);
- An error correction with no material impact.

In the LIFE returns, the sum of "net change due to assumptions updates for future service yet to be provided" and the "net change due to basis change for future service yet to be provided" must correspond to the amount disclosed on pages 70012 and 70013, lines 230, 240 and 310, column 29 less pages 70016 and 70017, lines 220, 230, 240 and 310, column 29.

vii) Net miscellaneous change

The actuary must quantify any change in net contract liabilities due to all other types of changes that are not related to assumptions, methods or adjustments. Depending on the type of change, the impact may be calculated at the beginning or end of the period.

For example, a net miscellaneous change may include the purchase (or sale) of an insurance portfolio or the ceding/retrocession (or recapture) of a portfolio.

In the LIFE returns, this change must correspond to the amount disclosed on pages 70012 and 70013, line 610, column 29 less pages 70016 and 70017, line 610 column 29.

viii) Risk mitigation

If the insurer uses hedging and decides to recognize a portion of the *CSM* in the net income or the other comprehensive income to reduce earnings volatility, the financial expense due to risk mitigation will have to be separated and reflected in this item. The actuary must ensure that the item is removed from the corresponding change types i) to vii).

7.2 Experience gains/losses and changes in assumptions by type and line of business

In this section of the Report, the actuary must quantify the net change related to experience gains and losses for service provided during the period or past services provided in the prior periods, the net change due to updated assumptions, the net change due to basis changes for future service yet to be provided to complete Table 7.2, which provides a consolidated total. The objective is to be able to reconcile the expected FCF with the actual FCF at the end of the period, and to assign the variations to the different assumptions.

For contracts not measured using the PAA, the net experience gains and losses correspond to the negative amounts quantified for the net change related to experience gains and losses, while the net change due to assumptions updates and the net change due to basis changes must directly match the amounts quantified based on sections 7.1iii), v) and vi) of the Guide, **but excluding the impact of the changes in assumptions on the *CSM***.

The actuary must reproduce this table in the Report, providing the details for each of the assumption update and for each basis change, including the assumption for the previous period, the assumption of the period, as well as the impact on net contract liabilities, but excluding the impact of the changes in assumptions on the *CSM*. The actuary must also justify the changes made to the assumptions, while maintaining the order of presentation by assumption type and line of business in Table 7.2.

For each type of assumption, the information must be presented **at a minimum for each line of business in the LIFE returns**[9] on a non-consolidated basis, even when the change in net contract liabilities for a line of business is lower than the materiality standard.

For the subsidiary business, only the combined total for all types of assumptions and all lines of business must be presented.

Note that each change made to the assumptions must be sufficiently justified to allow for good understanding. The actuary can also refer to section 4.2 of the Report where a detailed justification of the changes in assumptions must be presented.

7.3 Comprehensive income analysis

In this section of the Report, the actuary must disclose the insurer's total consolidated comprehensive income (loss) based on various sources. The items included in this

[9] Refer to the list of lines of business from the LIFE forms in section 2.1 of the Guide.

disclosure will allow for the reconciliation of the consolidated total comprehensive income (loss) for the period and the expected insurance service results for service provided in the period on a non-consolidated basis (as defined in section 7.1).

For this purpose, the actuary must present Table 7.3.

At a minimum, the actuary must present the data in this table **at least for each line of business in the LIFE returns** on a non-consolidated basis, while only the net income (loss) for the year and the total OCI are required by line of business for the subsidiaries, in order to reproduce the consolidated total comprehensive income (loss). The income must also be presented on a net basis, i.e. the income from *insurance contracts* net of the income from *reinsurance contracts* held.

The actuary must comment on or justify any items to make it easier to understand the comprehensive income analysis, especially for the "Other" items in Table 7.3. Accordingly, the actuary may, if necessary, add more lines to the table presented in the Report, which is not, however, permitted in the Excel file.

The actuary must also briefly describe the methodology used to complete each section of Table 7.3.

