Actuarial Standards Board
Conseil des normes actuarielles

Final Standards

Final Standards – Revisions within the Practice-Specific Standards for Insurance (Section 2500 and Part 1000)

Actuarial Standards Board

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360 Albert Street, Suite 1740, Ottawa ON K1R 7X7 613.236.8196 613.233.4552 secretariat@asb-cna.ca **www.asb-cna.ca**

.02 Usually, the actuary is responsible for all aspects of his or her work and performs it in accordance with accepted actuarial practice. The engagement to which the recommendation applies is usually one in which one or more aspects of work are omitted or are stipulated by the client or employer or the terms of a benefit plan. Examples include situations where

- The actuary uses, but does not take responsibility for, the software system, or the work, of the staff of the client or employer; and
- The client or employer or the terms of a benefits plan stipulates an assumption or a method that is not in accordance with accepted actuarial practice.

.03 Conflict between accepted actuarial practice and the law is not the same as conflict between accepted actuarial practice and the terms of an engagement. In the case of an engagement whose terms call for deviation from accepted actuarial practice, the actuary has discretion to accept or not to accept the engagement.

.04 The practicality and usefulness of reporting a result in accordance with accepted actuarial practice are the same as for subsection 1210, Conflict with law.

1230 Unusual and unforeseen situations

.01 Deviation from a particular recommendation or other guidance in these standards is accepted actuarial practice for an unusual or unforeseen situation for which the standards are inappropriate[2]. [Effective February 1, 2018]

.02 The actuary would report without reservation when deviating from a particular recommendation or other guidance in these standards in accordance with this subsection 1230, but it may sometimes be appropriate to describe and justify the deviation in the report.

1240 Materiality

.01 Deviation from a particular recommendation or explanatory text in these standards is accepted actuarial practice if the effect of so doing is not material. [Effective February 1, 2018]

[2] Actuaries are encouraged to bring such situations to the attention of the Actuarial Standards Board, who may wish to consider how standards might be improved so that they do contemplate such situations.

.02 "Material" has its ordinary meaning, but is judged from the point of view of a user, having regard for the purpose of the work. Thus, an omission, understatement, or overstatement is material if the actuary expects it to affect either the user's decision-making or the user's reasonable expectations. When the user does not specify a standard of materiality, judgment falls to the actuary. That judgment may be difficult for one or more of these reasons:

- The standard of materiality depends on how the user uses the actuary's work, which the actuary may be unable to foresee. If practical, the actuary would discuss the standard of materiality with the user. Alternatively, the actuary would report the purpose of the work as precisely as possible, so that the user is warned of the risk of using the work for a different purpose with a more rigorous standard of materiality.
- The standard of materiality may vary among users. The actuary would choose the most rigorous standard of materiality among the users.
- The standard of materiality may vary among uses. For example, the same accounting calculations may be used for a pension plan's financial statements and the financial statements of its participating employer. The actuary would choose the more rigorous standard of materiality between those two uses.
- The standard of materiality depends on the user's reasonable expectations, consistent with the purpose of the work. For example, advice on winding-up a pension plan may affect each participant's share of its assets, so there is a conflict between equity and practicality. The same is true for advice on a policy dividend scale.

.03 The standard of materiality also depends on the work and the entity that is the subject of that work. For example,

- A given dollar standard of materiality is more rigorous for a large than for a small entity;
- The standard of materiality for valuation of an insurer's policy liabilities is usually more rigorous for those in its financial statements than for those in a forecast in financial condition testing;
- The standard of materiality for data is more rigorous for calculating an individual benefit (such as in a pension plan wind-up) than for a valuation of a group benefit plan (such as a going concern valuation of a pension plan); and
- The standard of materiality for work involving a threshold, such as a regulatory capital adequacy requirement calculation of an insurer or a statutory minimum or maximum funding level for a pension plan would become more rigorous as the entity approaches that threshold.

.04 The actuary would not report an immaterial deviation from a particular recommendation or other guidance in these standards except if doing so assists a user to decide whether the standard of materiality is appropriate for that user.

.05 The recommendation applies to both calculation and reporting standards.

