Appendix 1

Rule and Statement of Guidance

Actuarial Valuations

September 2025

Contents

List of Acronyms

CIMA	Cayman Islands Monetary Authority
CPD	Continuing Professional Development
GAAP	Generally Accepted Accounting Principles
GDP	Gross Domestic Product
IBNR	Incurred But Not Reported
ICM	Internal Capital Model
IFRS	International Financial Reporting Standards
LOB	Line of Business
MAA	Monetary Authority Act (as amended)
PCR	Prescribed Capital Requirement
RSOG	Rule and Statement of Guidance
UPR	Unearned Premium Reserve
URR	Unexpired Risk Reserve

Rule and Statement of Guidance
Actuarial Valuations

1. Introduction

1.1. This document establishes the Cayman Islands Monetary Authority's (the "Authority" or "CIMA") Rule and Statement of Guidance on Actuarial Valuations. The Rule and Statement of Guidance should be read in conjunction with the following:

a) Regulatory Policy on Recognition and Approval of an Actuary;
b) Statement of Guidance on Capital Adequacy of Class B Insurers;
c) Statement of Guidance for Licensees seeking approval to use an Internal Capital Model ("ICM") to calculate the Prescribed Capital Requirement ("PCR");
d) The Insurance (Capital and Solvency) (Class A Insurers) Regulations (as amended);
e) Insurance (Capital and Solvency) (Classes B, C and D Insurers) Regulations (as amended);
f) Supervisory Information Circular – Stress Testing for Insurers;
g) Rule and Statement of Guidance on Internal Controls for Regulated Entities; and
h) any other relevant acts, and regulatory instruments issued by the Authority from time to time.

1.2. The Authority recognises that actuarial valuation reports are critical for ensuring licensees' capital adequacy, forming the basis for evaluating an insurer's financial position and ability to meet policyholder obligations. Accordingly, actuarial valuation reports should deliver reliable, transparent, and holistic assessments of an insurer's assets and liabilities, while addressing material risks relevant to the insurer's operations, to support a meaningful and proportionate solvency assessment.

2. Statement of Objectives

2.1. This Rule and Statement of Guidance ("RSOG") is aimed at ensuring reliable solvency assessments for regulated entities in the Cayman Islands by establishing a clear and proportionate framework for actuarial valuations, setting mandatory requirements, and providing guidance for preparing and submitting actuarial valuation reports under the Insurance Act and in line with best practices.

2.2. The Authority recognises that actuarial valuation practices may vary by the nature, scale, and scope of insurers' businesses. Accordingly, the Authority makes allowance for actuaries to exercise appropriate professional judgment while preparing actuarial valuation reports for the insurer.

3. Statutory Authority

3.1. This Rule and Statement of Guidance is consistent with:

a) Section 34 (1) of the *Monetary* Authority Act (MAA) which provides that:

"*After private sector consultation and consultation with the Minister charged with responsibility for Financial Services, the Authority may–*

issue or amend rules or statements of principle or guidance concerning the conduct of licensees and their officers and employees and any other persons to whom and to the extent that the regulatory laws may apply;…"

b) Section 9(1) of the Insurance Act which establishes the requirements for insurers to submit a valuation report annually to the Authority, as follows:

"*An insurer shall, except as otherwise approved by the Authority in writing and subject to subsection (3), submit to the Authority by way of annual return, within six months of the end of its financial year –*
… (b) an actuarial valuation of its assets and liabilities including loss and loss expense provisions, certified by an actuary approved by the Authority;"

c) Section 9(3) of the Insurance Act which provides that:

"The following exemptions apply to the requirements of subsection (1)– a class C insurer or a class B insurer that does not write long term business is not required to make submissions under subsection (1)(b) or (c); and

the Authority may in writing, exempt other classes of insurer from the requirement under subsection (1)(b) where it considers it appropriate, based on the nature, scale or scope of the insurance business involved."

3.2. To highlight the Authority's rules related to Actuarial Valuations within this Rule and Statement of Guidance, a rule is written in light blue and designated with the letter "R" in the right margin.

4. Scope of Application

4.1. This RSOG applies to all insurers required to submit actuarial reports under the Insurance Act.

4.2. The Authority may, in writing, exempt other classes of insurers from the requirement per Section 9 (1)(b) of the Insurance Act where it considers it appropriate based on the nature, scale or scope of their insurance business.

4.3. The RSOG also applies to insurers that the Authority directs to prepare and submit actuarial valuation reports, such as those under specific licensing or regulatory conditions.

4.4. The Authority recognises that insurers within a group may face group-wide valuation and reporting obligations. However, valuation requirements specific to the Cayman Islands-licensed business must be reported separately in the actuarial valuation report.

4.5. References to any act or regulation shall be construed as references to those provisions as commenced, amended, modified, re-enacted, or replaced from time to time.

5. Definitions

5.1. The following definitions are provided for the purpose of this RSOG:

5.1.1 "Actuary" has the same meaning as defined in the Insurance Act.

5.1.2 **"Amortised Cost"** refers to a valuation method that determines the value of an asset or liability based on its original cost, adjusted over time for principal repayments, interest, and any impairments.

5.1.3 **"Best Estimate"** refers to the actuarial calculation of the expected future cash flows for insurance obligations (e.g., premiums, benefits, expenses, and distributions), based on unbiased, probability-weighted assumptions, excluding any margin for uncertainty in the estimate.

5.1.4 **"Capital Adequacy"** refers to the condition where an insurer's regulatory capital resources exceed the prescribed capital requirements, ensuring solvency and the ability to meet policyholder obligations.

5.1.5 **"Contract Boundaries"** refers to the point beyond which neither party to an insurance contract has a unilateral enforceable right to alter its terms, defining the scope of cash flows (e.g., premiums, benefits, claims) included in the Best Estimate.

