**IAN 100**

**IFRS 17 Insurance Contracts**



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**International Actuarial Note on Application of IFRS 17 Insurance Contracts**

This International Actuarial Note (IAN) is promulgated under the authority of the International Actuarial Association (IAA).  It is an educational document on an actuarial subject that has been prepared in accordance with the Due Process for IANs and that is published by the IAA in order to

* Advance the understanding of the subject by readers of the IAN, including actuaries and others, who use or rely upon the work of actuaries, and
* Serve as a model for Member Associations that wish to publish notes on the same subject (recognizing however, that the IAN might not address country specific issues)

IANs are issued

1. To assist actuaries in complying with an International Standard of Actuarial Practice (ISAP), in this case ISAP4, by offering practical examples of ways in which actuaries might implement an ISAP or a related International Financial Reporting Standard (IFRS) in the course of their work;
2. To describe generally accepted actuarial practices related to an actuarial topic

An IAN is not an ISAP and is not intended to convey in any manner that it is authoritative. Practices described in an IAN are widely recognized as generally accepted actuarial practice but the language of an IAN is not directive.

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**International Actuarial Note on Application of IFRS 17 Insurance Contracts**

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**Defined Terms** – This IAN uses various terms whose specific meanings are defined in the Glossary. These terms are highlighted in the text with a dashed underscore and in blue, which is a hyperlink to the definition (e.g., actuary).

This IAN also uses key terms from IFRS 17, in which case they have the meaning as used in IFRS 17. These terms are highlighted in the text with a double underscore and in green (e.g., insurance contract).

[NB this will be addressed before final exposure of all chapters as will the addition of a Glossary]

# Chapter 1 - INTRODUCTION

This IAN has been written to assist actuaries in complying with IFRS17 and ISAP 4, by offering practical examples of ways in which actuaries might implement the ISAP and IFRS17 in the course of their work. This IAN is organised into 16 self-standing chapters, including this introduction, discussing the main topics of IFRS 17. It is written as a series of Questions and Answers,

1. **What are International Financial Reporting Standards?**

International Financial Reporting Standards (IFRSs[[1]](#footnote-1)), as issued by the International Accounting Standards Board (IASB), are intended to serve as guidance for developing general purpose financial statements and other financial reporting on a globally accepted basis.[[2]](#footnote-2) General purpose financial statements are the main source of information for investors and other users to make economic decisions.

IFRSs are focused on general purpose financial statements of consolidated groups of enterprises but are equally applicable to single societies or companies, be they profit-oriented entities or not-for-profit organisations such as mutual insurance companies. Financial reports in compliance with IFRSs (IFRS-reports) may be prepared voluntarily or their provision may be required, e.g. by state or stock exchange regulations. To be able to make an explicit and unreserved statement of compliance with IFRSs, the financial report needs to comply with all requirements of the relevant IFRSs.[[3]](#footnote-3) The contents of a complete IFRS-report are determined in IAS 1.10.

Some IFRSs are generally applicable (e.g. IAS 1 and IAS 8), some refer to specific circumstances (e.g. IAS 27, IAS 34, IFRS 1, or IFRS 10) whilst others refer to specific subjects (e.g. IAS 19, IAS 37, IFRS 9, IFRS 15 or IFRS 17) and are accordingly of more or less relevance for specific activities within the preparation of an IFRS-report, but considering the need to be in compliance with all IFRSs as noted before.

1. **What is IFRS 17– Accounting for Insurance Contracts?**

The project to develop authoritative guidance for accounting for insurance contracts in IFRS-reports began in 1997. After introducing an interim standard, IFRS 4, in 2002, applicable from 2004 onwards, which allowed a wide scope of accounting approaches to continue to be applied, IASB completed the project in 2017 by issuing IFRS 17 - Insurance Contracts. IFRS 17 may be applied from 2018 onwards under certain conditions and is to be applied for all periods commencing after 1 January 2021 at the latest.

IFRS 17 provides authoritative guidance whether or to what extent items are within the scope of IFRS 17 (subsequently referred to as “classification”) and about recognition, measurement, presentation and disclosure of items within the scope of IFRS 17. IFRS 17 covers insurance contracts, whether issued directly or acquired in the form of reinsurance contracts assumed by the entity. Rights and obligations of policyholders of direct insurance contracts are not within the scope of IFRS 17.

The scope of IFRS 17 refers mainly to insurance contracts, as defined in IFRS 17, as contracts transferring significant insurance risk, irrespective of the laws or regulation of the respective jurisdiction which might classify and regulate other contracts as insurance contracts. Special inclusions or exclusions of some forms of contracts which might meet the defining criteria are provided. Investment contracts with discretionary participation features are also covered by IFRS 17.

Recognition follows typical accounting practice but permits the recognition of future premiums in some cases, where they do not represent a current enforceable right of the entity. For that purpose, IFRS 17 introduces a concept referred to as contract boundary (see Chapter 2) describing whether a future non-enforceable premium might be anticipated or not.

1. **How is the liability for an insurance contract determined?**

The measurement under IFRS 17 requires the determination of a current value of the insurance contract, considering market perspectives for financial risks and the reporting entity’s perspective for all other risks, in IFRS 17 referred to as the Fulfilment Cash Flows. This current value is the basis of the measurement of the insurance contract and is to be disclosed. The disclosures include its conceptual parts, the unbiased estimate of the expected present value of future cash flows, which is adjusted for the time value of money and further adjustments applied for financial risks and non-financial risks.

At outset a Contractual Service Margin (CSM) is established to offset any gain at initial measurement - that is the value of premiums in excess of the value of obligations. This is then recognised as revenue over the period providing coverage. While there is no unit of account defined for the Fulfilment Cash Flows, the unit of account for the CSM are partitions of annual cohorts, based on at least three different profitability categories, which are part of annual new business and form the unit of account of the CSM.

The described main approach of IFRS 17 is referred to in this IAN as General Measurement Approach (GMA). IFRS17 allows for a simplified alternative approach to be used for contracts of short coverage period (typically not more than 12 months), known as the Premium Allocation Approach (PAA). The PAA is similar to the unearned premium method in that the measurement of the liability for remaining coverage of short duration contracts might be simplified by distributing premiums over the coverage period in line with passage of time or in proportion to expected benefits. The PAA only applies to the part of the total measurement of the contract referred to as liability for remaining coverage, with the liability of incurred claims following the GMA.

Some special guidance applies for certain contracts whose benefits are determined based on indices or other underlying items like surplus (i.e. insurance contracts with direct participation features) sometimes referred to as the Variable Fee Approach (VFA). It includes a feature distributing the insurer’s share in changes of financial risk and incurred events over the remaining coverage period of the contract.

Reinsurance ceded is measured using assumptions that are consistent with the ceded contract.

1. **How do profit or loss statements applying IFRS17 differ from profit or loss statements in general?**

The statement of financial performance (profit or loss) is expanded by a section for the insurance service result. This contains as insurance revenue any release of cash flows, except those from investment components, risk adjustments for non-financial risk and CSM from the liability for remaining coverage for the respective period as far as originally resulting from premiums. Actual benefits and expenses of the period, including changes in the liability for incurred claims, but excluding any investment component paid, are presented as insurance service expenses. Changes in the effect of discounting and any other effect of financial risk is presented as insurance finance revenue or insurance finance expenses in the financial result. There is an accounting policy choice to present the effect of changes of financial risk direct in equity (Other Comprehensive Income), potentially avoiding / reducing volatility in the statement of financial performance.

1. **Which specific disclosure requirements are included in IFRS 17?**

IFRS 17 includes requirements to disclose information about the amounts recognised in the IFRS-report, particularly requiring reconciliations of presented amounts, significant judgment in determining those figures, including disclosures of the applied interest rate curves and a quantification of the risk adjustment for non-financial risk, and the nature and extent of the risks from the covered contracts.

In applying IFRS 17 for the first time, the standard provides two alternative approaches for transition if the retrospective approach as required by IAS 8 is impracticable. These are a modified retrospective approach and a fair value approach.

There is not a separate chapter on Disclosure in this IAN. Rather disclosure is discussed in various chapters as relevant.

1. **Overview of the remaining chapters of this IAN on Accounting according to IFRS 17**

**Chapter 2 on Classification of Contracts and Contract Boundaries**

This Chapter considers approaches to the classification required by IFRS 17, including the identification of contracts, the scope of IFRS 17 and contract boundaries. It refers to other IANs addressing further specific classifications

**Chapter 3 – Model introduction**

This chapter introduces the following four chapters which cover the technical aspects of the General Modelling Approach (GMA). These four areas are often referred to as the Building Block Approach.

**Chapter 4 on Estimates of Future Cash Flows**

This Chapter considers the requirements for determining the estimates of future cash flows whether they be to calculate liabilities for remaining coverage or liabilities for incurred claims.  It discusses issues such as which cash flows would typically be included, how those cash flows might be estimated, how the term “current estimate” is defined or what does it mean to be unbiased.  The Chapter also refers the reader to the IAA's monographs on Current Estimates[[4]](#footnote-4) and on Stochastic Modelling[[5]](#footnote-5).  This Chapter does not discuss the cash flows particular to contracts with participating features or other variable cash flows which are discussed in Chapter 8

**Chapter 5 on Discount Rates**

This Chapter considers the time value of money in the measurement of future cash flows and financial risk. It discusses both the “Top Down” and “Bottom Up” approaches referred to in IFRS 17 for determining yield curves. The Chapter refers to the estimation of risk free rates, the decomposition of credit and liquidity risks, extrapolation of yield curves and investment related expenses. The roles of the discount rate in the measurement of cash flows varying with underlying items, the determination of interest expense and the interest to be accreted on the CSM are also considered.

**Chapter 6 on Risk Adjustment for Non-Financial Risks**

This Chapter considers the criteria for, and measurement of, the risk adjustment for non-financial risk required as part of the General Measurement Approach under IFRS 17 including the purpose and general requirements of the risk adjustment, what risks would typically be covered and specific considerations in determining the risk adjustment. This note discusses how to reflect risk mitigation as risk mitigation in a pool, diversification, risk sharing, catastrophic and other infrequent events, qualitative risks considerations, use of different approaches by line of business, and general considerations in selecting and calibrating a risk adjustment approach. For detailed risk adjustment methods and how to apply them, reference is made to the IAA Monograph Risk Adjustments [[6]](#footnote-6). This Chapter also covers high level disclosure requirements including confidence level disclosure, and issues around allocation of risk adjustments to a lower level.

**Chapter 7 on Contractual Service Margin and Loss Component**

This Chapter considers the requirement under IFRS 17 to set up a Contractual Service Margin (CSM) at outset for each group of insurance contracts, including the aggregation of contracts, the subsequent measurement including the allocation of revenue to future periods in line with the provision of services and the treatment of the loss component for “onerous contracts”.