The AMF expects the methodology used for this analysis to be consistent from one period to the next. Any change in methods must be disclosed and justified.

The actuary must also consider that every item in Table 7.3 should match the amounts disclosed based on the following coordinates from the LIFE returns:

- The net CSM recognized for current service provided (contracts not measured using the PAA) must correspond to the amount disclosed on pages 70012 and 70013, line 110, column 29 less pages 70016 and 70017, line 110 column 29;
- The net change in risk adjustment for non-financial risk expired (contracts not measured under the PAA) on a non-consolidated basis must correspond to the amount disclosed on pages 70012 and 70013, line 120, column 29 less pages 70016 and 70017, line 120 column 29;
- The net experience gains and losses must correspond to the amount disclosed on pages 70012 and 70013, lines 130 and 320, column 29 less pages 70016 and 70017, lines 130 and 320, column 29;
- The losses and reversal of losses on onerous contracts on a non-consolidated basis must correspond to the amount disclosed on pages 70014 and 70015, line 230, column 19 less pages 70018 and 70019, line 140 column 19;

- The other insurance service results must correspond to all the other changes in the statement of profit or loss and OCI, on a net basis;
- The insurance service result during the period for contracts calculated with the PAA, on a non-consolidated basis;
- The insurance service result on a non-consolidated basis must correspond to the amount disclosed on page 70022, line 199, column 01;
- The investment return on a non-consolidated basis must correspond to the amount disclosed on page 70022, line 300, column 01;
- The sum of net finance income (expenses) from contracts recognized in the statement of profit or loss (excluding risk mitigation) and risk mitigation on a non-consolidated basis must correspond to the amount disclosed on page 70022, lines 310, 315 and 320, column 01;
- The movement in investment contract liabilities on a non-consolidated basis must correspond to the amount disclosed on page 70022, line 330, column 01;
- The other income on a non-consolidated basis must correspond to the amount disclosed on page 70022, line 410, column 01;
- The share of net income (loss) of equity accounted investees on a non-consolidated basis must correspond to the amount disclosed on page 70022, line 415, column 01;
- The general and operating expenses on a non-consolidated basis must correspond to the amount disclosed on page 70022, line 420, column 01;
- The profit (loss) before taxes on a non-consolidated basis must correspond to the amount disclosed on page 70022, line 440, column 01;
- The total taxes on a non-consolidated basis must correspond to the amount disclosed on page 70022, line 499, column 01;
- The profit (loss) after taxes on a non-consolidated basis must correspond to the amount disclosed on page 70022, line 510, column 01;
- The net income (loss) for the year on a non-consolidated basis must correspond to the amount disclosed on page 70022, line 999, column 01;
- The net income (loss) for the year for subsidiaries should constitute a balance item in order to reproduce the net income (loss) for the year in a consolidated basis, which is the following item;
- The net income (loss) for the year on a consolidated basis must correspond to the amount disclosed on page 20022, line 999, column 01;

- The change in unrealized gains and losses for investment at FVOCI and for foreign currency translation (after reclassification to net income) on a non-consolidated basis must correspond to the amount disclosed on page 70042, lines 110, 140, 210, 410, 420, 440, 465, column 21;
- The change in unrealized gains and losses for derivatives designated as cash flow hedges (after reclassification to net income) on a non-consolidated basis must correspond to the amount disclosed on page 70042, lines 310 and 340, column 21;
- The share of OCI (loss) of equity accounted investees on a non-consolidated basis must correspond to the amount disclosed on page 70042, line 460, column 21;
- The revaluation surplus on a non-consolidated basis must correspond to the amount disclosed on page 70042, line 455, column 21;
- The remeasurements of defined benefit pension plans on a non-consolidated basis must correspond to the amount disclosed on page 70042, line 470, column 21;
- The other OCI on a non-consolidated basis must correspond to the amount disclosed on page 70042, lines 445 and 480, column 21;
- The total OCI for subsidiaries should constitute a balance item in order to reproduce the total comprehensive income (loss) on a consolidated basis, which is the following item; and
- The total comprehensive income (loss) on a consolidated basis must correspond to the amount disclosed on page 20042, line 589, column 01.