5.1.6 **"Deposit Premium"** refers to an initial payment made under a reinsurance contract, typically at the time the treaty is bound, representing an estimate of the premium expected to be earned over the coverage period. It is often subject to adjustment based on actual exposures or premiums written.

5.1.7 **"Diversification effects"** refers to the reduction in risk within a portfolio of insurance obligations due to the correlation of cash flows across homogeneous risk groups in the estimation of the Uncertainty Margin.

5.1.8 **"Economic Basis" or "Economic Valuation"** refers to a valuation approach that measures assets and liabilities based on the risk-adjusted expected future cash flows, reflecting their timing, amount, and uncertainty, consistent with market conditions**.**

5.1.9 **"Embedded Options and Guarantees"** refers to contractual features in insurance policies (e.g., lapses, surrenders, guaranteed benefits, discretionary participation) that impact future cash flows.

5.1.10 **"Fulfilment Value"** means a valuation approach for insurance liabilities that estimates the expected value of future cash flows required to meet contractual obligations, incorporating expected premiums, claims, expenses, and risk adjustments, used when market-consistent methods are not feasible.

5.1.11 **"General purpose financial reports"** refers to financial statements prepared in accordance with an applicable accounting framework (e.g., US GAAP, IFRS, etc.), intended to provide financial information about the reporting entity that is useful to a wide range of users in making economic decisions. These typically include the balance sheet, income statement, statement of cash flows, and accompanying notes.

5.1.12 **"Insurer"** has the same meaning as defined in the Insurance Act.

5.1.13 **"Licensee"** has the same meaning as defined in the Insurance Act.

5.1.14 **"Long term business"** has the same meaning as defined in the Insurance Act.

5.1.15 **"Market-Consistent"** refers to a valuation methodology that reflects the pricing principles used by market participants for instruments with similar characteristics, grounded in prevailing financial market conditions, using quoted market prices (or potentially alternative methods for illiquid or dysfunctional markets).

5.1.16 **"Regulatory Capital Resources"** refers to financial resources available to an insurer, as required by the Authority, to meet solvency and capital adequacy requirements for regulatory purposes.

5.1.17 **"Reserves"** means actuarial liabilities calculated on a Best Estimate basis – the amount an insurer sets aside to cover expected future cash flows from insurance obligations – plus an Uncertainty Margin.

5.1.18 **"Risk Adjustments"** refers to adjustments to the valuation of insurance liabilities or Reserves to account for inherent risks (e.g., uncertainty, default, policyholder behaviour), and is typically reflected in discount rates, Uncertainty Margin, or other actuarial assumptions.

5.1.19 **"Solvency assessment"** refers to the evaluation of an insurer's financial position to determine its ability to meet policyholder obligations and maintain regulatory capital requirements.

5.1.20 **"Total Balance Sheet Approach"** refers to the concept of recognising the interdependence among all assets, liabilities, regulatory capital requirements, and regulatory capital resources, to ensure that the effects of all relevant material risks on an insurer's overall financial position are appropriately and adequately reflected.

5.1.21 **"Uncertainty Margin"** refers to the component of Reserves that accounts for the cost of bearing inherent uncertainty in the Best Estimate.

5.1.22 **"Unexpired Risk Reserve (URR)"** refers to an additional reserve established when the expected future claims and expenses on unexpired insurance contracts exceed the Unearned Premium Reserve. The URR ensures that total Reserves are sufficient to meet the insurer's obligations over the remaining term of the contracts.

6. Preparation and Submission of the Actuarial Valuation Report

General Requirements

6.1. The Authority requires that an actuarial valuation report be prepared by the actuary on behalf of the insurer during every annual financial cycle and additionally, at the direction of the Authority, when major changes to the insurer's business structure or operations take place. R

6.2. The insurer is required to submit the actuarial valuation report to the Authority within six months of the end of the insurer's financial year. R

6.3. The actuary must disclose the accounting regime used in preparing the insurer's general purpose financial reports. Where the valuation approach used in the actuarial valuation report deviates from that regime, the actuary must identify the deviation, explain the rationale, and comment on its impact, where material. R

6.4. The insurer must confirm that actuarial reports are prepared in accordance with this RSOG to ensure reliable solvency assessments. Actuaries are permitted to include additional relevant information, such as supplementary risk analyses or market data, at their professional discretion to enhance the report's reliability. R

6.5. The insurer must respect and support the actuary's obligation to exercise independent professional judgment, free from undue influence by management, to ensure that valuation outcomes remain unbiased and objective. To facilitate this independence, the insurer should establish an agreement with the actuary, through its directors and/or senior officers, to provide timely access to essential data and business insights, including operational details and risk profiles. R

6.6. The insurer must establish and implement appropriate actuarial valuation policies and procedures, proportionate to the insurer's size and complexity, to promote consistency, reliability, and transparency in preparing actuarial valuation reports. These policies should outline standardised processes for data collection, assumption-setting, and reporting to support the effective preparation of actuarial reports. In this regard, considerations for the policies and procedures include, but are not limited to: R

a) The use of best practices surrounding model governance controls and independent review to enhance the reliability of model results;

b) Establishment of model governance policies and procedures including frequency of model updates, back-testing, sensitivity analysis, stress testing or other effective techniques; and

c) The documentation of model specifications, validation processes, results of validation, and any other relevant information.

6.7. An actuary preparing the valuation report for the insurer for the first time must directly communicate any concerns regarding the accuracy or reliability of prior actuarial reports to the Authority. R

6.8. The Authority acknowledges that actuarial report prepared for the first-time for the insurer may not be directly comparable to reports from prior reporting periods due to differences in methodologies or data. However, subsequent reports must include a comparative analysis with prior periods to demonstrate R

consistency and highlight material changes in the insurer's financial position. The prior period comparison must clearly show how exposures from the previous report have developed over time, and separately present exposures from the current period. This helps identify any significant changes in the insurer's financial position.