Calculation standards

.06 The result of applying a recommendation may not differ materially from the result of a simpler practice requiring less time and expense. For example, the practice-specific recommendations for valuation of insurance contract liabilities for term life insurance have little effect on an insurer whose volume of term life insurance is trivial. To ignore them in that situation is accepted actuarial practice if it helps the actuary to concentrate time and resources on material items.

.07 In considering materiality, it is not appropriate to net items that are reported separately. For example, if simple practices requiring less time and expense than those in the recommendations materially overstate the premium liabilities and materially understate its claim liabilities, but do not materially affect their sum, the understatement and overstatement are each material if the two items are reported separately. In considering materiality, it is, however, appropriate to net components within a separately reported item. To continue the example, it would be appropriate to net the overstatement of premium liabilities with the understatement of claim liabilities if only the sum of the two (i.e., the insurance contract liabilities) is reported.

.08 The effect of using a simpler practice requiring less time and expense than those in the recommendations may be conservative or not conservative. Usually, the criterion of materiality is the same in both cases.

Reporting standards

.09 The result of applying a recommendation may provide information that is not useful. For example, disclosure of a material change in the basis for valuing the liabilities with respect to a material class of a benefit plan's members is not useful if that class was trivial at the previous valuation. Also, description of immaterial provisions of a benefit plan is not useful. To ignore the recommendation is accepted actuarial practice in that situation.

1600 Assumptions and Methods

1610 Methods

.01 The actuary should select a method that takes account of the circumstances affecting the work. [Effective February 1, 2018]

.02 The basis for calculating actuarial estimates is comprised of a method and one or more assumptions. Methods represent the underlying manner in which actuarial calculations are undertaken. Methods differ from one area of actuarial practice to another and have differed over time.

.03 In selecting an appropriate method, the actuary would consider whether any method is mandated by law, by practice-specific standards or by the terms of the engagement.

1620 Assumptions

.01 The actuary should identify and select each assumption that is needed for the work, except for those that are prescribed, that are mandated by law or that are stipulated by the terms of the engagement. [Effective February 1, 2018]

.02 The actuary should select an appropriate model or data assumption for a matter as the best estimate assumption relating to that matter, modified, if appropriate, to make provision for adverse deviations. In selecting an assumption, the actuary should take account of the circumstances affecting the work, past experience data, the relationship of past to expected future experience, anti-selection, and the relationship among matters. [Effective February 1, 2018]

.03 The appropriate assumption for a matter, other than a model or data assumption, should be continuation of the status quo, unless there is none or unless there is a reasonable expectation that it will change, and the actuary so reports. [Effective February 1, 2018]

.04 Throughout the standards, the word "calculation" appears, but not as a defined term. It can imply a mathematical operation as simple as adding two numbers or as complex as a scenario of financial condition testing. "Calculation" does not necessarily imply that a model is used. The word "calculation", when used in the context of a model, emphasizes the result of a model run and to a lesser extent model specification and model implementation.

.05 It may be useful, under the terms of the engagement, to report the result of two assumptions without opining on their relative appropriateness and to recommend that each user select that which meets his or her needs.

Model assumptions

.06 The model assumptions are quantitative assumptions in a model about

- Contingent events;
- Investment return and other economic matters, such as price and wage indices; and
- Numerical parameters of the environment, such as the income tax rate.

.07 There is a model assumption for each of the matters that the actuary's model takes into account. Those matters would be sufficiently comprehensive for the model reasonably to represent reality.

.08 A model, whether simple or complex, requires model assumptions. The model depends on the purpose of the work and the sensitivity of the model run to the various matters about which assumptions could be made. The actuary would strike a balance between the complexity needed for reasonable representation of reality and the simplicity needed for a practical calculation. If the model specification does not take into account a matter, the result is an implicit assumption about that matter, usually an assumption of zero probability or of zero rate. The actuary may compensate for an inappropriate implicit assumption regarding a matter that the model specification does not take into account by altering the explicit assumption regarding a matter that the model does take into account.

.09 For models with interrelated model assumptions, the actuary would consider the interaction between assumptions.

Data assumptions

.10 Data assumptions are the assumptions, if any, needed to relieve insufficiency or unreliability in the data.