The actuary must explain and justify any deviation in using the previous references of the LIFE returns.

7.4 Impact of the IFRS 17 transition

In this section, the actuary must provide a detailed explanation and justify the difference between the actuarial liabilities for the contracts from the end of the previous period calculated using IFRS 4 and the net contract liabilities at the end of the previous period using IFRS 17. The actuary must, in particular, provide a detailed explanation of the difference based on the following items:

- Discount rates;
- Margin for adverse deviations vs risk adjustment for non-financial risk;
- CSM;
- Assumptions used to calculate cash flows ;

- Measurement method :
- Transition method :
- Other components deemed relevant by the actuary.

Section 8 - Reinsurance program

8.1 Reinsurance contracts held

The actuary must present Table 8a to catalogue all the *reinsurance contracts* held.

The actuary must also present Table 8b to catalogue new *reinsurance contracts* held and changes the amendments to existing *reinsurance contracts* held (riders) that were issued during the period, **as well as *reinsurance contracts* held/amendments that were not signed at the end of the prior period.**

8.2 Additional information

The actuary must provide a high-level description of certain items (in connection with the reinsurance policy), including:

- The overall reinsurance strategy and how it is applied in the coming years;
- Any change in retention limits;
- The counterparty risk assessment for the reinsurers they deal with. If the actuary does not conduct an assessment, this must be mentioned and justified;
    - The reinsurer's minimum acceptable credit rating and any changes in it;
    - The maximum concentration per reinsurer and any changes in it;
- Non-traditional *reinsurance contracts*, such as finite reinsurance agreements, with an insignificant risk transfer, and side agreements with an impact on an existing reinsurance agreement. The actuary must also disclose the purposes of these types of *reinsurance contracts*. The actuary must also ensure that the measurement of net contract liabilities adequately accounts for the impact of these contracts and must describe in the report how this was ascertained;
- Catastrophe *reinsurance contracts* and their terrorism and pandemic clauses. The items to disclose are as follows:
    - Amounts of terrorism and pandemic coverage (including the level of deductible, coinsurance and limits);
    - Terrorism exclusions (risks and events not covered, etc.);
    - Pandemic exclusions (risks and events not covered, etc.);
- Any endorsed reinsurance agreement, i.e., an agreement in which the insurer cedes a block of business to a reinsurer, and then agrees to take back the same block or a

similar block. The AMF does not allow capital credits to be taken for such arrangements.

Section 9 - Modelling for the valuation of contracts that include financial guarantees

In this section of the Report, the actuary must provide information about the valuation of contracts that include financial guarantees.

The stochastic models used for the valuation of these contracts must be described in section 9.1. An overview of the characteristics of these contracts, whether or not the valuation uses a stochastic approach, must be provided in section 9.2.

9.1 Stochastic models

In this section, the actuary must provide information about the stochastic modelling used for various types of contracts that includes financial guarantees.

Although some types of contracts are found in this section, the AMF nevertheless expect the deterministic assumptions to be placed in section 4.2 of the report, whether they are static or dynamic.

The purpose of this section is to help clarify the stochastic models used.

9.1.1 Guarantees of variable insurance contracts relating to segregated funds

In this section, the actuary must provide information about the stochastic modelling of the guarantees of variable insurance contracts relating to segregated funds.