**Chapter 8 on Participation Features and Other Variable Cash Flows**

This Chapter considers the recognition, measurement and presentation of participating features, particularly in the case of contracts with direct participation features, as well as for other cash flows subject to the discretion of the insurer or linked to indices, including the criteria to be met for those classifications

**Chapter 9 for Premium Allocation Approach**

This Chapter considers the use of the Premium Allocation Approach (PAA) under IFRS17 including the criteria to be met for an insurance contract to choose this method, the measurement approach and the differences between this approach and the General Measurement Approach. The Chapter focuses on the “liability for remaining coverage”. The measurement of the contract liability from the point of occurrence of an insured event includes the “liability for incurred claims” which follows the requirement of the General Measurement Approach discussed in other chapters.

**Chapter 10 on Reinsurance**

This Chapter considers the treatment of reinsurance, both held (ceded) and assumed, under IFRS 17; including how to determine if IFRS 17 is applicable to specific reinsurance transactions. It discusses issues related to the separate presentation and valuation of the reinsurance ceded from associated underlying (ceded) contracts, and considerations in determining the estimate of future cash flows, risk adjustments and CSM and allowance for counter party risk on reinsurance ceded. Similar issues are covered for reinsurance assumed.

**Chapter 11 on Presentation**

This Chapter considers the general requirements for presentation of financial information under IFRS contained in IAS 1 as well as the specific additional requirements in IFRS 17; including amounts to be shown, disclosures to be made and required reconciliations. This Chapter discusses these additional requirements including required and excluded elements of the financial statements, what constitutes revenues and expenses, how experience variances are presented, what is to be reported in the Statement of Financial Performance versus Other Comprehensive Income, the level of aggregation to be used in presentation and disclosure, and required reconciliations

**Chapter 12 on Contract Modifications**

This Chapter considers the treatment under IFRS 17 of contract modification to insurance contracts, including reinsurance contracts, de-recognition and transfer to third parties. It discusses what constitutes a contract modification and what can be simply treated as a change in estimate.

The Chapter describes approaches for determining the deemed premium when treated as a cancellation and replacement of the original contract as well as the application under the Premium Allocation Approach. The approaches applicable to future contractual cash flows to be considered due to a prior contract boundary are also outlined.

**Chapter 13 on Business Combinations and Portfolio Transfers**

This Chapter considers the requirements under IFRS 17 when accounting for insurance contracts or liabilities for incurred claims acquired in a business combination or a portfolio transfer, and in particular the need to use the fair value of the contracts as the initial consideration. This Chapter considers the interaction between IFRS 17 and the more general guidance found in IFRS 3 Business Combinations and discusses aspects of business combinations, such as the determination of goodwill and the recognition of intangible assets.

**Chapter 14 on Embedded Derivatives**

This Chapter considers the requirements under IFRS 17 for the separation of certain derivatives embedded in contracts subject to the scope of IFRS 17. This Chapter discusses the issues which may arise in detecting and identifying embedded derivatives in such contracts which may need to be separated. Further information about embedded derivatives based on other IFRSs is found in the existing IAN 10 Embedded Derivatives.

**Chapter 15 on Fair Value Measurement**

This Chapter considers the use of the fair value measurement of insurance contracts for IFRS 17 including for business combinations or portfolio transfers and on transition if the fair value approach is chosen.

It discusses the determination of the fair value of insurance contracts in the context of the more general guidance on fair value measurement found in IFRS 13 Fair Value Measurement and of common insurance industry practices

**Chapter 16 – Transition**

This Chapter considers the one-time event of presenting statements applying IFRS 17 for the first time. It has four sections: an overview and then a section for each of the three transition methods described in IFRS 17 -- the retrospective approach of IAS 8 and the alternative approaches introduced by IFRS 17, Modified Retrospective and Fair Value. The Chapter has a sample timeline. It also references content from Chapter 15 on Fair Value Measurement.

1. **References to IFRS17**

In this IAN the use of the phrase “Paragraph X” etc. is a reference to paragraphs in IFRS 17. Where paragraphs from other IASs / IFRSs are referenced (e.g. paragraph 28 of IFRS13) then that International Standard is stated.

# Chapter 2 – Classification of Contracts

This Chapter considers approaches to the classification required by IFRS 17, including the identification of contracts, the scope of IFRS 17 and contract boundaries. It refers to other IANs addressing further specific classifications.

To follow later in 2018

# Chapter 3 – Model Introduction

3. A. What does this chapter address?

This chapter introduces the following four chapters which cover the technical aspects of the General Measurement Approach (GMA). These four areas are often referred to as the Building Block Approach.

3.B. Which sections of IFRS 17 address this topic?

Paragraphs 29-52 provide guidance on this topic. BC 18-26 also provide background on the subject.

3.C. What other IAA documents are relevant to this topic?

The IAA has published monographs on Current Estimates (Measurement of Liabilities for Insurance Contracts: Current Estimates and Risk Margins) – see, in particular, Chapter 4, Discount Rates (see Chapter 5) and on stochastic methods that could be useful for this purpose. In addition, a monograph on Risk Margins is to be released shortly (see Chapter 6). In general, we will not repeat material from either of these monographs in this chapter. In addition, the general educational material of IAA members provides significant educational material on how to estimate future cash flows. All of this educational material could be relevant.

1. **What are the building blocks that make up the General Measurement Approach?**

The following paragraphs provide educational material on the use of the various “building blocks”[[7]](#footnote-7) that make up the General Measurement Approach in measuring a group of insurance contracts on initial recognition, and subsequent measurement. There then follow four chapters providing more in-depth educational material on individual aspects of the measurement model in greater detail.

Given the principle-based nature of IFRS 17, it is noted that there is potential for differing interpretations of the various building blocks. Consequently, it is possible that comparison between reporting entities may reveal inconsistencies. It is also possible that definition of the various building blocks may include either “overlapping” (or double-counting) of various aspects of the building blocks, or “gaps” (or omissions of certain elements). The scope of the actuary’s assignment may include responsibility to ensure that the building blocks are appropriately constructed, and that no such overlaps or gaps occur. Some examples of potential situations for differing interpretations follow

1. In defining the ***“estimates of future cash flows”***, IFRS 17 refers to “the expected value (ie the probability-weighted mean) of the full range of possible outcomes” (Paragraph 33). However, in the Basis for Conclusions for IFRS 17, the reporting entity is led towards use of “all reasonable and supportable information available without undue cost or effort about the future cash flows” (BC 18).

In practice, therefore, judgement will be needed, particularly in the incorporation of the extremes of the potential distribution of outcomes. For instance, certain extreme outcomes may be considered as not amenable to cash flow projection, and may be included in the model instead as risk adjustments, or perhaps not included at all.

1. In defining an adjustment for the ***“time value of money”***, IFRS 17 incorporates the need to allow for “the financial risks associated with the future cash flows” (BC 19), hence arriving at a risk-adjusted rate of discount. However, it also recognises that certain insurance contracts may combine financial and non-financial risks in such a way that “those components are interrelated” (BC 18). Hence, there is potential for the adjustment for the time value of money to exclude financial risk adjustment.

Judgement is needed in setting the barriers between the risks to be included in the discount rate.

1. In defining the ***“risk adjustment for non-financial risk”***, IFRS 17 does not separately define non-financial risk and effectively defines it by reference to “***financial risk***”, the definition of which is not fully clear.(see Chapter 6 for background)

Again this leaves room for judgement in setting the barrier between financial and non-financial risk.

1. The illiquidity risk may be included in the discount rate, or alternatively it can be allowed for as part of the risk margin.

The risk culture of the entity may inform the constitution of the building blocks, including:

* The perceived boundary between reasonable and unreasonable (i.e. spurious) cash flow projection in relation to the insurance contracts;
* The pricing bases for insurance products;
* Treatment of any asset and liability mismatch allowance/reserve
* The cash flows and risks within the boundary of the contract under IFRS 17 and those used for other purposes

# Chapter 4 – Estimates of Future Cash Flows

4.A. What does this chapter address?

This chapter provides information concerning the estimates of future cash flows for use in measurement of liabilities and assets arising under contracts within the scope of International Financial Reporting Standard (IFRS) 17 *Insurance Contracts*. This applies both at issues of the contract and at subsequent measurements.

4.B. Which sections of IFRS 17 address this topic?

Paragraphs 33-35 and B36-B71 provide guidance on this topic. BC 146-184 also provides background on the subject.

4.C. What other IAA documents are relevant to this topic?

The IAA has published monographs on Current Estimates (Measurement of Liabilities for Insurance Contracts: Current Estimates and Risk Margins) and on stochastic methods that could be useful for this purpose. In general, we will not repeat material from either of these monographs in this chapter.

In addition, the general educational material of IAA members provides significant educational material on how to estimate future cash flows. All of this educational material could be relevant.

# General Issues:

1. What are the requirements of IFRS 17 regarding the measurement of estimates of future cash flows?

Paragraph 33 includes the key characteristics of the measurement of estimates of future cash flows, namely they:

* + 1. Include all future cash flows within the contract boundary
		2. Are the probability weighted mean of the full range of possible outcomes
		3. Are unbiased,
		4. Reflect the perspective of the entity
		5. Are current
		6. Are explicit (i.e. they do not include the risk adjustment for non-financial risk)
1. What are the typical types of cash flows to be included?

Cash flows referred to in IFRS 17 are primarily payments of cash exchanged between the parties under an insurance contract in accordance with the terms and conditions of the contract. The term “cash flow” can also be used as shorthand for other transfers of economic resources (cash flow equivalents) that are not settled in cash between the parties to the insurance contract. They may also include such items as administration costs, payments to third parties and non-cash transactions such as the provision of goods and services.

Some non-cash transactions may be subject to other IFRSs that determine the amount of transfer of resource caused by fulfilling the contracts in the respective period. Measurement of future cash flows accordingly includes the allocation or transfer of resources to those future periods under the applicable IFRS.

Those cash flows may refer to any component of the insurance contract that is covered by IFRS 17 excluding separated components. Cash flows do include components that might sometimes be seen as separate but are not under IFRS 17 (e.g. policy riders or policy loans). See chapter 2 Classification for additional discussion of this topic.

Paragraph B65 provides examples of cash flows that are typically included within the boundary of the contract. They include but are not limited to:

* Premiums
* Payments to policyholders including claims that have been reported but not yet paid, incurred claims that have not yet been reported and future claims on unexpired risks
* An allocation of insurance acquisition costs
* Claim handling costs including those for payments in kind
* Policy administration and maintenance costs
* Transaction-based costs such as premium taxes
* Potential cash inflows from recoveries
* An allocation of fixed and variable overheads

Sometimes, it might be permissible (e.g. due to immateriality) to also consider cash flows exchanged between the parties under the contract not based on the actual payment date but based on a due date or the date when the triggering event incurs.

