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Revised Draft Educational Note

Comparison of IFRS 17 to Current CIA Standards of Practice

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Committee on International Insurance Accounting

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The actuary should be familiar with relevant educational notes. They do not constitute standards of practice and are, therefore, not binding. They are, however, intended to illustrate the application of the Standards of Practice, so there should be no conflict between them. The actuary should note however that a practice that the educational notes describe for a situation is not necessarily the only accepted practice for that situation and is not necessarily accepted actuarial practice for a different situation. Responsibility for the manner of application of standards of practice in specific circumstances remains that of the members. As standards of practice evolve, an educational note may not reference the most current version of the Standards of Practice; and as such, the actuary should cross-reference with current Standards. To assist the actuary, the CIA website contains an up-to-date reference document of impending changes to update educational notes.

MEMORANDUM

To: Members in the life and health insurance and P&C insurance areas

From: Steven Easson, Chair
Actuarial Guidance Council

Les Rehbeli, Chair
Committee on International Insurance Accounting

Date: November 17, 2020

Subject: **Revised Draft Educational Note: Comparison of IFRS 17 to Current CIA Standards of Practice**

The Committee on International Insurance Accounting (IIAC) has prepared this draft educational note to identify the key differences in the measurement of insurance contract liabilities between IFRS 17 and current CIA Standards of Practice and supporting guidance.

This draft educational note includes nine sections:

1. Introduction
2. IFRS 17 overview and comparison to current practice
3. Classification of contracts
4. Separation of contract components
5. Selection of measurement approach
6. Measurement considerations
7. Probability-weighted cash flows
8. Discounting
9. Risk adjustment for non-financial risk

A prior version of this draft educational note was published in September 2018. The proposed changes from the September 2018 version were shared with the Actuarial Guidance Council (AGC) and the following committees in the third quarter of 2020:

- Committee on the Appointed/Valuation Actuary
- Committee on Life Insurance Financial Reporting
- Property & Casualty Insurance Financial Reporting Committee
- Committee on Workers' Compensation

The IIAC believes it has addressed the comments received.

The information presented in this draft educational note is intended to alert Canadian valuation practitioners to key items that will affect their work. Additional information that provides more detail appears in International Actuarial Association (IAA) guidance and other CIA documents. This draft educational note is not intended to be a complete guide, but rather a roadmap for change that identifies the key similarities and differences between IFRS 17 and current valuation approaches in Canada.

The draft educational note *Compliance with IFRS 17 Applicable Guidance* provides guidance to actuaries when assessing compliance with IFRS 17. It is applicable to all educational notes pertaining to IFRS 17 and members are encouraged to review it prior to reading any educational note related to IFRS 17.

The creation of this cover letter and draft educational note has followed the AGC protocol for the adoption of educational notes. In accordance with the CIA's *Policy on Due Process for the Approval of Guidance Material other than Standards of Practice and Research Documents*, this draft educational note has been prepared by the IIAC and received final approval for distribution from the AGC on November 10, 2020.

Questions or comments regarding this draft educational note may be directed to Les Rehbeli at les.rehbeli@oliverwyman.com or to Lesley Thomson at lesley.thomson@sunlife.com.

Table of Contents

1. Introduction

International Financial Reporting Standard (IFRS) 17 *Insurance Contracts* is a new standard that will become effective in Canada on January 1, 2023. IFRS 17 establishes principles for the recognition, measurement, presentation, and disclosure of insurance contracts within the scope of the standard.

In this document, references to paragraphs are denoted by IFRS 17.XX, where XX is the paragraph number.

IFRS 17 specifies the basis for measurement (valuation) of insurance contract[1] liabilities. While there are many similarities to the current CIA standards of practice for valuation of insurance contract liabilities, there are also many differences.

This educational note provides actuaries with an overview of the similarities and significant differences of IFRS 17 measurement of liabilities compared to current practice in Canada. This educational note is not a comprehensive guide to IFRS 17. Actuarial guidance is provided or will be provided by the following sources:

- International Actuarial Association (IAA);
- CIA Committee on Life Insurance Financial Reporting (CLIFR);
- CIA Committee on Property and Casualty Insurance Financial Reporting (PCFRC); and
- CIA Committee on Workers' Compensation.

This educational note focuses on life and health (life) and property and casualty (P&C) insurance contracts. Workers compensation contracts are not discussed in this educational note; see instead the draft educational note *Application of IFRS 17 Insurance Contracts for Public Personal Injury Compensation Plans*.

2. IFRS 17 overview and comparison to current practice

IFRS 17 applies to any contract that is classified as an insurance contract, regardless of whether the issuing entity is an insurer. IFRS 17.B2–B30 provides guidance on the definition of an insurance contract. Most Canadian policies that are currently classified as insurance contracts will continue to be classified as insurance contracts under IFRS 17, although there are a few exceptions. See Section 3 for additional information.

Many Canadian life insurance contracts contain features that are akin to investment contracts or service contracts. IFRS 17 requires the entity to review insurance contracts and identify any embedded derivatives, investment components, and service components and assess whether those components are *distinct* (see IFRS 17.B31–B35). See Section 4 for additional information.

The measurement of insurance contract liabilities under IFRS 17 includes three "building blocks":

[1] The term "insurance contracts" as used in this educational note includes all contracts within the scope of IFRS 17 (i.e., including investment contracts with discretionary participation features and reinsurance contracts held).

1. **Present value of future cash flows:** Conceptually, this is similar to the current CIA liability without provisions for adverse deviations (PfADs), although there are several important differences as discussed in Sections 6–8.

2. **Risk adjustment for non-financial risk**: Conceptually, this is similar to current CIA PfADs for non-economic risk, with differences as discussed in Section 9.

   The sum of the present value of future cash flows and the risk adjustment for non-financial risk is the **fulfilment cash flows** (FCF).

3. **Contractual service margin (CSM):** The CSM represents the unearned profit from a group of insurance contracts. At contract inception, if the FCF including all cash flows of the contract (i.e., including acquisition expenses and all premiums) is less than zero, the CSM is established to offset that negative amount so there is no front-ending of profit. The CSM is then released into income as insurance contract services are provided. The CSM is a new concept versus current CIA standards, which allow front-ending of profit at issue.

The general measurement approach (GMA) described in IFRS 17 is the default approach to valuation. *Insurance contracts with direct participation features* (as defined in IFRS 17 Appendix A and IFRS 17.B101) are subject to some different requirements (called the variable fee approach (VFA)) as discussed in Section 5.

Furthermore, there is an option to use the simplified *premium allocation approach* (PAA) for contracts meeting the eligibility requirements in IFRS 17.53. The PAA is available for short term contracts (coverage period of one year or less), and may also be available for longer duration contracts if the PAA provides a reasonable approximation to measurement under the GMA over the life of the contract. See Section 5 for additional information.

3. Classification of contracts

3.1 General

According to IFRS 17 (Appendix A), an insurance contract is, "a contract under which one party (the issuer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder." The definition of "insurance risk," the meaning of "*significant*" in this context, and other guidance clarifying the classification of contracts is in IFRS 17.B2–B30.

IFRS 4 was effective in Canada on January 1, 2011. Since then, classification of contracts in Canada has been guided by the educational note *Classification of Contracts under International Financial Reporting Standards*, June 2009 (209066).

Contract classification under IFRS 17 is largely the same as IFRS 4. There are two differences as follows:

- Under IFRS 17.B19, the transfer of all insurance risk to a reinsurer is deemed to be significant insurance risk from the perspective of the reinsurer regardless of whether the reinsurer is exposed to loss.

- IFRS 17.BC67 indicates that the time value of money should be considered when assessing whether insurance risk is significant.

In addition, IFRS 17.8–8A identifies contracts that meet the definition of insurance contract but for which the entity has a choice to apply IFRS 17 or another Standard:

- Fixed fee contracts (IFRS 17 or IFRS 15).
- Contracts where compensation is limited to the policy-holder's obligation under the contract (IFRS 17 or IFRS 9).

3.2 Life and health insurance

For most life and health insurance products in Canada, classification is not expected to change under IFRS 17. For convenience, Appendix A of this document provides a summary of the classification of common Canadian life and health insurance products.

Some products might qualify for the choice provided by IFRS 17.8–8A as discussed above. For example, a contract that would be an investment contract except for the existence of a waiver of required deposit on disability might qualify for the paragraph 8A choice to apply IFRS 17 or IFRS 9.

3.3 P&C insurance

P&C contracts provide coverage for all risks other than life, including automobile, property and liability insurance. Such contracts that satisfy the definition of an insurance contract under IFRS 4 would generally continue to fall within the scope of IFRS 17.

3.4 Reinsurance

Reinsurance contracts issued (assumed) are treated in the same manner as direct written contracts under IFRS 17. Classification under IFRS 17 would be the same as under IFRS 4 except as noted above under IFRS 17.B17, which could affect the classification of a reinsurance contract issued.

Reinsurance contracts held (ceded) are treated as separate contracts under IFRS 17 and therefore will require their own classification rather than just being cash flows of the direct underlying contract as under IFRS 4.