Core Valuation Requirements

Total Balance Sheet Approach

6.9. Actuarial valuations must be determined using a total balance sheet approach to ensure that the effects of all relevant material risks on an insurer's overall financial position are appropriately and adequately reflected. R

6.10. The actuary must disclose and provide a detailed justification for any deviations from the total balance sheet approach in the actuarial valuation report, explaining the impact of such deviations on the insurer's solvency assessment, including potential effects on regulatory capital requirements or financial stability. R

a) The Authority notes that a total balance sheet recognises the interdependence between all assets, all liabilities, all regulatory capital requirements, and all regulatory capital resources. Accordingly, the impacts of all relevant material risks on an insurer's overall financial position should be appropriately and adequately recognised.

b) The Authority recognises that a total balance sheet approach, as applied to actuarial valuation, should reflect the economic interdependence between assets and liabilities relevant to the insurer's insurance obligations. This includes consideration of off-balance sheet exposures[1] and the use of consistent valuation bases for assets and liabilities, especially where such consistency materially affects the valuation of Reserves. Assumptions should be validated against market data where available and appropriate.

c) The actuary should consistently apply valuation methodologies, assumptions, and data across reporting periods to facilitate comparability and reliability of actuarial valuation reports. Any changes to consecutive reporting periods should be disclosed and justified.

d) The actuary should consider the characteristics of assets backing those liabilities, including asset types, redemption periods, currency, counterparties, location, and trading status. This supports asset-liability matching and risk exposure assessment under the Total Balance Sheet Approach.

Valuation of Assets and Liabilities

6.11. The valuation of assets and liabilities must be performed in a reliable and transparent manner to support reliable solvency assessments. This includes ensuring that valuation outcomes are objective, free from inappropriate bias, reflective of applicable economic conditions, and support informed judgments about solvency. R

1 Refers to potential financial obligations or risks not recorded in an insurer's balance sheet, such as contingent liabilities, guarantees, or financial commitments, which may impact its solvency if triggered.

a) Objectivity is an important aspect of valuing assets and liabilities reliably so that a valuation is not inappropriately influenced by an insurer's management or other sources of bias. Accordingly, the values assigned should be a credible measure of the assets and liabilities as of the solvency assessment date.

b) The Authority notes that transparency of valuation approaches is essential to support market discipline and regulatory oversight. Accordingly, actuarial reports should disclose sufficient information about the valuation methods, assumptions, and judgments used.

c) All assumptions used in determining valuations should be validated against internal and external data. The actuarial valuation report should document any diversification effects considered in the valuations.

d) The actuary should ensure that valuation methodologies reflect the economic conditions as of the solvency assessment date and are consistent with the insurer's financial condition and regulatory capital framework. Material risks—such as liquidity and credit risk—should be considered, and the economic basis for valuations clearly documented in the actuarial valuation report. Stress testing techniques should be adopted to consider the impact of realistically likely changes to economic conditions in the future.

6.12. The valuation of assets and liabilities for actuarial valuation reports must be conducted using consistent methodologies to ensure reliable comparability across reporting periods. R

a) The Authority recognises that a consistent valuation approach enables reliable comparability assessments of insurers' financial position, capturing the specific characteristics of assets and liabilities, such as their cash flow timing, amount, and inherent uncertainties.

b) The valuation approach used should not only focus on the measurement of assets and liabilities but also ensure that the risks inherent in those are appropriately reflected in the valuation assumptions and methodologies, consistent with the insurer's risk profile and reserving objectives.

c) Additionally, undertaking valuations using consistent methods ensures that any differences in the values of assets and liabilities are attributable to the specific characteristics of the instruments or contracts, such as the timing, amount, and uncertainty of their cash flows, rather than to differences in valuation methodology or assumptions.

6.13. The actuarial valuations of assets and liabilities must be recognised, derecognised, and measured to the extent necessary for risks to be appropriately reflected in the actuarial valuation report. R

a) The actuarial valuations should recognise insurance contract obligations at the bound date and derecognise them only upon extinguishment of the obligations. Any diversions to this should be explained and justified in the actuarial valuation report.

b) For liabilities that are subordinate to an insurer's policyholder obligations — such as subordinated debt or contingent liabilities — the actuary should value these based on expected recoveries in the event of default, consistent with the economic valuation basis. Where applicable, the

valuation should reflect the insurer's priority of obligations and the potential impact on solvency. The valuation methodology and assumptions used, including any material uncertainty, should be disclosed in the actuarial valuation report.

c) Where the recognition, derecognition, or measurement of assets and liabilities used in the actuarial valuation report differ from values reported in general purpose financial reports, these shall be documented and justified in the actuarial valuation report. R

6.14. Assets and liabilities must be valued using an economic valuation approach that appropriately reflects risk-adjusted future cash flows, capturing timing, amount, and uncertainty of the cash flows as applicable. The actuary must ensure that all material risks are appropriately considered. R

6.15. The actuary must apply market-consistent valuation methods for assets and liabilities where reliable market data is available, ensuring valuations reflect current economic conditions. R

a) Market-consistent values should be based on observable prices in active, liquid markets. Where such prices exist, they should be used directly or through appropriately calibrated models.

b) If direct market prices are unavailable, the actuary should apply alternative market-consistent techniques—such as replication using financial instruments or discounted cash flow models calibrated to market data—ensuring reliability and decision-usefulness of the actuarial valuation report.

c) The valuation approach should align with financial market expectations, using principles, methodologies, and parameters consistent with prevailing market conditions.

d) The actuary should disclose in the actuarial valuation report the valuation methods used, including data sources, calibration techniques, and the impact of valuation choices on solvency. The Authority may review the appropriateness of market-consistent valuations and request additional information, as necessary.