.11 The available data may be not sufficient or not reliable. For example, files of pension plan members may lack the date of birth of the members' spouses. Based on sampling, or on comparison with comparable data, it may be appropriate to assume a relationship between spouse and member ages; for example, that a male spouse's date of birth is three years before the member's, and that a female spouse's date of birth is three years after the member's.

Assumptions other than model and data assumptions

.12 The assumptions other than model and data assumptions are the assumptions about the legal, economic, demographic, and social environment upon which the model and data assumptions depend.

.13 Such other assumptions are usually qualitative, dealing with the environment; for example,

- Legislation, like the Income Tax Act (Canada);
- Student education;
- The medical care system;
- Government social security systems; and
- International treaties.

.14 Those assumptions are needed to the extent that the model assumptions and, in some cases, the data assumptions depend upon them. Such assumptions are numerous and it is not practical to identify all of them.

.15 Continuation of the status quo is usually the appropriate assumption for other than model and data assumptions; for example, an assumption that the fund of a registered pension plan continues not to be taxed or that the capital markets remain more or less as they are. Users may infer that assumption except where the actuary reports otherwise. The actuary would report an assumption

- That is different from continuation of the status quo; and
- Regarding a matter for which there is no status quo, for example, a student's assumed occupation after completion of education.

Acceptable range

.16 There is a reasonable range of assumptions that may be selected by an actuary for particular work and that might produce materially different results. Sometimes, it is desirable that actuaries produce results within a relatively narrow range, in which case the practice-specific standards may prescribe certain methods and/or assumptions to achieve that purpose.

Circumstances affecting the work

.17 Knowledge of the circumstances affecting the work may require consultation with the persons responsible for the functions that affect experience. For example, if the calculation is to value the assets or liabilities of a benefits plan, the actuary would consult the persons responsible for investments, administration, and plan provisions. If the calculation is to value the policy liabilities of an insurer, the actuary would consult the officers responsible for investments, underwriting, claims, marketing, product design, policy dividends, and policy servicing.

.18 An assumption about a matter would take account of the circumstances affecting the work if those circumstances affect that matter. The circumstances affecting the work are relevant for experience in most matters other than economic matters.

Past experience data

.19 The available and pertinent past experience data are helpful in the selection of assumptions.

.20 Other things being the same, pertinent past experience data are data

- Relating to the case itself rather than to similar cases;
- Relating to the recent past rather than to the distant past;
- That are homogeneous rather than heterogeneous; and
- That are statistically credible.

These criteria may conflict with each other.

Expected future experience vs. past experience

.21 To extrapolate pertinent past experience and its trend to the near future is often, but not necessarily, appropriate.

.22 The appropriateness of the extrapolation depends on the matter assumed. For example, pertinent past mortality experience is a better indicator of the outlook than is pertinent past investment return experience.

.23 An extrapolation would take account of a change that affects the outlook. For example,

- Adoption of a subsidized early retirement option in a pension plan may affect retirement rates;
- A change in an insurer's case estimate practices may affect its claims development;
- An insurer's discontinuance of a line of business may affect its expense rates allocable to the remaining lines; and
- A change in judicial practice may affect the settlement of claims.

Anti-selection

.24 Each assumption would normally take account of potential anti-selection.

.25 One party in a relationship may have the right (or the administration of the relationship may give the privilege) to exercise certain options. That party may be, for example, an insurer's policy owner, a benefits plan's member, a borrower, a lender, or a shareholder.

.26 Examples are the right or privilege of a

- Pension plan member to select his or her retirement date when the pensions at various retirement ages are not actuarially equivalent;
- Policy owner to renew term life insurance at its expiry for a stipulated premium;
- Mortgagor to prepay principal, or an issuer to call a bond or redeem a preferred share; and
- Shareholder to retract a share.

.27 When considering a single relationship, it is reasonable to expect that party to exercise those options to the detriment of the other party in the relationship if it is to the first party's advantage to do so. However, where a number of such relationships are concerned, such as a portfolio of policy owners or members of a benefit plan, it may not be reasonable to assume that every one of these would exercise such an option in that manner.

