Office of the Superintendent of Financial Institutions Canada
Bureau du surintendant des institutions financières Canada

OFFICE OF THE SUPERINTENDENT OF FINANCIAL INSTITUTIONS

IFRS 17 PROPERTY AND CASUALTY MEMORANDUM TO THE APPOINTED ACTUARY

2023

OSFI
BSIF

Canada

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1. OVERVIEW

This Memorandum describes the requirements of the Office of the Superintendent of Financial Institutions (OSFI or Superintendent) with respect to the Appointed Actuary's Report (AAR) specified in subsection 667(2) of the *Insurance Companies Act (ICA)*. It sets out the minimum standards used in determining the acceptability of the AAR and provides guidance for the Appointed Actuary preparing reports in matters relating to presentation, level of detail and nature of the discussions to be included.

Many insurers are required to file an AAR, as part of the Annual Return forms, with more than one regulator, federal or provincial, in Canada. The insurer is responsible for ensuring that the AAR submitted as part of the Annual Return to each regulator complies with the requirements of that regulator.

The term AAR refers to the detailed actuarial report submitted to a regulator. This includes the opinion of the Appointed Actuary concerning the appropriateness of the actuarial and other policy liabilities included in the insurer's financial statements, a detailed commentary, data exhibits and calculations supporting that opinion.

The actuary must opine on the actuarial and other policy liabilities included in the insurer's financial statements in the AAR, as specified in subsections 367(2) of the ICA, regardless of the accounting basis under IFRS (typically IFRS 9, IFRS 15 or IFRS 17). These include: (re-)insurance contracts issued, reinsurance contracts held, and investment contracts with discretionary participation features (DPF) investment/service components[1], investment contracts or service contracts.

The AAR comprehensively documents the work done by the Appointed Actuary to calculate the actuarial and other policy liabilities. OSFI views the AAR as a key component of its review of the entity's financial position and profile.

The AAR is not solely a report from the entity's Appointed Actuary to OSFI's actuaries. It is also intended for entity management and is read by regulators who may not be actuaries but who are knowledgeable about insurance. Therefore, the AAR should be presented in a manner generally understandable to both entity management and the regulator.

2. REGULATORY REQUIREMENTS

2.1 Application of Professional Standards to the Appointed Actuary's Valuation

Subsections 365(2) and 629(2) of the ICA require that "The actuary's valuation shall be in accordance with generally accepted actuarial practice with such changes as may be determined by the Superintendent and any additional directions that may be made by the Superintendent.".

OSFI's Guideline E-15 *Appointed Actuary: Legal Requirements, Qualifications and Peer Review* describes the role of the Appointed Actuary and sets out some of OSFI's expectations

[1] If applicable.

with respect to that role. The guideline also outlines the actuary's qualification required to carry out the Appointed Actuary's role.

The Canadian Institute of Actuaries (CIA) annually issues a letter (the Fall Letter) from the Committee on Property and Casualty Insurance Financial Reporting (PCFRC) and, from time to time, may issue other educational notes. While the Fall Letter and educational notes are not standards, the Appointed Actuary should disclose when either the educational notes and/or the PCFRC Fall Letter are/is not followed as well as the supporting justification.

For purposes of the Appointed Actuary's valuation of actuarial and other policy liabilities, OSFI currently accepts that work performed in accordance with "accepted actuarial practice" in Canada (as defined by the CIA) is sufficient to satisfy the 'generally accepted actuarial practice' requirement referred to in the ICA sections identified above. "Accepted actuarial practice" is defined in the professional actuarial standards of practice of the CIA, augmented by the additional requirements and directions of this Memorandum. Any deviations from CIA Standards of Practice or from the additional requirements of this Memorandum must be reported in the AAR and justified.

This Memorandum for 2023 fiscal year-end IFRS 17 financial reporting does not contain any requirements that override or limit accepted actuarial practice in Canada.

In complying with accepted actuarial practice, the Appointed Actuary must meet a standard of care with respect to the data used in valuations. This standard of care, implicitly stated in the CIA Standards of Practice, requires the Appointed Actuary to establish suitable check procedures for the verification of data. The CIA Standards of Practice (SOP) Subsection 1520 offers the Appointed Actuary the option to consider the Auditor's work. The AAR must discuss the extent to which the Appointed Actuary considers the work of the Auditor. Where the Appointed Actuary uses the work of the Auditor, the details of the Auditor's work should not be addressed in the AAR. If there are instances where the Appointed Actuary does not use the work of the Auditor because of any special circumstances, this must be disclosed in the data section of the AAR. The Appointed Actuary should describe the data verification that was performed.

The CIA SOP Subsection 1510 describes the Appointed Actuary's use of another person's work. Such use of the work of others should be disclosed in the section of the AAR where it most logically applies (for example, at the entity level, a specific product level, etc.).

With respect to any line of business (including, more specifically, accident & sickness business, pools and facility associations), the Appointed Actuary should describe at a high level:

- any use of the work of another actuary;
- the scope of such use;
- a justification for such use; and
- the extent of the review of the other actuary's work should also be described.

2.2 Filing Directions for the AAR, Financial Condition Testing (FCT) Report and Peer Review Report

The filing deadlines for the above reports are:

- AAR including the supplementary tables - 60 days after the end of the fiscal year,
- FCT Report - the earlier of 30 days after the presentation to the Board of Directors, Audit Committee or Chief Agent and one year after the fiscal year end, and
- Peer Review Report (full 3-year review or the limited annual review) - copies of pre-release reports, both the full peer review report, and any summary, for financial statement work should be forwarded to OSFI based on the same deadlines that apply to filings of the P&C regulatory financial returns. For post-release reviews, the reviewer's report should be submitted to OSFI no later than thirty days after release of the AA's report on the work reviewed, and for future financial condition reports, no later than December 31.

OSFI's Guideline E-15 *Appointed Actuary: Legal Requirements, Qualifications and Peer Review* provides more details on filing deadlines.

For the AAR, the FCT Report and the Peer Review Report, the entity must submit one electronic copy uploaded via the Regulatory Reporting System (RRS). A copy of the signed opinion must be included in the electronic submission. **Failure to meet the deadlines of the filings will result in a penalty fee under OSFI's Late and Erroneous Filing Penalty Framework.**

For security reasons, entities should not file reports through e-mail. The file should be in PDF format and preferably created with a PDF software rather than through scanning, as the former is searchable while the latter is not. The information should be easily copied by OSFI staff from the AAR, the FCT or the Peer Review Report. Therefore, the reports should not be security protected and exhibits should be in a format that can easily be transferred to a spreadsheet. Otherwise, the entity should be prepared to promptly provide searchable data in an alternative media upon request.

With the exception of some entities, OSFI does not require hard copies of the AAR. Entities required to provide hard copies will be contacted individually.

Entities should follow the file naming conventions outlined in the instructions for Unstructured Financial Returns. Both the full 3-year peer review and the limited annual peer review share the same naming conventions.

Instructions on the use of the web portal can be found on the OSFI website at www.osfi-bsif.gc.ca under *Regulatory Data and Returns / Filing Financial Returns / Canadian & Foreign Property and Casualty Insurance Companies*.

In order to file a Peer Review Report within RRS, entities are reminded that these filings must first be requested by contacting ReturnsAdmin@osfi-bsif.gc.ca or by calling 613-991-0609.

The ICA requires entities to file their AAR with their Annual Return. OSFI will not accept a certificate containing only the opinion of the Appointed Actuary in lieu of a full AAR.

Entities are reminded that the filing of AARs and opinions with the P&C Return requires that each copy of the P&C Return filed with OSFI should contain a properly signed copy of the AAR.

Note that Section 7.4 requires a separate cover letter for Disclosure of Compensation.

2.3 Filing Directions for the Supplementary Tables

When filing the AAR and FCT reports, entities must complete and submit the corresponding supplementary tables, which are included in separate Excel spreadsheets. These supplementary schedules will permit OSFI to capture selected information in a format that facilitates data analysis.

2.4 Persons Signing the Appointed Actuary's Report

The AAR must be signed by the Appointed Actuary, who must be a Fellow of the CIA.

3. OSFI'S REVIEW PROCESS

OSFI recognizes the confidential nature of the AAR. Reviews of the filed Annual Return may disclose that an Appointed Actuary's valuation warrants further assessment and questioning. The Superintendent may reject assumptions and methods where it appears that the actuarial and other policy liabilities produced are inappropriate.

Since the review of an AAR may take place over an extended period after filing, OSFI may request the Appointed Actuary to provide supplemental detail to sufficiently assess the assumptions and methods. The Appointed Actuary is expected to respond promptly to all supplemental requests. Documentation required to support the computation of the actuarial and other policy liabilities reported in the Annual Return and the AAR should be available at all times and should be made available to OSFI upon request.