Illiquid or Dysfunctional Markets

6.16. The Authority recognises that illiquid or dysfunctional markets, where reliable market prices are unavailable or distorted, may pose challenges for actuaries in achieving reliable and consistent valuations for solvency purposes. In such adverse market conditions, alternative valuation approaches are necessary to support reliable solvency assessments.

6.17. In illiquid or dysfunctional markets, actuaries must document any alternative valuation methods used in the actuarial valuation report. R

a) When reliable market inputs are unavailable or during distressed market conditions, actuaries may apply alternative valuation methods—such as fulfilment value, amortised cost, or component-based approaches for complex contracts—provided they incorporate risk adjustments, undergo periodic impairment or adequacy assessments, and are fully justified in the actuarial valuation report.

b) The use of alternative valuation methods should be based on the nature, complexity, and sensitivity of the assets or liabilities being valued. These methods may be particularly relevant where cash flows are long-duration, volatile, or exposed to significant market disruption. The actuary may apply professional judgment in determining whether such methods are appropriate.

c) All alternative valuations should be risk-adjusted, validated, and aligned with the total balance sheet approach, using relevant economic data (e.g., inflation trends, bond yields, GDP forecasts, etc.).

d) The actuarial valuation report should disclose the following, where applicable:

i. The valuation method used (e.g., fulfilment value, amortised cost, etc.);

ii. Rationale for method selection;

iii. Economic data and assumptions applied, with justifications;

iv. Validation results (e.g., impairment or adequacy testing); and

v. Effects on Reserves and solvency, including quantitative impacts when material.

e) The Authority may review the use of alternative valuation methods and request additional information, as necessary.

Stress and Sensitivity Testing

6.18. The actuary must conduct scenario-based stress and sensitivity tests (e.g., market crashes, interest rate shocks, natural catastrophes, elevated policy surrender rates, extreme mortality events) to evaluate insurers' solvency under adverse but plausible conditions, using models calibrated to historical data where applicable. These models must be validated at least annually, with results documented in the actuarial valuation report. R

a) Where applicable, sensitivity adjustments[2] should be applied to key assumptions affecting the insurer's financial position.

b) Models used for stress and sensitivity testing should be calibrated to historical data and their validation and results clearly documented in the actuarial valuation report.

Time Value of Money

6.19. The Authority notes discounting ensures that, as applicable, the time value of money is reflected in valuations. This is particularly important for accurately determining the economic value of long-duration assets and liabilities, which are especially relevant for long term business.

2 Sensitivity adjustments refer to changes made to key assumptions or input variables in an actuarial model to assess how sensitive the valuation results are to those changes. These adjustments are part of sensitivity tests and help identify potential vulnerabilities in the insurer's financial position. They support solvency assessments, capital planning, and risk management decisions by illustrating the impact of assumption variability on key outcomes.

6.20. The actuary must apply appropriate discount rates for long term business, recognising the time value of money, so that assets and liabilities reflect the present value of future cash flows. The rationale for the chosen discount rates must be documented in the actuarial valuation report. R

6.21. For non-long term business, the actuary may choose to apply discounting to insurance liabilities (such as claims and related expenses), based on professional judgment, provided that the rationale is clearly documented in the actuarial valuation report and demonstrates consistency with the economic characteristics of the liabilities, including, but not limited to, duration, volatility, and liquidity.

6.22. When discounting is applied to non-long term business, the actuary must disclose the discounting decisions in the actuarial valuation report, including the rationale and impact on the valuations. R

6.23. When discounting is applied for any line of business, the actuary must disclose and justify the methodologies used to select discount rates in the actuarial valuation report. R

a) When selecting appropriate discount rates, the actuary should consider risk-free yield curves, such as government bond rates, adjusted for currency and duration. Where market data is unavailable, proxies such as U.S. Treasury yields may be appropriate. The actuary should ultimately select discount rates that best reflect current economic conditions and the nature of the assets and liabilities being valued.

b) The actuary may use interpolation or extrapolation techniques for yield curves where market data is unavailable. These techniques should be appropriate and consistent with an economic valuation basis, and the methodologies should be justified in the actuarial valuation report.

c) The selected discount rates and their impact on valuations should be documented, explained, and supported with appropriate sensitivity analysis in the actuarial valuation report. (This sensitivity analysis is distinct from the broader stress testing requirements and is specific to the impact of discount rate assumptions.)

Reserves

6.24. The Authority recognises that Reserves form the cornerstone of valuation for solvency purposes, ensuring that the insurers' reserve estimates comprehensively account for all insurance liabilities and associated risks, such as policyholder obligations and claim uncertainties, to safeguard policyholders and maintain the financial stability of insurers.

