



CENTRAL BANK OF  
TRINIDAD & TOBAGO

**GUIDELINE FOR APPOINTED ACTUARIES**  
**Requirements for the Valuation of Policy**  
**Liabilities and Other Actuarial Liabilities**  
**for General Insurance Business**

**DRAFT — September 2023**

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# 1. GENERAL REQUIREMENTS

## 1.1 Regulatory Requirements

The Central Bank of Trinidad and Tobago (“Central Bank”/ “Bank”) is empowered by sections 278 (1) (a) and (b) of the Insurance Act, 2018 (“Act”) to issue guidelines to give effect to the Act and enable the Bank to meet its objectives.

Section 78 of the Act requires insurance companies to appoint actuaries and section 215 of the Act requires the Appointed Actuary (“AA”) of an insurer doing general insurance business to value the policy liabilities and other actuarial liabilities of the company at the end of each financial year. The valuation must be conducted in accordance with regulations and standards of accepted actuarial practice with such changes as may be determined by the Central Bank. Pursuant to section 145(1)(d) and 215(1)(b), the results must be submitted to the Inspector of Financial Institutions (“IOFI”) using the form set out herein.

Section 145(1) of the Act stipulates that registered insurers shall submit to the IOFI, within sixty business days after the end of the financial year, annual returns which include the insurer’s annual audited financial statements. The company’s independent auditor must certify the annual returns. The annual returns must be based on the audited financial statements of the company.

The insurer is responsible for ensuring that the AAR complies with the requirements of the Act, the Central Bank and the IOFI.

## 1.2 Application and Scope

This Guideline<sup>1</sup> is applicable for AAR’s related to annual reporting periods beginning on or after January 1, 2023. It sets out the Central Bank’s expectations with respect to (a) certain aspects of the actuarial valuation and (b) the form and content of the AAR prepared by an AA and submitted by an insurer carrying on general insurance business in accordance with Section 215(1) of the Act. This Guideline also sets out the information to be presented in the AAR, including information on the results of certain supplementary calculations, and covers the nature of the discussions to be included. The AAR is a detailed report that comprehensively documents, among other things, the following:

- The data, methodology, assumptions, outcomes and reconciliations performed as part of AA’s valuation process; and
- Work done to substantiate the AA’s opinion.

The AAR should form a key part of the valuation control process and should, therefore, provide a record of the justifications underlying key decisions made in the process in sufficient detail to enable an informed audience (such as a reviewing actuary) to assess whether the documented process, data, assumptions and outcomes are reasonable. It includes, among other things, the opinion of the AA, commentary, exhibits, schedules and calculations that support that opinion.

The Central Bank’s review of the AAR of an insurer is a key component of its assessment of the insurer’s financial position, condition and profile.

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<sup>1</sup> This Guideline is based on the IFRS 17 Property & Casualty Memorandum to the Appointed Actuary issued in 2023 by the Office of the Superintendent of Financial Institutions (OSFI) in Canada

The AAR is not solely a report from the insurer's AA to the IOFI. It is also intended for the insurer's management team and will be read by employees of the Central Bank who may not be actuaries but who are knowledgeable about insurance.

### 1.2.1 Reconciliation to Corresponding Annual Return Liabilities

The AA is responsible for valuing the policy liabilities and other actuarial liabilities of the general insurance business of the insurer. The policy liabilities and other actuarial liabilities reported in the AAR must reconcile with those of the annual financial statements and the annual returns. Non-consolidated amounts are to be reported, unless otherwise specified by the IOFI. The AA is required to provide reconciliations of the non-consolidated liabilities reported in the AAR to the numbers reported in the annual returns and to the numbers reported in the annual financial statements.

## 1.3 Effective Date

This Guideline comes into effect on the date of its issuance.

## 1.4 Definitions

Definitions for the purpose of this Guideline are as follows:

*"annual financial statements"* means the audited financial statements (which includes the disclosures/notes) covering a full financial year prepared annually for shareholders or policyholders, a copy of which an insurer must submit to IOFI as part of its annual returns pursuant to section 144 of the Act;

*"annual returns"* mean the audited annual statements, a copy of which an insurer must submit to IOFI pursuant to section 145 of the Act;

*"appointed actuary"* means an actuary who has been appointed by an insurer pursuant to section 78 of the Act;

*"IFRS"* means the International Financial Reporting Standards developed and maintained by the International Accounting Standards Board (IASB) and adopted by the Institute of Chartered Accountants of Trinidad and Tobago;

*"policy liabilities and other actuarial liabilities"* has the meaning assigned to it in the Insurance (Policy Liabilities) Regulations, 2023 and include:

- (a) insurance contract liabilities/assets;
- (b) liabilities/assets for policy contracts and other obligations to policyholders other than insurance contracts;
- (c) policy liabilities/assets associated with:
  - (i) reinsurance contracts issued or held;
  - (ii) investment contracts with discretionary participation features (DPFs);
  - (iii) contracts with investment/service components;
  - (iv) investment contracts; and

- (v) service contracts.