Where the appropriateness of particular assumptions or methods is not sufficiently demonstrated, the Superintendent can require the Appointed Actuary to choose other acceptable assumptions or methods, and to re-compute the actuarial and other policy liabilities. In such a situation, the Appointed Actuary must re-file the AAR. The Superintendent may also require the entity to amend the Annual Return. Alternatively, the Superintendent may ask the entity to reflect the changes in the Annual Return for the following year. The Superintendent may request a report from an Independent Actuary.

4. SPECIAL LINE OF BUSINESS CONSIDERATIONS

4.1 Marine Insurance

Marine insurance business, if transacted, must be included within the scope of the AAR. The AAR should clearly identify the Appointed Actuary's provisions for marine insurance.

4.2 Title Insurance

Under IFRS 17, premiums for title insurance are no longer fully earned at issue; the coverage period will last until the policy expires or lapses. Title insurers will have to set up a liability for remaining coverage for the unexpired portion of the insurance contract, and book any unearned profit in the CSM. The AAR should clearly identify the Appointed Actuary's provisions for title insurance.

4.3 Acquired Business before the Transition Date

Applying the full retrospective approach, the liability for settlement of claims incurred before an insurance contract was acquired in a business combination or transfer, should be classified as a liability for remaining coverage in settlement period of the acquisition transaction, from the perspective of the acquiring entity.

Entities applying the modified retrospective approach will instead classify such a liability as a liability for incurred claims to the extent that they do not have reasonable and supportable information to apply the full retrospective approach. Entities applying the fair value approach can also classify a liability as liability for incurred claims.

The AAR should clearly identify the approach and disclose the amount of the acquired business before the transition date. The detailed information should be available upon OSFI's request.

5. FORMAT OF THE APPOINTED ACTUARY'S REPORT

5.1 Report Outline

While the format of the AAR differs from Appointed Actuary to Appointed Actuary, most AARs include sections similar to the following:

- Introduction
- Expression of Opinion
- Supplementary Information Supporting the Opinion
- Executive Summary
- Description of Entity
- Materiality Standards
- Data
- Expenses
- Classification of Contracts

- Portfolio Reporting
- Estimates of Future Cash Flows
- Discount Curve
- Risk Adjustment for Non-financial Risk
- Liabilities for Incurred Claims
- Liabilities for Remaining Coverage
- Other Liabilities/Other Assets
- Liability Roll Forward
- Liability for Investment and Service Contracts
- Transition Amount
- Other Disclosure Requirements
- Unpaid Claims and Loss Ratio Analysis Exhibit
- Exhibits and Appendices

In Section 6 "Contents of the Appointed Actuary's Report", the above outline is used to discuss the required contents. The Appointed Actuary is encouraged to use the above outline.

5.2 Table of Contents

A table of contents showing where the above information is located and a table of contents for the Exhibits and Appendices must be included at the beginning of the AAR.

To facilitate the review, the AAR should include clearly identified sections and numbered pages. Reference to such pages should be part of the table of contents.

6. CONTENTS OF THE APPOINTED ACTUARY'S REPORT

6.1 Introduction

This section should identify the scope of the AAR and should indicate clearly that the AAR is an actuarial valuation report or supports an actuarial opinion. This section should also identify:

- the entity involved,
- the date of valuation,
- the identity of the author,
- the author's full address, email address and telephone number, and
- the author's authority for preparing the AAR.

6.2 Expression of Opinion

The Appointed Actuary must use the prescribed opinion format (see Appendix I). The opinion wording is as recommended in the CIA Standards of Practice – Practice-Specific Standards

for Insurers. OSFI will consider any opinion that varies from this wording to be a qualified opinion.

This section must contain an original signature of the Appointed Actuary of the AAR, the Appointed Actuary's name (printed), the date and location of signing.

The actuarial opinions presented to the shareholders and policyholders of the entity should be essentially the same as the opinions filed with OSFI. Should this not be the case, the Appointed Actuary must disclose in writing in the report to OSFI the significant differences between the opinions, as well as the rationale for such differences. In addition, the Appointed Actuary must inform the Lead Supervisor of OSFI in writing.

Any qualification or limitation concerning any aspect of the valuation should be noted in this section of the AAR. These qualifications or limitations should be similar to the ones included in the opinion for Canadian Annual Return presented to the shareholders and policyholders. Caveats or any form of disclaimer should be excluded from the opinion but could be included in Section 6.3 "Supplementary Information Supporting the Opinion".

For branches where the External Auditor Report is not available at the time the Appointed Actuary has to render his/her opinion**,** a qualified opinion, conditional upon receiving an unqualified opinion from the External Auditor (Auditor), must be issued. The expected completion date of the external auditor's work should be stated. When the auditor's work is completed, the Appointed Actuary must either:

a. file an unqualified opinion with OSFI, or
b. file a revised opinion with a supporting AAR issued if the Auditor is unable to give an unqualified opinion or modifies the financial statements.

6.3 Supplementary Information Supporting the Opinion

Reader of the AAR should be able to understand how the Appointed Actuary's figures are derived. This section should contain references to the report sections, exhibits and/or appendices where these results are derived or summarized. Where results from several places must be added together, a table should be included.

Consolidated reporting will be required within the P&C Returns. OSFI anticipates that most Actuaries will continue to prepare non-consolidated AARs. However, the Appointed Actuary must include an additional exhibit and commentary that reconciles the information within the AAR to the consolidated opinion. Actuaries will be expected to value non-federally regulated subsidiaries under Canadian generally accepted actuarial practices and include these AARs as appendices or as a separate part of the AAR.

6.4 Executive Summary

This section should contain a summary of the key results and findings and any other information the Appointed Actuary wishes to bring to the attention of the reader. In particular, it should comment on the comparison of the actual experience with the expected experience in the prior year end valuation for all lines combined.

It should also reference any significant changes in methods or assumptions from the prior AAR, significant issues and how they were resolved, data or other concerns identified by the

Appointed Actuary and any other unusual circumstances identified as part of the valuation. **This section must also include any deviation from CIA Standards of Practice or from the requirements of this memorandum.**

6.5 Description of Entity

6.5.1 Ownership and Management

The Appointed Actuary should provide a brief history of the entity covering ownership and senior management. Changes over the past several years should be identified and potential impacts on the valuation as a result of these changes should be discussed.

6.5.2 Business

This section should contain a brief description of the lines/classes of business written, distribution channels and geographic distribution. It should also describe recent changes in business written, underwriting policies, claims policies and procedures as well as the impact of these changes.

6.5.3 Reinsurance

6.5.3.a Reinsurance Arrangement

The Appointed Actuary should describe the entity's reinsurance arrangements (type of arrangements, significant terms and conditions, order of application of treaties, and whether the arrangements are specific to the Canadian operations only) and any changes in the arrangements (including changes in retention or limits) during the experience period used in the AAR. This description should be included for all years where the reinsurance contracts held could be material. In many cases, it is useful to include the rationale for the changes (if any). In particular, the Appointed Actuary should identify whether the terms and conditions of the reinsurance/retrocession arrangements require payments to be made from the reinsurer/retrocessionaire directly to the ceding entity in Canada, including in the event of the cedant's insolvency.

6.5.3.b Reinsurance Contracts Held – Non-Performance Risk

The Appointed Actuary must explain how the allowance for the effect of any risk of non-performance by the issuer of the reinsurance contracts held is measured. The Appointed Actuary should indicate whether the adjustment is applied to the cash flows directly or to the discount rate or a combination of the two.

When making this estimate, the Appointed Actuary will not necessarily assess the financial condition of each reinsurer. However, the existence of any non-performance risk and the actions taken to address should be described, for example:

- a dispute has arisen with a reinsurer;
- a reinsurance collectible is significantly overdue;
- the reinsurer has a history of not settling accounts promptly;

- the reinsurer is known to have been the subject of regulatory restrictions in its home jurisdiction; or
- the reinsurer has a poor credit rating.

It is expected that the Appointed Actuary will discuss reinsurance matters with management and the Auditor of the entity to determine whether there are unusual problems and/or delays expected to be encountered in collecting the relevant amounts from the reinsurers.

Where reinsurance agreements were commuted or changed, the Appointed Actuary should clearly indicate how any changed arrangements were taken into account.

6.5.3.c Financial Reinsurance Agreements

The Appointed Actuary must disclose information of any material financial reinsurance agreements held where there is not significant insurance risk transfer between the ceding entity and the reinsurer, or where there are other reinsurance agreements or side letters that could offset the financial effect of the first reinsurance agreement. If no such agreements exist, the Appointed Actuary must state that there are no material financial reinsurance agreements. The Appointed Actuary should also describe the process used to reach the above conclusion.