6.25. Reserves must encompass the Best Estimate plus an additional Uncertainty Margin to address inherent uncertainties in the valuation of the Reserves. R

a) The Authority notes that this approach ensures insurers' Reserves are sufficient to meet obligations to policyholders under varying economic and operational conditions.

b) The Authority expects the Best Estimate to reflect the expected value of all relevant future cash flows, based on credible, unbiased, and appropriately conservative assumptions.

c) As applicable, the actuary should include non-guaranteed cash flows in their valuation of Reserves such as optional premiums or discretionary

benefits, with expected rates based on historical experience and/or industry data.

d) The actuary should document segmented expense assumptions, separating acquisition, maintenance, and overhead costs, in the actuarial valuation report.

e) The actuary should include appropriate allowances for embedded options and guarantees, including, where applicable, the effects of lapses, surrenders, and other policyholder behaviour in Reserves. Valuations should use stochastic simulations or simplified methods, as appropriate. Discretionary bonuses should be defined based on contract terms, with methodologies disclosed in the actuarial valuation report.

f) For liabilities with significant litigation uncertainty[3], time value or risk adjustments may be excluded if unreliable, with reliance on disclosure to the Authority in the actuarial valuation report. The actuary should justify such exclusions, detailing the nature of the litigation uncertainty and their impact on Reserves.

g) The actuary should consider whether any Unearned Premium Reserve (UPR), typically determined using accounting or regulatory rules, is sufficient to cover expected future claims and expenses. Where it is not, the actuary should establish an additional Unexpired Risk Reserve (URR) to ensure adequacy of Reserves. The actuarial valuation report should clearly disclose the treatment of UPR and URR and explain how these relate to the overall Reserves reported.

h) The actuary should assess and disclose any material asset-liability mismatches, including duration gaps, and describe the insurer's liquidity management approach. The actuary should also estimate the sensitivity of the insurer's solvency position to changes in interest rates or other key assumptions.

6.26. The actuary must base the valuation of Reserves on meeting the insurer's contractual obligations over the full term of the policy, consistent with the economic valuation approach. R

6.27. The actuary must not reflect the credit standing of the insurer in the valuation of Reserves and other liabilities. R

6.28. The actuary must consider the creditworthiness of any reinsurers in valuing Reserves, accounting for any reinsurer default risks as appropriate. R

Contract Boundaries

6.29. The Authority recognises that contract boundaries define the limits of cash flows to be included in the Best Estimate of insurance liabilities. They determine when an insurer's obligations begin and end under a contract, ensuring that only relevant and supportable future cash flows are considered in the valuation. Properly defined boundaries promote consistency, comparability, and alignment with the insurer's risk exposure.

3 Litigation uncertainty refers to unpredictability in the outcome, timing, or cost of legal proceedings related to insurance liabilities (e.g., disputed claims or class-action lawsuits), which may render time value discounting or risk adjustments unreliable.

a) As applicable, contract boundaries should include all cash flows arising from existing insurance obligations. These include, but are not limited to:

i. Contractual termination dates, extended by unilateral policyholder options to continue coverage;

ii. Future premiums and benefits within the current contract, reflecting expected exercise of in-the-money options; and

iii. Voluntary premium contributions guaranteed under the contract, with expected payment rates.

b) The Authority notes the following considerations for contract boundaries:

i. Cash flows beyond the insurer's unilateral right to cancel or re-underwrite (e.g., annually renewable non-life policies) should be excluded unless contractually obligated;

ii. Cash flows requiring mutual agreement for continuation should also be excluded; and

iii. Final determination of contract boundaries rests with the actuary, based on professional judgment and the specific terms and conditions of the insurance contract.

c) In certain cases, particularly involving reinsurance arrangements, contract boundaries may give rise to timing mismatches between the recognition of ceded reinsurance exposures and the underlying insurance liabilities. For example, a reinsurance treaty may be bound and partially paid (e.g., via a deposit premium) before the insurer has underwritten the corresponding inward business. In such cases, the actuary must assess the implications of this mismatch on solvency and valuation. The Authority requires that such mismatches be disclosed and evaluated in accordance with Rule 6.32 below.

6.30. The actuary must disclose the contract boundaries applied, including assumptions about policyholder behaviour (e.g., option exercise rates), and clearly explain any deviations from standard contract boundary definitions or those used in the insurer's general purpose financial reports. If material, the impact of such divergence on the insurer's solvency should be quantified in the actuarial valuation report. R

Reinsurance Contracts

6.31. The actuary must value reinsurance contracts to reflect the risks they mitigate to ensure reliable recognition of the recoverable and liabilities associated with the reinsurance contracts. The reinsurance arrangements should be included in the actuarial report. R

a) Reinsurance contracts should be valued in line with the risks they cover, excluding cash flows related to future direct policies not yet recognized.

b) Reinsurance recoverables should be recognized at the bound date of the reinsurance contract and derecognized only upon extinguishment or novation of the underlying insurance obligations.

c) The actuary should assess reinsurer creditworthiness, incorporate default risks into the Reserves, and disclose any material solvency concerns or provisions for non-payment in the actuarial valuation report.

d) The actuary should document all reinsurance arrangements, including contract terms, recoverables, risk mitigation effects, and credit assessments. Documentation should be sufficient to support solvency assessments and supervisory review.

e) The Authority may request additional information on reinsurance valuations, as necessary.

6.32. Where a reinsurance treaty is bound and partially paid (e.g., via a deposit premium) before the corresponding inward business is underwritten, the actuary must assess and disclose any resulting initial loss strain[4] and its impact on solvency. The actuarial valuation should reflect the timing of recognition of both ceded and assumed exposures, and any material mismatches must be clearly explained in the report. R

Uncertainty Margin

6.33. The Authority recognises that the treatment of uncertainty in insurance valuations must reflect the nature, scale, and complexity of the Cayman Islands insurance market. The Uncertainty Margin is a component of Reserves, applied to reflect inherent variability in future cash flows. It complements Best Estimate and must be applied in a manner that avoids double-counting with regulatory capital requirements, which address unexpected losses and broader risk exposures.

6.34. The Authority does not prescribe a fixed methodology for calculating the Uncertainty Margin. Actuaries are expected to apply sound, conservative professional judgment, supported by transparent documentation and justification within the actuarial report.