“Regulations” mean the Insurance (Policy Liabilities) Regulations, 2023;

“standards of accepted actuarial practice” means the following as specified by the Inspector:

- a) the following standards of the Caribbean Actuarial Association (CAA):
  - i. Actuarial Practice Standard 0: General Actuarial Practice (December 2019);
  - ii. Actuarial Practice Standard 6: Actuarial Services in Connection with International Financial Reporting Standard 17 (June 2023); and
  - iii. any other relevant standards, educational notes, guidance and technical papers issued by the CAA; and
- b) International Actuarial Note 100: Application of IFRS17 Insurance Contracts (August 2021).

## 1.5 Application of Professional Standards to the Appointed Actuary’s Valuation

When performing a valuation of an insurer’s policy liabilities and other actuarial liabilities and preparing an AAR for the insurer’s submission to the IOFI, the AA must comply with the following:

1. The requirements of the Act and the Regulations;
2. The requirements set out in this Guideline;
3. The Code/Rules of Professional Conduct of the AA’s governing body; and
4. Standards of accepted actuarial practice.

The AA must not deviate from the requirements of the Act or Regulations. Any deviation from generally accepted actuarial practice or any other of the requirements of this Guideline must be disclosed in the AAR and justified.

In complying with standards of accepted actuarial practice, the AA must meet a standard of care with respect to the data used in valuations. Standard of care is to be interpreted with reference to Section 2.5 Data Quality of the CAA APS0: General Actuarial Practice Standard or any other relevant sections of the applicable standards of accepted actuarial practice. This standard of care requires the AA to assess whether there is sufficient and reliable data to perform the actuarial valuation and to take reasonable steps to review the consistency, completeness and accuracy of the data used (e.g. consistency of current valuation data with previous valuation data, with financial statements and records of policy movements). The AA must describe the verification, the assessment and review in the AAR.

Where an AA uses another person’s work regarding the accuracy of the data used in the valuation, the AA, in addition to fulfilling the requirements of standards of accepted actuarial practice, shall obtain a signed statement from the other party(ies) in the following format and include the signed statement(s) below in Section 5.7 of the AAR.

## STATEMENT OF ACCURACY OF POLICY RECORDS

I, **Name**, **Title of Company Name**, **Address of Company** hereby affirm that the listings and summaries of policies and contracts as of **31 December 2023**, prepared for and submitted to **Actuary Name** are to the best of my knowledge and belief substantially accurate and complete.

\_\_\_\_\_  
Signature of **Name**

\_\_\_\_\_  
Address of **Company Name**

The words in **bold** should be adapted to the situation.

### 1.6 Filing Requirements for the AAR

The filing deadlines for the AAR, which includes the Schedules to the AAR for General Insurance Business (“Schedules to the AAR-GEN”)<sup>2</sup>, is sixty (60) business days after the end of the financial year.

For the AAR, the insurer is required to submit:

- One hard copy with a signed opinion;
- One electronic copy, pdf format. A scanned copy of the signed opinion must be included in the electronic submission; and
- One electronic copy of the required Schedules to the AAR-GEN in Excel format.

When filing the AAR report, the AA must complete and submit the file “Schedules to the AAR-GEN”. All values must be expressed in Trinidad and Tobago currency rounded to the nearest dollar. The tables must not be modified by adding rows or columns. The AA must ensure that all tables are completed in the specified format. Column headings must not be changed or reordered. If no data is available, cells must be left blank. If changes are required to the workbook, the request should be sent to [FISDActuarial@central-bank.org.tt](mailto:FISDActuarial@central-bank.org.tt).

## 2. CENTRAL BANK’S REVIEW PROCESS

Reviews of the annual returns and AAR may reveal that an AA’s valuation calls for further assessment and questioning. Working papers and documentation required to support the computation of the policy liabilities and other actuarial liabilities reported in the annual returns and the AAR must be made available to the IOFI upon request.

Where the IOFI determines that the provision for policy liabilities and other actuarial liabilities are inappropriate, section 212(3) of the Act gives the IOFI the authority to disallow assumptions and methods in

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<sup>2</sup> The Schedules to the AAR-GEN are based on the tables supporting the IFRS 17 Property & Casualty Memorandum to the Appointed Actuary issued in 2023 by the Office of the Superintendent of Financial Institutions (OSFI) in Canada.



accordance with section 148 of the Act. Further, where the IOFI determines that the appropriateness of particular assumptions or methods is not sufficiently demonstrated, the IOFI shall require the AA to adopt other acceptable assumptions or methods, and to re-compute the policy liabilities and other actuarial liabilities. In such a situation, the AA must re-submit the AAR by a deadline stipulated by the IOFI. The IOFI may also require the insurer to amend the annual returns in accordance with section 148 of the Act. Alternatively, the IOFI may ask the insurer to reflect the changes in the annual returns for the following year. The IOFI may in the alternative, in accordance with Section 153(1) of the Act, request a report from an independent actuary.