6.5.3.d Related Party Reinsurance

The Appointed Actuary should disclose any related party reinsurance that has or could have a material impact on the liabilities for (re-)insurance contracts issued. The disclosure should include the parties involved, a description of the reinsurance and the impact on the liabilities for (re-)insurance contracts issued.

6.5.3.e Retrospective Reinsurance Contracts Held

The Appointed Actuary must disclose any retrospective reinsurance contracts held that are carried on the balance sheet as “Asset for Remaining Coverage (ARC)”. The disclosure should include a description of the reinsurance and the amount of ARC where the underlying insurance contracts issued are carried as “Liability for Incurred Claims (LIC)”.

6.5.3.f Reinsurance Contracts Held Funds Withheld

For reinsurance contracts held, the Appointed Actuary should disclose the amount of funds withheld. The disclosure should also include a description of the reinsurance.

6.6 Materiality Standards

In preparing the entity’s Annual Return, the entity management and the external auditor routinely agree on a level of materiality. The AAR must report this materiality standard. In addition, the AA must report on how his/her materiality standard is selected in the valuation of actuarial and other policy liabilities.

6.7 Data

The AAR should note the extent of the Appointed Actuary's review and verification of the data and the extent of the Appointed Actuary's use on data prepared by others. The AAR should also describe the methods and procedures used to ensure that the valuation data are sufficient, reliable and accurate.

In particular the AAR should describe the type of data provided and the review and verification procedures applied thereto and the procedures and steps undertaken to ensure that the valuation data are sufficient, reliable and accurate.

The statutory requirement that the Appointed Actuary file an AAR with the Annual Return assumes that the Appointed Actuary has met the standard of care, as implicitly stated in the CIA Standards of Practice. In particular, this requires that the Appointed Actuary establish suitable check procedures to verify that the data utilized is reliable and sufficient for the valuation of the actuarial and other policy liabilities .

In the event that the External Auditor's work is not complete when the Appointed Actuary provides his/her opinion, refer to Section 6.2 Expression of Opinion.

6.8 Expenses

The Appointed Actuary should disclose how directly attributable expenses are determined and how total entity expenses are allocated among acquisition, policy administration and maintenance costs, and other (refer to the examples noted per paragraphs IFRS 17.B65(f), B65(l), etc.).The information should be split by (re-)insurance contracts issued and reinsurance contracts held.

The Appointed Actuary should also disclose the allocations of all directly attributable acquisition costs in a portfolio to groups in that portfolio, and of any acquisition costs directly attributable to any future renewals of contracts (outside the boundary of the new contracts) to future groups using a systematic, consistent, and rational basis.

The Appointed Actuary should disclose the type of investment expenses considered directly attributable.

The Appointed Actuary should disclose the treatment of the acquisition costs for the coverage period that is one year or less.

Insurance acquisition cash flows incurred before the recognition of their related group of insurance contracts are held as an asset. This asset will be referred to as the asset for insurance acquisition cash flows.

- The Appointed Actuary should disclose the two recoverability tests (required per IFRS 17.28E and B35D) on insurance acquisition cash flows if facts and circumstances indicate that the asset may be impaired.

6.9 Classification of Contracts

This request is only for the first year of the implementation of IFRS 17, i.e. fiscal year 2023. If applicable, the Appointed Actuary should disclose any contract classification that has changed under IFRS 17 from IFRS 4 (i.e. from IFRS 4 investment contract to IFRS 17

insurance contract or vice versa), the amount of liabilities/assets and the rationale of the reclassification in the following table:

Contract Classification Changed under IFRS 17

Line of Business	Insurance Contract Liabilities/Assets ($000s) Under IFRS 4 (@ Dec 31, 2022)	Insurance Contract Liabilities/Assets ($000s) Under IFRS 17 (@Dec 31, 2023)	Rationale for Reclassification

6.10 Portfolio Reporting

The AA should report how each of the portfolio is determined at the legal entity level. The Appointed Actuary should disclose any material changes from the prior year's AAR.

The reporting of each portfolio should include the following:

- Identify and describe the Actuarial Lines of Business[2] in each portfolio in Table 1 of the accompanying supplementary table spreadsheet.
- The Appointed Actuary should briefly discuss any unique circumstances in determining the contract boundaries for individual contract or the portfolio of contracts.

6.11 Estimates of Future Cash Flows

The AAR should report all the components embedded in the future cash flows, which may include:

- Disclose the list of future cash flows that are included in the estimates and how these cash flows are generated.
- For claim expense cash flows, they are normally split between internal (unallocated) and external (allocated). Some actuaries combine external expenses with incurred losses and base their analysis on the total of losses and expenses. Other actuaries calculate separate provisions for indemnity and external expenses. Both approaches are acceptable; however, the Appointed Actuary should clearly indicate the approach followed. A variety of methods are used for internal loss expense provisions. Any method in accordance with accepted actuarial practice is acceptable. The AAR should describe the method(s) as well as any changes in methods from prior AARs. The impact of such changes should be clearly indicated and, if material, included in the Executive Summary.

6.12 Discount Curve

The AAR must report the following and provide the rationale and justification for the inputs, assumptions and methodologies used:

[2] Please refer to Appendix V.

- Describe the approach(es) used to develop the discount curve (e.g. top-down, bottom-up, etc.) and the rationale for using the chosen approach.
- The discount rates derived can either be expressed as forward rates or as spot rates. Disclose which form is used and provide rationale for the choice.
- For the effects of financial risk (IFRS 17 Paragraph B74 (b)), if applicable, an insurer can use discount rates that reflect the effects of financial risk or adjust cash flows for the effect of financial risk or some combinations.
    a) If the entity uses discount rates that reflect the effect of financial risk, describe how the discount rates are adjusted.
    b) If the entity adjust cash flows that reflect the effect of financial risk, elaborate and identify types of cash flows that are impacted.
- Provide the total discount rates by year by liquidity category in Table 3 of the accompanying supplementary table spreadsheet. The liquidity categories should start with the most liquid category (with the lowest illiquidity premium) as category number 1, and so on so forth. The risk-free rates (spot rates) only need to be provided for the bottom up approach.
- For contracts measured under the Premium Allocation Approach (hereinafter as "PAA"), the AA should disclose any groups of contracts (separately for LIC and LRC) where future cash flows are not adjusted for the time value of money and the effect of financial risk, under the following conditions:
    a) Future cash flows relating to LIC are expected to be paid or received in one year or less from the date the claims are incurred, or
    b) The time between providing each part of the coverage and the related premium due date is no more than a year for future cash flows relating to LRC.

6.12.1 Bottom-Up Approach

If the bottom up approach is used, provide the following information in details:

- Risk-free rates
    a) Describe the method(s) used to construct the observable portion of the risk-free curve (use government bonds, swaps, etc.)
    b) Describe the source of the risk-free rates and the length of the observable period.
    c) Provide the risk-free rates by year (if applicable) in Table 3 of the accompanying supplementary table spreadsheet.
- Illiquidity Premium
    a) Describe liquidity classes or categories (beginning with number "1" as the most liquid category with the lowest illiquidity premium, etc.) used to categorize insurance contracts/products and incurred claims and the number of liquidity classes used.
    b) For Liability for Incurred Claims (LIC) and Liability for Remaining Coverage (LRC) respectively, list the actuarial lines of business (Auto, Property, etc.) to be included in each liquidity class.
    c) Provide a rationale for the number of categories deemed necessary and sufficient.
    d) Describe the considerations used to assess the liquidity characteristics of insurance contracts (e.g. features, exit value, inherent value, exit cost, etc.).
    e) Describe the technique(s) used to derive the illiquidity premium by liquidity class.

- Replicating portfolio
  a) Describe the types of products where a replicating portfolio would be used for valuation including the rationale for choosing a replicating portfolio approach.
  b) Describe how the replicating portfolio is constructed – that is how the entity ensures that the replicating portfolio (IFRS 17 Paragraph B46) has the cash flows that exactly match cash flows of the contract liability in amount, timing and uncertainty, for all scenarios.
  c) Describe at a high level the types of assets that are expected to be included for each replicating portfolio, along with the rationale for decisions made

6.12.2 Top-Down Approach

If the top-down approach is used, provide the following information in details:

- Reference portfolio
  a) Describe whether the entity's own assets or a hypothetical mix of assets or both are used, and explain rationale for choosing the particular method. If a hypothetical mix of assets is used, please provide detail on the asset mix, types of asset used, credit rating, etc. and explain the appropriateness of the choice.
  b) Describe the types of assets that are expected to be included for each liquidity category of a portfolio. Explain why the selected reference portfolio is appropriate for the liquidity category.
  c) Describe any adjustments to yield curve(s) to eliminate factors that are not relevant to the insurance contracts (i.e. credit risk, market risk and/or other risk adjustments, etc.). Provide details of what factors are eliminated and the methodologies of determining the adjustments by each asset classes:
     - Corporate bonds
     - Public equity
     - Non-fixed income assets other than public equity (be specific of the asset classes)
     - Others
  d) Describe any adjustments to reflect the differences in liquidity characteristics of insurance contracts and the reference portfolio.