6.35. The Uncertainty Margin should reflect the insurer's risk profile, including but not limited to:

a) Policyholder behaviour (e.g., lapses, surrenders, premium payment patterns)

b) Claims volatility (e.g., frequency and severity fluctuations)

c) Premium-related uncertainty (e.g., variability in universal life premiums or fixed property insurance premiums)

d) Mortality and morbidity trends

e) Economic assumption variability (e.g., interest rates, inflation, currency)

f) Insurance-related expense projections (e.g., claims handling, policy servicing)

g) Reinsurance recovery risk (e.g., counterparty default or disputes)

4 Initial loss strain refers to the immediate negative impact on an insurer's solvency position when liabilities exceed premiums or recoverables at contract inception, often due to timing mismatches in reinsurance arrangements where ceded liabilities are recognized before the related business is underwritten or earned.

6.36. The Uncertainty Margin should be calculated using methods that are appropriate to the insurer's risk profile and the nature of the underlying obligations. Acceptable approaches may include conservative assumptions, scenario-based margins, or other actuarial techniques such as cost of capital[5], quantile[6], conditional tail expectation[7], provided they are applied consistently and supported by validated data and assumptions. The selection of methodology ultimately rests with the actuary's professional judgment, considering the insurer's specific circumstances and the credibility of available data.

6.37. The level of sophistication in methodology should be proportionate to the insurer's size, complexity, and risk exposure.

6.38. The appointed actuary must ensure that risks reflected in the Uncertainty Margin do not duplicate those captured in regulatory capital requirements. R

a) To support this requirement, the actuary should consider whether the regulatory capital framework explicitly identifies and quantifies the risks it covers. The actuary should confirm that the Uncertainty Margin reflects only residual risks not already captured in capital requirements and should explain in the actuarial valuation report how this was assessed, including the rationale.

6.39. Portfolio-level uncertainty must be reflected in the Uncertainty Margin, while insurer-specific operational risks[8] and expenses not arising from insurance obligations must be excluded. R

6.40. Where the Uncertainty Margin is captured implicitly through replicating portfolios[9], hedging instruments[10], or other valuation techniques, the actuary must justify the approach and demonstrate how the underlying uncertainty is reflected in the valuation. R

6.41. Policyholder behaviour must be modelled over the full contract term, considering economic conditions that may influence the behaviour. Assumptions should be validated using the insurer's historical experience and relevant industry data and reflect realistic impacts on Reserves. R

6.42. Diversification effects may be recognised as a means of reducing the Uncertainty Margin, where the aggregation of risks across homogeneous portfolios demonstrably lowers overall uncertainty in projected cash flows. Examples of diversification benefits include but are not limited to:

a) Correlation of cash flows across risk groups (e.g., reduced claim volatility in a diversified property and casualty portfolio);

5 Cost of Capital is a method for calculating the Uncertainty Margin by estimating the cost of holding capital to cover portfolio-specific risks over the lifetime of insurance liabilities, based on a risk-adjusted rate (e.g., 6% above risk-free rate).
6 Quantile techniques determine the Uncertainty Margin by selecting a specific percentile (e.g., 75th or 90th) of the distribution of potential claim outcomes to reflect portfolio-specific uncertainty in cash flows.
7 Conditional Tail Expectation (CTE) calculates the Uncertainty Margin as the average of claim outcomes exceeding a specified percentile (e.g., 95th), capturing the expected severity of extreme portfolio-specific losses.

8 Insurer-specific operational risks refer to uncertainties arising from an insurer's internal processes, systems, or management, such as administrative errors, IT system failures, or fraud, which are excluded from the Uncertainty Margin to focus on portfolio-level risks.
9 A replicating portfolio is a set of traded assets designed to match the liability's cash flows.
10 Hedging instruments are financial contracts that are reduce specific risks.

b) Geographic or demographic spread in life insurance;

c) Product line diversification (e.g., auto and home insurance with uncorrelated claim triggers);

d) Longevity risk mitigation in annuity portfolios with diverse age cohorts; and

e) Reduced catastrophe exposure in reinsurance portfolios covering multiple regions.

6.43. As applicable, the actuary should establish clear criteria for applying diversification and disclose its impact on solvency position of the insurer.

6.44. The actuarial valuation report must include clear and comprehensive disclosure of how the Uncertainty Margin is included in the valuation. R

6.45. At a minimum, the actuarial report should address the following for the Uncertainty Margin:

a) The method used to calculate the Uncertainty Margin and the rationale for its selection.

b) Whether premium-related uncertainty (e.g., variable future premiums) is included or deferred, based on the insurer's risk management approach (e.g., universal life vs. property insurance).

c) The assumptions, methodologies, and data used to model policyholder behaviour and diversification effects, including validation and sensitivity analysis.

d) Where applicable, the basis for recognising diversification effects in the Uncertainty Margin, including:

i. The structure and segmentation of the portfolios involved;

ii. The correlation assumptions used and their justification;

iii. The data sources and validation methods applied;

iv. The quantitative impact of diversification on the Uncertainty Margin; and

v. A statement confirming that no double-counting of risk reduction occurs between Reserves and capital requirements, supported by a description of how, where applicable, the insurer's regulatory capital framework is designed to incorporate diversification and other risk mitigation techniques (e.g., hedging, reinsurance). This does not require the actuary to validate the insurer's regulatory capital framework.

e) The impact of the Uncertainty Margin on Reserves and solvency of the insurer.

f) Disclosure of whether the Uncertainty Margin is reported separately or embedded within Reserves, with justification of the chosen approach.

g) Any material changes in data, assumptions, or methodology in calculation of uncertainty margin from prior periods, with quantified impacts on solvency of the insurer as applicable.