Under IFRS 17, lapse risk and expense risk in a direct written contract are not considered insurance risks, because the risk is created by the contract itself (i.e., lapse/expense cannot be an insured event). However, the transfer of lapse or expense risk from one entity to another would meet the definition of insurance risk from the perspective of the entity assuming the risk. Therefore, it is possible for a reinsurance contract issued (assumed) to be within the scope of IFRS 17 while the corresponding contract that transfers risk to the reinsurer is not. Such a contract would also have to transfer insurance risk to be a reinsurance contract held in scope of IFRS 17.

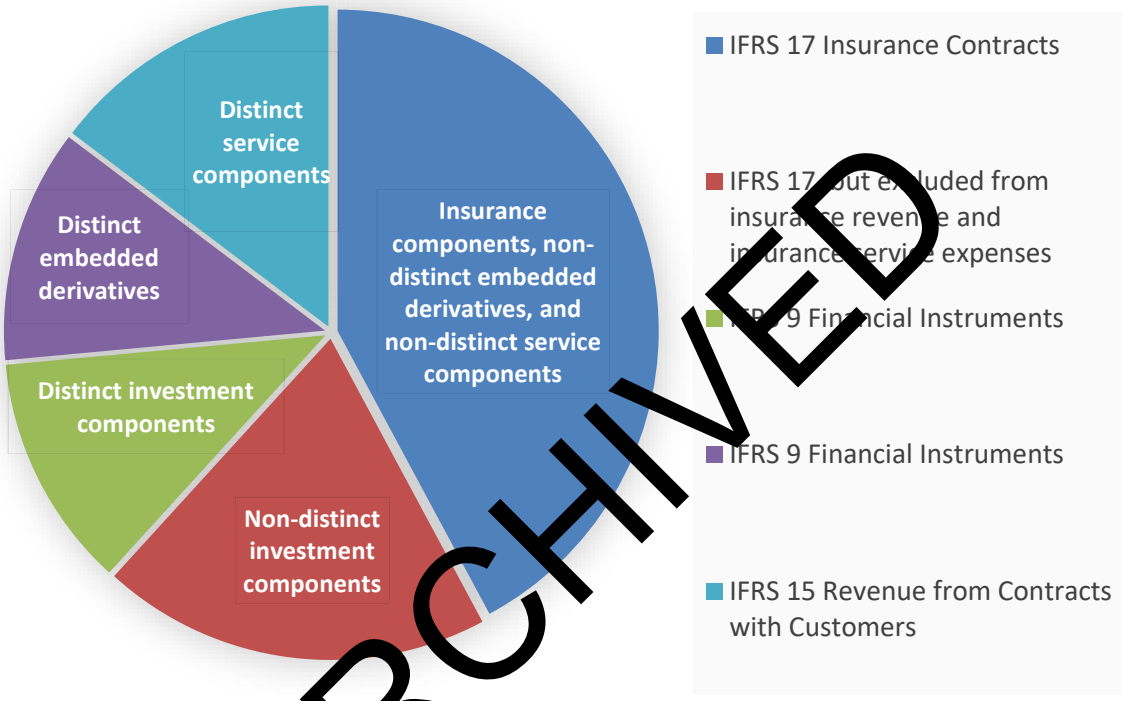
Also, because reinsurance contracts held are treated as separate contracts under IFRS 17, there will not necessarily be a one-to-one correspondence between a reinsurance contract held and its underlying direct contract(s). For example, the reinsurance contract under IFRS 17 might be

the entire reinsurance treaty covering cessions over a number of years, or over a certain time period (i.e., quarter). See Section 6.2 for additional information.

4. Separation of contract components

4.1 General

IFRS 17 requires identification of certain components within insurance contracts and, if distinct, separate measurement and reporting of those components. The following chart summarizes:



The comparison of these IFRS 17 requirements to current (IFRS 4) accounting requirements is as follows:

- **Embedded derivatives:** under IFRS 4, the entity has options for separate reporting that are not available under IFRS 17.
- **Distinct investment components:** under IFRS 4, separate reporting of deposit components[2] is permitted but not required under certain conditions, and there is no requirement to identify deposit components if separate reporting is not elected.
- **Non-distinct investment components:** under IFRS 4, there is no requirement to identify deposit components that are not eligible for separate reporting.
- **Service components:** under IFRS 4, separate reporting is not permitted, and there is no requirement to identify service components (whether distinct or not).

[2] "Deposit component" is the terminology in IFRS 4. Though similar in concept, the definition of deposit component in IFRS 4 is different from the definition of "investment component" in IFRS 17.

4.2 Embedded derivatives

Guidance for the identification of embedded derivatives and the criteria for whether they are distinct is in IFRS 9 *Financial Instruments*[3]. This guidance is the same as the corresponding current guidance in International Accounting Standard (IAS) 39. If an embedded derivative is found to be non-distinct, the entire contract is measured under IFRS 17 and there are no special presentation or disclosure requirements for the embedded derivative component. Distinct embedded derivatives would be measured under IFRS 9 *Financial Instruments* and reported with investment contracts in the financial statements.

Under IFRS 4, the entity had the option to separate some non-distinct embedded derivatives, while under IFRS 17, separation is required for distinct embedded derivatives and prohibited for non-distinct embedded derivatives.

Also, IFRS 4 included an exception for a policyholder option to surrender an insurance contract that was not carried forward to IFRS 17. However, it is expected that this change will have no impact in practice because surrender options would not be distinct from the host contract.

4.3 Investment Components

The term "investment component" is defined in IFRS 17 Appendix A as "The amounts that an insurance contract requires the entity to repay to a policyholder in all circumstances, regardless of whether an insured event occurs." Examples of non-distinct investment components include the cash surrender value of a traditional whole life insurance contract, term certain payments in a life contingent annuity contract, and the account value (net[4] of any surrender charges) of a universal life insurance contract.

The insurance contract including non-distinct investment components would be measured under IFRS 17. However, insurance revenue and insurance service expenses reported in the Statement of Financial Performance (the income statement) exclude the portion related to the non-distinct investment components. For revenue, this will require splitting expected claims between amounts payable only on death and amounts payable in all circumstances. Similarly, for insurance service expense, this will require splitting payments on the insured event (i.e., death) between the claim (the amount payable only on death) and the investment component (the amount payable in all circumstances).

Refunds of unused premium that are not investment components are also excluded from insurance revenue and insurance service expense, but the payment on death would not be reduced in reporting the amount of claim.

Guidance for determining whether investment components are distinct or not appears in IFRS 17.B31–B32. Examples of investment components that might be distinct include dividends on deposit and funds held under underwriting agreements. Unless they are investment contracts with discretionary participation features, distinct investment components would be measured under IFRS 9 *Financial Instruments* and reported with investment contracts in the financial statements.

[3] In Canada, IFRS 9 will be implemented prior to, or at the same time as IFRS 17.

[4] Under discussion – will reflect IAA guidance when finalized.

Appendix B of this document includes possible examples of investment components and considerations for determining whether they are distinct.

4.4 Service components

Guidance for identifying whether components for services other than insurance contract services are distinct is in IFRS 17.B33–B34. Distinct service components would be measured under IFRS 15 *Revenue from Contracts with Customers* and reported with other service contracts on the financial statements.

An example of a possible distinct service component is claims adjudication services provided along with reinsurance protection. Note that the assessment of whether this service component is distinct would be performed both by the reinsurer (for the reinsurance contract issued) and the cedant (for the reinsurance contract held). There is no requirement for the assessment to be the same, even if the reinsurer and the cedant belong to the same group of entities.

There is no need to identify non-distinct service components.

Appendix C of this document includes possible examples of service components.

5. Selection of measurement approach

5.1 Overview

Under IFRS 17, contracts are measured using the GMA with the following exceptions:

- Contracts satisfying the criteria in IFRS 17.53 may be measured using the PAA. The PAA simplifies the measurement of the *liability for remaining coverage* (LRC), but has little impact on the *liability for incurred claims* (LIC). See Section 5.2 for additional information.
- Insurance contracts with direct participation features (IFRS 17 Appendix A and IFRS 17.B101) are measured using the VFA. See Section 5.3 for additional information.
- Reinsurance contracts held are measured using either the GMA or the PAA. However, there are some differences in measurement that apply to reinsurance contracts held as outlined in IFRS 17.63–70A. Reinsurance contracts held are never measured using the VFA.

Note that reinsurance contracts held (i.e., ceded) are measured as separate contracts under IFRS 17, and it is possible for a reinsurance contract held to be measured using a different measurement approach than the underlying direct contracts being ceded.

5.2 Premium allocation approach

The PAA is a simplification of the GMA that may be used for any contracts with a coverage period of one year or less, and any other contracts where measurement under the PAA would not differ materially from the GMA over the life of the contract. Eligibility for the PAA is assessed at inception of the group of contracts. Considerations in assessing whether the PAA would provide a reasonable approximation to the GMA can be found in IFRS 17.54, Chapter 9 (Premium Allocation Approach) of the draft educational notes *Application of IFRS 17 Insurance*

Contracts, and *Assessing Eligibility for the Premium Allocation Approach under IFRS 17 for Property & Casualty and Life & Health Insurance Contracts*.