### **3. SPECIAL CONSIDERATIONS**

#### **3.1 Acquired Business before the Transition Date**

Applying the full retrospective approach, the liability for incurred claims associated with insurance contracts, originated by the acquired/transferring insurer in a business combination or transfer, should be classified as a liability for remaining coverage in the settlement period of the acquisition transaction, from the perspective of the acquiring insurer.

Insurers 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. Insurers applying the fair value approach can also classify a liability as liability for incurred claims.

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

### **4. FORMAT OF THE APPOINTED ACTUARY'S REPORT**

#### **4.1 Report Outline**

The AAR must be presented in a manner generally understandable to both the insurer's management and the regulator. At a minimum, the following sections must be included in the AAR:

- Introduction
- Expression of Opinion
- Supplementary Information Supporting the Opinion
- Executive Summary
- Description of Insurer
- Materiality Standard
- Data
- Expenses
- Classification of Contract
- Portfolio Reporting
- Estimates of Future Cash Flows
- Discount Rate

- Risk Adjustment
- Liabilities for Incurred Claims
- Liabilities for Remaining Coverage
- Other Liabilities/Other Assets
- Liability Roll Forward
- Transition Amount
- Liability Composition by IFRS Standard
- Other Disclosure Requirements
- Unpaid Claims and Loss Ratio Analysis Exhibit
- Exhibits and Appendices

In Section 5 “Contents of the Appointed Actuary’s Report”, the above outline is used to discuss the required contents.

## 4.2 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 must include clearly identified sections and numbered pages. Reference to such pages should be part of the table of contents.

## 5. CONTENTS OF THE APPOINTED ACTUARY’S REPORT

### 5.1 Introduction

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

- The insurer 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.

### 5.2 Expression of Opinion

In forming his/her opinion, the AA shall assess:

- The valuation of policy liabilities and other actuarial liabilities;
- The presentation of these results in the annual financial statements, including the notes; and
- Any other matter directed by the IOFI regardless of the International Financial Reporting Standard (IFRS) that applies (typically IFRS 9, IFRS 15 or IFRS 17).

An AA who is in a position to give an unqualified opinion shall use the wording specified in Appendix I. The IOFI will consider any opinion that varies from this wording to be qualified. See also section 5.2.1 for further details. The AA may not use the wording specified in Appendix 1 unless he/she takes

responsibility for the work and report, including taking responsibility for information prepared by, work done by and methodologies and assumptions set by another person.

In deciding whether to take responsibility for items set by others, the AA should bring to the fore of his/her mind the requirements of Section 1.5 of this Guideline. The following questions<sup>3</sup> could assist the AA during that determination:

- Is the policy or method or assumption that has been set by another party consistent with a reasonable interpretation of the IFRS 17 standard?
- Is the policy or method or assumption that has been set by another party consistent with generally accepted actuarial practice?
- Is the policy or method or assumption similar to what the AA would have chosen or if not similar would the outcome not be materially different?
- Has the AA considered the other person's qualifications, competence, integrity, and objectivity? Has the AA considered discussions and correspondence between the AA and the other party regarding any facts known to the AA that are likely to have a material effect upon the information used? Is the other person aware of how the AA intends to use that person's work? Does the AA need to review the other person's supporting papers?
- Is the AA able to judge the appropriateness of the policy or method or assumption set by another party without performing a substantial amount of additional work beyond the scope of the assignment?

The opinion must contain an original signature of the AA, the AA's name (in block letters), the date and location of signing.

The actuarial opinions presented to the shareholders and policyholders of the insurer should be the same as the opinion filed with the Central Bank. Should this not be the case, the AA must disclose in writing in the AAR to submitted to the IOFI any material differences between the opinions, as well as the rationale for such differences.

### 5.2.1 Qualified Opinion

Any qualification or limitation concerning any aspect of the valuation must be noted in this section of the AAR. Comprehensive explanations must be provided in the relevant sections of the report. These sections must be cross-referenced in the opinion. The qualifications or limitations should be similar to the ones included in the annual financial statements presented to the shareholders and policyholders. Appendix II provides two examples of situations where a reservation in reporting is required. The list is not exhaustive, and the examples are meant to be illustrative. The AA is required to amend the opinion to fit the circumstance which gave rise to the qualification.

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<sup>3</sup> CIA Education Note, Role of the Appointed Actuary Under IFRS 17

## 5.3 Supplementary Information Supporting the Opinion

Readers of the AAR must be able to understand how the AA's figures are derived. This section must 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 must be included.