6.12.3 Reference Curves for Liquid and Illiquid Categories

- The liquid and illiquid reference curves are defined as the CIA IFRS 17 Discount Curves – Fiera Capital provided from the Rates and Indexes under Resources section of the CIA website.
- The AAR must report Table 2 of the accompanying supplementary table spreadsheet.
- The Appointed Actuary should also disclose whether the Fiera Capital data were used to derive the illiquidity premium, and provide reasons of your choice.
- If the reference curves are not the same as the entity's discount curves used to calculate the present value of the estimates of future cash flows for financial reporting purposes, the Appointed Actuary should explain the choice and describe main factors that cause the differences.

- If the entity's discount curves are higher than the corresponding reference curves[3] at any duration, then the Appointed Actuary should compare and report the present value of the estimates of future cash flows obtained using the entity's discount curves to the present value obtained using the reference curves.

6.13 Risk Adjustment for Non-Financial Risk

The Appointed Actuary should disclose the risk adjustment (or RA) amount both on a gross[4] and net/ceded[5] basis, and technique used for setting the risk adjustment in Tables 4.1 and 4.2 of the accompanying supplementary table spreadsheet. The Appointed Actuary should disclose the confidence level of the risk adjustment on the entity level in Table 4.1.

The Appointed Actuary should specify the level of aggregation to determine the risk adjustment for non-financial risk and give the rationale of why such level best represents the entity's view of the compensation required to bear uncertainty. If it is determined at a higher level of aggregation than groups of contracts, the Appointed Actuary should describe how the risk adjustment for non-financial risk would be allocated to different groups.

If the entity has multiple entities and diversification is being assumed between entities, the Appointed Actuary should explain the diversification between entities.

The Appointed Actuary should describe the methodology for setting the RA and provide rationale to support the RA that reflects the compensation the entity requires for uncertainty in its cash flows.

The Appointed Actuary should describe how the discount curve, if applicable, to discount the risk adjustment is constructed and if this discount curve is different from the one used for the associated future cash flows and provide the rationale for the approach chosen.

The Appointed Actuary should disclose information for setting the RA when applicable, including but not limited to the following:

Cost of Capital Approach:

The Appointed Actuary should disclose:

- The projected capital amounts, cost of capital rate and discount rates used to determine the RA at the entity level. The information should be filled in Table 5.1 through Table 5.4 of the accompanying supplementary table spreadsheet.
- The Appointed Actuary should disclose the techniques used to determine the average capital amount and any adjustments made in the capital amount for calculating the RA (for example, removal of the capital component(s) related to risks other than the non-financial risks in scope of the RA.)
- The approach and considerations in selecting the cost of capital rate.
- How the aggregate RA be allocated amongst portfolios and groups of contracts.

[3] The corresponding reference curves refer to the reference curves at the initial recognition if the locked-in yield curves are used for the CSM and OCI option.
[4] Please refer to Appendix V.
[5] Please refer to Appendix V.

- If the entity chooses to reflect the benefits of diversification in its RA, disclose:
    a) The techniques used to reflect diversification. If a correlation matrix is used, please disclose it.
    b) How is the diversification benefit reflected at the relevant level of consolidation?
- The technique(s) used to determine the confidence level of the RA amount.
- The Appointed Actuary should quantify, disclose and justify the impact of changes from prior year in selected target rate of return on capital, including restated 2022 in the first year of the IFRS 17 implementation. The Appointed Actuary should also disclose in the Executive Summary cases where the impact of the changes in selected target rate of return on capital is material.

Quantile Techniques Approach:

The Appointed Actuary should disclose:

- The approach (i.e. probability distribution for present value of cash flows, Monte Carlo simulation or other scenario modelling) to generate the risk distribution.
- The technique(s) used to determine the confidence level of the RA amount.
- How the aggregate RA be allocated amongst the portfolios/groups of contracts.
- If the entity chooses to reflect the benefits of diversification in its RA, disclose:
    a) The techniques used to reflect diversification. If a correlation matrix is used, please disclose it.
    b) How is diversification benefit reflected at the relevant level of consolidation?
- The Appointed Actuary should quantify, disclose and justify the impact of changes from prior year in selected quantiles, including restated 2022 in the first year of the IFRS 17 implementation. The Appointed Actuary should also disclose in the Executive Summary cases where the impact of the changes in selected quantiles is material.

Margin Approach:

The Appointed Actuary should disclose:

- The level of margin used for each actuarial line of business and its justification.
- How the margins reflect diversification among the non-financial risks in the entity's various groups of contracts.
- The Appointed Actuary should quantify, disclose and justify the impact of changes from prior year in selected margins, including restated 2022 in the first year of the IFRS 17 implementation. The Appointed Actuary should also disclose in the Executive Summary cases where the impact of the changes in selected margins is material.

Combining/hybrid Approach:

The Appointed Actuary should disclose the above information required under applicable approaches when appropriate.

6.14 Liability for Incurred Claims

The liability for incurred claims comprises of the fulfilment cash flows related to past service allocated to the groups of contracts at that date. The fulfilment cash flows comprise of the best estimate of future cash flows, an adjustment to reflect the time value of money (if applicable), and a risk adjustment for non-financial risk.

6.14.1 Estimates of Future Cash Flows

The commentary on the estimates of future cash flows must contain details of the derivation of the future cash flows on a gross, ceded and net basis. Normally the Appointed Actuary will calculate two of these cash flows directly and derive the third by addition or subtraction. The cash flows calculated directly will depend on the circumstances of the entity and the preference of the Appointed Actuary; however, the individual cash flows should each be reasonable.

The data, analysis and commentary will normally be provided by actuarial lines of business. These lines will be selected by the Appointed Actuary based on the credibility and homogeneity of the resulting data. Where the actuarial lines of business have changed from the prior AAR, the current year's AAR should clearly state the reasons for the changes. In some cases, it may be appropriate to use different lines of business for the ceded and gross/net cash flows. The commentary should disclose whether or not the entity has exposure to mass tort and latent claims, and if the entity has had a subsequent event. If the entity has such exposure, the Appointed Actuary should discuss the nature and treatment of those claims in the calculation of the estimates of future cash flows for liability for incurred claims.

Where the actuarial lines of business do not include all the business written by the entity (e.g. pools and associations), the AAR should clearly indicate the additional amounts and include them in a reconciliation exhibit.

In determining the future cash flows for each actuarial line of business, the Appointed Actuary should consider, at a minimum:

- any amounts for salvage and subrogation,
- any significant trends in the severity and frequency of claims,
- any important changes in the coverage of the policies,
- the changes in the cost of reinsurance and/or in reinsurance arrangements,
- any changes in the lags in the reporting of claims and in the payment of claims,
- changes to the loss reserving practices,
- the effects of regulatory changes and
- directly attributable maintenance expenses need to be included in the estimation of future cash flows that do not flow through ALAE and ULAE.

The commentary should discuss the existence of any significant development (adverse or favourable) in the changes in estimated ultimate that had been set up in prior years, reasons for the development and changes to methods and assumptions that would eliminate the recurrence of any consistent development.

6.14.2 Discounting the Estimates of Future Cash Flows

The entity shall 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, unless the entity chooses IFRS 17 Paragraph 59(b), in which case the Appointed Actuary should disclose the actuarial line(s) of business.

6.14.3 Risk Adjustment for Non-Financial Risk

An explicit risk adjustment is always required for LIC. The Appointed Actuary should disclose the approach and amount for LIC in columns (1) and (2) of Tables 4.1 and 4.2 in the accompanying supplementary table spreadsheet.

6.14.4 Comparison of Actual Experience with Expected Experience in Prior Year-End Valuations

Actual experience refers to the ultimate gross, and net or ceded undiscounted estimates selected for each accident year for each actuarial line of business valued as of the current year-end (December 31 or October 31). Expected experience in previous year end valuations refers to the ultimate undiscounted estimates selected by the Appointed Actuary at each of the prior year-ends. If the ultimate undiscounted estimates are not available for a line of business (e.g. tabular reserves), then the ultimate discounted estimates may be used. The AAR must include the total for all lines combined as well as subtotals, where useful.