If the PAA is selected, the LRC at issue is equal to premiums received (i.e., unearned premiums (UEP) less premiums receivable), less (if applicable) deferred acquisition costs (DAC). Under IFRS 17.59(a), the entity has the accounting policy choice to expense or defer acquisition costs for groups where the coverage period of contracts is one year or less. The LRC for subsequent periods follows the pattern of UEP less premiums receivable less DAC.

The LIC would be established for any incurred claims, including claims incurred but not yet reported or settled as of the valuation date. The LIC under the PAA is the same as under the GMA except that IFRS.59(b) allows the entity to ignore the time value of money and the effect of financial risk if the LIC cash flows are expected to be paid or received in one year or less from the date the claims are incurred.

Under current practice, the LRC is analogous to the present value of future cash flows with PfADs for non-economic risk for life insurance, and to premium liabilities for P&C insurance. For life insurance, UEP less DAC can be used whenever it provides a reasonable approximation to the explicit valuation approach. For P&C insurance, the booked liability is the higher of UEP less DAC and the explicit valuation. The following differences between IFRS 17 and current practice are worth noting:

- **Criteria:** IFRS 17 allows the PAA to be used for all contracts with a coverage period of one year or less, with no requirement to assess whether the PAA is a reasonable approximation to the GMA. For life, current CIA standards would allow UEP minus DAC to be used only when it is a reasonable approximation to the explicit valuation approach, regardless of the coverage period.
- **Deferral of acquisition costs:** IFRS 17 allows the entity to choose whether to defer acquisition costs or expense them directly if the coverage period is one year or less. Current CIA standards require deferral of acquisition costs for life insurance (through extending the term of the liability), while for P&C contracts, there is no deferral of acquisition costs in the explicit valuation, but deferral if UEP less DAC is held.
- **Amount of deferrable acquisition costs:** The amount of acquisition expenses considered deferrable could be different. IFRS 17 defers acquisition expenses considered directly attributable to the portfolio of insurance contracts, with those expenses allocated to groups on a systematic and rational basis. Further, any acquisition expense directly attributable to groups (i.e., non-refundable commissions) must be allocated to that group and to groups expected to arise from renewals of contracts in that group.
- **Recoverability of DAC:** IFRS 17 requires two levels of recoverability testing of DAC as described in IFRS 17.28E and IFRS 17.B35D.
- **Reflecting time value of money and the effect of financial risk in the LRC:** If the contract has a significant financing component, IFRS 17 requires the time value of money and the effect of financial risk to be reflected using the discount rates established at initial recognition unless the entity expects (at initial recognition) that the

time between providing each part of the services and the related premium due date is no more than a year, in which case the time value of money and the effect of financial risk may be ignored. Current CIA standards require the time value of money and the effect of financial risk (at current rates) be taken into account in any case, either directly or, for life insurance, as part of the assessment of whether UEP minus DAC is a reasonable approximation to an explicit approach.

- **Discounting of the LIC:** In applying the PAA, the time value of money and the effect of financial risk can be ignored in measuring the LIC if the LIC cash flows are expected to be paid or received in one year or less from the date the claims are incurred.

5.3 Variable fee approach

The term "variable fee approach" (VFA) refers to the special requirements related to the measurement of insurance contracts with direct participation features as defined in IFRS 17 Appendix A and IFRS 17.B101. Measurement of the liability for insurance contracts with direct participation features is based on the same building blocks as the GMA, but with special treatment of the CSM (and other comprehensive income (OCI) if this presentation option is elected). Note that the term "participation features" in IFRS 17 is a different concept from "participating policy" as defined in the Canadian Insurance Companies Act.

5.4 Measurement Approach for Typical Canadian Products

Most Canadian individual life insurance products would be valued using the GMA.

The VFA would apply to most segregated fund and participating life insurance contracts. Also, some universal life insurance products could meet the definition of insurance contracts with direct participation features.

The PAA would be an option (for the LRC) for most P&C contracts. Many P&C contracts would have a coverage period of one year or less and therefore be eligible automatically. P&C contracts with longer coverage periods might also be eligible for the PAA, but the entity would need to assess whether the PAA is a reasonable approximation to the GMA.

The PAA would also be an option for many group life and health contracts, as these typically have short coverage periods of one year. If the coverage period is longer than one year, the entity would need to assess whether the PAA is a reasonable approximation to the GMA.

Reinsurance contracts held are treated as separate contracts under IFRS 17 and thus separate assessment of eligibility for PAA. Reinsurance contracts held are never measured under the VFA.

Appendix D of this document contains a list of typical Canadian products and the measurement approach that might be used.

6. Measurement considerations

6.1 Level of aggregation

IFRS 17 requires entities to identify portfolios of contracts, which comprise contracts subject to similar risks and managed together. Contracts in different product lines would generally not be

in the same portfolio as they would not be expected to have similar risks (IFRS 17.14). Portfolio is the level of aggregation at which some accounting policy choices (i.e., whether to apply the OCI option) and some presentation requirements (i.e., IFRS 17.78) apply. Note that reinsurance contracts held would be in different portfolios than the underlying direct contracts because the risks are not similar.

IFRS 17 also requires portfolios of contracts to be divided into groups of contracts according to IFRS 17.16–23. Group is the unit of account for the measurement of the CSM. Under IFRS 17, contracts cannot be split into components (i.e., for different coverages) and assigned to different groups. However, a (legal) contract would be split into different contracts if needed to reflect the substance of the contractual rights and obligations (IFRS 17.2).

In Canada, because there is currently no CSM, there is no analogous requirement to identify groups of contracts. As a result, it is common to measure coverages separately, and sometimes report them on separate lines of the financial statements. Under IFRS 17, cash flows for different components/coverages can still be projected and measured separately, but each component/coverage would be assigned to the appropriate group(s) for the purpose of measuring the CSM of each group. This could create significant administrative hurdles, especially combined with the requirement to measure liabilities using premiums received rather than premiums due.

IFRS 17 does not specify the level of aggregation to determine the risk adjustment for non-financial risk, though it would be consistent with the compensation the entity requires for bearing uncertainty (IFRS 17.37). That is, it would be set at the level that best represents the entity's view (i.e., taking diversification benefits into account or not) of the compensation required to bear uncertainty. If determined at a higher level of aggregation than group, the risk adjustment for non-financial risk would be allocated to the different groups in a reasonable manner. Under current CIA standards, PfADs should be appropriate in aggregate, but this takes into account both financial and non-financial risk and there are varying practices in how diversification benefits are recognized. Therefore, there could potentially be a change to the level of aggregation at which the risk adjustment for non-financial risk (analogous to PfADs for non-economic risk) is set.

Other than expenses, there is no specific requirement regarding the level at which assumptions are set under IFRS 17. Assumptions can be set at the level that is most appropriate to estimate future cash flows, with future cash flows allocated to groups in a reasonable way. This is the same as current CIA standards, so it is unlikely that changes will be required, though the requirement to allocate to groups is new.

The level of aggregation for identifying the expenses included in the measurement of liabilities under IFRS 17 is portfolio. The expenses included are then allocated to groups within the portfolio on a systematic and rational basis. Under current CIA standards, there is no specific level of aggregation set for expenses, though in practice, portfolio (or something similar) is likely the level at which expenses are set, so little change is expected other than the new requirement to allocate expenses to groups.

However, the requirement to include acquisition expenses in presentation and measurement of liabilities is new, so the identification of directly attributable acquisition expenses for portfolios is new, as is the allocation of those expenses to groups. See Section 7.3 for additional information.

The level of aggregation for IFRS 17 reporting (disclosure) purposes might also necessitate some administrative changes. For example, incurred claim liabilities that are currently reported in aggregate (i.e., for reinsurance contracts held) might need to be separated among groups (if the CSM is affected) or portfolios (to meet the requirements of IFRS 17.78).

6.2 Contract boundary/coverage period

IFRS 17.33 requires the entity to identify the contract boundary (IFRS 17.34), which determines the coverage period (defined in IFRS 17 Appendix A) and hence the future cash flows to be included in the estimates of future cash flows.

For most contracts, the coverage period under IFRS 17 will be evident, and equal to the term of the liability (life insurance) or the term of the contract (P&C insurance). Fully guaranteed whole life insurance, for example, would have a contract boundary and coverage period that extends to the end of the life of the policy-holder. Typical group life and health and P&C contracts that are annually renewable would have a coverage period that ends at the next renewal date.