The actuary must describe the valuation method for the calculation of net contract liabilities, including:

- The modelling approach for cash flows and cash flow partitioning;
- A description of the random number generator(s);
- A description of the economic scenario generator(s), including:
    - The scope (interest rates, bond indexes, stock market indexes, inflation, etc.);
    - The rationale for selecting the generator used;
    - The modelling of the discount rates;
    - The number of scenarios and the projection frequency (time steps);
    - The calibration of the parameters and data sources used;
        - The data tags (*Bloomberg*, *DataStream*, etc.) used for the calibration of certain assumptions;

- For the stochastic modelling of economic assumptions used (interest rates, bond yield, equity returns, inflation, exchange rate, implied volatility, etc.), the 1st, 5th, 10th, 15th, 50th, 85th, 90th, 95th, and 99th percentiles of the distribution of spot rates for 5-10-30- and 60-year durations;
- The presence or absence of the mean reversion property;

- Basis risk modelling;
- Adjustments made to the model(s) to reflect the difference between the guarantee(s) and the financial instruments used to determine observable market parameters; and
- Any approximations.

The actuary must also describe the hedging strategy modelling, including the level of hedging, if any.

9.1.2 Financial guarantees relating to universal life insurance contracts

In this section, the actuary must provide information about the stochastic modelling of the financial guarantees relating to universal life *insurance contracts*.

The most common (but not only) forms of guarantee are the following:

- Amounts invested in a fixed-term guarantee investment contract ("GIC") or in account(s) comprised of guaranteed investment portfolios;
- For contracts with a dynamically measured redemption value, i.e., where it varies based on an interest rate that depends on the performance of an index or an underlying portfolio of assets;
  - For contracts for which the client's account generates a return net of management fees (which may be negative) and for which an implicit guarantee of 0 % is stipulated in the contract;
- Minimum return guarantees;
- Indexed guarantees;
- Minimum bonus guarantees;
- Smoothed return guarantees.

The actuary must describe the valuation method for calculating the net contract liabilities and include the same items as those requested in section 9.1.1 of the Guide.

9.1.3 Financial guarantees relating to other types of contracts

In this section, the actuary must provide information about the stochastic modelling of other types of contracts that includes financial guarantees, both explicit and implicit, including:

- Participating products, including minimum dividend guarantees;
- Contractually adjustable products with a limit of adjustability;
- Guarantees on other types of life insurance products;
- Indexation guarantees on annuity contracts and on deposit accumulation contracts;
- Guarantees on group insurance contracts sold.

The actuary must describe the valuation method used to calculate the net contract liabilities, including the same items as those requested in section 9.1.1 of this Guide.

9.2 Summary of contracts that include financial guarantees

9.2.1. Guarantees of variable insurance contracts relating to segregated funds

In this section, the actuary must provide information about the net contract liabilities (excluding the CSM) in the insurer's general funds concerning guarantees of variable insurance contracts related to segregated funds.

In the report, the actuary must present, for its different products/grouping of contracts, tables for the various types of guarantees of variable *insurance contracts* relating to segregated funds for which the insurer bears the risk.

Accordingly, the actuary must present Tables 9.2.1a to 9.2.1e.

These tables deal with the following guarantees:

- Guaranteed minimum withdrawal benefit ("GMWB") in the payment phase;
- Guaranteed minimum withdrawal benefit ("GMWB") in the accumulation phase;
- Guaranteed minimum maturity benefit ("GMMB");
- Guaranteed minimum death benefit ("GMDB");
- Other guarantees.

If in Table 9.2.1e the actuary presents items for "Other guarantees" of variable *insurance contracts*, the nature of these guarantees must also be specified.

For each guarantee specified, the “In-the-money”/”Out-of-the-money” status is calculated using the actuary's assumptions. The actuary must describe how the “In-the-money”/”Out-of-the-money” statuses were established for the various types of guarantees. It should be noted that the market value of assets held must be established on the date the net contract liabilities (excluding the CSM) are calculated.

Variable *insurance contracts* that offer several types of guarantees simultaneously must appear in each of the corresponding tables.

Group of different contracts can be presented together, as long as these groups have similar guarantees (e.g., do not group contracts that offer a 75% guarantee with contracts that offer a 100% guarantee).

