Canadian Institute of Actuaries / Institut canadien des actuaires

Educational Note

IFRS 17 – Actuarial Considerations Related to Reinsurance Contracts Issued and Held

Committee on Property and Casualty Insurance Financial Reporting

September 2022

Document 222129

Ce document est disponible en français

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Canadian Institute of Actuaries / Institut canadien des actuaires

MEMORANDUM

To: Members in the property and casualty, and life insurance area

From: Dean Newell, Chair and Steven W. Easson, Immediate Past Chair
Actuarial Guidance Council

Simon Guénette, Chair and Sarah Chevalier, Immediate Past Chair
Committee on Property and Casualty Insurance Financial Reporting

Date: September 14, 2022

Subject: **Educational Note: IFRS 17 – Actuarial Considerations Related to Reinsurance Contracts Issued and Held**

The Committee on Property and Casualty Insurance Financial Reporting (PCFRC) has prepared this educational note to summarize some of the accounting and actuarial implications affecting reinsurance contracts issued and reinsurance contracts held related to IFRS® 17 Insurance Contracts (IFRS 17 or the Standard) requirements.

Although prepared by the PCFRC with P&C reinsurance contracts in mind, much of the content in this educational note could also apply to Life reinsurance contracts. It is therefore recommended that Life practitioners also review this note, as guidance contained herein could be relevant and helpful for Life reinsurance as well.

The background on accounting treatment of reinsurance contracts outlined in this educational note is at a high level; additional information that provides more detail on this topic can be found in International Actuarial Association (IAA) guidance or other CIA documents.

The purpose of this educational note is to provide the reader with possible interpretations of the Standard, without advocating any particular approach. Each topic presented in this document addresses the implications of the Standard for either a reinsurance contract issued, a reinsurance contract held, or both: level of aggregation, fulfilment cash flow (FCF) projections, insurance revenue considerations, estimation of the liability/asset for remaining coverage (LRC/ARC), and the accounting treatment for residual market mechanisms.

A draft version of this educational note was published in April 2020. Since then, a number of educational notes related to IFRS 17 have been published by the CIA. In this paper, whenever a topic was already addressed by another CIA educational note, the relevant text is being presented in a quote using *italic fonts*. The following list provides a summary of all significant changes that were implemented to this document:

- Usually, whenever an element of the Standard applies to insurance issued, it would normally also apply to reinsurance contracts issued. However, for the sake of

clarity, in this educational note we have adopted the following terminology whenever a concept applies equally to insurance & reinsurance held: "insurance/reinsurance contract".

- Clarifications added to "Section 4.3. Insurance Revenue Considerations". A new table was added, showing examples of cash flows that are contingent on claims versus those that are not contingent on claims. Also, a new section on non-distinct investment component (Section 4.3.3.) has been added.
- New "Section 5.3.2. Business Combinations and Retrospective Reinsurance Contacts".
- The former "Section 6. Onerous Contracts Identification and Recognition" has been eliminated & replaced by:
  - Two new sub-sections under "Section 2. Level of Aggregation": "2.3. Onerous Contracts: Initial Recognition"; and "Section 2.4. Onerous Contracts: Subsequent Measurement".
  - Three new sub-sections under "Section 5. LRC/ARC: PAA[1] and GMA[2] Considerations":
    - 5.4. Accounting for Groups Deemed Onerous
    - 5.4.1. Recognition of LC[3] on Onerous Groups (Insurance/reinsurance contracts issued)
    - 5.4.2. Reinsurance Contracts Held – LRECC[4]

A preliminary version this educational note was shared with the following committees for their review and comments, and presented to the Actuarial Guidance Council (AGC) in the months preceding its approval:

- Committee on Life Insurance Financial Reporting
- Committee on Risk Management and Capital Requirements
- Committee on the Appointed/Valuation Actuary
- International Insurance Accounting Committee
- Committee on Workers' Compensation
- Group Insurance Practice Committee

A preliminary version of the draft educational note was also shared with the staff of the Accounting Standards Board (AcSB) to broaden consultations with the accounting community. Given that this educational note provides actuarial guidance rather than accounting guidance, the AcSB staff review was limited to citations of and any inconsistencies with IFRS 17. CIA educational notes do not go through the AcSB's due process and therefore, are not endorsed by the AcSB.

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[1] PAA: Premium Allocation Approach
[2] GMA: general measurement approach
[3] LC: Loss Component
[4] LRECC: Loss-Recovery Component

The PCFRC is satisfied it has sufficiently addressed the material comments received by the various committees and the AGC. The PCFRC notes that this educational note may incorporate preliminary interpretations on several topics that may end up being resolved differently than anticipated. The creation of this cover letter and 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 educational note has been prepared by the PCFRC and has received approval for distribution from the AGC on September 12, 2022.

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Questions or comments regarding this educational note may be directed to the Chair of PCFRC (noted above) at guidance.feedback@cia-ica.ca.

DN, SWE, SG

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1. Introduction

IFRS® 17 Insurance Contracts (IFRS 17) establishes principles for the recognition, measurement, presentation, and disclosure of insurance contracts. The purpose of this educational note is to provide practical application guidance on topics relating to IFRS 17 for reinsurance contracts issued and reinsurance contracts held. In this educational note, the use of the notation IFRS 17.XX refers to specific paragraphs of IFRS 17, where XX represents the paragraph number.

As noted in IFRS 17.4, all references to insurance contracts also apply to reinsurance contracts held[5], unless otherwise indicated by specific references to insurance contracts issued[6] or as described in IFRS 17.60 through IFRS 17.70A for reinsurance contracts held. This educational note addresses both reinsurance contracts issued and reinsurance contracts held.

Appendix A of IFRS 17 defines a reinsurance contract as:

> An insurance contract issued by one entity (the reinsurer) to compensate another entity for claims arising from one or more insurance contracts issued by that other entity (underlying contracts).

Where an entity enters into reinsurance contracts to cede insurance risk associated with underlying insurance contracts, the reinsurance contracts held by the ceding entity are recognized and presented in the statement of financial position[7] and in the statement of financial performance[8] separately from the underlying insurance contracts (IFRS 17.78 and IFRS 17.82).

This educational note is structured as follows:

- Level of aggregation;
- Fulfilment cash flow (FCF) projections;
- Insurance service result considerations;
- Liability/Asset for remaining coverage (LRC/ARC): premium allocation approach (PAA) and general measurement approach (GMA) considerations;
- Accounting treatment of residual market mechanisms.

This educational note supplements the following:

- Chapter 9 – Reinsurance of the CIA educational note *Application of IFRS 17 Insurance Contracts* (Document 221117, October 2021, “IFRS 17 Application EN”), which provides general guidance about reinsurance contracts issued and reinsurance contracts held. The IFRS 17 Application EN adopts without modification the *International Actuarial*

[5] Reinsurance contracts held are often referred to as reinsurance ceded.
[6] Reinsurance contracts issued are often referred to as reinsurance assumed. Throughout this educational note, the term “insurance contracts issued” encompasses all types of insurance contracts (i.e., both primary insurance contracts issued and reinsurance contracts issued).
[7] The statement of financial position is often referred to as the balance sheet.
[8] The statement of financial performance is often referred to as statement of profit or loss, or as the income statement.

Note 100 (*IAN 100*) published by the IAA in August 2021, including a CIA preamble presenting a number of clarifications to several of the topics discussed in the IAN 100, including two clarifications related to chapter 9.

- CIA Explanatory Report: *IFRS 17 Expenses* (Document 222095, June 2022, "CIA IFRS 17 Expenses Report")
- CIA Educational Note: *Comparison of IFRS 17 to Current CIA Standards of Practice* (Document 222094, June 2022);
- CIA Educational Note: *Assessing Eligibility for Premium Allocation Approach Under IFRS 17 for Property & Casualty and Life & Health Insurance* (Document 222091, June 2022, "PAA Eligibility EN");
- CIA Educational Note: *IFRS 17 Risk Adjustment for Non-Financial Risk for Property and Casualty Insurance Contracts* (Document 222089, June 2022, "PCFRC Risk Adjustment EN");
- CIA Educational Note: *IFRS 17 Discount Rates and Cash Flow Considerations for Property and Casualty Insurance Contracts* (Document 222098, June 2022, "PCFRC Discounting EN");
- CIA Educational Note: *IFRS 17 – Actuarial Considerations Related to Liability for Remaining Coverage in P&C Insurance Contracts* (Document 222092, June 2022, "PCFRC LRC EN").

In writing this educational note, the PCFRC followed these guiding principles:

- Consider Canadian-specific perspectives rather than simply repeating international actuarial guidance.
- Develop application guidance that is consistent with IFRS 17 and applicable Canadian actuarial Standards of Practice and educational notes without unnecessarily narrowing the policy choices available under IFRS 17.
- Consider practical implications associated with the implementation of potential approaches and methods; in particular, ensure that due consideration is given to options that do not require undue cost and effort to implement.