Possible differences from current practice include the following:

- **Bias towards conservatism:** For life insurance contracts, the concept of contract boundary/coverage period is similar to the term of the liability. Where the term of the liability is uncertain, or where extending the term of the liability would increase the liabilities, current CIA standards require the actuary to be conservative. For example, paragraph 2320.03 requires the actuary to include future renewals only if the resulting liability is larger; and paragraph 2320.19 urges the actuary to err on the side of caution where the term is not obvious. However, there is no such concept in IFRS 17, which could lead to a difference between the term of the liability and the coverage period. For example, if a renewal (at which the term of the liability/coverage period might end) is expected to be loss-making (even though the entity has the right to increase premiums to avoid loss), the loss would be included in the IFRS 4 liabilities, but not in the IFRS 17 liabilities.
- **Consideration of rights and obligations of both parties:** Under IFRS 17, the rights and obligations of both parties to the contract are considered when determining the contract boundary, while under current CIA standards, only the rights and obligations of the entity are considered. For example, if the entity has the right to compel the policyholder to pay premiums, the IFRS 17 contract boundary would not end, while the IFRS 4 term of the liability would end unless extending the term would increase the liabilities.
- **Coverages within contracts:** The treatment of coverages within a contract may be different. For life insurance contracts, current CIA standards (paragraph 2320.19) require the actuary to consider the substance of the contract over the legal form in

assessing the term of the liability. For example, a certificate under a group insurance contract that in substance is a collection of individual contracts (such as a creditor or association contract) would be considered as though it were an individual contract, each with its own term of liability. In contrast, under IFRS 17, one contract can have only one boundary, which in this case would be determined based on the terms and conditions of the group contract. However, IFRS 17 does require separation of contracts if required to reflect the substance of the obligations (IFRS 17.2) and cash flows are only within the contract boundary for coverages that create substantive rights or obligations at the reporting date (IFRS 17.34). Therefore, in practice there might be few, if any, changes required because of this difference.

- **Constraints on repricing:** The identification of contract boundary becomes more difficult when the entity is partially constrained in its ability to terminate or adjust the contract. IFRS 17.34, B62–B64 provide considerations for making this assessment. Generally, the considerations are similar to current practice, focusing on the extent of constraint placed on the entity, and the practical ability of the entity to make changes. However, one important difference is that the intent of the entity (to reprice or not) is not considered in setting the contract boundary under IFRS 17; rather, only the rights and obligations of the parties to the contract are considered. Also, under IFRS 17, in assessing the practical ability of the entity to make changes, commercial considerations would be ignored if the same considerations apply to new contracts.
- **Extension of term of liability for deferred acquisition costs:** Current CIA standards (life) allow extension of the term of the liability to account for deferred acquisition costs. This is common in the valuation of segregated fund products and some short duration group life and health contracts. Under IFRS 17, there is no corresponding concept because acquisition costs are considered directly in the measurement of liabilities.
- **LRC versus LIC:** For insurance contracts where the settlement of a claim has insurance risk (e.g., long-term disability), IFRS 17 allows the liability for settlement of a claim to be established as an LRC (with the contract boundary/coverage period extending to end of the claim settlement period) rather than an LIC. Furthermore, this treatment is required in two situations:
    - **Title insurance:** Title insurance is insurance against defects in the title to land or buildings. Under current Canadian practice, the insured event (the defect) is considered to have occurred before the contract was written, so the liabilities consist solely of claim liabilities (LIC under IFRS 17). Under IFRS 17, title insurance is described as "insurance against the discovery of defects in the title". As such, the insured event is discovery of the defect, so the contract boundary/coverage period extends for as long as the policy-holder owns the property or holds the mortgage on the property (depending on the type of title insurance policy).
    - **Acquisition:** On acquisition of obligations in the claim settlement period, the liability established by the acquirer would be LRC rather than LIC, regardless of how the entity from which the obligations was acquired accounted for the obligations (they had the choice of LIC and LRC).

- **Segregated funds with material guarantees:** Where segregated fund contracts contain material constraints, current CIA standards (paragraph 2360.07) require the term of the liability be set to maximize the liability. The purpose of this adjustment is to ensure consistency with the treatment of similar segregated fund contracts without material constraints. This concept does not apply in IFRS 17. The contract boundary would be the full duration of the segregated fund contract when the entity has no right to adjust the contract. Whether cash flows associated with future deposits would be included depends on whether substantive rights or obligations associated with those future deposits exist at the reporting date. Generally speaking, if future deposits are treated the same as deposits on new contracts, they would be excluded.
- **Segregated funds supported by hedging strategy:** Where hedging is used to manage segregated fund risk, current CIA standards permit the term of the liability to be extended under certain conditions. The existence of hedging is irrelevant to the determination of the contract boundary; however, under the VFA, IFRS 17 accomplishes a similar objective (to reduce accounting mismatches) through IFRS 17.B115–B116.

Examples of products for which the contract boundary/coverage period determined under IFRS 17 is potentially different from the term of the liability under current practice include the following:

- **Fully guaranteed individual life insurance contracts:** The contract boundary/coverage period would generally be the same as the term of the liability and would be the lifetime of the individual contract. For insurance contracts with the option to convert to a different coverage at a guaranteed price, the term of the liability under CIA standards would only include the cash flows after conversion if doing so would increase the liabilities. Under IFRS 17, the contract boundary of such contracts would include the boundary of the coverage to which the contract converts.
- **Adjustable individual life insurance contracts:** The term of the liability would normally be the earliest date at which the entity can adjust the contract, unless extending the term increases the liability. Under IFRS 17, the contract boundary/coverage period would be the earliest date at which the entity can adjust either the individual contract or the portfolio of contracts to which the individual contract belongs, with the added constraint given by IFRS 17.34(b)(ii) that "the pricing of the premiums for coverage up to the date when the risks are reassessed does not take account the risks that relate to periods after the reassessment date". If the product was priced by taking into account all of the future cash flows (i.e., level premiums), then the contract boundary would extend to the end of the life of the policy-holder.
- **Group employer/employee contracts:** Typical contracts are annually renewable, although some contracts offer premium rate guarantees that extend beyond one year. The term of the liability under current practice would typically be the next renewal date, extended to account for premium rate guarantees if that increases the liability, and also sometimes extended to allow for deferred acquisition costs. Under IFRS 17, unless the

contract is cancellable (see below), the contract boundary would be the date at which the premium rate guarantees expire.

- **Cancellable contracts:** If a contract is cancellable without penalty by both parties, the term of the liability under current practice would extend beyond the cancellation date if that increases the liability unless it is expected that the contract (or coverage) will be cancelled. Under IFRS 17, if the entity has the practical ability to cancel the contract (after considering all substantive rights and obligations of the contract), the contract boundary would be the cancellation date. An example where this is relevant is reinsurance treaties where both parties have the right (without penalty) to close the treaty to new cessions with a notice period of (say) 90 days. In this case, the contract boundary (for new cessions) is limited to 90 days, and the reinsurance treaty will be separated into contracts that each include 90 days' of cessions.
- **Group creditor/association contracts:** Current practice varies on these products. Some entities view the individual certificates under the group contracts as individual contracts, each with its own term of the liability. Others view the contracts as group contracts, and look solely to the terms of the group contract to determine the term of the liability. Under IFRS 17, the contract must first be defined – the default is the legal form of the contract, but separation (i.e., into individual certificates) is required if needed to reflect the substance of the contract. Once the contract is defined, the boundary of each contract is determined.
- **Segregated fund contracts and annuity contracts:** As noted above, the contract boundary/coverage period will often be different than the current term of the liability, and would be determined based solely on the contract guarantees. For deferred annuity contracts that are classified as insurance contracts, the term of the liability under current practice would typically end at the date the credited interest rate is reset. Under IFRS 17, the contract boundary extends for the length of the insurance coverage.
- **Onerous contracts:** If a contract has terms and conditions that are guaranteed and these will result in an onerous contract, then under IFRS 17 the entity would need to recognize the liability as soon as it is bound by the terms of the contract, which could be prior to the effective date of the contract. This may be different from current practice.
- **Reinsurance contracts held:** IFRS 17 requires reinsurance contracts held to be measured as separate contracts, including separate determination of the contract boundary. In contrast, under current CIA standards, the term of the liability is determined for the underlying direct contract only, and reinsurance cash flows are projected consistent with the term of the underlying direct contract, based on the assumption that the direct writer and the reinsurer exercise their contractual rights (i.e., the right to reprice or recapture) to their advantage (paragraph 2120.32). Under IFRS 17, it is possible for the boundary of a reinsurance contract held to be different than the boundary of the underlying direct contract(s). However, the boundary of a reinsurance contract held (ceded) will always be the same as the boundary of the corresponding reinsurance

contract issued (assumed), because the rights and obligations of both parties are considered in determining the contract boundary.

7. Probability-weighted cash flows

7.1 Comparison to current practice

IFRS 17.33 describes requirements for estimates of future cash flows in the GMA and VFA. In particular, estimates of future cash flows represent the probability-weighted mean of the full range of possible outcomes, considering all reasonable and supportable information available at the reporting date without undue cost or effort.

The concept of probability-weighted cash flows is broadly aligned with current practice to determine best estimate cash flows. It is unlikely that major changes to current processes will be required. Further guidance can be found in the draft educational notes *IFRS 17 Estimates of Future Cash Flows for Life and Health Insurance Contracts* (life) and *IFRS 17 Discount Rates and Cash Flow Considerations for Property and Casualty Insurance Contracts* (P&C).