## 5.4 Executive Summary

This section must contain a summary of the key results and findings and any other information the AA wishes to bring to the attention of the reader. In particular, it must comment on the comparison of the actual experience with the expected experience in the prior year end valuation for all lines combined. In addition, it is expected that the AA discuss any major differences between IFRS 4 and IFRS 17 for the first year of the implementation of IFRS 17.

It must 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 AA and any other unusual circumstances identified as part of the valuation. **This section must also include any deviation from CAA Standards of Practice or from the requirements of this Guideline.**

## 5.5 Description of Insurer

### 5.5.1 Ownership and Management

The AA must provide a brief history of the insurer 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 must be discussed.

### 5.5.2 Business

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

### 5.5.3 Reinsurance

#### *5.5.3.1 Reinsurance Arrangement*

The AA must describe the insurer's reinsurance arrangements (type of arrangements, significant terms and conditions, and order of application of treaties) and any changes in the arrangements (including changes in retention or limits) during the experience period used in the AAR. This description must 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).

#### *5.5.3.2 Reinsurance Contracts Held – Non-Performance Risk*

The AA 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 AA must indicate whether

the adjustment is applied to the cash flows directly or to the discount rate or a combination of the two.

The AA must detail all material factors impacting this liability including, but not limited to, the effect of disputes resulting in payment reduction.

When making this estimate, the AA will not necessarily assess the financial condition of each reinsurer. However, the existence of any non-performance risk and the actions taken to address must 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 AA will discuss reinsurance matters with management and the auditor of the insurer 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 AA must clearly indicate how any changed arrangements were taken into account.

#### *5.5.3.3 Financial Reinsurance Agreements*

The AA must disclose information of any material financial reinsurance agreements held where there is not significant insurance risk transfer between the ceding insurer 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 AA must state that there are no material financial reinsurance agreements. The AA must also describe the process used to reach the above conclusion.

#### *5.5.3.4 Related Party Reinsurance*

The AA must disclose any reinsurance with connected parties or related groups that have or could have a material impact on the liabilities for insurance and reinsurance contracts issued. The disclosure must include the parties involved, a description of the reinsurance and the impact on the liabilities for insurance and reinsurance contracts issued.

#### *5.5.3.5 Retrospective Reinsurance Contracts Held*

The AA must disclose any retrospective reinsurance contracts held that are carried on the balance sheet as “Asset for Remaining Coverage (ARC)”. The disclosure must 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)”.

## 5.6 Materiality Standards

In preparing the insurer's annual returns, the management of the insurance company and the external auditor routinely agree on a level of materiality. The AAR must report the materiality standard. In addition, the AA must report on how the materiality standard for the valuation of policy liabilities and other actuarial liabilities was selected.

## 5.7 Data

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

In particular, the AAR must 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 AA file an AAR with the annual returns assumes that the AA has met the standard of care, as implicitly stated in the CAA Standards of Practice. In particular this requires that the AA establish suitable check procedures to verify that the data utilized is reliable and sufficient for the valuation of liabilities for insurance and reinsurance contracts issued and assets for reinsurance contracts held.

With respect to any class of business, the AA must describe at a high level:

- Any use of the work of another actuary or other professionals;
- The scope of such use;
- A justification for such use; and
- The extent of the review of the other actuary's work must also be described.

## 5.8 Expenses

The AA must disclose how directly attributable expenses is determined and how total insurer 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 must be split by (re-)insurance contracts issued and reinsurance contracts held.

The AA must 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 AA must disclose the type of investment expenses considered directly attributable.

The AA must 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 insurance contracts are held as an asset. This asset will be referred to as the asset for insurance acquisition cash flows.

The AA must 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.

## 5.9 Classification of Contracts

This request is only for transition period. The AA must 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:

Line of Business	Insurance Contract Liabilities/Assets Under IFRS 4 (@ Financial Year End 2022)	Insurance Contract Liabilities/Assets Under IFRS 17 (@ Financial Year End 2023)	Rationale for Reclassification

## 5.10 Portfolio Reporting

The AA must report how each portfolio is determined in the transition period i.e. 2023. The AA must also disclose any material changes after the implementation of the IFRS 17.

The reporting of each portfolio must include the following:

- Identification and description of the Actuarial Lines of Business<sup>4</sup> in each portfolio in Table 1 of the accompanying Schedules to the AAR-GEN; and
- A brief discussion of any unique circumstances in determining the contract boundaries for individual contract or the portfolio of contracts.

## 5.11 Estimates of Future Cash Flows

The AAR must 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; and
- 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 AA must 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 must describe the method(s) as well as any changes in methods from prior AARs. The impact of such changes must be clearly indicated and, if material, included in the Executive Summary.

<sup>4</sup> Please refer to Appendix VI.

## 5.12 Discount Curve

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

- 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 combination.
  - a) If the insurer uses discount rates that reflect the effect of financial risk, describe how the discount rates are adjusted.
  - b) If the insurer 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 Schedules to the AAR-GEN 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 must 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 LRC.