2. Level of aggregation

Under IFRS 17, insurance contracts are aggregated into portfolios of insurance contracts issued and portfolios of reinsurance contracts held (portfolios) comprising contracts subject to similar risks and managed together (IFRS 17.14). Portfolios are then divided into groups of insurance contracts (groups) considering, amongst other things, the expectation regarding the net cash flow of the contracts at initial recognition (i.e., whether the insurance contracts issued are expected to be onerous or, for reinsurance contracts held, whether there is an expectation of a net gain on initial recognition) and the cohort issue date. Additional guidance on separating insurance contracts into portfolios and groups is provided in Chapters 1 and 5 of the IFRS 17 Application EN.

IFRS 17.47 states that:

> An insurance contract is onerous at the date of initial recognition if the fulfilment cash flows allocated to the contract, any previously recognised insurance acquisition cash flows and any cash flows arising from the contract at the date of initial recognition in total are a net outflow. (…)

2.1. Portfolios and groups

Based on IFRS 17.16:

> An entity shall divide a portfolio of insurance contracts issued into a minimum of:
>
> (a) a group of contracts that are onerous at initial recognition, if any;
>
> (b) a group of contracts that at initial recognition have no significant possibility of becoming onerous subsequently, if any; and
>
> (c) a group of the remaining contracts in the portfolio, if any.

It should be noted that there is no limit regarding the number of groups contained within a given portfolio. IFRS 17.24 states: "An entity shall establish the groups at initial recognition and add contracts to the groups applying paragraph 28. The entity shall not reassess the composition of the groups subsequently." At subsequent valuation, a group of insurance contracts issued that was deemed non-onerous at initial recognition may still become onerous subsequently (or vice versa) if the expectation regarding the future net cash flows of the group changes from positive to negative (or vice versa).

Note that, even though the measurement of the LRC/ARC is required at the group level, FCF can be estimated at a more or less granular level and then aggregated or allocated to the group level if deemed more appropriate. See further discussion in Section 2.2 – The insurance/reinsurance contract as the smallest unit of account.

At inception, each contract is assigned to a specific portfolio and group. Thereafter, at subsequent measurements, for the portion of the liability related to past service (i.e., "liability/asset for incurred claims", or "LIC/AIC"), the concept of group may disappear. In other words, for the LIC/AIC the measurement and reporting is only required at the portfolio level and not at the group level.

The level of aggregation for reinsurance contracts held is assessed independently from the underlying insurance/reinsurance contracts issued. The level of aggregation requirements for insurance contracts, outlined in IFRS 17.14 through IFRS 17.24, also apply for reinsurance contracts (both issued and held). However, for reinsurance contracts held, IFRS 17.61 replaces references to onerous contracts in those paragraphs with a reference to contracts on which there is a net gain on initial recognition. Therefore, reinsurance contracts held cannot be onerous, as indicated in IFRS 17.68.

For reinsurance contracts held, the level of aggregation (i.e., portfolios and groups) may differ from the level of aggregation of the underlying insurance/reinsurance contracts issued. In many cases, a single reinsurance contract held covers many underlying groups or portfolios. It may therefore be reasonable for a portfolio or a group of reinsurance contracts held to consist of a

single reinsurance contract held, whereas a portfolio or group of a single underlying P&C insurance/reinsurance contract would be unusual.

Portfolios of reinsurance contracts held are usually in an asset position and portfolios of reinsurance contracts issued are usually in a liability position. While the recognition and the measurement of the LRC/ARC is performed at the group level, it is the combination of the LIC/AIC and LRC/ARC for portfolios of contracts that dictates the presentation of insurance contracts in the statement of financial position. As required by IFRS 17.78, the portfolios that are in an asset position (based on the combined expected cash flows of the LIC/AIC and LRC/ARC for the portfolio) are presented separately from those that are in a liability position. An insurance contract liability results when expected cash outflows are greater than expected cash inflows for the portfolio (including LIC/AIC and LRC/ARC). In circumstances where the expected cash inflows are greater than the expected cash outflows for a given portfolio of underlying contracts, an insurance contract asset would be booked.

2.2. The insurance/reinsurance contract as the smallest unit of account

Under IFRS 17, the lowest unit of account is the insurance/reinsurance contract. In most cases, it is not permitted to disaggregate individual insurance/reinsurance contracts for the purposes of assessing PAA eligibility, for aggregating contracts into portfolios and groups, or for other financial reporting purposes.

Some reinsurance contracts (issued and held) cover more than one line of business under a single contract. These reinsurance contracts, often referred to as multi-line reinsurance contracts, can take various forms (e.g., excess-of-loss, aggregate stop-loss, or proportional reinsurance).

For multi-line reinsurance contracts (issued and held), the actuary has several options for aggregating those contracts into portfolios and groups, including:

- Aggregating reinsurance contracts based on the predominant exposure covered;
- Creating a portfolio or group containing hybrid or multi-line contracts; or
- Separating the reinsurance contracts into sub-contracts and assigning those sub-contracts to separate groups and possibly portfolios. This option may only be acceptable if the insurer is able to prove that a single legal reinsurance contract was bound solely for the administrative convenience of the policyholder (in this case, the insurer) and the price is simply the aggregate of the standalone prices for the different reinsurance covers provided.

Under the first option, one acceptable methodology is to assign each multi-line reinsurance contract issued/held based on its dominant exposure as measured by expected losses, which may be determined from a pricing analysis. For example, if the majority of the expected losses for a multi-line reinsurance contract issued/held covering both casualty and property exposures is driven by casualty exposures, then one approach is to assign such contract to a casualty portfolio and to a casualty group even though the contract also covers property exposures (albeit to a lesser extent).

In some instances, it might be reasonable to separate a reinsurance contract issued/held into its contributing components (e.g., layers) when the terms or the exposures are significantly different.

For example:

- A global reinsurance contract where some layers are covering a specific region;
- A contract where some layers are multi-years, while some others are annual; or
- Different commission structures.

Specific situations may need to be discussed with the company auditor. For additional information on "Separation of insurance components of a single insurance Contract", please refer to Agenda Paper 01 prepared by the Board staff for the February 6, 2018 Transition Resource Group (TRG) meeting.

2.3. Onerous contracts: initial recognition

Based on IFRS 17.47, "an insurance contract is onerous at the date of initial recognition if the fulfilment cash flows allocated to the contract… are a net outflow."

For reinsurance contracts held, the concept of onerous groups does not exist (IFRS 17.61). Under the GMA, the CSM for reinsurance contracts held is determined in the same manner as for insurance contracts issued, but instead of reflecting the unearned profit, it represents the "net cost or net gain on purchasing the group of reinsurance contracts held" (IFRS 17.65).

For further information about the accounting implications for groups deemed onerous, please refer to Section 5.4 of this educational note.

The following set of paragraphs is an excerpt from the PCFRC LRC EN, Section 5.3.1:

> *As a simplification from the GMA, IFRS 17.18 allows entities applying the PAA to rely on the assumption that no contracts in the portfolio are onerous at initial recognition unless facts and circumstances indicate otherwise.*
>
> *While a quantitative assessment would only be required when facts and circumstances indicate onerousness, a challenge facing entities applying the PAA is that IFRS 17 does not define "facts and circumstances." Note that onerousness exists when the fulfilment cash flows (FCF) (i.e., including the risk adjustment) are higher than the LRC ex. LC*[9]*. In broad terms, facts and circumstances can arise from any existing information readily available to management without undue cost or effort. These may include the business plan, pricing strategy, key performance indicators, or other metrics used to track financial results, in addition to facts and circumstances that could arise from external factors such as changes in regulatory rules. A metric such as the combined ratio may be an option to identify onerous contracts. The IFRS 17 Application EN in Section 7.14 states that:*
>
>> *The wording "facts or other circumstances" in this paragraph implies that an explicit test is not required. An explicit test is only needed when there is reason to*

[9] LC: Loss Component

> *believe that the portfolio[10] containing the contracts may be onerous. This is clearly a matter of judgement. Possible indicators that may inform the decision to conduct testing include:*
>
> a. *a group of contracts in the portfolio that are known to be onerous at initial recognition;*
>
> b. *past losses in the portfolio;*
>
> c. *aggressive underwriting or pricing;*
>
> d. *unfavourable experience trends; and*
>
> e. *unfavourable external conditions.*

Hence facts and circumstances would generally be expected to comprise information that is readily available to senior management and the finance function as part of the regular financial reporting and planning processes.

For some reinsurers, contract level pricing information on the reinsurance contracts issued may be available to senior management. In those instances, management may consider individual reinsurance contract level pricing information to identify onerous contracts.

2.4. Onerous contracts: subsequent measurement

Based on IFRS 17.17:

> If an entity has reasonable and supportable information to conclude that a set of contracts will all be in the same group applying paragraph 16, it may measure the set of contracts to determine if the contracts are onerous … and assess the set of contracts to determine if the contracts have no significant possibility of becoming onerous subsequently…

If management identifies that a group of insurance/reinsurance contract issued is onerous at any point before its effective date, the group would be recognized at the date at which it is deemed onerous. A loss component (LC) would be estimated for that group and a loss-recovery component (LRECC) from any corresponding reinsurance contract held.

Applying the PAA, a group that was deemed non-onerous at initial recognition may be determined to be onerous at subsequent measurement due to changes in facts and circumstances that are unfavourable to the group.

Similarly, a group that was deemed onerous at initial recognition may, at a later date, be determined to be non-onerous, due to changes in facts and circumstances that are favourable to the group.