The actuary should also discuss any other information deemed relevant.

9.2.2 Financial guarantees relating to universal life insurance contracts

In this section, the actuary must provide information for universal life *insurance contracts* that include financial guarantees for its different products/grouping of contracts. These guarantees may take different forms in a universal life insurance contract, as mentioned in section 9.1.2.

Accordingly, the actuary must present Table 9.2.2.

The actuary should also discuss any other information deemed relevant.

9.2.3 Financial guarantees relating to other types of contracts

In this section, the actuary must provide information for other types of contracts that include financial guarantees for its different products/grouping of contracts. These guarantees may take different forms in a contract, as mentioned in section 9.1.3. Given the many forms of financial guarantees that may be included in this section, the actuary must provide enough details on the nature of the guarantees to ensure good understanding.

Accordingly, the actuary must present Table 9.2.3.

The actuary should also discuss any other information deemed relevant.

Section 10 - Asset and liability management (ALM)

Although, owing to the transition to IFRS 17, the value of net contract liabilities is no longer directly related to the value of the matching investment items, the AMF expects the insurer to continue to have a process for managing mismatch risk. Investment matched to the net contract liabilities are also often an indicator of contract liquidity and can be used to establish interest rate curves.

10.1 Asset and liability matching

The actuary must also discuss the following items [10]:

- The contract/product aggregation included in each segment;
- The methodology used to segment investment items matched to contract/product aggregation in each segment;
- For the measures used in this section, the methods and assumptions used must be clearly defined, including the returns and how the future cash flows of the investment items were defined;
- The objective of the matching process (e.g., to reduce interest-rate sensitivity of profits, equity, etc.);
- The immunization strategy and measures used (e.g., alignment of future cash flows, durations, convexities, etc.);
- Mismatch tolerance limits;
- Maximum maturity of future cash flows from contract/product aggregation for immunization against interest rate risk using fixed income investment items;
- Investment strategies for the purpose of investing inflows;
- The hedging strategies used to manage mismatch risk by segment, including inter-segment transaction strategies and the values of those transactions;
- The insurer's policies concerning the composition of investment items, including how the insurer accounts for the type, duration, quality and negotiability of the investment items;
- The frequency of rebalancing the matching of each segment;
- The frequency for monitoring changes in the matching position for each segment;
- The use of inter-segment transactions must be described and justified.

[10] Some items must be linked, to the integrated risk management policy, the risk appetite and levels of risk tolerance statement or the insurer's investment policy.

All changes in the insurer's practices concerning asset and liability management must be disclosed.

To provide a detailed description of the matching level by segment based on duration, the actuary must first present Table 10.1a. A segment for the non-consolidated surplus is also required.

To provide a detailed description of matched investment items for each segment, the actuary must also present Table 10.1b. Please note that the same instructions for Table 10.1a also apply to this table.

10.2 Reference portfolios

If the actuary has defined a reference portfolio(s) for the purposes of the top-down approach or the hybrid approach to establish a discount curve (as defined in section 4.2.2 of the Guide), the portfolio(s) must be included in this section. The actuary should describe this segmentation and present Tables 10.2a and 10.2b.

Section 11 – Conclusion

i) Compliance status

The Report must state the actuary's compliance status with the CIA Standards of Practice. Grounds for non-compliance must be clearly explained and justified.

ii) Restrictions

Any restriction related to the valuation carried out by the actuary and resulting in a modification of the actuary's certificate must be explained in this section.

The actuary must clearly describe the reasons and state the impact on net contract liabilities as well as the steps that were or will be taken to rectify the situation.

Appendices

Appendix 1 – Actuary's certificate

In accordance with section 128 of the Act, the actuary's report must be accompanied by a certificate.

The actuary must include in the Report the text of the actuary's certificate below and reproduce it on the LIFE returns. The wording of the certificate corresponds to the wording recommended in the CIA Standards of Practice applicable to insurance.