### 5.12.1 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 Schedules to the AAR-GEN.
- 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 line of business (Motor Vehicle, 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 liquidity 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 insurer 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

### 5.12.2 Top-Down Approach

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

- Reference portfolio
  - a) Describe whether the insurer'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.

## 5.13 Risk Adjustment

The AA must disclose the risk adjustment (“RA”) amount both on a gross<sup>5</sup> and net/ceded<sup>4</sup> basis, and technique used for setting the risk adjustment in Table 4.1 and 4.2 of the accompanying Schedules to the AAR-GEN. The AA must disclose the confidence level of the risk adjustment on the insurer level in Table 4.1.

The AA must 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 insurer’s view of the compensation required to bear uncertainty. If it is determined at a higher level of aggregation than groups of contracts, the AA must describe how the risk adjustment for non-financial risk would be allocated to different groups.

If the insurer has multiple entities and diversification is being assumed between entities, the AA must explain the diversification between entities.

The AA must describe the methodology for setting the RA and provide rationale to support the RA that reflects the compensation the insurer requires for uncertainty in its cash flows.

The AA must 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 AA must disclose information for setting the RA, including but not limited to the following:

### Cost of Capital Approach:

The AA must disclose:

- The projected capital amounts, cost of capital rate and discount rates used to determine the RA at the insurer level. The information must be filled in Table 5.1 through Table 5.4 of the accompanying Schedules to the AAR-GEN.
- The AA must 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.
- If the insurer 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 AA must 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 AA must also disclose in the Executive Summary cases where the impact of the changes in selected target rate of return on capital is material.

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<sup>5</sup> Please refer to Appendix VI.

### Quantile Techniques Approach:

The AA must 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 techniques used to determine the confidence level of RA amount.
- How the aggregate RA be allocated amongst the portfolios/groups of contracts.
- If the insurer 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 AA must 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 AA must also disclose in the Executive Summary cases where the impact of the changes in selected quantiles is material.

### Margin Approach:

The AA must 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 insurer's various groups of contracts.
- The AA 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 AA should also disclose in the Executive Summary cases where the impact of the changes in selected margins is material.

### Combining/hybrid Approach:

The AA must disclose the above information required under applicable approaches when appropriate.

## **5.14 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.

### **5.14.1 Estimate of Future Cash Flows**

The commentary on the estimate of future cash flows must contain details of the derivation of the future cash flows on a gross, ceded and net basis. Normally the AA 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 insurer and the preference of the AA; 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 AA 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 must 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 must disclose whether or not the insurer has exposure to mass tort and latent claims, and if the insurer has had a subsequent event. If the insurer has such exposure, the AA must 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 insurer, the AAR must 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 AA 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 must 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.

#### **5.14.2 Discount the Estimates of Future Cash Flows**

The insurer 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, unless the insurer chooses IFRS 17 Paragraph 59(b), in which case the AA must disclose the actuarial line(s) of business.

#### **5.14.3 Risk Adjustment**

An explicit risk adjustment is always required for LIC. The AA must disclose the approach and amount for LIC in columns (1) and (2) of Tables 4.1 and 4.2 in the Schedules to the AAR-GEN spreadsheet.

#### **5.14.4 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 fiscal year-end. Expected experience in previous year end valuations refers to the ultimate undiscounted estimates

selected by the AA 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, the IOFI requires insurers 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 for 10 years. However, if data for 10 years is not currently available, the AA must 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 AA.

In addition, the AA must compare actual experience with expected experience at prior year-end valuation for one-year development by completing the Tables 6.1, 6.2 and 6.3 in the Schedules to the AAR-GEN by actuarial lines of business. The AA must also specify the cause of material development (favourable or unfavourable) for each line. The material causes may include the changes of data on actual claims, loss development factors, projection methods, expected loss ratios<sup>6</sup> and other.

Where there are changes in the actuarial lines of business, the AA 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 must show the development using the old actuarial lines of business as well.

Where the AA uses underwriting/policy year rather than accident year, the AA may show the comparison of actual to expected experience using projected loss ratios based on underwriting/policy year data. In this case, the AA 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.

Whenever material differences in ultimate estimates occur for any accident year or underwriting/policy year where the coverage period has expired, the AA should provide commentary explaining such changes in ultimate estimates for each accident year or underwriting/policy year. In addition, the AA must discuss any actions taken to reduce the likelihood of similar differences in the future. The AA must update commentary from prior AARs based on the most recent experience. For this section, the AA 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.

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 AA must quantify and explain any difference that is expected due to changes to the presentation of data in the UCLR Analysis Exhibit.

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<sup>6</sup> Please refer to Appendix VI.

## 5.15 Liability for Remaining Coverage

Under the General Measurement Model (hereinafter as “GMM”), 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 AA must disclose when the basis of allocation differs from the passage of time during the coverage period for any portfolio.