3. FCF projections

The FCF is calculated as:

[10] Note: while the reference refers to portfolios, the evaluation would be done at the contract level.

- An unbiased current estimate of future cash flows (at the "expected value (i.e., the probability-weighted mean) of the full range of possible outcomes." per IFRS 17.33(a));
- An adjustment to reflect the time value of money; and
- A risk adjustment for non-financial risk (RA).

Estimates of the FCF are used for:

- Determining the LIC/AIC;
- Determining the LRC/ARC when using the GMA for reinsurance contracts issued/held); and
- Estimating the LC for onerous groups (regardless of the use of GMA or PAA) and any associated LRECC on corresponding reinsurance contracts held.

3.1. Discounting and cash flows considerations

A separate CIA educational note addresses the topic of discounting under IFRS 17: PCFRC Discounting EN. The discussion in this educational note is therefore limited to topics affecting reinsurance contracts issued and reinsurance contracts held.

For entities using the GMA, consistency of measurement for reinsurance contracts held and the underlying contracts is addressed in IFRS 17.63:

> In applying the measurement requirements of paragraphs 32–36 to reinsurance contracts held, to the extent that the underlying contracts are also measured applying those paragraphs, the entity shall use consistent assumptions to measure the estimates of the present value of the future cash flows for the group of reinsurance contracts held and the estimates of the present value of the future cash flows for the group(s) of underlying insurance contracts. In addition, the entity shall include in the estimates of the present value of the future cash flows for the group of reinsurance contracts held the effect of any risk of non-performance by the issuer of the reinsurance contract, including the effects of collateral and losses from disputes.

Assumptions selected for the estimation of the present value of the future cash flows for the LIC/AIC and the LRC/ARC (both PAA and GMA) would normally be consistent between reinsurance contracts held and the underlying insurance/reinsurance contracts issued. Reference to "consistency" and "consistent assumptions" does not necessarily imply identical assumptions.

Board staff response for TRG (#S40):

> Paragraph 63 of IFRS 17 requires an entity to use consistent assumptions to measure the estimates of the present value of the future cash flows for the group of reinsurance contracts held and the estimates of the present value of the future cash flows for the group(s) of underlying insurance contracts. This consistency is required to the extent that the same assumptions apply to both the underlying contracts and the reinsurance contracts held. This requirement

> does not require/permit the entity to use the same assumptions used for measuring the underlying contracts when measuring the reinsurance contracts held if those assumptions are not valid for the terms of the reinsurance contracts held. If different assumptions apply for the reinsurance contract held, the entity uses those different assumptions when measuring that contract.

Consistent assumptions can produce differences between the estimates of FCF for insurance/reinsurance contracts issued and the estimates of FCF for reinsurance contracts held. These differences can arise from different sources, such as:

- Contracts grouping;
- Contract boundaries;
- Discount rates;
- RA; and
- The expected reinsurance default.

3.1.1. Liquidity of the insurance/reinsurance contracts issued and held

The yield curve selected when projecting the FCF can be based on either the bottom-up or the top-down approach. Under the bottom-up approach, the discount rate at any given age is calculated as the sum of the risk-free rate plus the illiquidity premium.

The following excerpt from Question 3.16 in Chapter 3 (Discount Rates) of the IFRS 17 Application EN pertains to the quantification of the liquidity characteristics of insurance contracts:

> The adjustment to reflect the liquidity characteristics of the insurance contracts has been broadly termed the illiquidity premium. Highly liquid insurance contracts would have a low (or even no) illiquidity premium while very illiquid contracts would have a higher illiquidity premium.
>
> There is no general accepted practice yet for the quantification of the illiquidity premium. Data relating to illiquidity premium of insurance contracts is generally not directly available in the market. Looking beyond insurance contracts, market prices for liabilities where the issuer of debt has the possibility to redeem the debt early are also very limited.
>
> A theoretical approach to determine the illiquidity premium is to assess possible replicating portfolios.

The topic of illiquidity, as it relates to reinsurance contracts issued and reinsurance contract held, is covered in the PCFRC Discounting EN, Section 4.6.1 (issued) and Section 4.6.2 (held).

The assessment of the level of illiquidity of the insurance contract liabilities associated with an insurance/reinsurance contract issued is based on contract provisions affecting the ability of policyholder/purchaser of the reinsurance to either: cancel the policy/treaty before its expiry date and to receive the value without significant exit costs or to obtain the exit value on an incurred claim in advance of normal scheduled payment dates. The LIC/AIC for most

insurance/reinsurance contracts issued is generally considered illiquid, while the LRC/ARC is generally considered somewhat more liquid.

The general concepts outlined above in respect of insurance/reinsurance contracts issued also apply to reinsurance contracts held. The following paragraph is an excerpt from the Discounting EN, Section 4.6.2:

> *For a group of reinsurance contracts or treaties, the liquidity of the LRC is evaluated on the basis of the ability of the purchaser of the reinsurance to cancel the reinsurance contract before its expiry date and to receive value. Most reinsurance contracts have a one-year term with limited provision for early cancellation by either party. Treaty-specific cancellation provisions are considered for the purposes of assessing liquidity.*
>
> *In most cases, the LIC for a group of reinsurance contracts (held) is likely considered illiquid based on the inability of the purchaser of reinsurance to influence the timing of claim payments.*

3.1.2. Risk of non-performance by the issuer of the reinsurance contracts held

As stated in IFRS 17.63, for the measurement of reinsurance contracts held on initial recognition:

> … the entity shall include in the estimates of the present value of the future cash flows for the group of reinsurance contracts held the effect of any risk of non-performance by the issuer of the reinsurance contract, including the effects of collateral and losses from disputes.

When estimating the AIC, and when estimating the ARC under the GMA on reinsurance contracts held, the actuary would determine a probability-weighted provision to account for the risk of non-performance of the reinsurer, including consideration for reinsurer default, coverage dispute, and other risk of non-performance[11]. When estimating the risk of non-performance, the actuary would consider various elements, including, but not limited to:

- The financial strength of the reinsurers;
- The history of claims and coverage disputes with reinsurers;
- Delays in payments;
- Any concentration risk;
- The risk of contagion across various reinsurance arrangements;
- The length of time over which liabilities are expected to be settled; and
- The effect of collateral available to mitigate the risk of non-performance;

The risk of non-performance must be included in the measurement of the estimates of the present value of the future cash flows for reinsurance contracts held (IFRS 17.63). Thus, the risk of non-performance by the issuer of the reinsurance contracts held is incorporated as a

[11] These considerations are similar to those included, prior to the implementation of IFRS 17, in the former CIA requirements for provision for adverse deviations (PfAD) for recovery from reinsurance ceded.

decrease to the estimates of future cash inflows from the reinsurance contracts held (and not through a separate provision as it was under IFRS 4)[12]. The actuary may choose to estimate this provision separately before combining it with the FCF. Separation of the expected cash flows may facilitate discussions with senior management as well as audit and peer review of the actuarial analyses.

In estimating the ARC under the GMA, IFRS 17.67 states that "changes in the fulfilment cash flows that result from changes in the risk of non-performance by the issuer of a reinsurance contract held do not relate to future service and shall not adjust the contractual service margin." Therefore, if the risk of non-performance is changed at subsequent measurement, the changes in the FCF that result from changes to the risk of non-performance on the reinsurance contracts held would be recognized immediately in profit or loss. The CSM would not be adjusted as a result of the change in the risk of non-performance but the ARC would be adjusted to account for the changes in the FCF.

Similarly, changes in the risk of non-performance would affect the AIC and be recognised immediately in profit and loss.

As described in Section 6 of this educational note, some residual market mechanisms may need to be accounted for as reinsurance held under IFRS 17. In those instances, the actuary would evaluate if the FCF should be adjusted to account for the risk of non-performance.

3.2. The RA associated with reinsurance contracts held

A separate CIA educational note addresses the topic of RA: PCFRC Risk Adjustment EN. The discussion in this educational note is therefore limited to topics affecting reinsurance contracts issued and reinsurance contracts held.

The RA associated with reinsurance contracts held is described in IFRS 17.64, which states:

> Instead of applying paragraph 37, an entity shall determine the risk adjustment for non-financial risk so that it represents the amount of risk being transferred by the holder of the group of reinsurance contracts to the issuer of those contracts.

Chapter 9 of the IFRS 17 Application EN addresses the issue of the RA for reinsurance contracts. Question 9.10 asks: "How is the reinsurance held risk adjustment for non-financial risk determined?" The response states:

> A specific definition for the determination of the risk adjustment for reinsurance contracts held is provided that replaces the general definition in paragraph 37 used for insurance and reinsurance contracts issued in the standard. Under the definition for reinsurance held, the risk adjustment for non-financial risk represents the amount of non-financial risk being transferred by the holder of a group of reinsurance contracts to the issuer(s) of those contracts (paragraph 64).

[12] However, as explained in the PCFRC Risk Adjustment EN: "non-performance risk may have an "indirect" impact on the RA due to a reduction of future cash flows on which the RA is based".