.28 The extent of anti-selection depends on

- The size of the advantage from each exercise of the option (for example, anti-selection is dampened if the advantage to each policy owner is small even when the aggregate potential detriment to an insurer is large);
- The concomitance of exercise of the option (for example, election of a favourable early retirement pension may force the plan member into unwanted unemployment, or a policy owner (who is also the life insured) in ill health may be unable to afford to continue an insurance policy with a low premium);
- The policy owner's or plan member's difficulty in making the required judgment (for example, everyone knows his or her age, but a person may be unable to gauge the effect of ill health on longevity); and
- The sophistication of the policy owner, plan member, borrower, lender, or shareholder.

Independently reasonable and appropriate in the aggregate

.29 The assumptions that the actuary selects or for which the actuary takes responsibility, other than alternative assumptions selected for the purpose of sensitivity testing, would be independently reasonable and appropriate in the aggregate.

.30 The actuary would select independently reasonable assumptions. The following are examples:

- For a typical defined benefit pension plan valuation, the actuary would adopt an explicit investment assumption, as well as an explicit expense assumption rather than using implicit assumptions incorporated within a net discount rate. However, for a small defined benefit pension plan, the actuary may choose to use approximations for the investment expenses.
- For a typical non-participating life insurance portfolio where experience is not passed on to policy owners, all assumptions would be established independently. However, for a typical participating life insurance portfolio where experience is passed on to policy owners through changes to the dividend scale, a reasonable representation of reality would be to assume that the current dividend scale and current experience persist into the future, as long as any implicit offsets in assumptions simplify the valuation and do not materially affect the amount of the valuation.

.31 The actuary would avoid the use of independently reasonable assumptions that are inconsistent or biased in the same direction, either of which might result in the assumptions not being reasonable in the aggregate. If an assumption is prescribed, is mandated by law or is stipulated by the terms of the engagement, it would not be appropriate to compensate for this prescription or stipulation by modifying other assumptions. The remaining assumptions would be reasonable in the aggregate and to the extent possible be independently reasonable.

.32 The use of independently reasonable assumptions implies that each assumption is explicitly defined. However, there would be no requirement to use explicit assumptions in the model specification, as long as the result of using that model does not produce a material error. For example, for pension valuations, use of a discount rate net of expenses may produce a value very close to the value obtained by using explicit assumptions. In this case, the actuary would disclose both the gross investment rate assumption and the expense assumption.

Stipulated or mandated assumptions

.33 Use of an assumption stipulated by the terms of the engagement is use of the work of another person.

.34 If the assumption is mandated by law and an amendment to the law is virtually definitive, it may be useful to report a result that reflects the amendment.

Discount rate

.35 The use of a discount rate is inherent in the actuarial present value method. The discount rate may be constant or it may vary over time. In selecting the best estimate assumption for the discount rate, the actuary, consistent with the circumstances affecting the work, may either

- Take into account the expected investment returns of the assets that support the liabilities; or
- Reflect interest rates on relevant fixed income reference securities.

.36 In selecting the best estimate assumption for the discount rate, the actuary, consistent with the circumstances affecting the work, may assume that the yields on fixed income investments at future dates, either

- Remain at levels applicable at the calculation date; or
- Revert in the long term to expected levels.

1630 Provision for adverse deviations

.01 The actuary should include a provision for adverse deviations in calculations only to the extent required by the terms of the actuary's engagement or as mandated by law or as prescribed by practice-specific standards. [Effective February 1, 2018]

1640 Comparison of current and prior assumptions

.01 Unless the actuary reports the inconsistency, the assumptions for a calculation for a periodic report should be consistent with those of the prior calculation. [Effective February 1, 2018]

.02 The definition of consistency for the purpose of this recommendation varies among practice areas. For example,

- For advice on funding a pension plan, the assumption at a calculation date is consistent with the corresponding assumption at the prior calculation date if the two are numerically the same; and
- For valuation of an insurer's insurance contract liabilities for its financial reporting, an assumption at a calculation date is consistent with the corresponding assumption at the prior calculation date if the two assumptions
  - Each reflect the conditions and outlook at their respective calculation dates in the case of a best estimate assumption;

2500 Financial Condition Testing

2510 Scope

.01 Part 1000 applies to work within the scope of this section 2500.

.02 This section 2500 applies to the appointed actuary of an insurer when reporting on the insurer's financial condition pursuant to law.