7. Structure and Content of Actuarial Report

General Requirements

7.1. The Authority requires that all mandatory content specified in this RSOG be fully addressed in the actuarial valuation report[11]. Any exclusions or deviations must be justified in the report, detailing their rationale and impact on the insurer's solvency assessment. R

7.2. The appointed actuary must include in the report their full name, professional credentials with confirmation of current good standing with their professional body, including compliance with annual Continuing Professional Development (CPD) requirements, and a declaration specifying whether they are engaged as an employee of the licensee or as an external consulting actuary. A peer reviewing actuary must also be nominated to ensure independent validation of the report's findings. R

7.3. The peer reviewing actuary must be sufficiently involved with the reserving actuary's analysis and documentation such that they can verify that all requirements of the RSOG have been carried out by the reserving actuary. R

7.4. The peer reviewing actuary must communicate directly with the reserving actuary during the preparation of the reserving report to offer challenge and support as needed to the decisions made by the reserving actuary in producing the reserving report. R

7.5. The peer reviewing actuary must prepare a separate report that independently assesses the insurer's actuarial valuation in accordance with all applicable requirements of this RSOG. This report must be based on the peer reviewing actuary's own analysis, calculations, and professional judgment, and not solely on a review of the appointed actuary's work. The peer reviewing actuary must document any areas of divergence from the appointed actuary's conclusions, along with commentary on the implications for the insurer's solvency assessment. R

7.6. Both actuaries must provide a detailed justification of their experience and qualifications relevant to the reported lines of business (LOBs), such as life insurance or property and casualty. If the Authority deems the actuary's experience as insufficient for specific LOBs, a qualified secondary actuary, distinct from the peer reviewer, must countersign the report to validate its technical accuracy. R

7.7. The actuarial valuation report must include a comprehensive executive summary that details all key conclusions, such as loss and loss expense provisions, the excess of assets over liabilities, and a comparison to the prescribed capital requirement. All elements presented in the executive summary must be clearly traceable to specific sections or findings within the full report or appendices, to facilitate regulatory review and stakeholder understanding. R

11 The actuary may structure the actuarial valuation report at their discretion, provided they achieve the outcome anticipated in this RSOG and can justify the approach to the Authority upon request.

7.8. The appointed actuary must document in the actuarial valuation report the investigation's purpose, the commissioning entity's name and contact details, limitations on report reliance, and external parties approved for distribution. R

7.9. The actuarial valuation report must provide a comparative analysis of current and prior year valuations, by major business segments, explaining material differences. Material variances must be explained with reference to changes in methodologies, conclusions, and differences between forecasted and actual outcomes, with their impacts clearly documented. The comparison must assess the insurer's financial position excluding new business written in the past 12 months, with the valuation of that new business shown separately. R

7.10. The actuary must include a statement in the actuarial valuation report confirming that the data used in the preparation of the report was appropriate and sufficient for the purposes of the valuation. R

7.11. The actuary should disclose in the actuarial valuation report any limitations in valuation analysis depth due to the scale of business or data credibility, explaining the rationale and their impact on the valuation.

7.12. Where appropriate, the actuary should consider the implications of the insurance cycle on his/her reserving processes, particularly where downward pressure on premium rates might lead to pressure from directors/senior officers to call for reserve releases.

7.13. The actuary must describe any current or pending legal actions listed on the insurer's risk register, including their estimated impact. R

7.14. The actuary must disclose, within the actuarial valuation report, any significant issues that could adversely affect the report's quality or validity. These may include constraints on insurer resources, weaknesses in data, risks related to reinsurer solvency, material flaws in valuation models, or difficulties obtaining sign-off from directors or senior officers. The actuary must also explain how each issue was addressed or mitigated. R

Data Quality and Groupings

7.15. The actuary must validate insurer-provided data codes, such as claims catastrophe identifiers, policy series, or expense codes, through sampling, disclosing any material data reliability issues to the Authority within the actuarial valuation report. R

7.16. The actuary should review and, where necessary, update valuation assumptions at least annually, or upon material changes, to ensure that assumptions remain appropriate, credible, and reflective of current economic conditions and insurer-specific experience. In this regard, considerations include, but are not limited to:

a) consideration of internal experience data, supplemented by industry benchmarks where internal data lacks credibility, and validated against observable market indicators (e.g., interest rates, inflation);

b) consideration of each portfolio's characteristics—such as risk profile, policy terms, or benefit structure—when selecting and documenting assumptions; and

c) consideration of the impact of any changes in valuation assumptions on the Reserves and solvency of the insurer.

7.17. Valuation results must be tabulated and presented by LOBs in the actuarial valuation report. R

7.18. The actuary must structure data into coherent LOBs with homogeneous risk groupings, using tables and including loss and loss adjustment expense reserves. Materially different groups must be addressed separately with age or cohort classifications and relevant analytics. R

7.19. Where smaller blocks of business are combined into other LOBs, the actuary must clearly document the rationale and basis for amalgamation in the actuarial valuation report. R

7.20. Where applicable, novated accepted business[12] should be analysed separately within its own homogeneous risk groupings to reflect its distinct risk profile.

7.21. The actuarial valuation report must present gross, ceded, and net amounts for policyholder reserves, death benefits, annuity payments, surrenders, bonus payments, claims, incurred but not reported (IBNR) reserves, ultimate forecast claims, and premiums. These must be tabulated by LOBs, with summary data by age, year, or quarter of exposure. Key LOBs must be presented separately, with the remaining business grouped. R

7.22. The actuary must disclose the basis used for presenting results—whether by accident year, underwriting year, or reporting year—and justify the selected approach as most appropriate for the insurer's risk profile and data structure. R

7.23. The actuarial valuation report must state its effective date, with all data and assumptions aligned with the valuation date. Any dataset with a different effective date must be clearly indicated and justified in the actuarial valuation report. R

7.24. The actuary may modify data to correct errors or omissions, enhancing report accuracy, provided all material modifications are documented with justifications in the actuarial valuation report.