Below is a list of examples where differences from current practice might occur:

- **Assumptions that include implicit margins for adverse deviations (MfADs)**: IFRS 17 requires separate disclosure of the risk adjustment for non-financial risk. For life business, the distinction between "best estimate" and "with PfAD" is not always quantified, though much of this would have been identified with regulatory capital requirements (LICAT/MCT/CARLI).
- **Cash flows that vary with assumptions related to financial risk**: (For example, credited rates on universal life contracts tied to economic scenarios, or cash flows linked to an inflation index). Current practice is to separate "best estimate" assumptions (i.e., the CIA-prescribed base economic scenario as defined in subsection 2330) from MfADs. However, under IFRS 17, provisions for financial risk are included in the present value of future cash flows on a market consistent basis. Stochastic modelling of market consistent economic parameters might be needed in these situations to determine the probability-weighted cash flows under IFRS 17. See Section 7.2 for additional information.
- **Policy-holder options**: Estimates of future cash flows take into account policyholder behaviour including the expected effect of anti-selection. This is true under current CIA standards, though the distinction between "best estimate" and "PfAD" is sometimes blurred. Also, if policy-holder behaviour is expected to be linked to assumptions related to financial risk, the provision for financial risk would be included in the present value of future cash flows (rather than in PfADs).
- **Future income taxes**: IFRS 17 excludes income taxes (other than those specifically chargeable to the policy-holder under the terms of the contract) from estimates of future cash flows. This is different from current CIA standards, which require consideration of all future income taxes.

- **Ongoing expenses:** Current CIA standards require the liability to include provision for ongoing policy-related expenses. IFRS 17 has a similar requirement, but restricts the expenses included in the valuation to those that relate directly to the fulfilment of the contract (IFRS 17.B35). For life business, IFRS 17 expenses will likely be a subset of the expenses included under current practice, but for P&C insurance, more expenses might be included in IFRS 17 than under current practice. Under IFRS 17, expenses related to reinsurance (ceded) are attributable to portfolios of reinsurance contracts held.

  IFRS 17 requirements for reflecting changes in unit expenses (i.e., for changes in economies of scale) are similar to those in current CIA standards.

- **Investment expenses:** The treatment of investment-related expenses under IFRS 17 may differ from current practice. Investment-related expenses included in the projection of future cash flows are described in IFRS 17.B65(ka).

- **Reinsurance contracts held**: IFRS 17 requires reinsurance contracts held to be measured separately from the underlying direct contract(s), including separate consideration of the contract boundary. This can lead to different cash flows being included in the valuation.

- **Risk of non-performance by the issuer of the reinsurance contract**: Provision for the risk of non-performance by the reinsurer is included in both IFRS 17 and current CIA liabilities. In current practice, this provision may be implicit in the liability net of reinsurance, or might be reported as PfAD. Under IFRS 17, this provision is treated in the same manner as financial risk and is therefore included in the liability for reinsurance contracts held in the estimates of future cash flows and not the risk adjustment for non-financial risk. Further guidance can be found in the draft educational note *IFRS 17 Actuarial Considerations Related to P&C Reinsurance Contracts Issued and Held*.

7.2 Cash flows that vary with assumptions related to financial risk

The projection of cash flows that vary with assumptions related to financial risk might require modification from current practice, which is often based on deterministic "best estimate" scenarios prescribed in the current CIA standards or on real-world stochastic scenarios that meet certain calibration criteria. These scenarios are not necessarily consistent with observable market prices as required under IFRS 17.

Estimates of cash flows that vary with assumptions related to financial risk would be consistent with observable market prices at the measurement date, which will include provision for financial risk. Possible approaches include the use of replicating portfolios or stochastic modelling with risk-neutral parameters. Alternatively, provisions for financial risk can be made by adjusting the discount rate as discussed in Section 8.

Further guidance can be found in the draft educational note *IFRS 17 Market Consistent Valuation of Financial Guarantees for Life and Health Insurance Contracts*.

7.2.1 Universal life contracts

Universal life contracts often include features that are similar to financial options and that vary with market conditions. Some examples include the following:

- Credited interest rates on policyholder account values are generally linked to the returns, minus a spread, of investment choices available to the policyholder.
- Minimum interest rate guarantees, the value of which varies according to current and projected interest rates.
- Performance and persistency bonuses that vary according to the past financial performance of the contract and/or the persistency of the policyholder (i.e., bonus that becomes effective after a certain duration, under certain conditions).

Current common practice is to project the universal life cash flows under the prescribed interest rate scenarios of the CIA standards and to establish a liability based on the most adverse scenario. The liability ascribed to these financial options is therefore unlikely to be consistent with observable market prices. Stochastic modelling with risk-neutral scenarios or replicating portfolio techniques will likely be needed under IFRS 17.

Some best estimate policy-holder behaviour assumptions may vary according to market parameters (e.g., lapse or future premium persistency could depend on projected market conditions or amount of funds available). IFRS 17 does not introduce any new requirements to vary policy-holder behaviour assumptions with market conditions. However, if policy-holder behaviour assumptions are linked to market conditions, the resulting cash flows under IFRS 17 could be different from current practice, as they would include provision for financial risk consistent with observable market prices.

7.2.2 Segregated fund guarantees

Segregated fund guarantees are similar to options on defined underlying items, and therefore need to be valued consistent with observable market prices. Stochastic modelling techniques currently used in segregated fund valuations will continue under IFRS 17, although the scenarios used to determine the probability-weighted cash flows would need to be risk-neutral (or real-world with deflators) rather than real world. Unlike current Canadian practice, the IFRS 17 FCF would be the same regardless of whether or not the guarantees are hedged.

Comments similar to those for universal life (above) can apply to policy-holder behaviour assumptions that vary according to market conditions.

7.2.3 Index-linked payments

Some annuity or disability insurance payments are indexed based on a defined, published index such as the Consumer Price Index (CPI), often subject to some floors and caps. Under current Canadian practice, the indexation is linked to the deterministic scenario being valued. Under IFRS 17, inflation might be considered a market variable and, if so, would require projections to be consistent with observable market prices.

Consider the following example of three different annuities, each with different payment indexation:

1. Flat 2% per year indexation.
2. Indexation of annuity payments based on 100% of the CPI movement.
3. Same as item 2 but with a floor of 0% and a cap of 5%.

In the first example, cash flows would simply be projected based on contractual indexation. Market prices are not considered because indexation does not depend on any market variable.

In the second example, indexation does depend on a market variable, and thus consistency with observable market prices is required by IFRS 17. Since the relationship with the market variable remains the same regardless of the actual CPI-index level, implied forward CPI might be used to reflect market information, or central bank targets could be considered if there is no reliable market information.

The third example is more complicated because of the presence of floors and/or caps. Stochastic modelling may be needed to estimate the liability consistent with observable market prices.

7.2.4 Expense inflation

Under current practice, assumed expense inflation is often tied to interest rate scenarios, but need not be. Similarly, IFRS 17 recognizes that assumptions about inflation are sometimes assumptions related to financial risk (i.e., if based on an index of prices (i.e., CPI) or interest rates) and sometimes not assumptions related to financial risk (IFRS 17.B128).

In situations where assumptions about inflation are related to financial risk, consistency with observable market prices would be required by IFRS 17. Similar to index-linked payments where the relationship between the cash flow and the market variable remains unchanged regardless of the market variable's level, market prices might be reflected by using future implied inflation rates, or central bank targets if there is no reliable market information.

7.2.5 Participating insurance

Projected policyholder dividends under participating contracts are linked to the projected market environment and reflect the ability to pass experience to policy-holders. Conceptually, this is the same requirement as in current CIA standards. Many actuaries approximate this by assuming that current economic conditions persist, and the current dividend scale is maintained, with separate testing to ensure that the policy-holder dividend scales contain sufficient room to absorb adverse movements in market conditions.

IFRS 17 introduces one significant difference to current Canadian practice, which is that the cost of financial guarantees is included in the present value of future cash flows, and not in the risk adjustment for non-financial risk. Currently, provisions for economic risk would be included as a component of PfAD.

Further guidance can be found in the draft educational note *IFRS 17 Measurement and Presentation of Canadian Participating Insurance Contracts*.

7.3 Deferrable acquisition expenses

Under IFRS 17, acquisition cash flows need to be included in the present value of future cash flows in order to calculate the CSM at initial recognition. Acquisition cash flows are defined in IFRS 17 Appendix A as, "cash flows arising from the costs of selling, underwriting and starting a group of insurance contracts that are directly attributable to the portfolio of insurance contracts to which the group belongs." Only expenses that are directly attributable to a portfolio of contracts, such as commissions and some direct expenses, are included in the estimates of future cash flows. Other acquisition expenses are recognized as incurred.

The inclusion of acquisition expenses in the present value of future cash flows reduces the CSM, and results in the deferral of those expenses to be recognized in profits later, through the release of the CSM as insurance contract services are provided to the group of contracts. This is similar to the DAC asset that is held on the balance sheet and amortized over time for some products under IFRS 4. However, the deferred expenses are part of the insurance contract liabilities through a reduction in the CSM, rather than held as a separate asset.