In order to assess the effect of changes in the estimates of future cash flows, OSFI requires entities to provide a comparison of actual experience with expected experience on an undiscounted basis for each actuarial line of business and for all lines combined by accident year for 10 valuation years. However, if data for 10 valuation years is not currently available, the Appointed Actuary should comment on this fact but also move toward the 10 year standard. These comparisons must be provided on a gross, and net or ceded basis. Normally these comparisons will include external adjustment expenses, exclude internal adjustment expenses and classes of business not reviewed by the Appointed Actuary (e.g. pools).

In addition, the Appointed Actuary should compare actual experience with expected experience at prior year-end valuation for one-year development by completing the Tables 6.1 and 6.3 in the accompanying supplementary table spreadsheet by actuarial lines of business. The Appointed Actuary should also specify the cause of material development (favourable or unfavourable) for each line. The main material causes may include the changes of data on actual claims, loss development factors, projection methods, expected loss ratios[6] and other.

[6] Please refer to Appendix V.

Where there are changes in the actuarial lines of business, the Appointed Actuary must allocate the actual total liability for incurred claims from prior AARs to the current actuarial lines of business using a reasonable approximation. For the first year following the change, the AAR should show the development using the old actuarial lines of business as well.

Where the Appointed Actuary uses underwriting/policy year rather than accident year, the Appointed Actuary may show the comparison of actual to expected experience using projected loss ratios based on underwriting/policy year data. In this case, the Appointed Actuary should estimate the dollar impact of the development. This would normally be calculated by multiplying the change in loss ratio by the underwriting/policy year insurance revenue/earned premium at the prior year-end. For one-year development, the Appointed Actuary should complete the Tables 6.2 and 6.4.

Whenever material differences in ultimate estimates occur for any accident year or underwriting/policy year where the coverage period has expired, the Appointed Actuary should provide commentary explaining such changes in ultimate estimates for each accident year or underwriting/policy year. In addition, the Appointed Actuary should discuss any actions taken to reduce the likelihood of similar differences in the future. The Appointed Actuary should update commentary from prior AARs based on the most recent experience. For this section, the Appointed Actuary may use a standard greater than the selected materiality standard to eliminate comments on normal fluctuations in data. A lower standard should be used for individual lines and a moderately higher standard may be used for older accident years to avoid repeating some of the less important comments from prior AARs.

Material differences may exist between the loss development on page 60.45 of the Annual Return and that shown in the Comparison of Actual Experience. OSFI acknowledges that the entity is not required to use the AAR as a basis for completing page 60.45 and that the differences can arise from such items as the allocation of internal loss adjustment expenses, Facility Association etc. **The Appointed Actuary should inform the entity of any material differences and include a discussion of the differences in the AAR or indicate that there are no differences.**

The ultimate loss development is expected to be the same as that calculated by summing over columns (3) and (6) using data from the UCLR Analysis Exhibit in the current AAR compared to data in prior year AARs. The Appointed Actuary should quantify and explain any difference that is expected due to changes to the presentation of data in the UCLR Analysis Exhibit.

6.15 Liability for Remaining Coverage

Under the General Measurement Approach (hereinafter as "GMA"), the liability for remaining coverage comprises of the fulfilment cash flows related to future service allocated to the groups of contracts at that date and the contractual service margin (CSM) of the groups of contracts at that date. The fulfilment cash flows comprise of the best estimate of future cash

flows, an adjustment to reflect the time value of money, and a risk adjustment for non-financial risk.

Under the PAA, liability for remaining coverage excluding loss component at initial recognition and at the end of each subsequent reporting period is measured by adjusting premiums received for components such as insurance acquisition cash flows, investment component etc. as required per IFRS 17.55-59. The premiums received are usually allocated on the basis of the passage of time over the coverage period. The Appointed Actuary should disclose when the basis of allocation differs from the passage of time during the coverage period for any portfolio.

6.15.1 Measurement Approach

The Appointed Actuary should disclose the portfolios and groups of contracts and their associated measurement approach.

- For groups of contracts measured under the PAA, provide detailed justification for:
    - how the entity has satisfied the eligibility requirements (when applicable, provide a summary of the calculations or tests that have been performed),
    - the method it has chosen to recognise insurance acquisition cash flows.
    - the process or procedure used to come to the conclusion of onerous groups of contracts.
- For each portfolio, the Appointed Actuary should identify the groups of contracts, measurement approaches and rationale for the grouping in Tables 7.1 and 7.2 of the accompanying supplementary table spreadsheet for (re-)insurance contracts issued and reinsurance contracts held respectively. The Appointed Actuary should disclose any material changes on portfolios, groups of contracts and associated measurement approaches from prior year's AAR.
- For each portfolio, the Appointed Actuary should also disclose:
    - The considerations used to determine the groups of the insurance contracts for the purposes of recognizing insurance revenue,
    - The tests and/or considerations used to determine the groups of onerous contracts at initial recognition, no significant possibility of becoming onerous, and remaining contracts in the portfolio.

6.15.2 Estimates of Future Cash flows

OSFI expects the Appointed Actuary to comment on all the components embedded in the future cash flows under the GMA or groups of onerous contracts under the PAA and particularly on the following (indicate if not applicable):

- expected losses, directly attributable non-acquisition expenses and servicing costs on the policies in force,
- anticipated broker/agent commission,
- expected adjustments (plus or minus) to swing rated policies,
- expected future premium receipts,
- expected changes to premiums as a result of audits, late reporting or endorsements,

- expected commission adjustments on policies with variable commissions, and
- net outflow amounts provided for onerous contracts issued in advance.

The commentary should disclose whether or not the entity has had a subsequent event. If there was a subsequent event, the Appointed Actuary should discuss the nature and treatment of the event in the calculation of the provisions for liabilities for remaining coverage.

The estimates of future cash flows should also include details of how future new business but not yet written for reinsurance contracts held is determined, i.e. the estimates of future cash flows of future reinsurance contracts held that cover the unexpired portion of (re-)insurance contracts issued. These cash flows include expected losses recoverable, which is net of expected future reinsurance costs.

6.15.3 Discounting the Estimates of Future Cash Flows

If applicable, the entity shall 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.

6.15.4 Risk Adjustment for Non-Financial Risk

For portfolios or groups of contracts measured under the PAA, an explicit risk adjustment calculation for the LRC is not required for groups of contracts that are not deemed onerous. However, if facts and circumstance indicate the groups of contracts become onerous, the Appointed Actuary should disclose the explicit risk adjustment in the calculation of the loss component for these groups. In this case, the Appointed Actuary is required to fill column (05) in Tables 4.1 and 4.2 in the accompanying supplementary table spreadsheet.

For portfolios or groups of contracts measured under the GMA, an explicit risk adjustment calculation is required. The Appointed Actuary should disclose the approach and amount for LRC in columns (03) and (04) of Tables 4.1 and 4.2 in the accompanying supplementary table spreadsheet.

6.15.5 Contractual Service Margin

The Appointed Actuary should discuss the approach used to determine the discount rate locked in at initial recognition for the measurement of CSM and the approach used to determine the interest to accrete on the CSM.

The Appointed Actuary should discuss:

- How many groups are in each of the portfolios as stated in the Tables 7.1 and 7.2, explain considerations used (e.g. how to segment levels of profitability) to determine the number of groups are appropriate. Explain how the contracts' profitability is assessed to assign to appropriate groups, and provide justification to support the other criteria used.
- The general considerations used to determine the coverage units, and to select the discount rate. If discount rate is not used, the Appointed Actuary should provide the rationale.

6.15.6 Loss Component

The Appointed Actuary should explain the key drivers for:

- the loss component for each of the groups of onerous contracts at initial recognition;
- the loss component for each of the groups of contracts for which a loss component arises at subsequent measurement; and
- under the GMA approach, the Appointed Actuary should also discuss subsequent changes to the loss component for each of the groups of onerous contracts.

Where a reinsurance contract held covers only a portion of the group of underlying onerous contracts, the Appointed Actuary should disclose the systematic and rational allocation method to determine the portion of losses of the group of onerous contracts that is reinsured. The Appointed Actuary should disclose how the loss-recovery component is established.

The Appointed Actuary should describe the approach used to allocate the changes in the fulfillment cash flows of the liability for remaining coverage specified in paragraph 50(a) of IFRS 17.

For insurance contracts that are measured under the PAA, please provide the commentary on the facts and circumstances associated with any groups of insurance contracts for which a loss component arises at subsequent measurement, and must contain the amount of the loss components on a group basis and on a portfolio basis.

6.16 Other Liabilities/Other Assets

The Appointed Actuary must comment on the adequacy of Self-Insurance Retention (SIR) plans. SIRs represent the portion of a loss that is payable by the policyholder. They should be reported net of reinsurance, not net of the supporting assets. The AAR should describe these provisions and provide details of their calculation.

If there are liabilities or assets that are not included in the previous sections but determined by the Appointed Actuary, please describe these liabilities or assets, as well as the methods and assumptions used to value them.