1. At what level are cash flows determined?

Cash flows are generally identified at the individual contract level but, for measurement purposes, contracts may be aggregated. IFRS 17 allows, moreover, the entity to estimate the cash flows at whatever level of aggregation is most appropriate from a practical perspective. If the entity makes estimates at a higher level, it needs to be able to allocate those estimates to groups of insurance contracts so that the appropriate amounts are included in the measurement of the groups of insurance contracts’ fulfillment cash flows for future service and incurred claims.

IFRS 17 requires that for certain purposes, particularly the initial measurement of the CSM and the initial allocation of a contract to a group of contracts, and ongoing measurement of the resultant groups of insurance contracts, contracts be aggregated or broken down to a prescribed level. See chapter 7 on Contractual Service Margin for a discussion of aggregation for measurement of the CSM.

Assumptions may be derived at aggregation levels that are different from the aggregation level applied for measuring contracts. In that case, judgement will be needed to determine what adjustment, if any, is needed to apply them at the required aggregation level. For example, maintenance expenses may be determined for all life insurance contracts but separate assumptions may be needed for term insurance and whole life contracts.

In some cases, particularly for general insurance contracts covering multiple risks and / or perils, it may be helpful to analyze the experience separately for each of those multiple coverages. Such separation, for analysis and projection purposes, is particularly appropriate where the balance of coverages varies from contract to contract within a line of business, such as small business package policies. Such coverage cash flows are then combined at the contract level before contract cash flows are aggregated into groups and portfolios for measurement purposes. Similar concerns will also apply to life insurance contracts with multiple risks (e.g. mortality and disability) or groups of insurance contracts with multiple durations (e.g. 10, 20 and 30-year term in the same group of insurance contracts).

In summary, BC117 states: “IFRS 17 allows an entity to estimate the fulfilment cash flows at whatever level of aggregation is most appropriate from a practical perspective. All that is necessary is that the entity is able to allocate such estimates to groups of insurance contracts so that the resulting fulfilment cash flows of the group comply with requirements of IFRS 17.” Paragraph 24 gives effect to this.

# Issues concerning the definition of cash flows to be included

1. What is a current estimate?

A current estimate at the report date is the entity’s estimate based on currently available information in a manner consistent with relevant accounting guidance. The term “current estimate” is used in this chapter as a short form for the “current unbiased estimate of the expected future contractual cash flows”.

IFRS 17 defines the term “fulfilment cash flows” as including the risk adjustment and the effect of discounting. This chapter, however, does not refer to issues regarding calculating present values but focuses on the identification of cash flows and estimating unbiased expected values of those cash flows.

1. What is the meaning of expected value?

For IFRS purposes, “expected value of cash flows” represents the mean of the (typically unknown) probability distribution of cash flows. In line with this mathematical concept, IFRS 17 requires that conceptually all scenarios are covered in determining the value of the cash flows, including scenarios in the extreme tails of the distribution. Where the variability in future cash flows follows a uniform distribution, actuaries may conclude that the impact and likelihood of favorable and unfavorable extreme scenarios not explicitly considered in a model may broadly offset each other; however, where the distribution of future cash flows is skewed it may be necessary to adjust the expected value to reflect extreme scenarios not allowed for in the model.

For example, the probability distributions of general insurance property claims tend to be positively skewed. The available data for similar products is rarely sufficient to fully reflect the future impact of natural catastrophes and it is necessary to rely on other sources of data and judgement to adjust the models, which tends to increase the expected value to reflect these high-cost but low frequency events. Similarly, actuaries may consider it appropriate to take into account favourable extreme scenarios such as, for life insurance, a fall in mortality rates if an affordable cure for cancer is developed. All such adjustments would require judgement on the likely impact and probability of occurrence to adjust the modelled expected value.

The reference in IFRS 17 to scenarios is about the defining characteristic of the mean value of a distribution function rather than providing guidance regarding how to estimate the mean value. It does not imply a requirement that all possible (or even any) scenarios be explicitly constructed nor is it expected that entities will develop stochastic models for all IFRS 17 reporting.

1. Does this mean that the distribution function of cash flows needs to be determined?

Not necessarily. The accounting purpose is to derive a current unbiased estimate of the expected value of cash flows. IFRS 17 does not provide any guidance regarding how the estimate is to be made. Any statistical or non-statistical approach applied in determining figures for an IFRS report needs to comply with general accounting requirements as outlined elsewhere in this chapter.

There is a variety of approaches that can be used for determining unbiased estimates of expected values without a need to know the underlying distribution function. If the cash flows depend significantly on circumstances that cannot be described statistically but require the choice of scenarios, as, for instance, for future market prices or interest rates affecting the value of the cash flows, the consideration of some scenarios (often referred to as stochastic modeling) might be needed to estimate the expected values (see paragraph B28 of IFRS 13).

1. What does “unbiased” mean?

An estimator is unbiased if its mean value equals the mean of the value to be estimated. Therefore, an unbiased estimate does not include either conservatism or optimism.

1. What are some examples of current estimates as intended by IFRS 17 and other possible objectives (e.g. best estimate vs. median vs conservative estimate)

IFRS 17 calls for an estimate of the statistical mean, rather than the statistical median or mode. Other descriptions, such as best estimate, used in other accounting structures, may often not be the same. Before using cash flows developed for other purposes, their fitness for reporting under IFRS 17 needs to be assessed.

1. How are cash flows that are not directly determined by the contract, but are contractual, distinguished from cash flows belonging to the entity in general?

Cash flows belonging to the contract are those that are specifically generated because the contract is in existence (e.g. benefits, commissions, direct administrative expense). Indirect administrative expense, including general overhead are included only if they are directly attributable to fulfilling a portfolio of insurance contracts as per paragraphs B65(l) and B66(d). If they are not, they are general expenses of the entity not belonging to the contract and are thus not considered in measurement of the expected cash flows of the contracts.

IFRS 17 is silent with respect to techniques to be used for estimating cash flows therefore, no special techniques are required to determine these indirect expenses. The customary methods used for pricing or other types of reporting can also be used for this purpose so long as the result meets the requirements of IFRS 17.

Any cash flows or costs of the entity related to other standards are not discussed in this chapter. When investment administration expenses are estimated, only expenses that are required by the contract are included, not the expenses of the actual investments of the entity. Under normal circumstances, investment expenses are not included in the fulfillment cash flows. Instead they are subject to IFRS 9. An exception to this may apply when those investment expenses are required by the insurance contract (see Chapter 8 on contracts with participation features).

1. To what extent do the expected values have to differentiate contracts with different characteristics (e.g. age, gender), and other known peculiarities of contracts?

Statistical estimates are usually only differentiated for a limited number of characteristics of the item to be estimated and include the average effect of other characteristics. Since insurance is based on statistical estimates, IFRS 17 does not require the entity to assess all characteristics of a contract that might be relevant to the outcome and establish estimates on that basis. Paragraph B37 does require consideration of “all reasonable and supportable information available at the reporting date without undue cost or effort.”

Accordingly, it is a matter of judgment as to what degree characteristics of individual contracts are considered in the measurement and grouping. It may be appropriate for individual contracts to be aggregated into groups of contracts that are not further distinguished. B37 does note, however, that “information available from an entity’s own information systems is considered to be available without undue cost or effort.”

Paragraph 17 may require identification of the fulfilment cash flows of an individual contract, for the purposes of initial grouping. Accordingly, assumptions that are appropriate for that purpose would need to be chosen for each contract. It is necessary to determine the degree to which the assumptions are differentiated for the characteristics of individual contracts. The individual characteristics of each contract are only considered to the extent that the assumptions are differentiated on the basis of those characteristics.

The actuary may consider a wide range of factors in an internal experience analysis used for determining liabilities for remaining coverage and incurred claims. This consideration is to determine whether it is appropriate to incorporate those factors explicitly into the analysis and whether it is appropriate to then incorporate them into the measurement. Factors need not be incorporated in the analysis unless there is reason to suppose that they can reasonably be collected and used by the insurer without undue cost and that they are likely to materially impact the measurement of the fulfilment cash flows of the groups of insurance contracts.

Many characteristics of contracts will not be available to the entity in any case. For other characteristics, even if known, the entity might not be able to assess their impact due to limited statistical data or the undue cost or effort to obtain them. Other characteristics of contracts will not be consistently available for all contracts and, as a consequence, may be ignored since they can only be averaged over other contracts. Other characteristics, which might be assessable at outset or are even assessed, might be ignored in pricing since the overall benefits from such a differentiation would not outweigh the cost of doing so. For example, certain medical examinations or adjusting information systems to differentiate a certain characteristic could be more expensive than the price effect. An entity might thus limit the differentiation of contract characteristics to a certain number that can reasonably be administratively and statistically managed. Administrative convenience, however, should not be confused with a marketing decision to cross-subsidize between identifiable sets of contracts.

Accordingly, the differentiation of assumptions as applied to individual contracts will usually start with the differentiation used for pricing. A lower level of differentiation than applied in pricing might, if applied to individual contracts, result in inconsistencies between premiums and the measurement of the related cash outflows, if the cash flows would be based on averaged assumptions while the associated premiums are more differentiated. For example, a contract viewed in pricing as being riskier and accordingly having a higher premium, would be compared with an average risk and therefore would show a high CSM while a contract seen in pricing as less risky and accordingly having a lower premium would result in comparison with the average risk in a low CSM or even be shown as onerous.

There are exceptions to this principle. Paragraph BC135 (a) refers to an “intentional pricing strategy”. If the entity underprices certain contracts intentionally, e.g. to gain market share, by ignoring certain relevant and known characteristics of the contracts, it might have the same consequences as if the entity chooses to charge insufficient premiums. Accordingly, measurement considers those peculiarities of the respective contracts and differentiates assumptions on that basis. As a consequence, the premiums agreed for that contract might turn out to be insufficient to cover the value of the risk.

Furthermore, paragraph 20 allows an exception for grouping, where law or regulation constrains the use of specific characteristics for pricing (e.g. where pricing of annuities must be on a unisex basis). In such cases, the insurer may include such contracts in the same group, but only if they would otherwise fall into a different group due solely due to the regulatory pricing constraints. Note that this does not allow those specific characteristics to be ignored in the measurement process, only for grouping.

It is acceptable to allow for the average impact of considered characteristics for the contracts in a group, so that only the average impact of the characteristics is reflected in the measurement, provided that it reflects the true mix of such characteristics in the group. If the composition of a group changes, however, it may be necessary to reassess the average impact, so that it continues to reflect the mix of characteristics in the group.

For small portfolios, where there is a level of subjective underwriting in the premiums charged, and sometimes for larger portfolios, it may be possible for the actuary to conclude that the premium charged is the best available measure of the relative levels of expected costs between contracts. In such cases, it is acceptable to use the premium as a proxy for most or all of the characteristics of the contracts.

# Inflows

1. What are the cash inflows to be considered?

All cash inflows arising under rights of the insurance contracts and within the contract boundary are considered. The primary inflow is, of course, premium. Investment income, other than that related to policy loans (see below), is not included since it is a cash inflow due to investments and not specifically related to the fulfilment of the contracts.