The risk adjustment for the reinsurance held can therefore conceptually be thought of as the difference in the risk position of the entity with (i.e., net position) and without (i.e., gross position) the reinsurance held. As a result, the risk adjustment for the reinsurance held could be determined based on the difference between these amounts.

Another possibility to determine the risk adjustment for reinsurance held is to consider the cost of reinsurance as an indicator of the entity's view of the compensation that would be required to keep (i.e., not reinsure) the risk. Under this view, the cost of reinsurance would be an estimate of the risk adjustment for the reinsurance held.

For reinsurance held, because the risk adjustment for reinsurance held is defined based on the amount of risk transferred to the reinsurer, the risk adjustment for reinsurance held will either increase the reinsurance contract asset or reduce the reinsurance contract liability. This has the opposite effect from the risk adjustment on insurance contracts issued. For example, the release of the risk adjustment on reinsurance contracts held in a reporting period will reduce reported profit rather than increase it.

When estimating the present value of future cash flows and the RA, the actuary has three options:

- Estimate the gross[13] and the net[14], and then calculate the ceded[15] as a difference;
- Estimate the gross and the ceded, and then calculate the net as a difference; or
- Estimate the net and the ceded, and then calculate the gross as a sum.

The RA reflects the compensation that the entity requires for bearing the uncertainty related to non-financial risks and is apportioned to insurance/reinsurance contracts issued and reinsurance contracts held. Ultimately, the key concepts underlying the RA are:

- The RA for the insurance/reinsurance contracts issued represents the compensation that the entity requires for bearing the non-financial risk associated with writing those contracts, and
- The RA for the reinsurance contracts held accounts for the non-financial risk transferred from the entity to the reinsurer(s).

Any method that respects these concepts would generally be acceptable.

The following is an excerpt from the PCFRC Risk Adjustment EN, Section 3.3:

Reinsurance is a hedge against the risk in the insurance contract. Theoretically, where the price of reinsurance is proportional to the level of risk being hedged (i.e., ceded) from the entity's perspective and where the majority of portfolios and years of claims reserves

[13] "Gross" in this context refers to insurance/reinsurance contracts issued.
[14] "Net" in this context refers to the difference: gross minus ceded.
[15] "Ceded" in this context refers to reinsurance contracts held.

> *are subject to the same ceded percentages, then the ceded RA may be proportional to the gross RA (depending on the potential effect of diversification). The gross RA would be unaffected by the presence of reinsurance unless the reinsurance hedge affects the level of compensation required on the insurance contract; for example, some insurance contracts may not be issued if reinsurance cannot be secured on them.*
>
> *An entity's reinsurance portfolio may contain a mix of proportional contacts (at potentially different ceding percentages by portfolio and/or by year) as well as excess of loss or other forms of reinsurance contracts. From the entity's perspective, when the price of reinsurance is not proportional to the level of risk being hedged, the ceded RA may not be proportional to the gross RA. The cost of the reinsurance may be viewed as evidence of the price the entity is willing to pay to be relieved of risk and therefore indicative of the entity's compensation requirements related to the uncertainty of the risk being ceded.*

With regards to the risk of non-performance and its potential effect on the RA for reinsurance held, the preamble to "IFRS 17 Application EN" states (in point 23 clarifying the CIA interpretation of the answer to Question 9.11 from the IAN 100):

> *The final paragraph of this answer addresses whether risk adjustment should include any adjustments for counterparty non-performance risk. The answer notes that since counterparty non-performance risk is not transferred to the reinsurer, the risk adjustment would not include an adjustment for this risk. However, an alternate view is also presented, which states that the risk adjustment could include such an adjustment. Discussions of the Transition Resource Group (TRG) of the International Accounting Standards Board indicated that this alternative view is not supported. Reinsurer non-performance risk affects the present value of estimates of future cash flows of the group of reinsurance contract held and not the risk adjustment for non-financial risk of the group of reinsurance contracts held.*

4. Insurance service result considerations

Under IFRS 17, the concept of insurance revenue for reinsurance contracts issued may differ from the concept of earned premium for many reasons, including:

- For entities applying the PAA, the revenue recognition requirements;
- The treatment of reinsurance cash flows that are contingent on claims on the underlying contracts; and
- The treatment of amounts paid to the purchaser of the reinsurance contracts issued that are not contingent on claims of the underlying contracts.

IFRS 17.86 indicates that income or expenses from a group of reinsurance contracts held, other than insurance finance income or expenses, may be presented in the statement of financial performance either:

- As a single amount (i.e., net presentation); or

- Separately as “amounts recovered” from the reinsurer and an “allocation of premiums paid” (i.e., gross presentation).

For entities selecting the gross presentation, the same reasons listed above in respect of reinsurance contracts issued also apply and may result in differences between the “allocation of premiums paid” on reinsurance contracts held and the concept of ceded earned premium.

4.1. Insurance revenue accruals – reinsurance contracts issued

IFRS 17.B126 states that when an entity applies the PAA, insurance revenue for the period is the amount of expected premium receipts allocated to the period. For proportional reinsurance contracts issued, there are many instances where the reinsurance coverage starts before premium is received by the reinsurer. For example, on a proportional reinsurance contract issued with an effective date of January 1, it would be expected that the reinsurer receives the first bordereau[16] in May or June (i.e., more than four or five months after contract inception). In such instances, an accrual (i.e., expected premium receipt) is used to estimate the insurance revenue reported in the statement of financial performance of the reinsurer. Furthermore, if the revenue recognized is larger than the amount of premium collected, the resulting LRC associated with that reinsurance contract issued could be negative, leading to a decrease in the insurance contract liability, and potentially creating an asset if the LIC and LRC combined for the portfolio is negative (e.g., in the example presented here, this might happen for the March 31 reporting period). The same situation would also exist (in reverse) for the reinsurance held perspective (i.e., the allocation of reinsurance premium may be larger than the actual cash paid to the reinsurer as of March 31).

4.2. Insurance revenue recognition pattern

According to IFRS 17.B126, under the PAA, the allocation of insurance revenue to each period of coverage is based on either the passage of time or the expected timing of incurred insurance service expenses (e.g., based on the seasonality of losses). IFRS 17.B126 states:

> When an entity applies the premium allocation approach in paragraphs 55–58, insurance revenue for the period is the amount of expected premium receipts (excluding any investment component and adjusted to reflect the time value of money and the effect of financial risk, if applicable, applying paragraph 56) allocated to the period. The entity shall allocate the expected premium receipts to each period of coverage of insurance contract services:
>
> (a) on the basis of the passage of time; but
>
> (b) if the expected pattern of release of risk during the coverage period differs significantly from the passage of time, then on the basis of the expected timing of incurred insurance service expenses.

Examples of reinsurance arrangements where a uniform insurance revenue recognition pattern based on the passage of time may not be applicable includes:

- Risk-attaching proportional treaties;

[16] “Bordereau” in this context refers to the invoice received by the insurer in relation to a proportional treaty.

- Catastrophe treaties with material seasonality (e.g., hurricane); and
- Retrospective reinsurance (e.g., stop-loss or reserve protection coverage – See Section 5.3.2 of this educational note).

4.3. Income or expenses presentation requirements

Based on the economic effect of amounts exchanged between the reinsurer and the cedant, the presentation of those amounts in the statement of financial performance of each party may be affected. For example, some amounts may have to be reported as either a reduction to the "allocation of premiums paid" to the reinsurer, or as a reduction to the "claims that are expected to be reimbursed" by the reinsurer.

In the statement of financial performance of the reinsurer, a reduction to the "allocation of premiums paid" to the reinsurer would be reported as a reduction to insurance revenue, while "claims that are expected to be reimbursed" would be reported as a reduction to insurance service expenses".

For reinsurance contracts held, IFRS 17.86 states:

> (…) If an entity presents separately the amounts recovered from the reinsurer and an allocation of the premiums paid, it shall:
>
> (a) treat reinsurance cash flows that are contingent on claims on the underlying contracts as part of the claims that are expected to be reimbursed under the reinsurance contract held;
>
> (b) treat amounts from the reinsurer that it expects to receive that are not contingent on claims of the underlying contracts (for example, some types of ceding commissions) as a reduction in the premiums to be paid to the reinsurer;
>
> (ba) treat amounts recognised relating to recovery of losses applying paragraphs 66(c)(i)–(ii) and 66A–66B as amounts recovered from the reinsurer; and
>
> (c) not present the allocation of premiums paid as a reduction in revenue.

It is important to note that that the allocation of premiums paid on reinsurance contracts held must not be presented as a reduction in revenue from insurance contracts issued.

4.3.1. Reinstatement premiums

Following the occurrence of an insured event, the ceding company may be required to pay a reinstatement premium to be covered for additional events that may occur during the remainder of the term of the reinsurance contract held. For the purpose of this educational note, two types of reinstatements are described: reinstatements contemplated in the original reinsurance contract and additional negotiated reinstatements.

4.3.1.1. Reinstatements contemplated in the original reinsurance contract

If a ceding entity makes the accounting policy choice to present separately the "amounts recovered" from a reinsurer and an "allocation of premiums paid" to the reinsurer, the cash flows related to mandatory reinstatement premiums paid on the reinsurance contracts held are

normally considered as an offset to the “amounts recovered” from the reinsurer. For the reinsurer, if the amounts exchanged are contingent on claims, the reinstatement premiums collected on the reinsurance contracts issued would be accounted for as a reduction to the insurance service expenses.