### 5.15.1 Measurement Approach

The AA must 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 insurer 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 AA must identify the groups of contracts, measurement approaches and rationale for the grouping in Tables 7.1 and 7.2 of the accompanying Schedules to the AAR-GEN. The AA must disclose any material changes on portfolios, groups of contracts and associated measurement approaches from prior year’s AAR.
- For each portfolio, the AA must 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.

### 5.15.2 Estimates of Future Cash flows

The AA must comment on all the components embedded in the future cash flows under the GMM 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 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 must disclose whether or not the insurer has had a subsequent event. If there was a subsequent event, the AA must 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 must 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.

### 5.15.3 Discount the Estimates of Future Cash Flows

If applicable, the insurer 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.

### 5.15.4 Risk Adjustment

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 AA must disclose the explicit risk adjustment in the calculation of the loss component for these groups. In this case, the AA is required to fill column (05) in Tables 4.1 and 4.2 in the Schedules to the AAR-GEN.

For portfolios or groups of contracts measured under the GMM, an explicit risk adjustment calculation is required. The AA must disclose the approach and amount for LRC in columns (03) and (04) of Tables 4.1 and 4.2 in the Schedules to the AAR-GEN.

### 5.15.5 Contractual Service Margin

The AA must 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 AA must 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 AA should provide the rationale.

### 5.15.6 Loss Component

The AA must 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 GMM approach, the AA 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 AA must disclose the systematic and rational allocation method to determine the portion of losses of the group of onerous contracts that is reinsured. The AA must disclose how the loss-recovery component is established.

The AA must describe the approach used to allocate the changes in the fulfilment 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, commentary on the facts and circumstances associated with any groups of insurance contracts for which a loss component arises at subsequent measurement must be provided, and must contain the amount of the loss components on a group basis and on a portfolio basis.

### 5.16 Other Liabilities/Other Assets

If there are components of other liabilities/other assets that are not included in the previous sections but provided by the AA, details on the calculations must be provided.

### 5.17 Liability Roll Forward

The AA must provide the liability roll forward schedules by portfolio shown in Table 8.1 and Table 8.2 of the Schedules to the AAR-GEN, separately for insurance and reinsurance contracts issued and reinsurance contracts held. These tables must be constructed to enable users to reconcile information within the AAR to the annual returns, as per following:

- Tab 50.17 - Liability Roll Forward (Analysis by remaining coverage and incurred claims (all insurance contracts));
- Tab 50.19 - Liability Roll Forward (Reinsurance contracts held analysis by remaining coverage and incurred claims (all contracts))



## 5.18 Liabilities for Investment and Service Contracts

The AA must complete Table 9 of the accompanying Schedules to the AAR-GEN for the liabilities for investment and service contracts, if applicable.

## 5.19 Transition Amount

For contracts measured under the modified retrospective approach, full retrospective approach or the fair value on transition to IFRS 17, details on how the insurer determined the measurement of the contracts at the date of transition and how CSM is determined must be provided.

# 6. OTHER DISCLOSURE REQUIREMENTS

## 6.1 New Appointment

AAs must meet the qualifications requirements outlined in the definition of an “actuary” in Section 4 of the Act, as well as the requirements of Section 78 of the Act.

If the AA 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 AA;
- Confirmation of communication with the previous AA, as required by section 79 of the Act; and
- A list of the AA’s qualifications, keeping in mind, but not limited to, the relevant Code/Rules of Professional Conduct.

## 6.2 Annual Required Reporting to the Board or Audit Committee

The AAR must disclose the date on which the AA met with the board or the audit committee of the board pursuant to regulation 11(5) of the Insurance (Financial Condition Report) (Amendment) Regulations.

## 6.3 Continuing Professional Development Requirements

The AA must disclose in the AAR that he/she is in compliance with the Continuing Professional Development requirements of his/her governing body.

## 6.4 Reporting Relationships of the Appointed Actuary

The AAR must disclose the reporting relationships, to and from, the AA.

For AAs who are employees of the insurer, the AAR must disclose the name and position of the person (or persons) to whom the AA 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 AA is not an employee of the insurer, the AAR must disclose the names and positions of the main contacts within the insurer with respect to the different functions of the AA, such as the valuation, financial condition reporting, and capital adequacy testing.

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

- The person who hired the AA; and
- The insurer's employees with whom the AA discusses findings and reports.

## 6.5 Peer Review of the Work of the Appointed Actuary

If the work of the AA was peer reviewed in the last three years, the AA must state the name and qualifications of the peer reviewer, summarize the key findings or recommendations, and the status of each finding/recommendation by year. For the recommendations from peer reviews before the effective date of IFRS17, the AA must indicate whether the recommendations are still applicable under IFRS17.

## 6.6 Re-submitting the report

Where the insurer re-submitted the AAR to the IOFI, the AA must disclose in the report, the reason(s) for re-submission.