Other cash inflows considered include such items as salvage, subrogation, contract charges such as cost of insurance charges, and claw-backs of agent commissions originally paid related to the contract. The treatment of such recoveries is not specified in IFRS 17. Any actuarial estimates of such recoveries should follow their accounting treatment.

Cash inflows on insurance riders and future insurance options, such as disability premium waiver, hospitalisation, term insurance, guaranteed future insurance (including cash flows from the expected exercise of such guarantees) will also be included if they are within the contract boundary. See chapter 2 for more on classification.

1. How are policy loans and repayments handled?

If policy loans are a component of the insurance contract (see chapter 2 Classification), loans and repayments of policy loans are part of fulfillment cash flows. If future policy loans are within the contract boundary, expected future loans and repayments should be included in the cash flows as well as interest accrued on outstanding loans. To the extent that interest accrued on the loan is accumulated at a rate different than from the discount rate applied in measurement under IFRS 17 there will be an effect on earnings.

1. How are premiums prepaid with interest accretion treated?

Prepaid premiums are treated the same as premiums paid at their due date. They are part of the cash inflows and the frequency and effect of their occurrence is included as part of future cash flows. In some cases, there is an agreement that the insurer grants a rebate on prepaid premiums in the form of interest accreted. If this agreement is a component of the insurance contract and not separated as a distinct investment component, the rebate is considered in measurement and treated as an adjustment to premium as per paragraph B65(a).

IFRS 17 does not directly address the issue of recognition of prepaid premiums. In the same way as insurance acquisition cash flows arising before recognising the group of insurance contracts are an asset according paragraph 27, however, liabilities arising from prepaid premiums might be recognised as incurred.

1. How are extra premiums paid for substandard risks included?

Extra premiums for substandard risks are treated identically to other premiums. It is, moreover, important that expectations for the related future benefits are estimated on the basis of the correspondingly higher risk, so as to be consistent with the extra premiums. Actuaries might also consider whether the statistical knowledge available about the higher risk provides an adequate basis from which to develop an appropriate estimate that deviates from the extra premium determined. Similar considerations apply for premium rebates for risks better than standard.

# Methods to estimate expected future cash flows

1. What kind of data is used to estimate future cash flows?

Paragraph B41 requires assumptions to be based on information including, importantly, the entity’s own experience to the extent it is available, supportable and credible. This data can be adjusted if there is reason to believe that historical trends will not continue in the future or if other influences may affect them. If such internal data is not available, either in whole or in part, then industry or other available data, e.g. population data, may be used as a basis for the assumptions. In general, an entity’s experience will be analysed for this purpose using an internal experience study.

While the entity’s own experience is the primary source for setting assumptions, to the extent that there is market information available, assumptions should be consistent with that information unless there is a justification for a divergence.

Paragraph 33 (a) and B37 set limits on the effort required to collect the statistical basis of determining the assumptions. In general, information used should be reasonable, supportable and obtainable without undue cost. Information available from the insurer’s own information system, e.g., internal experience studies, and other sources used for pricing may be suitable for measurement.

1. What methods are appropriate to estimate future cash flows that might be dependent on market variables?

Stochastic projections (see IAA monograph on Stochastic Modeling) are allowed but are not necessarily required. Stochastic methods will more likely be used to develop estimates of a risk adjustment (see IAA book on Risk Adjustments - due to be published mid 2018) or interest rate dependent cash flows than the usual mean estimate. IFRS 17 refers to using, but does not require, stochastic modelling regarding cash flows that are interest rate dependent (paragraph B48) and also if cash flows reflect a series of interrelated options (see paragraph B39 and paragraph B28 of IFRS 13 about the extent of such modelling needed).

1. How are available inputs from financial markets and from other external sources applied to cash flow estimates?

Available inputs from financial markets and from other external sources may not represent characteristics of the cash flows of a certain portfolio; if that is the case, the entity’s estimate or adjustment to financial market information are generally be used, as applicable. However, if for example the portfolio has new elements on which the entity has no or limited experience, external inputs, such as industry experience, could be used. As the entity obtains sufficiently robust experience of its own, it will supplement or substitute its own experience.

1. What needs to be considered in estimating policyholder behaviour (e.g., surrender rights, options to switch types of contracts if such option exists in a contract e.g. between a unit-linked and participating contract)?

The basis for the expected value is the expected behavior based on experience, not financial rational behaviour (see B62). Experience might cover only a very limited range of circumstances as incurred up to the present. Accordingly, for a wide variety of possible future circumstances, no past experience may be available. In filling that gap, the actuary may wish to consider whether the chosen assumptions have a significant effect on the outcome compared with the outcome resulting from assuming that the behavior would be in line with past experience even in changed circumstances. If the difference is relevant, the actuary may consider if and how the experience needs to adjusted to reflect current conditions (paragraph B41(c)). Risks from such assumptions are to be considered in the risk adjustment to the extent they are non-financial risk, depending on the nature of the risk. The expected value considers both advantageous and disadvantageous behavior of policyholders.

# Internal Costs

1. What methods are appropriate to estimate expected future internally incurred costs?

Estimates of future management costs will usually make use of any forecasts the entity makes including budgets and business plans. Those future unit costs will usually anticipate inflation consistent with the discount rates being used. It is also appropriate to allow for expected future economies (or diseconomies) of scale, consistent with the likelihood of these scenarios and unbiased mean.

Future unit costs will also consider the likelihood of the entity being measured as a going concern. Unit costs may therefore need to reflect a reasonable development of future new business, if appropriate, in deriving an unbiased estimate of the mean.

1. How are administration costs that are paid or expected to be paid prior or subsequent to contractual due date handled?

The measurement is based on the actual payment date, not the due date, and allows for any consequences of early or late payment (e.g. pre-paid or annualized commissions, interest accreted, penalties charged). If this can be shown to give materially the same result, the measurement could be based on due dates with an approximation of the interest effect to the actual payment date.

1. Which cash flows other than those exchanged between the parties may be considered?

The key guidance for differentiating cash flows other than those exchanged between the parties is the exclusion of general overhead cost in paragraph B66 (d) if they “cannot be directly attributed to the portfolio of insurance contracts that contain the contract”. Those general overhead costs are not included in the estimate of future cash flows of IFRS 17 and are accordingly subject to authoritative guidance in other IFRSs determining their recognition, measurement, presentation and disclosures. This Chapter does not discuss such items.

The reference to “directly attributable” is a generally used phrase in IFRSs and the entity might have previously adopted interpretations of that term in its accounting policies. This Chapter does not discuss further the accounting meaning of this phrase. The accounting interpretation of this phrase might, however, result in the need to choose the partition of the business into Portfolios of Insurance Contracts (PIC) suitably to allow an adequate split of currently incurred and future expected cost between those “directly attributable” to a PIC and general overhead that is not considered in measurement and presentation of insurance contracts.

After identifying those internal costs that can be directly attributed to portfolios of insurance contracts, those costs might be differentiated regarding their function in fulfilling the insurance contracts. IFRS 17 distinguishes insurance acquisition cash flows from other internal costs. IFRS 17 is silent regarding how to accomplish this separation and accordingly might be seen as an indication that normal cost accounting approaches, particularly key allocations between functions are appropriate.

In summary, the identification of costs considered in measurement might be split in three separate steps:

1) Exclude costs that are not directly attributable to a portfolio of insurance contracts (B66 d)).

2) Allocate the remaining costs to functions, i.e. insurance acquisition cash flows, servicing contracts during their coverage period and settling claims based on normal cost accounting principles (B65 (e), (f), (h) and (l)).

3) Allocate the identified costs per function to each group of insurance contracts “using methods that are systematic and rational, and are consistently applied to all costs that have similar characteristics” (B65 (l).

1. What are insurance acquisition cash flows?

Insurance acquisition cash flows are defined (IFRS 17.A) as “*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. Such cash flows include cash flows that are not directly attributable to individual contracts or group of insurance contracts within the portfolio.”* These include direct payments, such as commission, underwriting costs, certain stamp duties and other costs of contract issue specific to a particular contract, but also include such costs incurred for a portfolio of contracts. They do not include any allocation of overhead expenses.

To differentiate acquisition costs from other costs, particularly contract administration costs, the contract boundary might be of relevance. If a payment is contingent on persistency beyond the contract boundary, it might be seen as an acquisition cost outside the contract boundary. Therefore, those costs are not included in the cash flows of the existing contract, but might instead be an asset (in line with paragraph 27, if applicable) of the entity. In that case, the item is recognized as an expense only when the new contract becomes in force. If the payment is contingent only on persistency within the contract boundary it is generally an administration cost.

1. How are insurance acquisition cash flows considered if paid prior to initial recognition of the related group of insurance contracts?

Insurance acquisition cash flows paid prior to initial recognition are reflected as paid but otherwise treated identically to other insurance acquisition cash flows. They are considered to relate to existing contracts only if at least one contract of the related group of insurance contracts is already issued even if not yet recognized. In that case, the insurance acquisition cash flows are capitalized until the related group of insurance contracts is issued, otherwise they are immediately expensed.

1. How are insurance acquisition cash flows considered if paid in a reporting period (in the same year, in a subsequent year) after initial measurement (e.g. renewal commissions or asset-based commissions)?

Insurance acquisition cash flows paid after the initial sale, are reflected in the same way as other future costs, regardless of the year in which they are paid. That is, they are included in the contract’s expected future cash flows on a probabilistic basis. Therefore, for example, if the payment of the commission is dependent on the policy continuing within the contract boundary, the probability of lapsation is reflected.

In this sense, they are considered to be directly attributable expenses. The question of whether they are acquisition costs or direct administration costs is moot.

1. If agent / agency compensation is contingent upon agent / agency survival, how might those expenses be reflected (and if so, how might agent / agency turnover be considered)?

These expenses are usually included in expected cash flows in the same way as for other contingent cash flows, e.g. claim handling costs. Hence if agent / agency turnover materially affects expected cash flows, this needs to be considered in determining expected cash flows whether the expenses are for acquisition or maintenance of the contract.

1. What are some examples of expenses that are or are not insurance acquisition cash flows?

Insurance acquisition cash flows include, but are not limited to:

* Commissions
* Managerial overrides
* Underwriting costs
* Contract set up expenses

The following are not considered insurance acquisition cash flows

* Agency overrides
* Managerial bonuses for persistency
* Premium and commission processing costs
* Overhead of underwriting units if not directly attributable to a portfolio of insurance contracts
1. Are any taxes included in cash flows?

See B65. All transaction-based taxes (such as premium taxes, value added taxes and goods and services taxes) and levies (such as fire service levies and guarantee fund assessments) are included in cash flows. Wage based taxes, referred to as payroll taxes, social security taxes and similar items, are also included to the extent the wages they are based on are included. Also included would be any taxes paid on behalf of the policyholder. If the impact of certain of these taxes is only the small difference of the time value of the incoming and outgoing cash flows, those impacts could usually be ignored based on materiality considerations but noted in disclosures.