4.3.1.2. Additional negotiated reinstatements

Additional reinstatements can be negotiated as part of a separate reinsurance contract. This type of reinsurance contract is usually negotiated after the occurrence of one or more insured events to ensure that the ceding company remains covered after all contractual reinstatement limits provided in the original reinsurance contract are exhausted. An additional negotiated reinstatement to the reinsurance contract is normally considered outside of the scope of the original contract (i.e., the terms are determined and priced independently from the original reinsurance contract and the reinsurer is not obligated to accept the reinstatement premium). As a result, the insurance premiums generated by this new reinsurance contract are considered independent from the claims incurred previously. The premium related to this reinsurance contract are therefore accounted for as an “allocation of premiums paid to the reinsurer” by the ceding company and as insurance revenue for the reinsurer for the reinsurance contracts issued.

4.3.2. Commissions for reinsurance contracts

If the ceding entity choose to present separately the “amounts recovered” from the reinsurer and an “allocation of the premiums paid” (according to IFRS 17.86), the ceding commission (or portion of the ceding commission) which is received from the reinsurer that is not contingent on the claims of the underlying contracts would be accounted for as “a reduction to the allocation of reinsurance premiums paid” in the statement of financial performance. However, the portion of the commission that is contingent on claims would be accounted for as an offset to the “amounts recovered” from the reinsurer.

Similarly, on the statement of financial performance of the reinsurer, a portion of the commission would be booked as a reduction to the insurance revenue (i.e., the part that is not contingent on claims) and another portion as a reduction to the insurance service expenses (i.e., the part that is contingent on claims).

For example, for a proportional treaty with a sliding scale commission, the maximum commission would be deemed not contingent on claims and it would be booked as an offset to the insurance revenue of the reinsurer. For the cedant, it would represent a reduction to the “allocation of reinsurance premium paid”. Any adjustment to the maximum commission would be deemed contingent on claims and it would be booked as an offset to the insurance service expenses of the reinsurer. For the cedant, it would represent a reduction to the amount recovered from the reinsurer.

The following table provides a framework for assessing which cash flows are contingent on claims and the appropriate treatment for reinsurance contracts issued and held in the statement of financial performance.

Is the cash flow contingent on claims?	Examples of Transaction	IFRS 17 Treatment for Reinsurance Held (Ceded) *	IFRS 17 Treatment for Reinsurance Issued (Assumed)
No	- Reinsurance premiums - Maximum commission on a quota-share reinsurance treaty - Premium on negotiated reinstatement (i.e. a new contract)	Reported as part of (or as an offset to) the allocation of premiums paid to the reinsurer	Reported as part of (or as an offset to) the insurance revenue
Yes	- Claims incurred - Adjustments to the maximum commission on a quota-share reinsurance treaty - Automatic reinstatement premium	Reported as part of (or as an offset to) the amounts recovered from the reinsurer	Reported as part of (or as an offset to) the insurance service expenses

* Assuming that gross presentation has been selected.

All fees paid by an insurer/reinsurer to an intermediary to compensate for the business placed (e.g., brokerage fees) would be reported as part of insurance service expenses even if some of those fees may be contingent on the quality or the quantity of business generated.

4.3.3. Non-distinct investment component[17]

Amounts received from the holder of a reinsurance contract held (i.e., the cedant) may be considered an investment component by the reinsurer if they are projected to be repaid to the cedant in all circumstances, including when an insured event does not occur or on cancellation of the contract. Similarly, in some instances, the cedant may carry a negative investment component if the funds are expected to be recovered in all circumstances.

The investment component can be either distinct or non-distinct. According to IFRS 17.B31, an investment component is considered distinct only if it is not highly interrelated with the insurance component of the contract and it could be sold separately using the same terms, in the same market, by the entity or another entity. Distinct investment components need to be reported separately from the insurance contract, and these types of features are not common for property and casualty insurance contracts. This paper only addresses the accounting treatment of non-distinct investment components (NDIC).

Various contract provisions may indicate the need to assess whether an NDIC needs to be reported, including but not limited to:

- Sliding scale commissions
- Pre-paid reinstatement premiums repayable in all circumstances

[17] Investment component: "The amounts that an insurance contract requires the entity to repay to a policyholder in all circumstances, regardless of whether an insured event occurs."

- Loss or deficit carry-forward
- Profit sharing/Experience adjustment/No-claims bonus
- Contingency fee
- Premium rebate or refund
- Stabilization fund

The NDIC represents any amount collected from the purchaser of the reinsurance contract (i.e., the ceding entity) that will be returned in all circumstances. Insurance revenue and insurance service expenses presented in profit or loss shall exclude any investment components (IFRS 17.85). The NDIC is contingent on actual amounts collected or paid, rather than actual insurance revenue and insurance service expenses which may include estimates for amount not yet collected or paid.

At initial recognition, the NDIC will be recorded as part of the LRC/ARC. Thereafter, as the service gets recognized, this provision will gradually shift to the LIC/AIC, unless it has been returned to the purchaser of the reinsurance contract.

The NDIC is not an additional provision in the statement of financial position, as the LIC/AIC and/or LRC/ARC would implicitly include the NDIC as part of the expected losses or commissions. Nevertheless, any change in the NDIC during the current financial period would be reported as part of the line item "Investment Components" in the movements in carrying amounts or liability roll-forward.

The following is an example of a contract where an NDIC may need to be booked: A sliding scale commission ranges from 20% to 40% based on movement in the loss ratio (LR) from 30% to 70% (1 percentage point of commission/2 percentage points of LR):

Example: Sliding Scale Commission

Scenario	Loss Ratio	Comm.	Composite Ratio
1	0%	40%	40%
2	25%	40%	65%
3	30%	40%	70%
4	40%	35%	75%
5	50%	30%	80%
6	60%	25%	85%
7	70%	20%	90%
8	75%	20%	95%
9	100%	20%	120%

In this example, the portion of the premium that is returned by the reinsurer to the cedant in all cases stands at 40% of the premium (i.e., the minimum composite ratio). Therefore, any amount paid by the cedant, up to 40% of premium, minus any amount already returned by the reinsurer (e.g., the provisional commission, paid losses, and any commission adjustments) would be recorded as a negative NDIC by the cedant and as a positive NDIC by the reinsurer, until it is returned to the cedant.

Additional examples, including the complete impact on the statement of financial position and on the roll-forward of liability (or asset) for reinsurance contracts issued (or held) disclosure can the found in Appendix 2 of the CIA Report on Expenses.

4.3.4. Premium adjustments reflecting an adjusted exposure base

According to IFRS 17.B65:

> Cash flows within the boundary of an insurance contract are those that relate directly to the fulfilment of the contract, including cash flows for which the entity has discretion over the amount or timing. The cash flows within the boundary include:
>
> (a) premiums (including premium adjustments and instalment premiums) from a policyholder and any additional cash flows that result from those premiums.

Premium adjustments related to services rendered in past periods, and reflecting any adjustments to the exposure base (e.g., gross net earned premium) are normally independent from the loss experience of the purchaser of the reinsurance contract (i.e., the ceding entity). For the reinsurer, these premiums adjustments on reinsurance contracts issued would therefore be accounted for as insurance revenues in the financial period in which they are received. For the ceding entity, they would be accounted as part of the “allocation of premiums paid” to the reinsurer. These adjustments can be made during the year in which services are rendered or in a subsequent year.

5. LRC/ARC: PAA and GMA considerations

The topic of actuarial considerations related to the LRC/ARC is covered in detail in a separate CIA educational note: PCFRC LRC EN. Thus, similar to the topics of discounting and RA, this educational note is limited to a discussion of LRC/ARC related to reinsurance contracts issued and held.

The LRC/ARC consists of the obligation that relates to future services (i.e., the unexpired portion of the coverage period).

5.1. Estimation of the LRC/ARC for reinsurance contracts issued/held

The default approach for estimating the LRC/ARC is the GMA, while the PAA is a simplified measurement approach. Some portfolios or groups may be eligible for the PAA under certain conditions. More details about PAA and GMA are presented in Sections 5.2 and 5.3 respectively.

5.2. PAA eligibility

The topic of PAA eligibility is covered in detail in a separate CIA educational note: PAA Eligibility EN. This educational note is therefore limited to a discussion of PAA eligibility related to reinsurance contracts issued and held.

For insurance/reinsurance contracts where the coverage period can be easily defined as one year or less based on the contract’s effective date and expiry date, entities can opt to use the PAA. When the coverage period of contracts is greater than one year, entities have to

determine PAA eligibility by demonstrating that the measurement of the LRC/ARC does not differ materially between the GMA and the PAA.

It should be noted that the PAA eligibility for reinsurance contracts held must be assessed separately from the PAA eligibility for the related underlying insurance contracts.