The terminology in brackets can be adjusted based on the terminology used to present the financial statements. The AMF will consider any other change to be a qualified opinion. Any restriction concerning the certificate must appear in section 11 ii) of this Report.

The certificate must be signed by the actuary and it must state the actuary's date of appointment. Since the AMF requires an electronic version containing the actuary's signature to be submitted, in PDF format, the paper or electronic version containing the actuary's signature must be kept in the insurer's office for review by the AMF if required. This signature must be an original in the report submitted to the AMF, and in the LIFE returns.

To the policyholders [and shareholders] of [the ABC insurance company]:

I have valued the policy liabilities of [the Company] for its [consolidated] financial statements prepared in accordance with International Financial Reporting Standards for the year ended [December 31, XXXX].

In my opinion, the amount of policy liabilities is appropriate for this purpose. The valuation conforms to accepted actuarial practice in Canada and the [consolidated] financial statements fairly present the results of the valuation.

The valuation complies with the Quebec Insurers Act and its regulation.

Signature	Name in block Letters
Date of appointment	

Appendix 2 – Specific disclosure requirements

Disclosure of compensation

In in light of the actuary's responsibilities under the Act, an actuary who may receive incentive compensation related to the company's net income or incentive compensation that could create conflicts of interest must disclose this fact in writing to the key users of the actuary's work. The actuary must include this disclosure in the Report submitted to the regulator.

Consequently, this section of the Report, must briefly discuss the method used to determine each portion of the actuary's compensation (in particular, salary, bonuses (cash or stock), employee benefits and any other form of compensation) that is related to the insurer's net income (or comprehensive income) or solvency ratios or that could create conflicts of interest. In addition, the actuary must disclose, where applicable, any participation in a plan to purchase shares or any holding of shares of the insurer, a sister company, a subsidiary or any other affiliate.

Annual presentation of the Report to the board of directors or the audit committee

This section of the Report must disclose the date on which the actuary presented the liability report to the board of directors or the audit committee[11]. If the Report has not yet been presented to these bodies, the actuary must enter the expected date of presentation.

CIA's continuing professional development requirements

This section of the Report must confirm that the actuary is in compliance with the continuing professional development requirements of the CIA.

Reporting relationships of the actuary

The actuary must disclose all reporting and non-arm's length relationships.

The actuary who is employed by the insurer must disclose the name and titles of the person(s) to whom the actuary reports to, and any changes in this regard that have occurred during the period. Both solid line and dotted line reporting relationships should be disclosed, as well as anticipated changes.

The actuary who is not an employee of the insurer must disclose the names and titles of the main contacts within the insurer. The information provided could include the name and title of the following:

[11] As required by section 128 of the Act.

* The person who hired the actuary;
* The insurer’s employees with whom the actuary discusses findings and reports.

Appendix 3 – New contract issues and new products – Individual business

A3.1 Summary of new individual contract issues

In this appendix of the Report, the actuary must present Table A3.1 for new issues in individual business (including participating insurance).

For the *LRC* and *LIC* of *insurance contracts* and *reinsurance contracts* held, the data on premiums, *FCF*, *CSM*, the PAA and the loss component of onerous contracts (or the loss recovery component of onerous *insurance contracts*) must be segmented by *portfolio* and individual line of business in the LIFE returns.

A3.2 Summary of new individual products

In this appendix of the Report, the actuary must describe the new individual insurance and annuity products (including participating products) or new generations of existing products being marketed. The actuary must discuss the following:

- The number/name of the product's group(s) of contracts (in reference to section 2.4 or 4.1.2);
- The new features of the products, in comparison to existing products or previous generations;
- The client group targeted by the product;
- The client needs addressed by the product;
- The distribution method;
- The sales strategy;
- The expected sales in the coming years (number of contracts and face amount issued and ceded);
- The reinsurance contract(s) held (in connection with section 8 of the Guide).