2520 Analysis

.01 The appointed actuary should make an investigation at least once during each financial year of the insurer's recent and current financial position and financial condition, as revealed by financial condition testing for selected scenarios. [Effective January 1, 2020]

.02 The appointed actuary should make a report of each investigation in writing to the insurer's board of directors (or to the appropriate committee of the board such as audit committee, risk committee, etc., if they so delegate) or its chief agent for Canada. The report should identify possible actions, and reasons for those actions, for dealing with any threats to satisfactory financial condition that the investigation reveals. The actuary should also comment on the consistency of the results of the investigation and possible actions with the own risk and solvency assessment (ORSA). [Effective January 1, 2020]

.03 The appointed actuary should ensure that the investigation is current. The investigation should take into consideration recent events and recent financial operating results of the insurer. [Effective April 15, 2017]

.04 The timing and frequency of the appointed actuary's investigations would be sufficient to support timely corrective actions by management and the board of directors or chief agent for Canada.

Recent and current financial position

.05 The investigation would review operations of recent years and the financial position at the end of each of those years.

Financial condition testing

.06 Financial condition testing examines the effect of selected adverse scenarios on the insurer's forecasted capital adequacy. The actuary can supplement the financial condition testing with the use of other means, such as the ORSA and the business plan.

.07 The purpose of financial condition testing is to identify plausible threats to satisfactory financial condition, actions that would lessen the likelihood of those threats, and actions that would mitigate a threat if it materialized.

.08 Financial condition testing is defensive, i.e., it addresses threats to financial condition rather than the exploitation of opportunity.

Satisfactory financial condition

.09 The insurer's financial condition would be satisfactory if throughout the forecast period,

- Under the solvency scenarios, the statement value of the insurer's assets is greater than the statement value of its liabilities;
- Under going concern scenarios, the insurer meets the regulatory minimum capital ratio(s); and
- Under the base scenario, the insurer meets its internal target capital ratio(s) as determined by the ORSA.

Data, methods, and assumptions

.10 The actuary would start the forecast period using the data as of the most recent available fiscal year-end statement of financial position date.

.11 The assumptions and methods would reflect up-to-date studies and analysis available to the actuary.

.12 The policy liabilities would be revalued at the end of the first financial year of the forecast period if a change in assumption or method that is expected to be made by the insurer would result in a material change to the financial position of the insurer.

.13 The actuary would consider recent events and recent operating results of the insurer up to the date of the report.

.14 If an adverse event occurs between the date of the report and the date of its presentation to the insurer's board of directors (or its chief agent for Canada), then the actuary would, at a minimum in the presentation to the insurer's board of directors (or its chief agent for Canada), address the event and its potential implications on the results of the investigation. If appropriate, the actuary would redo the investigation.

Forecast period

.15 The forecast period for a scenario would be sufficiently long to be aligned with the risk emergence and the recognition of impacts through the accounting and solvency results, and to capture the effect of management actions.

Scenarios

.16 The scenarios would consist of a base scenario and adverse scenarios. Each scenario takes into account not only in-force policies but also the policies assumed to be sold or acquired during the forecast period, and both insurance and non-insurance operations (e.g., asset management, banking, or trust company subsidiaries).

Base scenario

.17 The base scenario would be a realistic set of assumptions used to forecast the insurer's financial position over the forecast period. Normally, the base scenario would be consistent with the insurer's business plan. The actuary would accept the business plan's assumptions for use in the base scenario unless these assumptions are so inconsistent or unrealistic that the resulting report would be misleading. The actuary would report any material inconsistency between the base scenario and the business plan.

Adverse scenarios

.18 An adverse scenario is developed by stress testing the assumptions used in forecasting the business plan, including the determination of insurance contract liabilities, with regard to risk factors that may trigger potential threats to the insurer's financial condition. The number and types of adverse scenarios may vary among insurers and over time for a particular insurer.

Solvency scenario

.18.1 A solvency scenario is a plausible adverse scenario if it is credible and has a non-trivial probability of occurring. The actuary may use percentile rankings of outcomes to determine whether a solvency scenario is both plausible and adverse.