As the CSM is calculated at the group level, acquisition expenses attributed to a portfolio need to be allocated to the groups within that portfolio on a systematic and rational basis. Further, any acquisition expense directly attributable to groups (e.g., non-refundable commissions) must be allocated to that group and to groups expected to arise from renewals of contracts in that group. Any amounts allocated to groups not yet recognized are held as DAC and subject to the recoverability tests described in IFRS 17.B35D.

The portion of expenses that is allocated to a group will affect the CSM or the loss taken at initial recognition of each group. Higher acquisition expenses reduce the CSM and increase the likelihood of a group being onerous at initial recognition.

Acquisition expenses also affect presentation (insurance revenue and insurance service expenses) per IFRS 17.B125.

8. Discounting

8.1 Comparison to current practice

Under current CIA standards, the approach to discounting is discussed in subsection 2240 for P&C insurance and subsection 2330 for life and health insurance.

Under IFRS 17, the relevant paragraphs on discount rates are 36, 56 (for the PAA) and B72–B85. Discount rates are set for cash flows that do not vary based on the returns on any underlying items, with adjustments made if needed to reflect the impact of financial risk that is not otherwise included in estimates of cash flows (IFRS 17.36) and to reflect variability of cash flows not otherwise reflected (IFRS 17.B74). IFRS 17 does not differentiate between P&C and life and health in setting discount rates.

Further guidance can be found in the draft educational notes *IFRS 17 Discount Rates for Life and Health Insurance Contracts*, *IFRS 17 Discount Rates and Cash Flow Considerations for Property & Casualty Insurance Contracts*, and *IFRS 17 Market Consistent Valuation of Financial Guarantees for Life and Health Insurance Contracts*.

This section expands on the differences between current practice and IFRS 17, beginning with a summary of current practice.

8.1.1 Current practice: P&C

Current CIA standards require the valuation of insurance contract liabilities to consider the time value of money and to include a PfAD to account for the uncertainty around the selected discount rate, claims development patterns, and reinsurance collectability.

The discount rate represents the expected investment return (portfolio yield) on the assets chosen to support the policy liabilities, and will depend on the asset characteristics including:

- assets owned at the calculation date;
- the allocation of those assets and related investment income among lines of business;
- the method of valuing assets and reporting investment income;
- yields on assets acquired after the calculation date;
- capital gains and losses on assets sold after the calculation date;
- investment expenses; and
- asset risks including credit-related events, default, impairment, or restructuring of obligations by the issuer of the invested assets at the calculation date.

Although discount rates may vary from one claim grouping to the next, from one future period to the next, or from one underlying accident or underwriting period to the next, it is common to select an aggregate portfolio of assets to generate a single discount rate for all years and product lines. Additionally, it is common practice to select a single discount rate to be applied to both net premium liabilities and net claim liabilities, but there is no requirement to do so.

The ceded policy liabilities are shown as recoverable amounts (assets) on the entity's balance sheet, and as such they are not supported by invested assets. The discount rate used to determine the present value of the ceded policy liabilities is generally selected from the following or a combination thereof:

- The discount rate selected for the present value of the net policy liabilities.
- A risk-free rate.
- The discount rate used by the assuming entity.

The actuary would add an explicit PfAD for the uncertainty around the selection of the discount rate(s) including consideration for unknown asset risk (including credit/default risk and liquidity risk), mismatch risk between payment of claims and availability of liquid assets, and uncertainty in estimating the payment pattern of future claims.

8.1.2 Current practice: life and health

Current CIA standards require that insurance contract liabilities be valued using the Canadian Asset Liability Method (CALM). Under CALM, there is no direct discounting of liabilities. Instead, CALM sets the value of the insurance contract liabilities equal to the current statement value of

supporting assets required to satisfy the obligations, taking into account reinvestment/ disinvestment.

The data required to calculate the CALM value of the insurance contract liability include the following:

- Liability cash flows.
- Cash flows for the invested assets that support the insurance contract liability.
- A risk-free (government) yield curve as of the valuation date.
- The projected level of credit spreads, asset deterioration and investment expenses by asset type.
- Investment return for non-fixed income investments.
- Reinvestment/disinvestment assumptions:
    - The entity's investment strategy (i.e., assumptions around how the entity will reinvest cash at maturities and disinvest assets as required over the life of the insurance contract liabilities).
    - CIA prescribed interest rate scenarios (for example, the base scenario for interest rates includes the implied forward interest rates for the first 20 years and grades to a prescribed ultimate reinvestment rate (URR) at year 60 and beyond. Between year 20 and year 60, there is a prescribed methodology for grading between the 20-year observed point and the prescribed URR.)

While CALM does not result in explicit discount rates, it is common practice to solve for an equivalent discount rate that when applied to the insurance contract liability cash flows will give the same liability. This could be done either by solving for a level discount rate, or more commonly, by solving for a vector of yearly rates that can be interpreted as the expected annual portfolio return on the assets supporting the insurance contract liability.

8.2 Cash flows that do not vary with returns on underlying items

Under IFRS 17, discount rates for cash flows that are fixed (i.e., that do not vary with returns on underlying items) are based on a liquidity-adjusted risk-free discount rate curve. This discount rate curve may be developed using either a bottom-up approach or a top-down approach.

Under either approach, two key differences from current practice are that the discount rates do not depend on the assets used to support the liabilities and there are no reinvestment/disinvestment assumptions. The discount rate curve is set to reflect the characteristics of the liability cash flows (e.g., liquidity, currency, timing) only.

8.2.1 Bottom-up approach

Under the bottom-up approach, a risk-free discount curve is adjusted by adding an illiquidity premium to reflect the characteristics of the insurance contract liabilities. This approach requires the following judgments/estimates:

- Should the risk-free discount curve be based on government bond rates or swap rates?

- What is the longest duration risk-free asset for which there is a reliable yield (i.e., price from deep, liquid, and transparent markets)?
- How would risk-free rates be estimated beyond the observable period (e.g., ultimate rate, extrapolation technique)?
- How would the illiquidity premium be estimated?

There is no existing requirement under current CIA standards to identify an explicit illiquidity premium in the discount rates. An illiquidity premium is implicitly included; however, it would reflect the liquidity characteristics of the assets supporting the liabilities rather than the liquidity characteristics of the liabilities.

8.2.2 Top-down approach

Under the top-down approach, a reference portfolio of assets is selected with characteristics that are similar to those of the insurance contract liability. For example, the current spot rate implied by a 20-year Canadian corporate bond might be selected as a reference for a 20-year Canadian liability cash flow. The current yields on the reference assets are then adjusted to remove any characteristics of the asset(s) that are not relevant to the liability, the primary examples being credit risk and market risk.

This approach requires the following judgements/estimates:

- What is the longest duration of reference assets for which there are reliable yields (i.e., prices from deep, liquid and transparent markets)?
- How would rates be estimated beyond the observable period?
- How would the reference portfolio be selected?
- How would the yield on reference portfolios be adjusted for characteristics that are not relevant to the insurance contract liability?

The yield on the reference portfolio might also be adjusted to account for differences in liquidity characteristics between the reference portfolio and the insurance contract liabilities. However, IFRS 17.B81 indicates that such adjustment is not required if the reference portfolio reasonably reflects the liquidity characteristics of the liabilities.

8.3 Reflecting financial risk

According to IFRS 17.36, discount rates are used to ". . . adjust the estimates of future cash flows to reflect the time value of money and the financial risks related to those cash flows, to the extent that the financial risks . . . are not included in the estimates of cash flows."

This means that the impact of financial risks on cash flows can be incorporated directly in the estimates of future cash flows or through the discount rate, or some combination thereof. In any case, the approach to reflecting financial risk would be consistent with observable market prices at the valuation date (IFRS 17.B44). In particular, unlike current practice, there is no provision for reinvestment/disinvestment risk in the IFRS 17 valuation.

IFRS 17.B46 describes the *replicating portfolio* technique, where the value of the liability is set equal to the fair value of an asset portfolio whose cash flows exactly match (in all scenarios) the liability cash flows. This technique is similar to the application of CALM (though limited to observable market prices) and can be applied to a portion of the liability cash flows. IFRS 17.B47 further says that though the replicating portfolio technique is not required, if a replicating portfolio exists for some of the cash flows, the technique chosen would be unlikely to lead to a materially different measurement.

It is useful to consider two different ways in which cash flows are affected by financial risk:

- Cash flows can vary based on returns on underlying items (usually assets). By this we mean the asset returns that are passed-through to policy-holders in products such as segregated funds, participating insurance, and some universal life contracts. Some of these contracts would meet the definition of insurance contracts with direct participation features (B101) and some would not.
- Cash flows can vary with assumptions related to financial risk, such as expense cash flows varying with inflation. Other examples are lapse rates that vary with future interest rates and minimum guaranteed credited rates.