Income taxes and other similar taxes (e.g. a tax based on Investment Income and Expenses) levied on the entire entity are not included as a cash flow in contract measurement even if they are reflected in benefits paid to policyholders unless paid in a fiduciary capacity on behalf of the policyholder. See chapter 8 Participating Contracts

1. Are there any special considerations for discretionary or voluntary payments to policyholders?

For policyholder bonuses or dividends see chapter 8 on Participating Contracts. Similar items on non-participating contracts (e.g. excess interest payments) should be measured in the same way they would be measured on a participating contract. For other discretionary cash flows of the entity, including any fair dealing in determining claims payable, whether their consequences are within or beyond the contract boundary needs to be considered. If they are within the contract boundary, they are measured at the expected value. Otherwise, they are not included.

1. How are policyholder dividends or bonuses projected for traditional participating contracts?

See Chapter 8 on Participating Contracts.

1. How are delayed benefits, benefits which are expected never to be paid, for events that create rights contingent on future events (e.g. annuitants to persons under third party liability, or joint life) accounted for?

These benefits are normally included taking into account their expected probability of payment.

1. How are interest credits paid to policyholders projected?

See Chapter 8 covering Participating Contracts

1. Where is there available guidance for estimating inflation and its effects on inflation-sensitive benefits, claims and expenses?

Paragraph B128 (b) provides guidance on when inflation risk is to be seen as non-financial risk. Paragraph B51 provides as an example a reference to observed market interest rates. A range of statistics are available in different countries. General living cost indices or wage indexes might be useful for many cash flows, but building, medical and other insurance relevant expenses may also have their own indices or may be responsive to specific factors other than general inflation. In addition, as inflation applies to the entity’s internal expenses, the relative change in productivity and changes in the number of units can also influence trends in unit expenses. As long as observations can be made regarding (neutral) expected values of inflation in market prices, those observations have priority compared with the entity’s expectations.

1. How can cash flows on blocks of business with no prior experience or no relevant experience (e.g. new line of business for entity, mortality past age 90 or coverage durations longer than the product has been issued) be estimated?

The best available relevant experience, both internal and from the general market is considered. This is likely to be supplemented by documented judgment.

1. How might cash flows on contracts covering multiple perils be developed?

This depends on the nature of the contract and the nature of the peril.

For example, many general insurance contracts cover standard combinations of perils. In such cases, the standard combination can be treated as a single peril.

If the perils are fully independent, then simple addition can be used.

Interdependent perils (e.g. joint life, first death) can be adjusted for the probabilities of co-incidence.

1. How might cash flows on single contract with multiple insured items, particularly if there is an open number of insured items in the contract (e.g. a group life contract or a corporate auto contract) be adjusted for added or deducted insured items?

Where an additional premium is to be agreed for each additional insured item (e.g. group life, health or disability), estimates may be made on the basis of the insured items active at the measurement date, since the additional insured item is beyond the contract boundary before it is added.

Where a fixed premium is charged even if the number of insured items can change within the contract boundary (e.g. workers’ compensation that covers all employees or group life insurance), then an expected value approach is appropriate estimating the number of insured items which will be covered within the contract boundary.

# Changes in estimates

1. How often are estimates re-evaluated?

In compliance with paragraph 33 (c) and B54-B60, the assumptions for estimations have to be re-evaluated at each reporting date. If there is no positive indication that anything relevant has changed, however, no change is required.

# Chapter 5 – Discount Rates

5.A. What does this chapter address?

This chapter discusses practices related to interest rates, yield curves, discounting and replicating portfolios for insurance contracts as required by IFRS 17 “Insurance Contracts”. First the general principles for discounting within IFRS 17 are discussed in questions 5.1-5.8. Discount rates used for cash flows that do not vary based on the returns on financial underlying items are discussed in questions 5.95.22. Discount rates for cash flows that do vary based on the returns on financial underlying items are discussed in questions 5.23-5.29. Discounting related to the Premium Allocation Approach is covered in questions 5.30-5.33 and locked-in discount rates are discussed in questions 5.34-5.39.

5.B. Which sections of IFRS 17 address this topic?

Paragraphs 36 and B72 – B85 mainly provide guidance on discounting.

Related sections are paragraphs B44-B48 (on market variables) and paragraphs87, 110-113 and B128-B136 (on insurance finance income and expenses).

The relevant paragraphs in the basis for conclusions are BC 19, BC 185 – BC 205, and BC 212

5.C. What other IAA documents are relevant to this topic?

The IAA has published a monograph on discount rates, “Discount Rates in Financial Reporting: A Practical Guide”, October 2013.

**General topics**

1. **What are the general principles related to discounting within IFRS 17?**

An amount payable today has a different present value from that of the same amount payable in the future. In other words, money has a time value. Discount rates are used to adjust cash flows to reflect the time value of money. The following general principles underpin the discounting guidance within IFRS 17.

**Principle 1:** Estimates of future cash flows are adjusted for 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 (paragraph.36).

**Principle 2:** Discount rates are reflective of whether the cash flows vary based on the returns on any financial underlying items (paragraph B74).

* For some insurance contracts, e.g., non-participating traditional term life or non-participating whole life insurance, the cash flows are not dependent on financial underlying items. IFRS 17 refers to these products as having **cash flows that do not vary based on the returns on any financial underlying items**. The discounting for these cash flows is discussed in questions 5.9-5.24;
* Other insurance contracts, e.g., unit-linked universal life insurance and variable annuities, typically have cash flows that are dependent on financial underlying items. IFRS 17 refers to these products as having **cash flows that vary based on the returns of any financial underlying items**. The discounting for these cash flows is discussed in questions 5.23-5.29;
* Based on the definitions in the standard, the distinction between cash flows that do vary based on the returns on financial underlying items and cash flows that do not vary based on financial underlying items is not equal to the distinction between insurance contracts with direct participation features and insurance contracts without direct participation features. This is further explained in question 5.8.

**Principle 3:** The discount rates applied to the estimates of the future cash flows reflect the characteristics of the cash flows and the liquidity characteristics of the insurance contracts (see paragraph 36a).

* The discount rates applicable to fully liquid instruments (the “risk-free curve”) are discussed in question 5.12;
* The liquidity characteristics of insurance contracts are discussed within questions 5.12-5.15.

**Principle 4**: The discount rates are consistent with observable market prices, if any, for financial instruments with cash flows whose characteristics are consistent with those of the insurance contracts and they shall exclude the effect of factors that influence such observable market prices but do not affect the future cash flows of the insurance contracts (paragraphs 36b and 36c).

* The concept of reference portfolio is discussed in question 5.10
* It may be possible to determine the discount rates for a portfolio of insurance contracts by identifying a replicating portfolio. This is discussed in question 5.27.

**Principle 5**: Estimates of discount rates are consistent with other estimates used to measure insurance contracts to avoid double counting or omissions (paragraph B74). For example, if nominal cash flows include the effect of inflation they are discounted at rates that include the effect of inflation. Similarly, when discounting cash flows that vary with financial underlying items, the cash flows and the discount rates used are aligned,

1. **For which purposes are discount rates required?**

Paragraph B72 lists the purposes for which discount rates are required.

|  |
| --- |
| *An entity shall use the following discount rates in applying IFRS 17*: |
| 1. *to measure the fulfilment cash flows – current discount rates applying paragraph 36.*
 | Discussed in questions 5.9-5.29 |
| 1. *to determine the interest to accrete on the contractual service margin […] for insurance contracts without direct participation features – discount rates determined at the date of initial recognition […].*
 | Discussed in question 5.34 |
| 1. *to measure the changes to the contractual service margin […] for insurance contracts without direct participation features – discount rates […] determined on initial recognition.*
 | Discussed in question 5.37 |
| 1. *for groups of contracts applying the premium allocation approach that have a significant financing component, to adjust the carrying amount of the liability for remaining coverage […] – discount rate […] determined on initial recognition.*
 | Discussed in questions 5.31 |
| 1. *If an entity chooses to disaggregate insurance finance income or expenses between profit or loss and other comprehensive income (IFRS 17.88), to determine the amount of the insurance finance income or expenses included in profit or loss:*
 |  |
| 1. *for groups of insurance contracts for which changes in assumptions that relate to financial risk do not have a substantial effect on the amounts paid to policyholders […] – discount rates determined at the date of initial recognition […];*
 | Discussed in question 5.36 |
| 1. *for groups of insurance contracts for which changes in assumptions that relate to financial risk have a substantial effect on the amounts paid to policyholders […] – discount rates that allocate the remaining revised expected finance income or expense […] at a constant rate; and*
 | Discussed in question 5.37 |
| 1. *for groups of contracts applying the premium allocation approach […] – discount rates determined at the date of the incurred claim […].*
 | Discussed in question 5.33 |

1. **How are liquid risk-free rates determined in the context of IFRS 17?**

A liquid risk-free yield curve is discussed in paragraphs B80 and in BC193. It is the basis of the bottom-up approach which is discussed in question 5.11 and would be required if the bottom-up approach is utilized. The liquid risk-free curve may not be required in a purely top-down approach (which is discussed in question 5.16.)

IFRS 17 does not define a method to derive the liquid risk-free yield curve. Favourable characteristics for market quoted interest rates used in deriving a liquid risk-free yield curve might include:

* Reliable and liquid;
* Contain the smallest possible amount of credit risk (i.e. very close to zero / negligible); and
* Have quoted / maturity dates for a wide range of terms/durations.

To set an entire curve, practitioners may, in some cases, consider using more than one security type or market index / reference rates to derive the overall curve. For example, some countries may not have any interest rates (in its local currency) with very close to zero credit risk premiums. Thus, deriving the liquid risk-free curve may involve judgement.

Some options and considerations that might be applied are set out below[[8]](#footnote-8).

1. Government bond rates

Politically stable governments in economically developed countries are commonly believed to have a low probability of defaulting on their debts. Reasons why default on government-issued securities is believed to be a low-probability event for stable governments in developed countries are taxing power and ability to expand money supply (which is not the case for all governments). The rating can be used as an indicator as to whether the bonds of the specific government may be considered risk free.

In the situation of a currency union, a basket of government bonds with a high rating might be used. In the situation of a currency union, an individual government does not have the ability to expand the money supply which may cause credit risk. Also sub national governments can issue debt. As in a currency union, these sub national governments do not have the possibility to print money. There may be credit risk in these types of bonds. If credit risk is present, an approach that estimates the credit risk component so that it might be removed is described in question 5.17 below.

Apart from the credit risk, the available maturities and the liquidity of the government debt market varies between governments. These may be factors when choosing between government bonds and alternative bases for the risk-free curve development.

1. Swap Curve

In many markets swap curves are observable and available for a range of terms. In some cases, they are more liquid and available for a greater range of terms than government securities.