6.17 Liability Roll Forward

The AA is requested to provide the liability roll forward schedules by portfolio shown in Tables 8.1 and 8.2 of the accompanying supplementary table spreadsheet, separately for (re-)insurance contracts issued and reinsurance contracts held. These tables should be constructed based on the legal entity level.

6.18 Liabilities for Investment and Service Contracts

The Appointed Actuary must complete Table 9 of the accompanying supplementary table spreadsheet for the liabilities for investment and service contracts, if applicable.

6.19 Transition Amount

For contracts measured under the modified retrospective approach, full retrospective approach

or the fair value on transition to IFRS 17, provide details on how the entity determines the measurement of the contracts at the date of transition and how CSM is determined.

For Title insurance business, if transacted, provide details on the approach used to determine the transition amount of the title insurance contracts at the date of transition.

7. OTHER DISCLOSURE REQUIREMENTS

7.1 New Appointment

OSFI expects Appointed Actuaries to comply with the qualification requirements contained in OSFI Guideline E-15, *Appointed Actuary: Legal Requirements, Qualifications and Peer Review*. The AAR must explicitly disclose any deviations from these qualifications, including future steps being/to be taken to meet the qualification requirements.

If the Appointed Actuary was appointed to the role during the last year, the AAR must include the following disclosures:

- the date of appointment,
- the date of resignation of the previous Appointed Actuary,
- the date on which OSFI was notified of the appointment,
- confirmation of communication with the previous Appointed Actuary, as required by the ICA section 364(1), and
- a list of the Appointed Actuary's qualifications, keeping in mind, but not limited to, the CIA's Rules of Professional Conduct.

7.2 Annual Required Reporting to the Board or Audit Committee

For a Canadian entity, the AAR must disclose the date on which the Appointed Actuary met with the board or the audit committee of the board, as required by paragraph 203(3)(f) of the ICA.

For a foreign entity, the AAR must disclose the date on which the Appointed Actuary met with the chief agent, as required by section 630 of the ICA.

7.3 Continuing Professional Development Requirements

The Appointed Actuary must disclose in the AAR that he/she is in compliance with the Continuing Professional Development requirements of the CIA.

7.4 Disclosure of Compensation

The Appointed Actuary must disclose their compensation. This disclosure is consistent with the Financial Stability Board's Principles for Sound Compensation Practices, which have been adopted by OSFI. The form of the disclosure statement should be as follows:

Disclosure of Compensation

I attest that all of my direct and indirect compensation is derived using the following methodology:

_____

_____

_____

_____

I confirm that I have performed my duties as Appointed Actuary without regard to any personal considerations or to any influence, interest, or relationship in respect of the affairs of my client or employer that might impair my professional judgment or objectivity.

I confirm that my ability to act fairly is unimpaired and that there has been full disclosure of the methodology used to derive my compensation (and/or my firm's compensation, if applicable) to all known direct users of my services as Appointed Actuary.

If the Appointed Actuary is an employee of the insurance entity, the methodology should include a list of the major components of the Appointed Actuary's compensation. This could include: base salary, cash and/or stock-based bonuses, retirement and other significant benefits, other compensation (e.g. signing bonuses, severance packages), and perquisites (e.g. car allowances).

For each component of the Appointed Actuary's compensation listed above that varies with the performance of the entity, the value of that component as a target percentage of the base salary must be disclosed. This might include, but is not limited to, participation in a bonus plan and/or a stock option plan that is based on entity performance. The entity must disclose the basis used to determine the amounts of these variable compensation components.

If the Appointed Actuary serves as an external consultant to the entity, then the information provided to OSFI must include:

- The consulting fees payable for the preparation of the AAR, FCT, and any other work performed as the Appointed Actuary in respect of the entity's current fiscal year;
- The basis used to determine the consulting fees payable for the Appointed Actuary's work (for example, fixed fee basis, time and expense basis, as well as any caps etc.), and whether the fees include any element of incentive or results-based compensation;
- The proportion that the consulting fees payable for the Appointed Actuary's work for the entity represents, as a percentage of the total revenue billed by the consulting firm's Canadian legal entity to the entity in the consulting firm's prior fiscal year (<10%, 10-25%, 25-50%, 50-75%, 75%+); and
- The proportion that the consulting fees payable for the Appointed Actuary's work for the entity represents, as a percentage of the total revenue billed by the consulting firm's Canadian legal entity to all clients in the consulting firm's prior fiscal year (<10%, 10-25%, 25-50%, 50-75%, 75%+)

Due to its sensitive nature, the "Disclosure of compensation" must be included in a separate cover letter to osficompletterpc@osfi-bsif.gc.ca and, on request, to other Canadian regulators with reference to the cover letter made in the relevant section of the AAR.

7.5 Reporting Relationships of the Appointed Actuary

The AAR should disclose the reporting relationships and dependencies of the Appointed Actuary.

For Appointed Actuaries who are employees of the entity, the AAR should disclose the name and position of the person (or persons) to whom the Appointed Actuary reports as well as any changes in this regard over the past year. Both solid line and dotted line reporting relationships should be disclosed, as well as any anticipated change.

When the Appointed Actuary is not an employee of the entity, the AAR should disclose the names and positions of the main contacts within the entity with respect to the different functions of the Appointed Actuary, such as the valuation, FCT, and MCT support (if any).

For example, the AAR should disclose the name and position of:

- The person who hired the Appointed Actuary; and
- The entity employees with whom the Appointed Actuary discusses findings and reports.

7.6 Peer Review of the Work of the Appointed Actuary

OSFI requires the work of the Appointed Actuary to be externally peer reviewed, as set out in OSFI's Guideline E-15, *Appointed Actuary: Legal Requirements, Qualifications and Peer Review*. The guideline, which includes peer review requirements, was updated in 2012.

For each Peer Review Report filed in the last three years, the Appointed Actuary must complete the filing tables (Table 10.1 and Table 10.2) in the accompanying supplementary table spreadsheet.

In addition, the AAR should indicate when the peer reviewer last reviewed the information, if any, prepared by the Appointed Actuary to assist the insurer in the completion of the MCT (BAAT) schedules in the P&C returns.

For each peer review report, the Appointed Actuary should summarize each key finding or recommendation, and the status of each finding / recommendation by year.

The Appointed Actuary should disclose if no peer reviews were completed in the last three years and the reasons why. Note that such circumstances would be rare and require OSFI pre-approval.

7.7 Re-submitting the report

The AAR must disclose the reason(s) for resubmission.

8. UNPAID CLAIMS AND LOSS RATIO ANALYSIS EXHIBIT

8.1 Introduction

The Unpaid Claims and Loss Ratio Analysis Exhibit (UCLR Analysis Exhibit), as shown in Appendix II, is constructed to allow the presentation and collection of industry loss information in a standard format. The compiled information allows for the analysis of the impact of discounting on estimates of future cash flows and the analysis of the evolution of loss trends. In order to achieve these objectives, the exhibits are constructed by class of insurance and by accident year and contain information on a current year and on a cumulative year basis.

8.2 Data

A page must be completed for each actuarial line of business and should reconcile to supporting exhibits in the AAR. Each actuarial line of business must be uniquely linked to one, and only one, Annual Return line of business as listed in Appendix III. For reinsurers, proportional and non-proportional business should be reported separately.

The entity must specify on each page the aggregation basis, on which the Exhibit is completed, either "accident year" or "underwriting year". The selected basis should be the same for all pages. Insurers completing the exhibits on a "report year" basis should select "accident year".

The entity must also specify on each page the corresponding liquidity category in Table 3 of the accompanying supplementary table spreadsheet upon which the underlying discount rate for the actuarial line of business is derived.

If an actuarial line of business is a combination of two or more Annual Return lines, the Appointed Actuary must determine in which Annual Return line to place it to best represent the operations of the entity. For actuarial lines of business where the insurance revenue is not available in the same detail as the claims (e.g. automobile-liability bodily injury and property damage), the Appointed Actuary should either estimate a split of the insurance revenue or combine the data showing it in the Annual Return line that best represents the line of business underwritten by the entity.

A "Total" page must also be completed; this exhibit should balance to the AAR. An individual page does not have to be completed for a category that is not reviewed by the Appointed Actuary but the total fulfilment cash flows for the category must be included in Line 15 ("Other Provisions") of the "Total" page. The Appointed Actuary should also provide a breakdown with commentary in the AAR when "Other Provisions" is greater than the selected materiality.

In the UCLR Analysis Exhibit, the estimate of present value of future cash flows (Column [7]) is expected to be less than the total estimate of future cash flows (Column [6]). If the amount in the column [7] is greater than the amount in column [6], the AAR must comment on the reason for the exception.