.19 The actuary would consider material, plausible risks or events to the insurer. Reverse stress testing can help assess whether certain risk factors need to be tested, on the grounds that certain risk factors could never deteriorate to the point where they would be a threat to the insurer's financial condition. The actuary can thereby determine whether a material, plausible risk or event exists for the insurer over the forecast period.

Going concern scenario

.19.1 A going concern scenario is an adverse scenario that is more likely to occur and/or less severe than a solvency scenario, and could include risks not considered in solvency scenarios.

Risk categories

.20 The actuary would assess various risk categories and identify those that are relevant to the insurer's circumstances when considering threats to capital adequacy under adverse scenarios.

.21 Repealed

Integrated scenarios

.22 The actuary would construct integrated scenarios by combining two or more risk factors whose combination gives rise to an adverse scenario.

.23 In developing integrated scenarios, the actuary would consider how risk factors interact. For example, the impact of combining adverse scenarios for two or more risk factors, where each is associated with a relatively high probability, may give rise to an integrated adverse scenario to which the insurer's financial condition is sensitive. In such cases, an integrated scenario would be constructed by combining stress tests related to two or more risk factors. An integrated scenario would be designed so as to itself constitute an adverse scenario.

.24 Repealed

Ripple effects

.25 In assuring consistency within each scenario, the actuary would consider ripple effects, including policy owner action, management's routine action, and regulatory action. Although most of the other assumptions used in the base scenario may remain appropriate under the adverse scenario, some may require adjustment to reflect the interdependence of assumptions in the adverse scenario.

.26 Selection of the assumptions for management's routine action would, where appropriate, take into account

- Effectiveness of the insurer's management information systems and adjustment mechanisms;
- Insurer's historical record of promptness and willingness, to respond to adversity;
- Policy owner action; and
- External environment assumed in the scenario.

.27 The actuary would report management's routine action, so that users may consider its practicality and adequacy. The actuary may also report the results assuming that the insurer does not respond to the adversity.

.28 Ripple effects also include regulatory action, which would vary depending on the regulatory capital ratio requirement breached by the adverse scenario. The actuary would consider action that could be taken by the Canadian regulator(s) as well as action taken by regulators in foreign jurisdictions. Such regulatory action and associated management action would consider the local assessment of solvency regardless of the insurer's worldwide solvency position as measured by Canadian regulatory standards. The actuary could also review the regulatory actions included in the ORSA's scenario testing, including internal target-setting exercise, and consider their applicability to the financial condition testing's adverse scenarios.

Corrective management actions

.29 For each of the adverse scenarios that would result in a threat to satisfactory financial condition, the actuary would identify possible corrective management actions that would lessen the likelihood of that threat, or that would mitigate that threat, if it materialized.

.29.1 Consideration would also be given to the effectiveness of possible corrective management actions in a volatile or stressed environment.

Management actions

.29.2 Management actions may include but are not limited to

- Repricing of insurance products;
- Policyholder dividend scale updates;
- Adjustments to non-guaranteed product elements;
- Suspending dividend payments, capital reductions, and transfers to the parent or home office, where applicable;
- Raising additional capital or adopting an approved plan to raise additional capital if and when needed within a reasonable time frame, or, in the case of a branch, requesting transfer of adequate funds from the parent company;
- Strengthening risk management practices;
- Mitigating the risk causing the capital shortfall; and
- An increased level of monitoring and reporting with respect to the insurer's capital position.

.30 Whether a management action is considered a ripple effect, a corrective management action, or a combination of both, would depend on the scenario analyzed and circumstances of the insurer.

Scope of the investigation and report

.31 The report would contain the key assumptions of the base scenario and the adverse scenarios posing risks to the satisfactory financial condition of the insurer.

.32 The report would disclose each of the risks considered in undertaking the financial condition testing analysis. It is expected that the actuary would scenario test and report at least once during each financial year on the base scenario, and adverse scenarios posing significant risk for the insurer.

.33 The report would also contain the adverse scenarios examined that cause the insurer to fall below its internal target capital ratio(s) as determined by the ORSA. The report would make it clear whether under these scenarios the regulators may impose restrictions on the operations of the insurer, including its ability to write new business.