Swaps are viewed by the market as the primary instrument for replicating and hedging interest rate risk arising from derivative assets which makes them a natural reference to derive the risk-free interest rates. Furthermore, swap contracts are typically collateralised and there is no risk on the principal, which substantially reduces the exposure to a credit default event. For example, European Solvency II approach[[9]](#footnote-9) uses Swap Rates for currencies with deep financial markets.

Swap quoted rates may have to be adjusted in order to reflect:

* The counter-party credit risk: A party who is receiving a fixed interest rate (i.e. fixed / quoted leg) of a swap from another party will require a premium on top of the interest rate to compensate for the risk of repayment. The “swap rate” will include an allowance for credit risk and an adjustment would be required, taking into account collateralisation requirements. Note that such an adjustment or allowance may not be required in other cases (e.g. when quoted rates are mid-rates or are for receiving (rather than paying) fixed rates).
* The underlying reference security credit risk: Swap rates are typically based on the yield of an underlying reference security and therefore any material credit risk premiums within this security would need to be removed to obtain a risk-free rate.

Understanding the basis underlying quoted rates is important when choosing any adjustment in relation to counter-party risk. Similarly, understanding the underlying reference securities is important when choosing any adjustment for credit risk.

1. Corporate Bond Rates

The use of corporate bond rates is not frequently used for developing a risk-free yield curve but in some jurisdictions, it may be the most widely traded market. Credit risks need to be considered in the context of corporate risks. Techniques that might be considered when using corporate bonds rates are similar to those presented in question 5.17 below.

Where, for a currency, none of the three above options (for securities/reference rates in that local currency) is suitable, or it is unclear as to its suitability, one consideration may be to conduct analysis using securities issued in a different currency. Examples of two different approaches are discussed below.

* Use of securities issued in a currency which is pegged to the currency in which the contract cash flows occur. The suitability of this approach depends upon adequately allowing for any risks that the level of the peg may change. Evaluating this risk may require particular care given that in these situations there may be a lack of forward exchange rate contracts which (if they were available) would be one source of a market observable measure of the risk of the peg changing.
* Using yields of securities in another currency (which is not pegged to the currency in which the contract cash flows occur). Where such analysis is undertaken, adjustments may be made for differences in expected inflation, for example by using rates quoted for forward exchange rate contacts.
1. **How is inflation reflected in discount rates?**

Paragraph B74 states that *nominal cash flows (i.e. those that include the effect of inflation) shall be discounted at rates that include the effect of inflation. Real cash flows (i.e. those that exclude the effect of inflation) shall be discounted at rates that exclude the effect of inflation*.

Cash flows subject to inflation may therefore either

1. be projected including the effects of inflation and discounted with a nominal rate or
2. be projected without inflation and discounted with real rates.

There are several potential methods that may be suitable for deriving inflation and/or real earning rate expectations. Some potential methods and aspects to consider in their application are discussed below. The considerations listed may not be exhaustive.

* **Market based approaches**
* Estimating inflation by taking the difference between nominal bond yields and inflation-linked bonds. This method requires limited judgement where the issuer / credit risk of the bonds is the same (otherwise judgement / subjectivity is involved in making further adjustments for differences in yield due to credit). More considerations may be required because in some markets, while the nominal bond market is considered reliable and well-functioning, the index-linked bond yields may be biased because of smaller volumes on issue and other supply/demand factors. This would then bias the derived estimate of inflation.
* Inflation swaps / other market instruments – investment banks or other traders may offer markets in future inflation. These may not be common causing possible biases. Where such trades occur, the prices may not be readily and publicly available. Nonetheless, where such information is available it may assist by providing insight into market information on inflation estimates.
* **Publicly available estimates**
* Monetary body targets for inflation.
* Forecasts of economic commentators and / or government bodies.
* Views of a long-term real risk-free rate. This is discussed further in question 5.19 of this chapter. This may assist with setting the long-term inflation estimate but is likely to be less helpful in setting short-term estimates.

Publicly available estimates may not be the same as the results of market based approaches or may not align with realized inflation. If the two estimates are not similar over a horizon, then an evaluation of the causes of difference may be useful. The appropriate adjustments will be based on the cause of the differences. Potential causes of differences may be:

* + The corresponding monetary bodies may not always achieve their target including on average over the long-run.
	+ Market based estimates can be biased due to limited volume of instruments available.

Some cash flows of an insurance contract may depend on a different inflation index than the consumer price indices (CPI) most commonly available. For example, the expenses of an insurance company may be expected to grow at a different pace than the CPI. Also, the insured amount may depend on an inflation that is not equal to the CPI. If this is the case, the appropriate inflation expectation would need to be used in the measurement, or in accordance with paragraph B74d the inflation component is excluded from both the cash flows and the discount rate.

1. **Is ‘own credit risk’ reflected in discount rates under IFRS 17?**

No, non-performance risk (defined in IFRS 13 Fair Value Measurement) related to the entity that has issued the insurance contract, ‘own credit risk‘, is not reflected (see paragraph 31) in the discount rates within the scope of this document (see question 5.16).

1. **Are investment administration expenses reflected in discount rates (or cash flows) under IFRS 17?**

There is no direct guidance in the standard about this topic, but some information can be found in the Basis for Conclusions which is not part of the accounting guidance. BC201 states:

* *to the extent that the cash flows from underlying items affect the cash flows that arise from the liability, the appropriate discount rate should reflect the dependence on the underlying items; and*
* *to the extent that the cash flows are expected not to vary with returns on underlying items, the appropriate discount rate should exclude any factors that influence the underlying items that are irrelevant to the contracts. […] Thus, the discount rate should not capture all of the characteristics of those assets, even if the entity views those assets as backing those contracts.*

The IASB apparently intended that only investment administration expenses that affect the return of the underlying items might be reflected in the discount rate or cash flows, but not both to avoid double counting. Investment administration expenses related to the actual investments of the company, under any other circumstances, might not be captured in the discount rate (nor the cash flow). They are irrelevant to the insurance contract.

1. **How are yield curves updated?**

Paragraph 36 requires that the discount rate be consistent with observable current market prices (if any) for financial instruments with cash flows whose characteristics are consistent with those of the insurance contracts, in terms of, for example, timing, currency and liquidity. Observable and relevant market prices are those available at each reporting period and are then updated on each reporting period. Unobservable inputs for which estimation techniques are used are developed using the best information available in the circumstances. These might be updated less frequently than every reporting period. All valuation parameters are expected to be appropriate at the valuation date.

1. **Do contracts with cash flows that vary based on the returns on financial underlying items meet the definition of insurance contracts with direct participation features and vice versa?**

Contracts with cash flows that vary based on the returns on financial underlying items may meet the definition of insurance contracts with direct participation features, but they may also be classified as insurance contracts without direct participation features. This would occur if the contract form did not satisfy all elements of the definition as specified in Appendix A of IFRS 17.

Note that all contracts with direct participation features, by definition, have contractual terms that specify that the policyholder participates in a share of a clearly identified pool of underlying items. These underlying items are typically financial in nature and as such the contracts have cash flows that vary based on the returns on financial underlying items

For contracts without participating features, the GMA is used or the simplified PAA, while for ‘direct participating’, the VFA is used. In this chapter, we distinguish between “cash flows that do not vary based on the returns on any financial underlying items” and “cash flows that do vary based on the returns on any financial underlying items” in order to describe the techniques deriving appropriate discount rates. A further explanation of participating features and the description of underlying items can be found in Chapter 8 “Contracts with participation features and other variable cash flows”.

**Cash flows that do not vary based on the returns on any financial underlying items**

1. **How are cash flows, that do not vary based on the returns on any financial underlying items, discounted?**

Paragraphs B80 to B85 establish two methods to determine rates for discounting cash flows that do not vary based on the returns of financial underlying items, the bottom-up approach (paragraph B80) and the top-down approach (paragraphs B81 to B85).

Both approaches are briefly discussed BC 196*: … (a) a ‘bottom-up’ approach based on highly liquid, high-quality bonds, adjusted to include a premium for the illiquidity. (b) a ‘top-down’ approach based on the expected returns of a reference portfolio, adjusted to eliminate factors that are not relevant to the liability, for example market and credit risk. The Board expects a reference portfolio will typically have liquidity characteristics closer to the liquidity characteristics of the group of insurance contracts than highly liquid, high-quality bonds. Because of the difficulty in assessing liquidity premiums, the Board decided that in applying a top-down approach an entity need not make an adjustment for any remaining differences in liquidity characteristics between the reference portfolio and the insurance contracts.*

For the top-down approach, a reference portfolio is necessary. For the bottom-up approach, an illiquidity premium has to be derived, which may also require a reference portfolio.

1. **What is a reference portfolio?**

IFRS 17 has no specific requirements for the reference portfolio. It could be based on actual assets held by the company or on a theoretical portfolio of assets. However, the better the reference portfolio reflects the characteristics (e.g. liquidity) of the cash flows for which the discount rate is being developed, the less adjustments are likely to be needed in the discount rate.

Factors that may differ between a reference portfolio and a portfolio of insurance contracts include, but are not limited to:

1. **Investment risks**: Investment risk can be credit risk, market risk, and other price risk that are inherent in the reference portfolio that are not inherent in the insurance contracts. Methods used to estimate these elements are discussed in question 5.17 (credit risk) and question 5.18 (market and other risks);
2. **Timing**: The timing of cash flows within the reference portfolio may not be the same as that of the liability contracts. Adjustments are then needed, based on observable assets traded in active markets or on estimation techniques if the market is not active or no market exists. Estimation techniques for long duration interest rate are discussed in question 5.21;
3. **Currency**: The reference portfolio of assets may contain assets that are in a different currency than the liabilities. One approach to adjust for the different currencies might be currency swaps.

NB the reference portfolio is different from a replicating portfolio (Paragraph B46) which is required to exactly match cash flows of the contract liability in amount, timing and uncertainty, for all scenarios.

1. **How does the bottom-up approach work?**

The bottom-up approach is described in paragraph B80 as

1. liquid risk-free yield curve
2. adjusted to reflect the liquidity characteristics of the insurance contracts.
3. **What are the liquidity characteristics of insurance contracts****?**

Paragraph 36 states that discounting should reflect the liquidity characteristics of the insurance contracts. In general, a liquidity agreement is an agreement that allows an asset holder to quickly convert his/her asset into cash, often referred to as its “callability” feature.

Similarly, the liquidity of an insurance contract is generally assessed from the perspective of its holder (and not from the perspective of the ease with which the entity itself can liquidate it). For an insurance contract, this “callability” feature relates to the redemption of the contract with the entity.

If the policyholder can exit a contract and receive all / a large part of the value of the contract, then the contract is considered highly liquid. If on exit of a contract, the policyholder receives no value or a small part of the value of the contract, then it is considered illiquid. Examples of highly illiquid insurance contracts would be residual insurance, term life insurance or pay-out annuity contracts. Example of liquid insurance contracts would be whole life insurance with large cash values or endowment insurance.