The following section is an excerpt from the PAA Eligibility EN, Section 7:

> *There is no difference between primary insurance and reinsurance contracts issued with regards to the PAA eligibility. For reinsurance contracts issued, the eligibility criteria of IFRS 17.53 apply. IFRS 17.69 and IFRS 17.70 pertain to reinsurance contracts held:*
>
> *69 An entity may use the premium allocation approach set out in paragraphs 55–56 and 59 (adapted to reflect the features of reinsurance contracts held that differ from insurance contracts issued, for example the generation of expenses or reduction in expenses rather than revenue) to simplify the measurement of a group of reinsurance contracts held, if at the inception of the group:*
>
> *(a) the entity reasonably expects the resulting measurement would not differ materially from the result of applying the requirements in paragraphs 63–68; or*
>
> *(b) the coverage period of each contract in the group of reinsurance contracts held (including insurance coverage from all premiums within the contract boundary determined at that date applying paragraph 34) is one year or less.*
>
> *70 An entity cannot meet the condition in paragraph 69(a) if, at the inception of the group, an entity expects significant variability in the fulfilment cash flows that would affect the measurement of the asset for remaining coverage during the period before a claim is incurred. Variability in the fulfilment cash flows increases with, for example:*
>
> *(a) the extent of future cash flows relating to any derivatives embedded in the contracts; and*
>
> *(b) the length of the coverage period of the group of reinsurance contracts held.*
>
> *For reinsurance contracts held, the LRC includes the FCF related to the underlying contracts expected to be issued in the future to the extent that the ceding entity has substantive rights to receive services from the reinsurer related to the future underlying contracts.*
>
> *If the coverage period exceeds one year, then the criteria of IFRS 17.69(a) and IFRS 17.70 for a group of reinsurance contracts held are used to assess PAA eligibility. The PAA eligibility for reinsurance contracts held is assessed separately from the PAA eligibility for the related underlying insurance contracts covered by reinsurance. The considerations described in Sections 2 to 5 for insurance contracts apply equally for reinsurance contracts.*

5.2.1. Considerations related to risk-attaching reinsurance contracts issued or held

For risk-attaching reinsurance contracts issued or held, the coverage period usually extends beyond the term of the treaty itself. For these types of reinsurance contracts, the coverage period is affected by the coverage period of the underlying policies in addition to the timing of the writing for the underlying policies.

For example, the coverage period for a 12-month risk-attaching reinsurance contract covering underlying insurance contracts with 12-month term would usually span two loss occurrence years, assuming that the underlying contracts are underwritten throughout the year (i.e., the contract boundary on such reinsurance contracts could be up to two years). Such risk-attaching reinsurance contract would provide coverage that extends beyond a one-year coverage period. Hence, PAA eligibility must be determined by demonstrating that the measurement of the LRC/ARC does not differ materially between the GMA and the PAA. This rationale applies to all risk-attaching treaties, even those with a contract term of less than one year.

5.2.2. Determination of coverage period and contract boundary for reinsurance contracts issued and held

On the topic of coverage period and contract boundary, IFRS 17.34 states:

> Cash flows are within the boundary of an insurance contract if they arise from substantive rights and obligations that exist during the reporting period in which the entity can compel the policyholder to pay the premiums or in which the entity has a substantive obligation to provide the policyholder with insurance contract services … A substantive obligation to provide insurance contract services ends when:
>
> (a) the entity has the practical ability to reassess the risks of the particular policyholder and, as a result, can set a price or level of benefits that fully reflects those risks; or
>
> (b) both of the following criteria are satisfied:
>
> (i) the entity has the practical ability to reassess the risks of the portfolio of insurance contracts that contains the contract and, as a result, can set a price or level of benefits that fully reflects the risk of that portfolio; and
>
> (ii) the pricing of the premiums up to the date when the risks are reassessed does not take into account the risks that relate to periods after the reassessment date.

Reinsurance contracts issued and held have a variety of features that the actuary would consider when determining the coverage period. Options to extend the reinsurance contract may affect the contract boundary and therefore the PAA eligibility.

Some contractual cancellation provisions of reinsurance contracts may shorten the contract boundary to the extent that they are available to both parties (reinsurer and cedant). As a

result, such cancellation provisions would generally increase the likelihood of the reinsurance contract being PAA eligible.

Some multi-year reinsurance contracts that have a cancel and re-write provision at the option of the cedant only. These types of reinsurance contracts are normally considered long-term by the reinsurer (i.e., more than one year), and therefore PAA eligibility assessment is required.

Non-contractual cancellations (e.g., early contract termination following the sale of an entity, loss portfolio transfers, novations, and commutations) normally occur after the reinsurance contract inception date. These types of cancellations are usually unknown at inception and would not affect PAA eligibility. Non-contractual cancellations are requested by one of the parties bound by the reinsurance contract and agreed by the other(s).

In the case of an early termination and/or commutation, the accounting is fairly simple. The insured regains ownership of all ceded assets and liabilities (i.e., the AIC and ARC). In parallel, the assets and liabilities held by the reinsurer in relation to the reinsurance contract issued are considered settled.

The reader should refer to Section 3 – Coverage Period Consideration, of the PAA Eligibility EN for a more complete discussion on contract boundary considerations.

5.3. GMA considerations

5.3.1.Coverage units and the CSM

Under the GMA, the LRC/ARC is calculated as the sum of the FCF related to future services and the contractual service margin (CSM). For insurance/reinsurance contracts issued, the CSM represents the unearned profit that the entity will recognize as it provides insurance contract services in the future (IFRS 17.38).

According to IFRS 17.68, “reinsurance contracts held cannot be onerous.” Therefore, the cost of reinsurance contracts held is normally recognized over the life of the reinsurance contract. The CSM for reinsurance contracts held is determined in the same manner as for insurance contracts issued, but instead of reflecting the unearned profit, the CSM is the expected “net cost or net gain on purchasing the group of reinsurance contracts held” (IFRS 17.65). Thus, unlike the CSM for underlying insurance contracts, the CSM on reinsurance contracts held can be positive or negative.

For reinsurance contracts held, the concept of CSM is modified. According to IFRS 17.65:

> The requirements of paragraph 38 that relate to determining the contractual service margin on initial recognition are modified to reflect the fact that for a group of reinsurance contracts held there is no unearned profit but instead a net cost or net gain on purchasing the reinsurance.

In the statement of financial position, the CSM is booked as part of the LRC/ARC. The CSM is released consistent with the quantity of benefits provided and the expected duration of the group.

According to IFRS 17.B119:

An amount of the contractual service margin for a group of insurance contracts is recognised in profit or loss in each period to reflect the insurance contract services provided under the group of insurance contracts in that period … The amount is determined by:

(a) identifying the coverage units in the group. The number of coverage units in a group is the quantity of insurance contract services provided by the contracts in the group, determined by considering for each contract the quantity of the benefits provided under a contract and its expected coverage period.

(b) allocating the contractual service margin at the end of the period (before recognizing any amounts in profit or loss to reflect the insurance contract services provided in the period) equally to each coverage unit provided in the current period and expected to be provided in the future.

(c) recognizing in profit or loss the amount allocated to coverage units provided in the period.

The following section is an excerpt from the PCFRC LRC EN, Section 6.5.2:

For reinsurance contracts that require the reinsurer to indemnify the reinsured for losses incurred during the reinsurance contract period (loss-occurring contracts), the coverage unit pattern would typically be uniform, assuming that no significant growth or cancellations are expected.

For reinsurance contracts that cover reinsured losses on policies incepting during the contract period (risk-attaching contracts), the coverage unit pattern would typically be rising to reflect the policies attaching under the contract, and then declining as the underlying policies expire. Theoretically, the coverage units would be determined based on the expected underlying units in force at various points in time, as this reflects the quantity of insurance contract services available. Using individual underlying policy limits to estimate coverage units is a reasonable approach however, one key practical issue is data availability if policy limits are not readily available. Alternatives may include:

- *coverage units based on the number of underlying contracts in force, if the underlying risks are homogeneous (similar coverage limits); and*
- *coverage units based on premium earning pattern, if premiums are expected to be proportional to the quantity of benefits provided, are not receivable in different periods to the insurance services, and do not reflect different probabilities of claims for the same insured event in different periods rather than different levels of stand-ready service.*

If using policy limits to estimate coverage units, the actuary would consider adjustments if there are significantly skewed underlying limits (e.g., high-limit underlying policies written at the beginning of the reinsurance contract period and low-limit underlying policies written at the end of the reinsurance contract period).

> *When the reinsurance contract covers multiple lines of business with varying limits for the underlying risks, basing coverage units on the premium earning pattern may be a practical approximation.*

5.3.2. Business combinations and retrospective reinsurance contracts

Insurance contracts acquired by the entity in a transfer of insurance contracts or a business combination, other than reinsurance contracts held, may need to be accounted for as adverse development covers, as these types of contracts would typically not be eligible for the PAA.

According to IFRS 17.B5, "Some insurance contracts cover events that have already occurred but the financial effect of which is still uncertain. An example is an insurance contract that provides insurance coverage against an adverse development of an event that has already occurred. In such contracts, the insured event is the determination of the ultimate cost of those claims."

The liability for business combinations and retrospective reinsurance therefore remains as part of the LRC/ARC until all claims in this portfolio or group are settled. Examples of business combination includes acquired portfolios, loss portfolio transfers, and novations.

The CSM for these types of portfolios is amortized over the expected settlement period. The coverage units may be based on the expected amounts of underlying claims[18].