Claim counts reported in the UCLR Analysis Exhibit should be consistent with the way the Appointed Actuary defines and records claim counts in the AAR. The Appointed Actuary should provide the definition of claim count in the AAR, and describe any changes in the definition from the prior AAR. If it is difficult to obtain claim count information (e.g.

reinsurers, assumed business, etc.), the Appointed Actuary should provide a rationale in the AAR for why claim count cannot be reported.

The definition of claim count could include, if applicable, but not be limited to:

- whether an occurrence with payments for multiple coverages/parties is counted as one claim or multiple claims,
- whether claims with no case outstanding and no payments are included in the definition of reported claim counts, and
- how reopened claims are treated.

The AA has the option to calculate the undiscounted loss ratio in the UCLR Analysis Exhibit using insurance revenue or earned premiums, as reported in column [13] of the exhibit. For older accident years prior to IFRS 17, earned premiums should be reported instead of insurance revenue. The AAR should disclose whether insurance revenue or earned premiums is reported for prior accident years post IFRS 17, by line of business if applicable.

The UCLR Analysis Exhibit should be completed on a gross basis for each actuarial line of business and the total, and on a ceded basis for total. Any adjustments to the gross basis as reported in the AAR (e.g. industry pools or inter-company reinsurance) should be made in Lines 14 and 15 of the "Total" page.

The Appointed Actuary is responsible for ensuring the accuracy of the UCLR Analysis Exhibit and accompanying electronic filing.

Note that figures must be expressed in thousands of Canadian dollars.

Appendix IV contains detailed instruction for completing the UCLR Analysis Exhibit.

Detailed instructions for completing the electronic filing can be found on OSFI's website: *Unpaid Claims and Loss Ratio Analysis Exhibit (UCLRE)*.

9. Appendix I - Expression of Opinion

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 [31 December 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.

FCIA	
Signature of Appointed Actuary	Date opinion was rendered
FCIA	
Printed name of Appointed Actuary	Location opinion was rendered

The language in square brackets is variable and other language may be adjusted to conform to interim financial statements and to the terminology and presentation in the financial statements.

10. Appendix II - Unpaid Claims and Loss Ratio Analysis Exhibit

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Unpaid Claims and Loss Ratio Analysis Exhibit (030)

(All amounts are on a Gross basis and in $'000)

Exhibit Category Code:

Actuary's Category Code :

Aggregation Type Code:

Portfolio:

Liquidity Category for Discount Rate:

			Paid Losses[a]		Liabilities for Incurred Claims[a]								Loss Ratio Analysis[a]		Claim Counts		As at Prior Year-end	
Line no	Year code	Accident/ Underwriting Year	Current Year (XXXX)	Cumulative (XXXX and Prior)	Bornhuetter-Ferguson Initial Expected Loss Ratio Assumptions	Estimate of Future Cash Flows			Estimate of Present Value of Future Cash Flows - Total	Risk Adjustment (RA)		Fulfilment Cash Flows	Insurance Revenue/ Earned Premiums	Undiscounted Loss Ratio (%)	Open as at Year-end	Reported to Date	Total Estimate of Future Cash Flows[a]	Reported Claim Counts to Date
						Case Reserves	IBNR	Total		RA ($'000)	RA (%)							
		(01)	(02)	(03)	(22)	(04)	(05)	(06)	(07)	(23)	(24)	(12)	(13)	(16)	(18)	(19)	(20)	(21)
			m1	m2	m3	m4	m5	m6	m7	m8	m9	m10	m11	m12	m13	m14	m15	m16
1	01	XXXX-10 & Prior																
2	02	XXXX-9																
3	03	XXXX-8																
4	04	XXXX-7																
5	05	XXXX-6																
6	06	XXXX-5																
7	07	XXXX-4																
8	08	XXXX-3																
9	09	XXXX-2																
10	10	XXXX-1																
11	11	XXXX																
12	99	Total																

a) Including Allocated loss adjustment expenses (ALAE), but excluding Unallocated loss adjustment expenses (ULAE)

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Unpaid Claims and Loss Ratio Analysis Exhibit (030)

(All amounts are on a Gross basis and in $'000)

Exhibit Category Code: Total

Actuary's Category Code : Total

Aggregation Type Code:

Portfolio: Total

Liquidity Category for Discount Rate: Total

			Paid Losses[a]		Liabilities for Incurred Claims[a]								Loss Ratio Analysis[a]		Claim Counts		As at Prior Year-end	
						Estimate of Future Cash Flows				Risk Adjustment (RA)								
Line no	Year code	Accident/ Underwriting Year	Current Year (XXXX)	Cumulative (XXXX and Prior)	Bornhuetter-Ferguson Initial Expected Loss Ratio Assumptions	Case Reserves	IBNR	Total	Estimate of Present Value of Future Cash Flows - Total	RA ($'000)	RA (%)	Fulfilment Cash Flows	Insurance Revenue/ Earned Premiums	Undiscounted Loss Ratio (%)	Open as at Year-end	Reported to Date	Total Estimate of Future Cash Flows[a]	Reported Claim Counts to Date
		(01)	(02)	(03)	(22)	(04)	(05)	(06)	(07)	(23)	(24)	(12)	(13)	(16)	(18)	(19)	(20)	(21)
			m1	m2	m3	m4	m5	m6	m7	m8	m9	m10	m11	m12	m13	m14	m15	m16
1	01	XXXX-10 & Prior																
2	02	XXXX-9																
3	03	XXXX-8																
4	04	XXXX-7																
5	05	XXXX-6																
6	06	XXXX-5																
7	07	XXXX-4																
8	08	XXXX-3																
9	09	XXXX-2																
10	10	XXXX-1																
11	11	XXXX																
12	99	Total																

APV Reserves including ULAE, FA and Other (040)

13		ULAE - Total	m51
14		"Facility Association" and "Plan"	m52
15		Other Provisions	m53
16		Grand Total	m54

a) Including Allocated loss adjustment expenses (ALAE), but excluding Unallocated loss adjustment expenses (ULAE), except for lines 13 to 15.

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Unpaid Claims and Loss Ratio Analysis Exhibit (030)

(All amounts are on a Ceded basis and in $'000)

Exhibit Category Code: Total

Actuary's Category Code : Total

Aggregation Type Code:

Portfolio: Total

Liquidity Category for Discount Rate: Total

			Paid Losses[a]		Assets for Incurred Claims[a]								Loss Ratio Analysis[a]		Claim Counts		As at Prior Year-end	
						Estimate of Future Cash Flows				Risk Adjustment (RA)								
Line no	Year code	Accident/ Underwriting Year	Current Year (XXXX)	Cumulative (XXXX and Prior)	Bornhuetter-Ferguson Initial Expected Loss Ratio Assumptions	Case Reserves	IBNR	Total	Estimate of Present Value of Future Cash Flows - Total	RA ($'000)	RA (%)	Fulfilment Cash Flows	Insurance Revenue/ Earned Premiums	Undiscounted Loss Ratio (%)	Open as at Year-end	Reported to Date	Total Estimate of Future Cash Flows[a]	Reported Claim Counts to Date
		(01)	(02)	(03)	(22)	(04)	(05)	(06)	(07)	(23)	(24)	(12)	(13)	(16)	(18)	(19)	(20)	(21)
			m1	m2	m3	m4	m5	m6	m7	m8	m9	m10	m11	m12	m13	m14	m15	m16
1	01	XXXX-10 & Prior																
2	02	XXXX-9																
3	03	XXXX-8																
4	04	XXXX-7																
5	05	XXXX-6																
6	06	XXXX-5																
7	07	XXXX-4																
8	08	XXXX-3																
9	09	XXXX-2																
10	10	XXXX-1																
11	11	XXXX																
12	99	Total																

APV Reserves including ULAE, FA and Other (040)

13		ULAE - Total	m51
14		"Facility Association" and "Plan"	m52
15		Other Provisions	m53
16		Grand Total	m54

a) Including Allocated loss adjustment expenses (ALAE), but excluding Unallocated loss adjustment expenses (ULAE), except for lines 13 to 15.

11. Appendix III – Annual Return Lines of Business

- Property-Personal
- Property-Commercial
- Aircraft
- Automobile-Liability - Private Passenger
- Automobile-Personal Accident - Private Passenger
- Automobile-Other - Private Passenger
- Automobile-Liability - Other than Private Passenger
- Automobile-Personal Accident - Other than Private Passenger
- Automobile-Other - Other than Private Passenger
- Boiler and Machinery
- Credit
- Credit Protection
- Fidelity
- Hail
- Legal Expense
- Liability
  - Comprehensive General Liability (with products)
  - Comprehensive General Liability (without products)
  - Cyber Liability
  - Directors and Officers Liability
  - Excess Liability
  - Professional Liability
  - Umbrella Liability
  - Pollution Liability
  - All Other
- Mortgage
- Other Approved Products
- Surety
  - Contract Surety
  - All Other Surety
- Title
- Marine
- Accident and Sickness

12. Appendix IV - Unpaid Claims and Loss Ratio Analysis Exhibit

12.1 Information Contained in the Unpaid Claims and Loss Ratio Analysis Exhibits (by Column)

The UCLR Analysis Exhibit contains amounts segregated by accident years (refer to Section 12.3 for instructions on other than an accident year basis). All amounts entered on the UCLR Analysis Exhibit should be expressed in Canadian dollars and rounded to the nearest thousand dollars.