1. **How can the liquidity characteristics of insurance contracts be quantified?**

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 illiquidity premium while very illiquid contracts would have a higher illiquidity premium.

Data relating to illiquidity premium of insurance contracts is generally not directly available in the market. Looking beyond insurance contracts, market observations of 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. This is discussed in question 5.27. Some practical estimation approaches of illiquidity premiums for insurance contracts include:

* Using a reference portfolio and determine its illiquidity premium using top-down techniques (see questions 5.16 to 5.18).
* Comparing illiquid to liquid assets, both with same or similar degree of credit risk. The commonality in these approaches is that the instruments would have the same degree of credit risk and as such the spread difference would be largely attributable to liquidity. For example:
	+ Covered vs risk-free bonds: Covered bonds are illiquid bonds which are backed by collateral and as such, are considered safe;
	+ Public and private bond of the same issuer;
	+ Highly liquid and less liquid mortgage backed securities.

If the asset portfolio used in estimation is more liquid than the insurance contracts being considered, then additional adjustments might be needed. The illiquidity premium of insurance contracts may be different from market assets. However, this is dependent on the contract itself.

What follows is an example of a simple method used to relate the illiquidity premium of insurance contracts to the asset portfolios:

*liability illiquidity premium = r \* asset portfolio illiquidity premium* *+ constant illiquidity premium difference* where the constant term and multiplicative factor (r) is set based on either judgement or data if any is available. In the selection of the factor differing market environments may be taken into consideration. For example, using a high multiplicative factor (r) and a constant = 0 may not produce a convincing result during a credit crisis.

In the situations where the insurance contracts have a higher illiquidity premium than the return on assets available for investment earning the illiquidity premium might be problematic. This, however, is not a relevant factor in setting the illiquidity premium level.

Little is known about the term structure of illiquidity premium in current research and it is expected to be a function of the modelling approach selected. One reference that discusses the term structure of the illiquidity premium is (Kempf, 2011).

An important caveat in setting the illiquidity premium is discussed in paragraph B90 which states the discount rates should not include any implicit adjustments for non-financial risk in the discount rates. The illiquidity premium corresponds to the estimate reflected in the future cash flows while uncertainty attributable to non-financial risk is reflected in the risk adjustment for non-financial risks. In calculating these values, paragraph B90 suggests that double counting should be avoided.

1. **Are different products expected to have different illiquidity premiums?**

Yes, groups of insurance contracts exhibiting different features may have different possibilities to exit the contract and receive the full (or partial) value in cash. As such products may have different illiquidity premiums. If it is possible to determine different illiquidity premiums for different groups and the results differ materially, entities issuing insurance contracts might choose to use different illiquidity premiums for a given currency based on the liquidity characteristics of the underlying groups of insurance contracts. Otherwise an entity might decide, based on materiality considerations, using a single average illiquidity premium across products with cash flows that do not vary with financial underlying items.

1. **If a contract is reinsured, would the direct issuer use the same illiquidity premium when valuing the direct and the ceded contract?**

NB - the illiquidity premium from the reinsurer’s perspective is not in scope for this question as it would be determined in accordance with the previous questions.

Generally, the direct and ceded insurance contracts would have the same illiquidity premium, if they were being valued by the direct insurer. The liquidity characteristics of the direct contract are transferred from the entity to the reinsurer with the reinsurance contract. In theory, the reinsurance contract might have a different illiquidity premium from the direct contract if conditions for receiving the cash value when on early termination of the ceded contract are very different from the conditions of terminating the direct contract.

Paragraph 63 states that “*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*”.

Further paragraph 63 states that “*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*”. This topic is covered in Chapter 10 on reinsurance.

1. **How does the top-down approach work?**

An entity may determine appropriate discount rates for insurance contracts using a top-down approach (paragraph B81). Under this approach, discount rates are based on current market rates of return of a reference portfolio of assets which are adjusted to remove risk characteristics embedded within the reference portfolio but that are not inherent in insurance contracts. These adjustments are discussed in questions 5.17 and 5.18.

IFRS 17 does not require that adjustments to the yield curve be made for residual differences in liquidity characteristics of the insurance contracts and the reference portfolio. Nonetheless, an entity may still adjust the yield curve for these differences, as discussed in question 5.12.

1. **How could the reference portfolio be adjusted for credit risk?**

For debt instruments, the effect of credit risk would need to be eliminated from the total bond yield. The effect of credit risk usually comprises two components: the expected credit losses and the unexpected credit losses (i.e. compensation for bearing that risk). There is a wide range of practice to estimate the required deduction for credit risk inherent in bond yields. Observed practices include:

1. Market-based techniques:

Credit Default Swap (CDS) spread is used as a measure of the inherent credit risk in bonds and comprise the expected as well as the unexpected credit losses. An advantage of this approach is that the inherent bond credit risk is directly and instantly reflected in the CDS spread. A disadvantage is that it may capture additional risks (e.g. counterparty credit risk) and costs and, as such, may overestimate the bond credit risk. On the other side the CDS premium reflects the possibility that the CDS provider may default – and therefore the CDS premium is lower than it would be were this not the case – and therefore the CDS underestimates the bond credit risk (where this is the case it can result in the illiquidity premium being overestimated).

1. Structural-model techniques such as the Merton Model, Leland and Toft Model and EDF-Based Model. For further information see the IAA Discount Rate Monograph Section IV and [Agrawal, Arora and Bohn](https://www.researchgate.net/publication/238782267_PARSIMONY_IN_PRACTICE_AN_EDF-BASED_MODEL_OF_CREDIT_SPREADS).
2. Historical distribution techniques: The distribution of credit losses is assessed and calibrated using historical data. The expected default losses would be given taking the mean of the distribution. The unexpected credit losses would be based on an adjustment to reach a selected percentile credit loss level (confidence level approach). Another example would be to estimate the unexpected credit losses by the opportunity cost of investing in that credit risk instrument (cost of capital approach).

NB - several of the above approaches used to estimate the deduction for credit risk are complex and as such it has been observed that insurers are typically using simplified expressions for the deductions required for credit risk and calibrating these expressions based on the above approaches. Examples of such expressions include:

1. Deduction for credit risk = Expected Default Rate + X% (Total Bond Spread – Expected Default Rate)
2. Deduction for credit risk = X% (Total Bond Spread)
3. Deduction for credit risk = Expected Default Rate \* (1+Margin for Adverse Deviation)

Where the credit risk premium was derived using historical distribution techniques, the advantage of one of the first two approximations is that the credit risk premium changes as a function of the corporate spread.

1. **How could the reference portfolio be adjusted for market and other risks?**

As mentioned in paragraph B85 does not specify restrictions on the reference portfolio of assets used in applying paragraph B81. For example, equity or real estate investments could also be considered in the reference portfolio. However, the exercise could be much more challenging since many risks are specific to these investments and not necessarily related to the insurance contract characteristics. Such risks include, but are not limited to, market risk, variability in amount and timing of dividend, the risk of delay in finding a new tenant, obsolescence and unexpected deterioration.

Other market factors influence the reference portfolio assets and might bring some fluctuations in the overall spread such as market sentiment and market inefficiencies. Unless measured and treated separately, these factors might be attributed to the illiquidity component of the asset yield and hence would also be included in the liability discount rate.

1. **How does the yield curve extend beyond the term period?**

In constructing the discount curve, a core principle is that the discount rates are consistent with observable market prices. If liability cash flows extend beyond a certain point, such discount rates may not be directly observable in the market. An entity will then need to estimate the appropriate rates.

As an example, an approach followed in some markets for this ‘curve extension’ is to assume an “ultimate rate” and extrapolate from the end of the observable period to the ultimate rate. The moment at which the observable market is deemed to end is discussed in question 5.20 and possible ultimate rate estimation techniques are discussed in question 5.21.

The risk inherent in the estimation technique used increases insurance contract financial risks.  Paragraph B78 (b) indicates that in applying the estimation technique, an entity shall reflect current market conditions from the perspective of a market participant.  Compensation will be sought by market participants for bearing the uncertainty and financial risk inherent in the estimated rates.  Then, estimated discount rates will need to be adjusted to provide for the measurement uncertainty.

1. **When does the observable market end?**

The determination of the end of the observable market is a function of the financial market being considered and as such is potentially affected by whether the top-down or bottom-up approach is elected.

* For example, if the top-down approach is adopted and the reference portfolio comprised of debt instruments then the end of the observable market in the context of those debt instruments might need to be considered.
* Alternatively, if the bottom-up approach is adopted and the risk-free curve is based on government bonds then the end of the observable market in the context of those government bonds might need to be considered and if the risk-free curve is based on swap rates then the end of the observable market in the context of swap rates in that currency may be considered.

In general, IFRS 17 requires that market data are used if they are available. For example, if the market for the available financial instruments in the reference portfolio would end after 10 years and market data is available for a bottom up approach up to 30 years, these data can be used.

Once the financial market of interest has been determined, the longest duration is determined at which the market data is both available and relevant. Market data for longer durations can be used if market prices are available. The following criteria might be looked at to perform this assessment:

* availability of financial instruments
* bid-ask spread
* trade frequency
* trade volume

For example, in a given market, 1, 3, 5, 7, 10, 20 and 30-year instruments may be available and 50-year instruments may be occasionally but infrequently issued. In this example, since the 50-year instrument is infrequently issued, the market is not active; data at the 50-year point is unlikely to be considered available and relevant for construction of the curve. The core premise in determining the end of the observable market is determining the last point at which “available and relevant” market data are existing for construction of the yield curve, consistent with paragraph B78.[[10]](#footnote-10)

In the bottom-up approach, it may be difficult to split the spread on the reference portfolio that is used to derive the illiquidity premium in a credit spread and an illiquidity premium. This may be especially challenging for longer durations. In those situations, estimation techniques might be used for this split. In the top-down approach, the current credit spread, excluding an illiquidity premium, is needed to determine the discount rate. Also, here the split between credit spread and illiquidity has to be determined and estimation techniques might be used.

1. **Which assumptions can be made for long durations where there is not enough market observable data?**

 The following approaches are often used:

* extrapolation based on constant forward rates;
* extrapolation based on constant spot rates;
* extrapolation of the forward rate to an ultimate rate;
* extrapolation of the spot rate to an ultimate rate.

NB – there may be other approaches that are not considered here.

Extrapolation techniques based on constant forward rates or constant spot rates have the advantage of simplicity.

Using an ultimate forward rate or an ultimate spot rate has the advantage that economic expectations can be used for long durations. Setting the ultimate forward rate or the ultimate spot rate, requires some expert judgement however. Setting the ultimate level is discussed in question 5.22 below.

The use of ultimate forward rates produces a smoother curve and the ensuing yield curve reflects implicit market expectations. On the other hand the use of an ultimate spot rate is more consistent with the IFRS 17 guidance which says in paragraph B82(c) that “*if there is no market for assets in the reference portfolio… the entity might place more weight on long-term estimates than on short-term fluctuations*”. The ultimate spot rate results in a curve that is more stable in time and the discount factors for cash flows with very long durations become entirely stable. Using ultimate spot rate may result in a jump / cliff in forward rates.