7.25. The actuary may use external data to enhance the actuarial valuation report's statistical robustness, provided such data and its justification are clearly documented within the actuarial report.

Valuation Analysis Requirements

7.26. Where suitable analytics for the lines of business (LOBs) depend on exposure measures[13], these measures must be clearly stated in the actuarial valuation report, along with documentation justifying their selection. R

7.27. The actuarial valuation report must include a description of policy types issued, including in-force and run-off risks, and those arising from risk transfer agreements, such as reinsurance contracts. R

7.28. When using external mortality or morbidity tables—such as industry-standard tables with age adjustments or multipliers—the actuary must document and R

12 Novated accepted business refers to insurance contracts transferred to the insurer via novation. These will usually require separate analysis due to unique risk characteristics.
13 Exposure measures refer to the metrics used to quantify the level of insurance risk an insurer is exposed to over a given period. These may include premiums written, sums insured, number of policies, or other relevant indicators depending on the line of business. Accurate exposure measures are essential for assessing reserves, pricing adequacy, and solvency requirements.

justify the selection and application of such tables in the actuarial valuation report.

7.29. The actuary must document in the actuarial valuation report any historical, large, or unusual claims activity, including catastrophes, and their impact on Reserves. For general insurance LOBs, the actuary should explain the impact of significant environmental exposures, such as climate change risks. R

7.30. Where applicable, the actuary must ensure that modelling and analysis of claims incurred extends to claims incurred but not reported (IBNR), for each LOB where appropriate. The actuarial valuation report must also include allowances for direct claim settlement expenses and for underestimated expenses related to the run-off of existing business or ongoing policy maintenance. These estimates must be based on analysis of the insurer's current and expected expense base, supplemented by any additional information sources the actuary deems relevant. R

7.31. Expense assumptions must reflect either actual expenses incurred or supportable forward-looking projections. These must be categorised into policyholder servicing, acquisition, and overhead costs, and clearly documented in the actuarial valuation report. R

7.32. Acquisition cost assumptions must be clearly distinguished from other expense categories. Where applicable, the actuary may treat deferred acquisition costs in a manner consistent with the insurer's accounting regime, provided the approach is disclosed and justified in the actuarial valuation report. R

7.33. In cases where reinsurance protects the gross position, the actuarial valuation report must include projections and analysis of ceded exposures and losses, alongside gross exposures. The actuary must calculate the net position by subtracting ceded amounts from the gross position. It is not sufficient to only opine on the net of reinsurance position. R

7.34. Where policyholder guarantees—such as guaranteed benefits or discretionary bonuses—are included in policy terms, the actuary must provide in the actuarial valuation report a detailed explanation of the process used to identify and value these guarantees, supporting their valuation in Reserves as specified in the above section on *Core Valuations Requirements*. R

7.35. For each LOB, the actuarial valuation report must include a commentary explaining the extent to which the assumptions and methods used were informed by insurer-specific experience, industry studies, or actuarial judgment. Where applicable, the results of the modelling analysis must be presented as a point estimate with an appropriate range, or as a range of outcomes with associated probabilities (e.g., a stochastic approach). The actuary must explain the rationale for the chosen presentation. R

7.36. The actuarial valuation report must include a commentary on the approach taken to uncertainty. The actuary must explain whether the analysis reflects only outcomes reasonably expected based on observed data, or whether it also considers a broader range of plausible but previously unobserved outcomes. R

8. Peer Review and Governance

8.1. Prior to seeking each stage of peer review, the appointed actuary must ensure that their findings are complete and fully checked for numerical and other errors by following their normal office procedures and the relevant actuarial standards relating to quality assurance. R

8.2. The peer reviewing actuary must confirm compliance with the relevant professional actuarial standards and this RSOG, documenting key review results in the actuarial valuation report. R

8.3. The peer reviewing actuary's name, credentials, and relevant experience for the LOBs reviewed must be included in the actuarial valuation report, consistent with the format used for the appointed actuary's details. R

8.4. The actuaries may rely on the licensee's legal advisors for impacts outside actuarial expertise, such as legal disputes, documenting their input in the actuarial valuation report.

8.5. The appointed actuary must include in the actuarial valuation report key details showing how governance and peer review processes under this section were conducted, such as controls for unbiased valuations (e.g., independent claim data checks) or peer review steps (e.g., verifying mortality rate assumptions). R

9. Disclosures and Communications with the Authority

9.1. The regulated entity must maintain transparency in its valuation and actuarial arrangements and disclose to the Authority any matter that could materially affect the quality, reliability, or completeness of the actuarial valuation report. R

9.2. The insurer must notify the Authority in writing, in advance, of its proposed appointments for the appointed actuary and the peer reviewing actuary. These appointments are subject to the Authority's review and confirmation based on its suitability criteria. Any subsequent changes to the insurer's actuarial arrangements must also be promptly notified to the Authority, allowing sufficient time for review and confirmation. R

9.3. A notification of an actuary's termination must include the actuary's full name, the effective date of termination, the reason for termination, and the insurer's plan for appointing a replacement. R

9.4. The outgoing actuary must also submit a letter directly to the Authority explaining the circumstances of the termination. R

9.5. The actuary responsible for preparing the actuarial valuation report must directly communicate to the Authority any significant concerns regarding the accuracy, reliability, or appropriateness of prior actuarial reports or assumptions. R

10. Enforcement

10.1. Whenever there has been a breach of the rules included in this document, the Authority's policies and procedures as contained in its Enforcement Manual will apply in addition to any other powers provided in the regulatory acts and the Monetary Authority Act.

11. Effective Date

11.1. This Rule and Statement of Guidance comes into effect **6 months** from its publication in the Gazette.

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