# 7. UNPAID CLAIMS AND LOSS RATIO ANALYSIS EXHIBIT

## 7.1 Introduction

The Unpaid Claims and Loss Ratio Analysis Exhibit (UCLR Analysis Exhibit), as shown in Appendix III, 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 estimate 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.

## 7.2 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 returns class of business as listed in Appendix IV.

The insurer 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 insurer must also specify on each page the corresponding liquidity category in Table 3 of the accompanying Schedules to the AAR-GEN 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 returns lines, the AA must determine in which annual returns line to place it to best represent the operations of the insurer. 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 AA should either estimate a split of the insurance revenue or combine the data showing it in the annual returns class that best represents the class of business underwritten by the insurer.

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 AA but the total fulfillment cash flows for the category must be included in Line 14 (“Other Provisions”) of the “Total” page. The AA 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 AA defines and records claim counts in the AAR. The AA 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 AA 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 accident years post IFRS 17, by class 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. inter-company reinsurance) should be made in Line 15 of the "Total" page.

The AA must ensure that the UCLR Analysis Exhibit and accompanying electronic filing are accurate.

Note that figures must be expressed in T&T dollars rounded to the nearest dollar.

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

## 8. APPENDIX I – Certificate of the Appointed Actuary

### CERTIFICATE OF THE APPOINTED ACTUARY

I certify that:

- a) I am a member in good standing with my governing actuarial body, [Name of Organization] and comply with its [Code/Rules of Professional Conduct]
- b) I meet the qualification standards of the Central Bank of Trinidad and Tobago to value the policy liabilities and other actuarial liabilities of [Name of insurance company]; and
- c) The valuation of policy liabilities and other actuarial liabilities of [Name of Insurance Company], was conducted in accordance with the Insurance Act, 2018 and its regulations, International Financial Reporting Standards, standards of actuarial practice in Trinidad and Tobago, and guidelines issued by the Central Bank of Trinidad and Tobago.

In my opinion the amount of the policy liabilities and other actuarial liabilities of [Name of Insurance Company] reported in its financial statements prepared in accordance with International Financial Reporting Standards for the year ended [Date] is appropriate for this purpose and the annual returns presents fairly the results of the valuation.

\_\_\_\_\_  
Name of Appointed Actuary  
[Name, Title, Qualification]

\_\_\_\_\_  
Signature of Appointed Actuary

\_\_\_\_\_  
Date

## 9. APPENDIX II - Two examples of circumstance requiring a qualified opinion<sup>7</sup>

### 9.1 Liabilities different from those calculated by the actuary

If the [annual] financial statements of an insurer report policy liabilities and other actuarial liabilities that are materially different from those calculated and reported by the AA, then the AA would need to disclose the difference in the amounts and identify where to find an explanation for the difference. If possible, such explanation would include the important reasons for the difference.

The opinion could be as follows:

I certify that:

- a) I am a member in good standing with my governing actuarial body, [Name of Organization] and comply with its [Code/Rules of Professional Conduct];
- b) I meet the qualification standards of the Central Bank of Trinidad and Tobago to value the policy liabilities and other actuarial liabilities of [Name of insurance company]; and
- c) The valuation of policy liabilities and other actuarial liabilities was conducted in accordance with the Insurance Act, 2018 and its regulations, International Financial Reporting Standards, standards of accepted actuarial practice in Trinidad and Tobago and guidelines issued by the Central Bank of Trinidad and Tobago.

In my valuation, the amount of the policy liabilities and other actuarial liabilities is \$[X]. The corresponding amount in the annual financial statements is \$[Y]. The sources of this difference are described in [reference].

In my opinion, the amount of policy liabilities and other actuarial liabilities in the annual financial statements is not appropriate and as explained in [reference] the annual financial statements do not present fairly the results of my valuation.

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<sup>7</sup> Source: Canadian Institute of Actuaries June 2023 Consolidated Standards of Practice 2230

## 9.2 Change in assumption or methodology affecting disclosure items in the annual financial statements

If an item valued by the AA is materially affected by a change in assumption or methodology that is not disclosed in the [annual] financial statements, the AA would modify the opinion paragraph in the standard reporting language to disclose this situation.

The opinion could be as follows:

I certify that:

- a) I am a member in good standing with my governing actuarial body, [Name of Organization] and comply with its [Code/Rules of Professional Conduct];
- b) I meet the qualification standards of the Central Bank of Trinidad and Tobago to value the policy liabilities and other actuarial liabilities of [Name of insurance company]; and
- c) The valuation of policy liabilities and other actuarial liabilities was conducted in accordance with the Insurance Act, 2018 and its regulations, International Financial Reporting Standards, generally accepted actuarial practice in Trinidad and Tobago and guidelines issued by the Central Bank of Trinidad and Tobago.