8.3.1 Cash flows that vary with returns on underlying items

IFRS 17.B74(b) says: "Cash flows that vary based on the returns on any financial underlying items shall be (i) discounted using rates that reflect that variability; or (ii) adjusted for the effect of that variability and discounted at a rate that reflects the adjustment made." IFRS 17.B75 continues: "The variability is a relevant factor regardless of whether it arises because of contractual terms or because the entity exercises discretion, and regardless of whether the entity holds the underlying items", which clarifies that IFRS 17.B74(b) is not limited to contracts with direct participation features but applies to all products where returns on underlying items are passed-through to policy-holders.

For the portion of cash flows where asset returns are passed-through to policy-holders, the replicating portfolio technique would suggest that the discount rate be chosen such that the value of those liability cash flows equals the fair value of the underlying assets. This is similar to a CALM valuation that starts with an account value or segregated fund or a ring-fenced participating block of assets, and then adds the other portions of the liability. For contracts with direct participation features, the entity's share of the underlying items (IFRS 17.B104(b)(i)) would also be measured this way.

IFRS 17.B77 clarifies that there is no requirement to split the estimated cash flows into those that vary based on the returns on underlying items and those that do not; however, for some products it might be straightforward to split them when starting from the current valuation approach.

8.3.2 Cash flows that vary with assumptions related to financial risk

Cash flows that vary with assumptions related to financial risk can be handled through the discount rate or through the cash flows. However, in either case the approach would be consistent with observable market prices, and IFRS 17 suggests stochastic modelling techniques

and risk-neutral measurement techniques for achieving that objective (IFRS 17.B48, B77). Particular mention is made of the need to recognize the cost of options and guarantees, even when those guarantees are out-of-the-money (IFRS 17.B48, B76).

For financial risk that is fully hedged, the current valuation would include the cost of hedging the risk, which would be a reasonable basis for the IFRS 17 valuation provided the current provision is consistent with observable market prices.

For financial risk that is not fully hedged, the current valuation would typically include provisions based on projected "real-world" scenarios of financial risk variables. These approaches would generally not comply with the IFRS 17 requirement to be consistent with observable market prices. The IFRS 17 provision would be the same regardless of whether the risk is hedged or not.

9. Risk adjustment for non-financial risk

IFRS 17 requires the entity to adjust the present value of future cash flows to reflect "the compensation that the entity requires for bearing the uncertainty about the amount and timing of the cash flows that arises from non-financial risk" (IFRS 17.37).

The corresponding concept in the current CIA *Standards of Practice* is the PfAD, which takes account of the effect of uncertainty of the assumptions and data in determining the liability.

While the concepts are similar, there are important differences. One difference is that the IFRS 17 risk adjustment for non-financial risk only includes provision for non-financial risk, while PfADs cover uncertainty in both economic and non-economic assumptions. Under IFRS 17, provisions for financial risk (i.e., cash flows that vary with assumptions related to financial risk and liability timing, currency and liquidity) are included in the present value of future cash flows, either by adjusting cash flows or adjusting the discount rate. However, there are no provisions for financial risk related to the assets supporting liabilities, such as reinvestment (asset-liability mismatch) risk.

Another difference is that the IFRS 17 risk adjustment for non-financial risk depends on the entity's own compensation requirements for taking risk, rather than exclusively on the uncertainty of the estimated future cash flows. This could result in entities setting different risk adjustments for non-financial risk for similar groups of insurance contracts. Therefore, to facilitate comparison among entities, IFRS 17 requires entities to disclose the confidence level to which the risk adjustment for non-financial risk corresponds, which is an entirely new requirement.

The entity can use other approaches to determine the risk adjustment for non-financial risk, such as the "cost of capital" approach, the "confidence level" approach, or any other approach that satisfies the criteria laid out in IFRS 17.B91. Information on various approaches for setting risk adjustments and other guidance can be found in the draft educational notes *IFRS 17 Risk Adjustment for Non-Financial Risk for Life and Health Insurance Contracts* and *IFRS 17 Risk Adjustment for Non-Financial Risk for Property and Casualty Insurance Contracts*.

The table below compares the requirements for establishing PfADs and risk adjustments for non-financial risk:

	IFRS 17	**Current CIA standards**	**What's changed?**
Measurement objective	***Compensation*** required by ***entity*** to bear uncertainty.	Amount required to provide for the ***effect of uncertainty.***	Focus on **compensation required**, not just the effect of uncertainty.
Scope	Non-financial risk only.	Financial and non-financial risks.	No asset related MfADs, such as asset default, investment expenses, or reinvestment risk (C3).
Method	Various, at entity discretion.	Assumptions that are more conservative than best estimate (often MfADs).	For non-economic assumptions, current approach can continue to be used, with adjustment if required to reflect entity-specific compensation requirements. Other methods are also permissible.
Diversification benefit	Reflected, based on diversification that the entity considers when setting compensation requirements.	Reflected due to requirement that assumptions/liabilities be appropriate in aggregate. In practice, often given no explicit consideration or considered only within a line of business.	Diversification between financial risks and non-financial risks ignored. Entity's view of diversification may be different than diversification reflected in PfADs.

9.1 Reflecting uncertainty in the risk adjustment for non-financial risk

IFRS 17 does not specify the method that an entity uses to determine the risk adjustment for non-financial risk, but it outlines the characteristics of an appropriate risk adjustment in IFRS 17.B91. These characteristics are similar to those described in current CIA Standards of Practice and though the criteria do not match exactly, the same basic principles apply. The main difference is that IFRS 17 requires the entity's view of the cost of risk (i.e., compensation required for bearing uncertainty) to be taken into account in setting the risk adjustment for non-financial risk. This is described in IFRS 17.B87 as the compensation required, "to make the entity indifferent between fulfilling a liability that has a range of possible outcomes arising from non-financial risk, and fulfilling a liability that will generate fixed cash flows with the same expected present value."

9.2 Considerations for using PfADs to determine risk adjustment for non-financial risk

As noted above, the underlying principles for determining the risk adjustment for non-financial risk are the same as those used to set CIA PfADs. Therefore, the current PfADs for non-economic assumptions may be a good starting point for setting the risk adjustment for non-financial risk. The considerations to be taken into account include the following:

- Is the current level of PfAD consistent with the compensation the entity requires for bearing uncertainty?
- Are the diversification benefits included in current PfADs consistent with those that would be reflected in IFRS 17?
- How would the confidence level (to satisfy disclosure requirement of IFRS 17.B92) inherent in the current PfADs be determined?
- IFRS 17 requires reinsurance contracts held to be measured as separate contracts. How would the PfAD appropriate to the net liability be split between the direct and ceded contracts?
- Are any adjustments needed for pass-through features?

9.2.1 Current level of PfAD versus the compensation the entity requires

Current CIA PfADs are intended to provide for a similar level of uncertainty (sufficient without being excessive) across different risks and products for all entities. In selecting an MfAD within the recommended range, a lower/higher MfAD provides for less/more uncertainty but not for a lower/higher level of confidence or entity-specific compensation required for bearing the uncertainty.

Therefore, if using CIA PfADs to determine the IFRS 17 risk adjustment for non-financial risk, adjustment would be needed if the entity-specific view of the compensation required to bear uncertainty is different from that of typical Canadian entities.

9.2.2 Diversification benefits

IFRS 17.B88 requires the risk adjustment for non-financial risk to reflect the degree of diversification benefit the entity includes when determining the compensation it requires for bearing non-financial risk. Current CIA standards (paragraph 2120.07) also suggest consideration of diversification benefits, though in practice this is often done implicitly or only within product lines and would include consideration of both financial and non-financial risk.

Therefore, if using CIA PfADs to determine the IFRS 17 risk adjustment for non-financial risk, adjustment might be needed to achieve the objectives of IFRS 17.

9.2.3 Confidence level disclosure

IFRS 17.B92 requires disclosure of the confidence level of the risk adjustment for non-financial risk. The purpose of this disclosure is to allow users to compare risk adjustments across entities by distinguishing differences arising from different levels of uncertainty from differences arising from different entity-specific views of the compensation required to bear uncertainty.

As discussed in Section 9.2.1, current CIA PfADs are intended to provide for a similar level of uncertainty and hence a similar confidence level. Current CIA standards do not specify this confidence level and in practice there will be variation in confidence levels across entities (especially in the treatment of diversification benefits).

Note that the purpose of the confidence level disclosure is to help users understand and compare financial statements. In this context, it is important for the reported confidence level to be comparable among entities.

9.2.4 Reinsurance contracts held

IFRS 17 requires reinsurance contracts held to be measured separately from the underlying direct contract(s) and, in particular, the risk adjustment for non-financial risk is determined separately. IFRS 17.64 clarifies that the risk adjustment for non-financial risk on a reinsurance contract held represents the amount of risk transferred from the entity to the reinsurer. Therefore, unlike other contracts, the risk adjustment for non-financial risk on a reinsurance contract held reduces the liability (or increases the asset).

Under current CIA requirements for life, the PfADs for non-economic assumptions are set at a level appropriate for the liability net of reinsurance, and there is no requirement to split them between the direct contract and the reinsurance ceded contract.