The following section is an excerpt from the LRC EN, Section 6.5.2:

> *There are several potential approaches to determining the coverage units for an adverse development cover contract. The coverage unit pattern would generally be declining over time. When the adverse development cover has a claim limit, approaches[19] for determining the quantity of benefits may include:*
>
> - *comparing the contractual maximum amount that can be claimed in each period with the remaining contractual maximum amount that can be claimed as a constant amount for each future coverage period; and*
> - *comparing the expected amount of underlying claims covered in the period with the expected amount of underlying claims remaining to be covered in future periods. This method may not work when the underlying reserves are set at expected value and there is no adverse development on the reinsurance contract on an expected basis.*
>
> *When the adverse development cover does not have a claim limit, approaches[20] for determining the quantity of benefits may include the following:*
>
> - *Determining the coverage units based on the expected amount of underlying claims covered in the period with the expected amount of underlying claims remaining to be covered in future periods (i.e., expected pattern of release of underlying losses). [the reader may refer to the example in the LRC EN].*

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[18] Additional information about coverage units and CSM amortization for adverse development reinsurance contract can be found in the IFRS 17 TRG staff paper of May 2018.
[19] These approaches are also mentioned in Agenda Paper 05, Example 8 of the May 2018 TRG meeting.
[20] These approaches are also mentioned in Agenda Paper 05, Example 9 of the May 2018 TRG meeting.

- *Determining the coverage units based on an equal weight during the length of the settlement of underlying liabilities. This approach is based on the rationale that the entity would stand ready to pay for claims over the lifetime of the claims run-off. For this reason, it may be reasonable to use the expected settlement period of the claims to determine the length of time over which to amortize the coverage units.*

  The nature of the claims covered, and its effect on the length and uncertainty of the settlement period, would be considered. For example, the actuary may separate the claims covered by the adverse development contract into:

  - *groups of claims expected to be settled over one year;*
  - *groups of claims expected to be settled over two years;*
  - *groups of claims expected to be settled over three years; and so on.*

  Coverage units for the entire adverse development contract would then be weighted based on a systematic approach, such as the underlying liabilities.

The reader may refer to the example in the LRC EN.

5.3.3. Boundary of reinsurance contracts

In many reinsurance contracts, neither party has the right to cancel the contract unilaterally without a valid reason (e.g., fraud or material misrepresentation). In most cases, cancellation must be mutually agreed upon.

When estimating the ARC for reinsurance contracts held valued under the GMA, the ceding company would include all projected cash flows, including those related to underlying contracts that have not yet been issued, unless the reinsurance contract includes unilateral cancellation conditions. Failure to do so would contradict the fundamental principle of IFRS 17 that all future cash flows within the boundary of each contract in the group are reflected in the measurement of an insurance contract.

The projected FCF for reinsurance contracts held extend to the entire coverage period (e.g., this typically extends beyond the term or expiry date for a risk-attaching contract). The FCF of the subject contracts only include those underlying contracts for which insurance revenues have been recognized as per IFRS 17.25 (recognition). For example, at the end of the first quarter, assume that a primary insurer has written 25% of its policies (based on uniform writings throughout the year) and that the LRC for the underlying contracts is evaluated using the GMA. This means that 25% of the expected full year cash flows would be recognized. However, the FCF on the risk-attaching reinsurance contract held as of January 1 would include the projected cash flows on 100% of the policies expected to be written throughout the year. Note that this issue only occurs if the entity is using the GMA to estimate the ARC for reinsurance contracts held, and when there are no unilateral cancellation provisions.

Section 6.3 of the LRC EN provides various examples of situations where unilateral cancellation provisions exist. In such cases, the coverage period of the reinsurance held could be reduced to the length of the cancellation notice.

Under the GMA with no unilateral cancellation rights, the expected cash flows (and expected profit or losses) of a given contract are projected for the entire contract period. In a simple example of a 12-month loss-occurring reinsurance contract held, the contract boundary is 12 months. However, at interim valuation periods, the cedant will only have written a fraction of the subject business. The expected gain from the reinsurance contract held might therefore outweigh the expected loss on the underlying onerous contracts.

The actuary and management would need to understand this potential inconsistency and be able to explain any implication on the financial statements of the organisation.

5.4. Accounting for groups deemed onerous

The LC is defined as the expected net outflow of an onerous group. The LC is booked as part of the LRC in the statement of financial position. For PAA eligible groups or portfolios, the effect of the LC in the statement of financial performance is recognized as part of the insurance service expenses.

When estimating the LC under both the PAA and the GMA, the expected net outflow is projected for the entire contract boundary. In other words, the LC is calculated based on the projected full-term premium. Moreover, the FCF includes the effect of discounting and RA.

The LC is reported as part of the LRC. IFRS 17.50–52 requires an entity to make a systematic allocation of the subsequent changes in FCF between the LC portion of the LRC and the LRC, excluding the LC.

5.4.1. Recognition of LC on onerous groups (insurance/reinsurance contracts issued)

According to IFRS 17.25:

> An entity shall recognise a group of insurance contracts it issues from the earliest of the following:
>
> (a) the beginning of the coverage period of the group of contracts;
>
> (b) the date when the first payment from a policyholder in the group becomes due; and
>
> (c) for a group of onerous contracts, when the group becomes onerous.

Initial recognition will therefore take place either at the effective date of the group or at the date when the first payment from the policyholder becomes due unless the group is deemed onerous at inception, in which case initial recognition will take place earlier, with the earliest possible date for initial recognition being the "issue date" (which is the date the terms of the contract are set and the parties are bound). In many cases, this means that the recognition of the LC on onerous groups may need to be made prior to the effective date of the insurance or reinsurance contract issued. For example, assume a contract issued with an effective date of January 1, 20X3 is bound during the last week of December 20X2. If the entity is aware that this contract is onerous when bound, then the entity would book a LC in the financial statements as of December 31, 20X2.

5.4.2. Reinsurance contracts held – LRECC

The LRECC represents the expected recovery from a reinsurance contract held that is related to the LC from underlying insurance/reinsurance contracts issued.

IFRS 17.62 states that the entity recognizes a group of reinsurance contracts held from the earlier of:

- The beginning of the coverage period of the group of reinsurance contracts held; and
- The date the entity recognizes an onerous group of underlying insurance contracts, if the entity entered into the related reinsurance contract held in the group of reinsurance contacts at or before that date.

IFRS 17.62A states an additional consideration for reinsurance contracts held that provide proportionate coverage, "… an entity shall delay the recognition of a group of reinsurance contracts held that provide proportionate coverage until the date that any underlying insurance contract is initially recognized, if that date is later than the beginning of the coverage period of the group of reinsurance contracts held."

Section 6.2 of the LRC EN provides a summary table of various situations when the LC and the LRECC might be booked in the financial statements. In short, booking prior to the effective date would only be required for insurance/reinsurance contract issued that are deemed onerous at inception. Moreover, only reinsurance held contracts that have been entered into can be considered.

According to IFRS 17.B119C, a LRECC may only be recognized if the reinsurance contract held is entered into before or at the same time as the onerous underlying insurance contracts are recognised. The cash flows from the insurance/reinsurance contracts issued that are beyond the boundary of the reinsurance contract held in force will not be included in determining the LRECC. In other words, any future reinsurance treaty(ies) covering the unexpired portion of some onerous underlying group would not affect LRECC.

The following section is an excerpt from the PCFRC LRC EN, Section 6.5.3:

> *When an entity recognizes a LC on a group of underlying insurance contracts and these underlying contracts are covered by reinsurance contracts held, a portion of the LC is offset by a gain on reinsurance contracts held. This offset is called a loss-recovery component (LRECC) and is recorded as part of the Asset for Remaining Coverage (ARC) related to reinsurance contracts held:*
>
> - *when the reinsurance contracts held are measured using the GMA, the loss-recovery component adjusts the CSM of reinsurance contracts held; and*
> - *when the reinsurance contracts held are measured using the PAA, the loss-recovery component adjusts the carrying amount of the ARC instead of adjusting the CSM.*
>
> *Based on IFRS 17.B119D, the loss-recovery component is determined by multiplying:*
>
> - *the loss recognised on the underlying insurance contracts; and*

- *the percentage of claims on the underlying insurance contracts the entity expects to recover from the group of reinsurance contracts held.*

This calculation only applies at initial recognition or when the direct group first becomes onerous per IFRS 17.66A. Further, IFRS 17.B119E allows an entity to include in an onerous group of insurance contracts both onerous insurance contracts covered by reinsurance and onerous contracts not covered by reinsurance. In such cases, the entity would apply a systematic and rational method of allocation to determine the portion of the LC that relates to insurance contracts covered by reinsurance.

IFRS 17.B119F notes that after an entity has established a loss-recovery component, the LRECC would be adjusted to reflect changes in the loss component of the underlying insurance contracts. The carrying amount of the LRECC would not be greater than the portion of the carrying amount of the loss component of the underlying insurance contracts that the entity expects to recover from the group of reinsurance contracts held.

An important implication of the approach prescribed in IFRS 17 is that the establishment of a loss recovery component does not depend on whether entering into the reinsurance agreement results in a net gain or a net loss. In both instances, the LRECC would be identical.