.34 If the investigation identifies any plausible threat to satisfactory financial condition, then the actuary would identify possible corrective management action that would lessen the likelihood of that threat, or that would mitigate that threat, if it materialized. For each such adverse scenario reported upon, the actuary would report the results both with and without the effect of corrective management action. The actuary would ensure that the disclosure of the corrective management action is sufficiently clear so that users may consider its practicality and adequacy.

.35 The report would present the financial position of the insurer at each fiscal year-end throughout the forecast period.

Revaluation of the policy liabilities

.36 Ideally, for the base and each adverse scenario, the insurance contract liabilities and, if applicable, other policy liabilities or reinsurance assets, would be revalued throughout the forecast period.

Frequency and/or timing

.37 The frequency and/or timing of the report would depend on the urgency of the matters being reported and on the desirability of aligning financial condition testing into the insurer's financial planning cycle and the ORSA process.

.38 The frequency and/or timing of the actuary's investigation would be adjusted where an adverse change in the insurer's circumstances since the last investigation may be so significant that to delay reporting to the time of the next scheduled investigation would be imprudent. For example, failure to meet the internal target capital ratio(s), or adoption of a radically different business plan, may necessitate the preparation of an immediate report.

2530 Reporting

.01 In the case of a Canadian insurer, the appointed actuary should report to the board of directors or to an appropriate committee of the board (audit committee, risk committee, etc.) if they so delegate. In the case of a Canadian branch of a foreign insurer, the appointed actuary should report to the chief agent for Canada and may also report to the responsible senior executive in the parent head office. [Effective February 22, 2018]

.02 In order to give the insurer's senior management an opportunity to react to the results of the investigation, the actuary would discuss the report with the insurer's senior management in advance of its submission to the board of directors or chief agent for Canada.

.03 The report would be in writing, but an additional oral report that permits questions and discussions is desirable. An interpretative report would be more useful than a statistical report. The actuary would also consider other reporting such as the ORSA report to ensure, where appropriate, the consistency of messages and/or delivery of consolidated ORSA and financial condition testing results.

.04 The report would be submitted within 12 months following each fiscal year-end.

2540 Opinion by the actuary

.01 The report should contain an opinion signed by the appointed actuary. [Effective April 15, 2017]

.02 In this opinion, "future financial condition" has the same meaning as "financial condition." The actuary may use the words "future financial condition" in order to comply with legislation or regulation in some jurisdictions.

.03 The wording of the opinion follows: [insert appropriate wording where indicated by square brackets]

> "I have completed my investigation of the [future] financial condition of [insurer name] as at [date] in accordance with accepted actuarial practice in Canada.
>
> I have analyzed its forecasted financial positions over an appropriate forecast period under a series of scenarios. As part of my investigation, I have used [the ORSA and its determination of] or [insurer name] internal target capital ratio(s).
>
> [My report includes the identification of corrective management actions that could be taken to mitigate the effect of adverse scenarios threatening [[insurer name] [solvency]] or/and [its ability to operate on a going concern basis]].
>
> In my opinion, the [future] financial condition of the insurer [is satisfactory] or [is satisfactory subject to…] or [is not satisfactory for the following reason(s)...]."
>
> [Montréal, Québec] [Mary F. Roe]
> [Report date] Fellow, Canadian Institute of Actuaries

.04 A satisfactory opinion would disclose the action(s) it is subject to for any of the following situations:

- The base scenario projected regulatory capital ratios are maintained or brought back above internal target capital ratios as a result of an existing plan consistent with regulatory expectations.
- For the base scenario:
  - Regulatory capital ratios are projected to decrease below internal target capital ratio(s) at a period beyond the regulator's monitoring horizon;
  - The insurer has a plan to bring the ratios back above internal targets within a time frame consistent with regulatory expectations; and
  - The appointed actuary is satisfied that such plan is realistic.
- For going concern scenarios, the appointed actuary is satisfied that corrective management actions can restore the insurer's regulatory capital ratio(s) to above regulatory minimum capital ratio(s) in a manner consistent with regulator's expectations.
- For solvency scenarios, the appointed actuary is satisfied that corrective management actions under the control of the insurer can restore the insurer's assets to be sufficient to meet its obligations.

.05 Situations where a satisfactory financial condition is met because of management's routine actions, would not require the opinion to state those actions.