The actuary does not have to provide details about the valuation methods and assumptions, as they are already provided in section 4.2 of the Report. The actuary must, however, describe and justify differences between valuation assumptions and the pricing assumptions.

Appendix 4 – Lapse-supported products

In this appendix of the Report, the actuary must present Table A4 to provide information about lapse-supported products.

Appendix 5 - Information on subsidiaries

In this appendix of the Report, the actuary must present information about the subsidiaries.

The information provided must include:

- The names of the subsidiaries;
- The insurer's interest in the subsidiaries;
- A description of the lines of business in which they operate;
- A description of the *reinsurance contracts* between the insurer and the subsidiaries;
- Other types of agreements with the subsidiaries;
- A description of the audits carried out by the actuary on the subsidiaries' amounts included in the consolidated financial statements.

Appendix 6 - Contractually adjustable products and participating products

A6.1 Contractually adjustable products

In this appendix of the Report, the actuary must describe the method used to determine the adjustments to be made to contractually adjustable products, as well as the philosophy concerning the fair treatment of contract holders.

For this purpose, the actuary must present Table A6.1. The total for the column CARLI capital credit column must correspond to the amount in line 100, column 50 page 90000 of the CARLI form, but excluding the amounts attributable to the subsidiaries (i.e. on a non-consolidated basis).

A6.2 Participating products

In this appendix of the Report, the actuary must provide information about participating products.

The actuary must, in particular, present Table A6.2 for the participating account and for each participating sub-account, based on the insurer's management practices (blocks managed together), for the last three periods. The sum of the participating sub-account tables must be equal to the participating account table, which is required in the Excel file.

The actuary must also provide the following documents and information, where applicable:

- For each participating sub-account (or the participating account):
  - A brief description of the nature of the sub-account including:
    - The types of products;
    - The source (block acquired from another insurer, block from a demutualization, etc.);
    - The years of issue of the contracts;
  - A brief description of the dividend scale(s) including all changes made during the period, the key factors for theses changes, and prospective changes compared to the current scale(s);
  - For each period in Table 7.2 in which transfers to retained earnings or to the non-participating account exceed the maximum transferable amount allowed under section 542 of the Act, the actuary must justify and explain how, despite these transfers, compliance was maintained with this section of the Act which provides for minimum dividend rights for owners of participating contracts;

- The most recent policy for determining the dividends and bonuses payable to the holders of participating contracts approved by the board of directors, as required by section 543 of the Act;
    - A description and justification of all changes made to the dividend policy during the period;
- The most recent report to the board of director regarding the actuary's opinion on the compliance of the allocation of benefits to the holders of participating contracts with the policy established in that regard, as required by section 543 of the Act;
- The most recent participating fund surplus management policy approved by the board of directors, as required by section 544 of the Act;
    - A description of and justification of all changes made to the participating fund surplus management policy during the period;
- The study on the terms for the allocation of income and expenses in relation to participating and non-participating funds, which is required by the AMF under section 548 of the Act (note that the submission of this study is no longer required through AMF E-Services, but it is instead included in the Report).

Appendix 7 - Additional IFRS information for CARLI

In this section of the Report, the actuary must present Table A7.1 concerning the consolidated "Eligible Deposits" that are included in the numerator of the solvency ratio based on the *Capital Adequacy Requirements Guideline - Insurance of Persons* ("CARLI")

The actuary must also present Table A7.2 concerning credits for participating products and contractually adjustable products on a consolidated basis.

In the event of discrepancy with the amounts disclosed in the CARLI form or in the LIFE returns, the actuary must quantify and explain the differences.

The actuary must identify the *portfolios* of insurance contracts affected by the eligible deposits or credits, as well as the portfolios of reinsurance contracts held that support them. Alternatively, the amount allocated to each *portfolio* can be disclosed in the Appointed actuary's report on Capital Adequacy Requirements Guideline.

Additional appendices

In these appendices, the actuary must present any other information deemed relevant.