In my opinion, the amount of the policy liabilities and other actuarial liabilities of [Name of Insurance Company] reported in its annual financial statements for the year ended [Date] is appropriate for the stated purpose. As explained in [reference], [the assumption/methodology for XX] was changed from that used for the previous year. Except for the absence of the disclosure of this change and its impact, the annual financial statements, in my opinion, presents fairly the results of the valuation.

# 10. APPENDIX III - Unpaid Claims and Loss Ratio Analysis Exhibit

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:																		
Line no	Year code	Accident/Underwriting Year	Paid Losses <sup>a</sup>		Liabilities for Incurred Claims <sup>a</sup>							Loss Ratio Analysis <sup>a</sup>		Claim Counts		As at Prior Year-end		
			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 <sup>a</sup>	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)

**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

Line no	Year code	Accident/ Underwriting Year	Paid Losses <sup>a</sup>			Liabilities for Incurred Claims <sup>a</sup>						Loss Ratio Analysis <sup>a</sup>		Claim Counts		As at Prior Year-end		
			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)		Fulfillment Cash Flows	Insurance Revenue/ Earned Premiums	Undiscounted Loss Ratio (%)	Open as at Year-end	Reported to Date	Total Estimate of Future Cash Flows <sup>a</sup>	Reported Claim Counts to Date
			(01)	(02)	(03)	(22)	Case Reserves	IBNR	Total	(07)	RA (\$'000)							
			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																
<b>APV Reserves including ULAE, FA and Other (040)</b>																		
13		ULAE - Total																m51
14		Other Provisions																m53
15		Grand Total																m54

a) Including Allocated loss adjustment expenses (ALAE), but excluding Unallocated loss adjustment expenses (ULAE), except for lines 13 to 14.



**Unpaid Claims and Loss Ratio Analysis Exhibit (030)**

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

<b>Exhibit Category Code:</b>	Total
<b>Actuary's Category Code :</b>	Total
<b>Aggregation Type Code:</b>	
<b>Portfolio:</b>	Total
<b>Liquidity Category for Discount Rate:</b>	Total

Line no	Year code	Accident/ Underwriting Year	Paid Losses <sup>a</sup>			Liabilities for Incurred Claims <sup>a</sup>							Loss Ratio Analysis <sup>a</sup>		Claim Counts		As at Prior Year-end	
			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)		Fulfillment Cash Flows	Insurance Revenue/ Earned Premiums	Undiscounted Loss Ratio (%)	Open as at Year-end	Reported to Date	Total Estimate of Future Cash Flows <sup>a</sup>	Reported Claim Counts to Date
						Case Reserves	IBNR	Total		RA (\$'000)	RA (%)							
			(01)	(02)	(03)	(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																
<b>APV Reserves including ULAE, FA and Other (040)</b>																		
13		ULAE - Total															m51	
14		Other Provisions																m53
15		Grand Total																m54

a) Including Allocated loss adjustment expenses (ALAE), but excluding Unallocated loss adjustment expenses (ULAE), except for lines 13 to 14.

## **11. APPENDIX IV – Annual Return Classes of Business**

- Property
- Motor Vehicle
- Marine, Aviation and Transport
- Workers Compensation
- Liability
- Pecuniary Loss
- Personal Accident Short-Term
- Accident and Sickness (Long-term insurance business)

## **12. APPENDIX V - 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 T&T dollars and rounded to the nearest dollar.

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 AA in the AAR. Do not add any risk adjustment to this column.

#### 12.1.8 Column 12 – Fulfilment Cash Flows

Column 12 is the result of the following formula:

$$\text{Column}(07) + \text{Column}(23)$$

Note: for the “Total” exhibit, amounts for column 12 are entered on line 13 (ULAE – Total) and line 14 (Other Provisions) as well as line 15 (Grand Total). Lines 13 through 15 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:

$$100 \times [\text{Column}(03) + \text{Column}(06)] / \text{Column}(13)$$

#### **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 AA 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 AA 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 AA 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 AA 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 AA 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 – Other Provisions

The fulfilment cash flows for all other provisions (e.g. non-material lines of business and inter-company reinsurance) are entered in line 14 (Other Provisions) of the “Total” exhibit.

### 12.2.3 Line 15 – Grand Total

This is the total of lines 12 through 14 of column 12 of the “Total” exhibit. The Grand Total should balance to the AA’s Estimate in the Opinion Page.

## 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 insurer’s operation be used to complete the exhibits. In such case, line 15 (Other Provisions) of the “Total” exhibit must be adjusted so that line 16 (Grand Total) equals to the amount reported in the opinion page of the AAR.

## 13. APPENDIX VI – Technical Definitions

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

**Ceded:** Reinsurance contracts held.

**Gross:** Insurance and reinsurance contracts issued by an insurer.

**Net:** Gross minus ceded.

**Loss Ratio:** Claims divided by earned premiums for 2022 and before;  
Claims divided by insurance revenue for 2023 and after.

## 14. REFERENCES

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