Inversely, when an entity is “worse off” by purchasing reinsurance, the entity is still required to record a LRECC to offset the loss on the underlying direct contracts based on the percentage of claims expected to be recovered.

The approach prescribed in IFRS 17 is generally consistent with the concept of proportionate reinsurance, where financial cash flows (e.g., premiums, claims, acquisition expenses) are proportional. Under these circumstances, it follows that the reinsurance effect on the LC would also be proportional to the claims recovered.

This is not necessarily the case for non-proportionate reinsurance, where the percentage of expected claims to be recovered may not be proportional to other cash flows such as premiums and maintenance expenses. Nevertheless, IFRS 17 requires the use of the percentage of expected claims approach and the actuary would not calculate a loss-recovery component directly based on the fulfilment cash flows of the reinsurance contracts.

IFRS 17 does not prescribe a specific approach for determining the percentage of expected claims to be recovered, and therefore the actuary would use judgment in determining this assumption. The following is one approach which is thought to be consistent with the requirements of IFRS 17.

The actuary may consider the expected emergence pattern of incurred losses and loss adjusting expenses, but not other sources cash flows such as premiums and expenses. These losses may reflect the time value of money, consistent with the discount rates used to determine the LRC and would exclude the risk adjustment. The payment patterns, discount rates and risk adjustments may vary for the underlying contracts and the

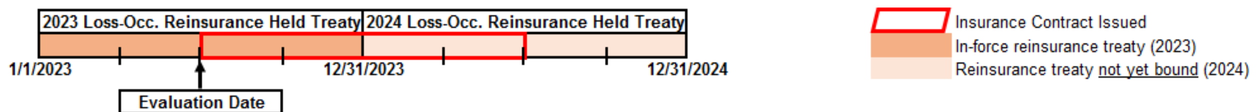
corresponding reinsurance contracts. Finally, the expected claims to be recovered may consider the risk of non-performance of the reinsurer.

Similarly, as described for the release the LC for groups measured under the PAA (see Section 5.3.3), the actuary may use a simplified approach to determine the percentage of claims to be recovered when the percentage is not expected to change materially from one reporting date to another.

Example: Loss Component (LC) and Loss-Recovery Component (LRECC) Recognition – PAA eligible contracts

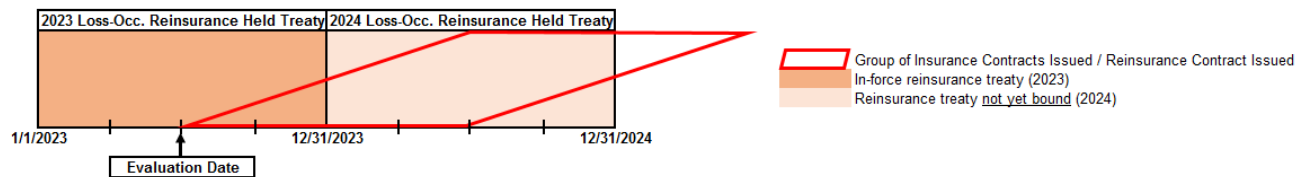
The following diagrams provide visual representations of the coverage period and associated LC and LRECC for a single underlying policy and a group of policies or reinsurance issued:

Single insurance policy:



- Insurance contract issued effective 7/1/2023 (issue date in June 2023).
- Reinsurance contract held: 12-month loss-occurring reinsurance contract(s) effective 1/1/2023.
- LC booked @ 6/30/2023.
- LRECC booked @ 6/30/2023 to recognize the expected recovery of a portion of the LC from the coverage provided under the 2023 reinsurance treaty (note that this treaty was entered into prior to the initial recognition of the onerous contract, however, it covers only 50% of the exposure – i.e., the area of the left half of the red box related to 2023 occurrences).
- No LRECC can be booked to recognize the expected recovery of a portion of the LC from the coverage that would be provided under the 2024 loss-occurrence reinsurance treaty as this treaty was not yet entered into as at June 30, 2023 (i.e., at the date of initial recognition of the underlying policy that is deemed onerous).

Group of insurance contracts issued or a risk-attaching reinsurance contract issued[21]:



[21] Assuming that there are no options to extend the reinsurance contract held beyond the boundary of the initial contract.

- Onerous group of insurance contracts issued or onerous risk-attaching reinsurance contract issued (with underlying contracts written uniformly throughout the year), with first underlying contract effective 7/1/2023 (issue in June 2023).
- Reinsurance contract held: 12-month loss-occurring reinsurance contract(s) effective 1/1/2023.
- LC booked @ 6/30/2023.
- LRECC booked @ 6/30/2023 to recognize the expected recovery of a portion of the LC from the coverage provided under the 2023 reinsurance treaty (note that this treaty was entered into prior to the initial recognition of the onerous contract, however, it covers only 12.5% (1/8) of the exposure – i.e., the area of the small red triangle related to 2023 occurrences).
- No LRECC can be booked to recognize the expected recovery of a portion of the LC from the coverage that would be provided under the 2024 loss-occurrence reinsurance treaty as this treaty was not yet entered into as at June 30, 2023 (i.e., at the date of initial recognition of the underlying group of insurance contracts or reinsurance treaty issued that is deemed onerous).

6. Accounting treatment of residual market mechanisms (automobile insurance)

The Facility Association (FA) administers, on behalf of its members, several types of residual market mechanisms that operate in all Canadian provinces and territories except for Quebec, British Columbia, Manitoba, and Saskatchewan. These automobile insurance residual market mechanisms are:

- Facility Association Residual Market (FARM);
- Risk Sharing Pools (RSPs); and
- Uninsured Automobile Funds (UAFs).

In Quebec, the Groupement des Assureurs Automobiles (GAA) administers a risk sharing pool mechanism called the Plan de Répartition des Risques (PRR).

It has been determined that the FARM, RSPs and PRR all involve insurance contracts, and therefore IFRS 17 applies. For the UAFs however, the mechanism functions more like a levy (i.e., a similar accounting treatment as a sales tax). Therefore, FA concluded that no insurance contract, as defined under IFRS 17, would exist for the UAFs. Therefore IFRS 17 would not apply[22].

For the FARM, the insurance contracts are issued by the "collective" of the FA membership using rates set by FA. FA's administration of the FARM is similar to a managing general agency model under which FA performs the administrative operations on behalf of its members. FA is not the actual entity to which the insurance risk is transferred to – the insurance risk is

[22] Accounting policy paper published by FA can be found at the following address: https://www.facilityassociation.com/Members/IFRS17Documents.

transferred to the “collective” of the FA membership. On this basis, the current accounting treatment continues under IFRS 17 (i.e., members account for their share of FARM insurance contracts as direct business (i.e., insurance contracts issued).

For the RSPs, an original insurance contract is issued by one of the FA members according to the member’s own rates and rules (i.e., insurance contract issued). Then, under a second and separate transaction, this member transfers some or all of the insurance risk from that contract to the “collective” of the FA membership (i.e., reinsurance contract held). In this case, similar to its role for the FARM, FA is administering the process (i.e., facilitating the transaction between the transferring member and the “collective” of the FA membership) but it does not assume any insurance risk directly.

When IFRS 4 was introduced, the previous accounting treatment was allowed to continue. This treatment was such that the transaction from the original issuing member to the collective was accounted for as a novation[23]. The original issuer was therefore allowed to eliminate the insurance transactions from their balance sheet. The issue with this accounting treatment is that one of the parties (i.e., the policyholder) is unaware of the second transaction (i.e., the transfer of the risk from the insurer to the RSPs). Therefore, the RSPs do not truly represent a transfer of the underlying insurance contract but rather represent a transfer of some or all insurance risk from the original policyholder to the issuing member. As such, it would not qualify for transfer accounting.

The RSPs mechanisms are very similar to a facultative-obligatory reinsurance contracts that would be written on a losses-occurring basis (i.e., the “collective” of the FA membership covers, through the RSPs, the specified share of the insurance policies issued by the ceding company or originating member, that the ceding company chooses to cede to the RSPs). Furthermore, it has been concluded that a contract exists for each province in which an RSP operates, except for Alberta in which two contracts exist (i.e., grid and non-grid). As a result, for each individual FA member, the contracts ceded to the RSPs would be accounted for as reinsurance contracts held and the contracts assumed from the RSPs would be accounted for as reinsurance contracts issued under IFRS 17.[24]

The same general conclusion applies to the treatment of the PRR in Quebec. Contracts transferred to the PRR and the shares assigned to each member (i.e., the risks assumed by the individual members by virtue of their participation in the PRR) act like reinsurance contracts under IFRS 17. As a result, for the individual GAA members, these contracts would be accounted for as reinsurance contracts held and reinsurance contracts issued, respectively, with the important difference that for the PRR, the reinsurance functions in a manner similar to annual facultative-obligatory reinsurance contracts written on a risk-attaching basis[25].

[23] A novation involves the transfer of contractual rights and obligations from one party to another with all three parties agreeing to the terms (i.e., the original two parties to the contract and the new party that is accepting the transfer of contractual rights).

[24] For further information, refer to the accounting policy papers published by FA.

[25] For further information, refer to the information bulletin released by the GAA in early 2022 for its members.