9.2.5 Effect of pass-through features

Some products have features that share risk with policy-holders. Under current CIA standards, entities take these features into account in assessing the PfADs required. For example, an entity could establish an MfAD at the low end of the CIA range (or even below the low end) depending on the extent of pass-through features. This concept also exists in IFRS 17, to the extent that the compensation an entity requires takes account of the existence of the pass-through features.

Therefore, if using CIA PfADs to determine the IFRS 17 risk adjustment for non-financial risk, adjustment would be required if the entity ignores (some or all) pass-through features in determining the compensation it requires for bearing uncertainty.

Appendix A: Contract classification for Canadian life and health products

Product	Analysis
Term life/whole life/ par/endowment	• Payment on insured event (death) is fixed but timing is uncertain, so would be classified as insurance contracts.
Payout annuities	• All payout life contingent annuities would be classified as insurance contracts, including those with term certain periods. On transition to IFRS 17, if the annuitant is deceased and payments are continuing under the term certain period, the annuity remains an insurance contract. • Guaranteed-only (i.e., term certain) annuity contracts from issue would be classified as investment contracts. Also, if a block of annuities is acquired from another entity, contracts where the annuitant is deceased and payments are continuing under the term certain period would be classified as investment contracts.
Deferred annuities	• Deferred annuities with minimum guaranteed annuity purchase options would be classified as insurance contracts unless the guarantee has no commercial substance or the insurance risk inherent in the guarantee is not significant. • Deferred annuities without minimum guaranteed annuity purchase options would generally be classified as investment contracts. • For deferred annuities where the only guarantee is to pay book value (or the higher of book value and market value) on death, the guarantee may be considered a waiver of surrender charges on death, which is not considered insurance risk under IFRS 17 (refer to IFRS 17.B18–B23 for further discussion). Therefore, such contracts might be classified as investment contracts.
Universal life and variable universal life	• Contracts usually contain significant insurance (mortality) risk, therefore would be classified as insurance contracts. • No specific threshold is provided on what constitutes "significant," though examples in drafts of IFRS 17 suggest that a death benefit of 101% of the account value does not constitute "significant" insurance risk.
Segregated funds without guarantees	• Generally, these are not insurance contracts as there is no transfer of insurance risk, and they would be classified as investment contracts.

Product	Analysis
Segregated funds with guarantees	• Generally, insurance contracts, but analysis would be done on the type of benefit to assess whether the insurance risk is significant. Financial guarantees and waiver of surrender charge are not considered insurance risk for the purpose of classification. • Guaranteed minimum death benefits (GMDB) – Minimum payout in the event of death. Death is the insured event, and the payment on death could be more than the policyholder fund. • Guaranteed minimum income or withdrawal benefits (GMIB/GMWB) – Similar to an annuity contract where survivorship is the insured event, and payment on survival could result in a loss to the entity. • Guaranteed minimum accumulation benefits (GMAB) – The benefit is paid on maturity similar to an endowment product. The amount paid is uncertain and the entity can pay more than the fund in certain scenarios. • Payment on the insured event of an amount higher than the policy-holder fund is not in itself sufficient to conclude the contract transfers significant insurance risk (for the same reason that waiver of surrender charges on death does not constitute insurance risk).
Group insurance contracts	• Group life, accidental death, health and disability insurance contracts would be classified as insurance contracts unless terms of hold harmless agreements mean there is no significant insurance risk transferred. • Administrative services only contracts (ASO) with risk pooling would be classified as insurance contracts. • ASO contracts without pooling (e.g., employee benefit programs, including life, accidental death, health, and disability benefits) would be classified as service contracts.
Employee benefit plans/defined benefit pensions	• Out of scope of IFRS 17 (IAS 19).

Product	Analysis
Reinsurance contracts	• Classification of reinsurance contracts issued is the same as insurance contracts issued (direct) except for IFRS 17.B19 (see Section 3.4). • Reinsurance contracts held are classified separately from the underlying direct contract(s). • The transfer of non-insurance risk (e.g., lapse or expense risk) from an entity to a reinsurer exposes the assuming entity to insurance risk. However, such a contract can only be a reinsurance contract held (from the cedant's perspective) if it also transfers insurance risk.
Credit insurance contracts	• Credit life and disability insurance contracts may be either group contracts or certificates of group insurance contracts. Such contracts would be classified as described above. • Credit related guarantees, other than for death or disablement, are not considered insurance contracts unless the issuer has previously asserted explicitly that it regards the contract as an insurance contract and has irrevocably elected to account for such contracts as insurance contracts. Otherwise, such contracts would be classified as investment contracts.
Disability (individual and group)	• Would be classified as insurance contracts. • Liabilities for claims in settlement can be either LICs or LRCs. However, if a block of claims in settlement is acquired from another entity, the liability is a LRC (IFRS 17.B5).
Critical illness	• Would be classified as insurance contracts.

Appendix B: Examples of investment components in Canadian life and health contracts

Contract feature	Investment component ?	Distinct?	Accounting treatment
Cash surrender value (CSV)	Yes	No	• Include in fulfilment cash flows (FCF). • Exclude from insurance revenue and insurance service expense. • Reduce death benefit by implicit CSV in insurance service expense.
Endowment benefit	Yes	No	• Include in FCF. • Exclude from insurance revenue and insurance service expense.
Policy loans	No	N/A	• Include in FCF. • Exclude from insurance revenue and insurance service expense. • Report balance with insurance contract liabilities (negative) rather than as a separate asset.
Return or refund of premium on surrender or expiry	No	N/A	• Include in FCF. • Exclude from insurance revenue and insurance service expense (surrender is not an insured event).
Return of premium on death (rider on critical illness)	No	N/A	• Include in FCF. • Include in insurance revenue and insurance service expense (death is an insured event).
Amounts on deposit	Yes	Maybe	• If distinct, would be separated from the insurance contract, measured under IFRS 9, and the liability would be included with other investment contract liabilities in the financial statements. • If non-distinct, IFRS 17 applies and the liability would be included with insurance contract liabilities. Exclude from insurance revenue and insurance service expense.

Policy-holder share of the underlying (VFA)	Yes	No	• Include in FCF. • Exclude from insurance revenue and insurance service expense.
Prepaid premium account	Yes	Maybe	• If distinct, would be separated from the insurance contract, measured under IFRS 9, and the liability would be included with other investment contract liabilities in the financial statements. • If non-distinct, IFRS 17 applies and the liability would be included with insurance contract liabilities. Exclude from insurance revenue and insurance service expense.
Account value (less surrender charges)	Yes	No	• Include in FCF. • Exclude from insurance revenue and insurance service expense.
Annuity payments during the term certain period on life-contingent annuities	Yes	No	• Include in FCF. • Exclude from insurance revenue and insurance service expense.
Experience rating	Yes	No	• Same as policy-holder share of the underlying (VFA). • If there is no insurance risk (i.e., some hold harmless agreements), the contract would be outside the scope of IFRS 17.
Claims fluctuation reserves, premium stabilization reserves	Yes	Maybe	• If distinct, would be separated from the insurance contract, measured under IFRS 9, and the liability would be included with other investment contract liabilities in the financial statements. • If non-distinct, IFRS 17 applies and the liability would be included with insurance contract liabilities. Exclude from insurance revenue and insurance service expense.

Appendix C: Examples of service components in Canadian products

Type of contract/feature	Accounting treatment
Individual insurance contracts – life, health, annuity, and property and casualty	
Policy and contract administration, and claims adjudication and administration	• If distinct (i.e., readily available to the contract holder through other means (B34)), cash flows would be separated, measured under IFRS 15, and included with other service contracts in the financial statements. • If not distinct, the cash flows would not be separated.
Group insurance contracts and ASO contracts	
ASO – pure	• IFRS 15 applies to pure ASO since entity has no insurance risk and provides administrative, claims, and processing services, while the group contract holder assumes all the insurance risk, and pays for all services and claims. • Absent any insurance features, IFRS 9 applies to any account balances.
ASO – with insurance	• AoD arising from annual accounting of the ASO might be a distinct investment component. If so, it would be separated, measured under IFRS 9 and included with other investment contracts in the financial statements. • The service component of the contract might be distinct under IFRS 17.34. If so, it would be separated, measured under IFRS 15, and included with other service contracts in the financial statements. The remaining components of the contract would not be separated.
Policy and contract administration, and claims adjudication, processing and administration	• If distinct (i.e., readily available to the contract holder through other means (B34)), cash flows would be separated, measured under IFRS 15, and included with other service contracts in the financial statements. • If not distinct, the cash flows would not be separated. • Also see IFRS 17 illustrative examples IE51–IE55.

Appendix D: Measurement approaches for typical Canadian products

Product	GMA	Eligible for PAA?	VFA required?
Group insurance with coverage period of one year or less	Yes	Yes	No
Group insurance with coverage period greater than one year	Yes	Maybe	No
Term life and whole life	Yes	No	No
Segregated funds	Possibly	No	Likely
Universal life	Maybe	No	Maybe
Participating life	Possibly	No	Likely
Critical illness, disability income, long-term care	Yes	No	No
P&C products with coverage period of one year or less	Yes	Yes	No
P&C products with coverage period greater than one year	Yes	Maybe	No