Columns 03, 13, 16, 19, 21 and 22 must be completed for the past 10 accident years while columns 02, 04 through 07, 12, 18, 20, 23 and 24 must be completed for all accident years.

12.1.1 Column 01 – Accident Year or Underwriting Year

Column 01 of the exhibit represents the segregation by accident/underwriting year, as specified in Aggregation Type Code. Line 11 represents the most recent accident/underwriting year, lines 02 to 10 represent the nine prior accident/underwriting years and line 01 represents all prior years to line 02.

12.1.2 Column 02 – Paid Losses: Current Year

Column 02 represents the paid claims and paid allocated adjustment expenses for the current calendar year.

Paid losses for Accident year XXXX-10 & Prior should be reported in Line 1.

12.1.3 Column 03 – Paid Losses: Cumulative

Column 03 represents the cumulative paid claims and paid allocated adjustment expenses for all calendar years.

12.1.4 Column 04 – Estimate of Future Cash Flows: Case Reserves

Undiscounted case basis reserves of the unpaid claims and allocated adjustment expenses are presented in column 04. If the claim liabilities are case reserved on a discounted basis (e.g. tabular reserves), the discounted case reserves are to be entered.

12.1.5 Column 05 – Estimate of Future Cash Flows: IBNR

Undiscounted incurred but not reported reserves are shown in column 05. These reserves also include any adjustment for the deficiency or redundancy of the case reserves (also known as the broad definition of IBNR) presented in column 04. The undiscounted IBNR includes all amounts related to the undiscounted unpaid allocated adjustment expenses. If the undiscounted claim liabilities for a line are not available, (e.g. tabular reserves), then the discounted IBNR should be entered.

12.1.6 Column 06 – Estimate of Future Cash Flows: Total

This is the total of columns 04 and 05.

12.1.7 Column 07 – Estimate of Present Value of Future Cash Flows: Total

Present value case basis reserves and IBNR of the unpaid claims and allocated adjustment expenses are presented in column 07. The underlying rule to be respected with the completion of the UCLR Analysis Exhibit is that the amounts shown should correspond to those calculated by the Appointed Actuary in the AAR. Do not add any risk adjustment to this column.

12.1.8 Column 12 – Fulfillment Cash Flows

Column 12 is the result of the following formula:

Column(07) + *Column*(23)

Note: for the "Total" exhibit, amounts for column 12 are entered on line 13 (ULAE – Total), line 14 (Facility Association and Plan) and line 15 (Other Provisions) as well as line 16 (Grand Total). Lines 13 through 16 are included only in the "Total" exhibit.

12.1.9 Column 13 – Insurance Revenue/Earned Premium

Insurance revenue/earned premium are shown separately by accident year. For older accident years prior to IFRS 17, earned premiums (or cumulative earned premium to date) should be reported instead of insurance revenue. Insurance revenue/earned premiums are reported and developed at ultimate where development is possible, for example, where experience rating is used.

12.1.10 Column 16 – Undiscounted Loss Ratio (%)

The undiscounted loss ratio is calculated using the following formula:

100 x [*Column*(03) + *Column*(06)] / *Column*(13)

12.1.11 Column 18 – Open Claim Counts as at Year-end

Open claim counts for an accident/underwriting year refer to the number of claims that has not been settled or on which payments are still being made as at the current year-end. If it is difficult to obtain claim count information (e.g. reinsurers, assumed business, etc.), this column should be left blank (i.e. not zero) and the Appointed Actuary should provide a rationale in the AAR.

12.1.12 Column 19 – Reported Claim Counts to Date

Reported claim counts for an accident/underwriting year refer to cumulative reported claim counts as at the current year-end. If it is difficult to obtain claim count information (e.g. reinsurers, assumed business, etc.), this column should be left blank (i.e. not zero) and the Appointed Actuary should provide a rationale in the AAR.

12.1.13 Column 20 – Total Estimate of Future Cash Flows as at Prior Year-end

This is equal to column 06 from the corresponding pages of the prior UCLR Analysis Exhibit. Where there are changes in the actuarial lines of business or the reinsurance/retrocession arrangements, the Appointed Actuary must allocate total estimate of present value of future cash flows from the prior AAR to the current actuarial line of business, based on the current reinsurance/retrocession arrangements, using a reasonable approximation.

The Appointed Actuary should treat non-performance risk of reinsurance consistently for the restated 2022 in the first year of the IFRS 17 implementation, i.e. including the non-performance risk of reinsurance directly in the cash flows or reflecting it in the discounting by increasing ceded discount rate.

12.1.14 Column 21 – Reported Claim Counts to Date as at Prior Year-end

This is equal to column 19 from the corresponding pages of the prior UCLR Analysis Exhibit. When the actuarial lines of business or definition of claim count have changed from the prior AAR, the AA must allocate reported claim counts to date from the prior AAR to the current actuarial line of business and definition of claim count using a reasonable approximation. If it is difficult to obtain claim count information (e.g. reinsurers, assumed business, etc.), this column should be left blank (i.e. not zero) and the Appointed Actuary should provide a rationale in the AAR.

12.1.15 Column 22 – Bornhuetter-Ferguson Initial Expected Loss Ratio Assumptions

These are the expected loss ratio assumptions used in the Bornhuetter-Ferguson (B-F) or the Expected Loss Ratio (ELR) method to estimate ultimate loss for the current year's valuation. If neither the B-F nor the ELR method is considered for an actuarial line of business, this column should be left blank (i.e. not zero).

12.1.16 Column 23 – Risk Adjustment

The Risk Adjustment is presented in column 23.

12.1.17 Column 24 – Risk Adjustment (%)

This column is equal to the ratio of column 23 to column 07.

12.2 Information Contained in the Unpaid Claims and Loss Ratio Analysis Exhibit (by Line)

The amounts contained in lines 1 to 12 of UCLR Analysis Exhibit exclude all paid and unpaid ULAE.

12.2.1 Line 13 – ULAE - Total

Discounted unpaid ULAE, including risk adjustment if applicable, are entered in line 13 in the "Total" exhibit but excluded entirely from the other exhibits.

12.2.2 Line 14 – "Facility Association" and "Plan"

The liabilities for insurance contracts assumed from all automobile pools (e.g. Facility Association, Ontario Risk Sharing Pool and Plan de Répartition des Risques) are entered in line 14 (Facility Association and Plan) of the "Exhibit - Total - Gross" exhibit. The assets for the cessions to all automobile pools are entered in line 14 (Facility Association and Plan) of the "Exhibit – Total – Ceded" exhibit.

12.2.3 Line 15 – Other Provisions

The fulfilment cash flows for all other provisions (e.g. non-material lines of business, non-automobile industry pools, inter-company reinsurance and directly attributable expenses that are not included in ALAE and ULAE) are entered in line 15 (Other Provisions) of the "Total" exhibit.

12.2.4 Line 16 – Grand Total

This is the total of lines 12 through 15 of column 12 of the "Total" exhibit.

12.3 Claims Reported on Other than an Accident Year Basis

Normally, the UCLR Analysis Exhibit will be completed on an accident year basis (year in which the claim was incurred).

However, some insurers may have used a basis other than accident year when completing the AAR. This includes reinsurers reporting on an underwriting year basis (year when the policy is written) as well as insurers writing policies on a claim-made basis who declare on report year (year when the claim is reported). These insurers may encounter difficulties in completing the UCLR Analysis Exhibit on an accident year basis.

It is recommended that the basis that is most suited to the entity's operation be used to complete the exhibits.

13. Appendix V – Definitions

Actuarial Line of Business: The cohort selected by the Appointed Actuary based on the credibility and homogeneity of the data for reserving analysis purpose.

Ceded: Reinsurance contracts held. For auto writers, “Facility Association” and “Plan” are included.

Gross: (Re-)insurance contracts issued by a (re-)insurer. For auto writers, “Facility Association” and “Plan” are included.

Net: Gross minus ceded.

Loss Ratio: Claims divided by earned premiums for 2022 and before when the earned premiums are used, otherwise claims divided by insurance revenue. For 2023 and after, loss ratio equals to claims divided by insurance revenue.