In any extrapolation model, the level and position of the end points are required. As such, the year at which the ultimate rate is achieved needs to be set. Approaches like e.g. the Smith Wilson techniques might be used to describe the transition to the ultimate forward rate. In some other practices, an ultimate spot rate is used and the transition from the last liquid point to the ultimate spot rate is linear in a period of 50 years.

Some believe that the convergence assumption is a function of whether the ultimate rate and ensuing extrapolation is based on spot rates or on forward rates. These people typically assume a shorter convergence horizon when using ultimate forward rates than when using ultimate spot rates. For example, if the end of observable period was set at the 30-year tenor and the ultimate spot construct was employed the discount curve might be assumed to converge to the ultimate spot rate at year 60. Alternatively, if the ultimate forward construct was employed the forward curve might be assumed to converge to the ultimate forward rate at year 40 or 50.

1. **How is the ultimate rate level set?**

In the process of setting the ultimate rate, both retrospective and prospective approaches might be considered. According to paragraph B44 “*Estimates of market variables shall be consistent with observable market prices at the measurement date. An entity shall maximise the use of observable inputs and shall not substitute its own estimates for observable market data”*. Furthermore, the information used in the estimation would need to be appropriate for the expectations for the long durations of the ultimate rate.

A retrospective approach has the advantage of simplicity. However, macroeconomic fundamentals may have changed over time. Furthermore, the choice of the starting point could be considered to be arbitrary. The observed period may be chosen long enough to eliminate cyclic effects. Retrospective approach examples would be an arithmetic mean (normal underlying distribution) or a geometric mean (lognormal underlying distribution) of the historical nominal interest rate or real-rate.

A very simple approach for a prospective approach would be to use the forward rate or spot rate at the last liquid point. Another approach might be to make use of well-known economic metrics reflecting market participant future expectations. Examples are the central bank inflation target or neutral rate and OECD GDP growth forecast.

One might also want to use historical observations and adjust them to obtain a realistic rate in a prospective approach. Economists have studied the decrease of the real interest rates around the world over the past decades e.g. (Rachel, 2015). Depending to which extent the economy of a country or currency is open, global developments influence the local interest rates. Some argue that there is a global long term real risk-free rate and that differences in the nominal rates are only caused by the targeted inflation rate of the central bank. Others point at differences in the long-term rates between currencies that are difficult to explain. The decline in the real rate is a global trend however. Understanding this trend may help in setting prospective assumptions. (Rachel, 2015) identifies possible causes of changes in the long-term rate. Some of them may revert, others are unlikely to revert.

Some practitioners have made the argument that with increasing globalisation, rates across groups of countries with similar economic environments and similar targeted inflation may converge. As such, for these countries the same ultimate rate may be used for liabilities with similar liquidity characteristics. Others believe that the discount curves post incorporation of currency adjustments should not allow for arbitrage and as such pre-incorporation of currency adjustments the ultimate rates would be different.

**Cash flows that vary based on the returns of any financial underlying items**

1. **Which types of dependencies on the return of financial underlying items are important to distinguish?**

Cash flows may depend on the return of financial underlying items**[[11]](#footnote-11)**. It is important to distinguish between a linear and a non-linear dependence. A non-linear dependence can be, for example, caused by a combination of dependence of the cash flows on the return of financial underlying items and a guarantee on the return of those financial underlying items. The valuation in the situation of a linear dependence is discussed in question 5.24 and the valuation in the situation of a non-linear dependence is discussed in question 5.25.

1. **How are cash flows, that do vary based on the returns of any financial underlying items, discounted?**

Paragraph B74 (b) provides guidance for cash flows that vary based on the returns on any financial underlying items. These cash flows shall be:

1. discounted using rates that reflect that variability; or
2. adjusted for the effect of that variability and discounted at a rate that reflects the adjustment made.

Under (i), cash flows are projected based on the expected risky returns of the financial underlying items. If the dependence is linear, this might be done using a deterministic real-world projection rate (or curve), i.e. including a risk premium. In that case, the discount rate (or curve) to be used shall reflect that variability, and thus, also include a risk premium.

Under (ii), cash flows are adjusted for the effect of that variability. Again, if the dependence is linear, one might project cash flows using a deterministic risk-free rate (or curve). In that case, the discount rate (or curve) to be used shall also be on a risk-free basis.

Both approaches avoid any valuation mismatch and double counting, since the discount rate is consistent with the rate used for the cash flow projection. Theoretically, both valuations are expected to lead to the same result.

1. **What approaches can be used if the dependence of the cash flows on the financial underlying items is non-linear?**

As discussed in paragraph B76, cash flows could vary with returns on financial underlying items, but be subject to a guarantee of a minimum return. These cash flows do not vary solely based on the returns on the financial underlying items, because there might be some scenarios where the cash flow will not vary based on the financial underlying items, e.g. when the guarantees are in-the-money. This is an example of a non-linear dependence.

Here are some approaches that might be used in the valuation if the dependence of the cash flows on the financial underlying items is non-linear (paragraph B77):

* Stochastic modelling techniques based on risk neutral scenarios. In this technique both the financial underlying item and the discount rate are projected using stochastic techniques. In each scenario, the net present value is calculated. The value of the cash flows of the insurance contract is equal to the average of the net present values of all scenarios.
* Stochastic modelling techniques based on real world scenarios. The financial underlying items are projected on a stochastic real world basis. The discounting is done with a stochastic real world deflator set. Also in this approach, the net present value is calculated for each scenario. The value of the cash flows of the insurance contract is equal to the average of the net present values of all scenarios.
* Replicating portfolio techniques (paragraphs B46 and B47). These are discussed in question 5.27.
* A closed formula solution might also be used. However, as per paragraph B48, the technique used must result in the measurement being consistent with observable market prices (if any) for such options and guarantees.
1. **When do cash flows need to be divided?**

As mentioned in paragraph B77, an entity is not required to divide estimated cash flows into those that vary based on the returns on financial underlying items and those that do not. If it does not, it shall apply discount rates appropriate for the estimated cash flows as a whole; for example, using stochastic techniques.

In some cases, it might be easier to divide cash flows than to apply discount rates appropriate for the estimated cash flows as a whole. One example might be a life insurance contract which provides a fixed death benefit plus the amount of an account balance if the insured person dies, and the account balance if the contract is cancelled. In this case, dividing the cash flows and applying different approaches might be practical for cash flows that vary based on the returns on financial underlying items vs those that do not.

In some other cases, it might be easier using stochastic techniques than trying to divide the cash flows. This could be the case when cash flows do vary with returns on financial underlying items but are subject to a guarantee of a minimum return.

1. **How can replicating portfolios be used?**

Paragraph B46 states that “*an important application of market variables is the notion of a replicating asset or a replicating portfolio of assets.  A replicating asset is one whose cash flows exactly match, in all scenarios, the contractual cash flows of a group of insurance contracts in amount, timing and uncertainty. […]  If a replicating portfolio exists for some of the cash flows that arise from a group of insurance contracts, the entity can use the fair value of those assets to measure the relevant fulfilment cash flows instead of explicitly estimating the cash flows and discount rate.”*

It might be difficult to find a replicating asset that exactly match the insurance contract cash flows in all scenarios. Nonetheless, replicating assets may exist for some of the cash flows that arise from insurance contracts. One may also strive to find a portfolio of assets which will reproduce some of the insurance contract characteristics. As per paragraph B48, judgement is required to determine the technique that best meets the objective of consistency with observable market variables in specific circumstances. The general process might start with the simplest method and progresses to the use of more involved methods as necessary.

For example, such techniques might include:

1. **Asset cash flow matching**: Insurance contract cash flows are adjusted for non-financial risk.  They are then replicated in terms of amount and timing with available asset cash flows. This method is similar to building a reference portfolio.
2. **Optimisation**: Insurance contract cash flows are adjusted for non-financial risk.  Assets are then chosen to match, as closely as possible, the key financial risk metrics related to these cash flows (e.g. duration matching).
3. **Dynamic replication**: Stochastic valuation techniques are used to derive risk-factor sensitivities that can be replicated directly.

The choice of method depends primarily upon the nature and complexity of the asset or liability under consideration and the purpose of the replicating strategy. For example, if the asset or liability is relatively simple, it might be possible to identify a pure replicating portfolio (e.g. capital guaranteed equity product and a vanilla European equity option). However, for more complex assets or liabilities, such corresponding assets may not exist, even theoretically. In this case, optimization techniques might be used (e.g. path-dependent guaranteed cash flow proxied by a portfolio of vanilla and exotic options). In other complex cases, optimization techniques may deliver poor results, hence the need to make use of dynamic replication techniques.

1. **How is the discount rate adjusted for illiquidity if cash flow do vary based on the return of financial underlying items?**

Consistent with paragraph B74 (b), if the cash flows that vary based on the return of financial underlying items do contain an illiquidity premium, this illiquidity is logically also reflected in the discount rate. If the cash flows that vary with the return on financial underlying items are projected without an illiquidity premium, the discount rate is chosen accordingly.

Cash flows in an insurance contract may depend on a combination of the return on financial underlying items, a guarantee on the return of the financial underlying items and other insurance cash flows subject to non-financial risk. All elements contribute, depending on their significance in the value of the cash flows, to the overall illiquidity:

* the illiquidity premium from the financial asset underlying that is passed to the policyholder in so far it is included in the projection;
* the guarantee on the return of the financial underlying items;
* other insurance cash flows subject to non-financial risk.

As discussed in question 5.13, the risk adjustment reflects the uncertainty of non-financial risk and the other insurance cash flows can be discounted using an illiquid rate.

1. **How is the present value of future cash flows corrected for financial risk?**

In a market consistent projection, either risk neutral or real world using deflators, future cash flows are part of the calculation of forward prices. Unlike the projection of cash flows that do not vary based on financial underlying items and only contain non-financial risk, this is not a neutral expectation, but in both cases the present value of the cash flows is implicitly adjusted for financial risk as the market requires. This implicit adjustment for financial risk is released over the duration of the contract and accounted for as financial risk.

**Premium Allocation Approach (PAA)**

1. **Under which circumstances is discounting required for a group of contracts subject to the PAA measuring the liability for remaining coverage?**

If the entity uses the PAA for a group of insurance contracts, as per IFRS 17.53-59, discounting is only required in special circumstances in the liability for remaining coverage:

* For contracts with a significant financing component within a group of contracts where the PAA is applied, unless, at initial recognition, the entity expects that the time between providing each part of the coverage and the related premium due date is no more than a year (paragraph.56);
* For contracts that have become onerous (paragraph 57), unless time value of money for the liability for incurred claims is not considered under paragraph 59.
1. **When required, which discount rates are used for the liability for remaining coverage for contracts that have a significant financing component within a group of contracts where the premium allocation approach is applied?**

For the liability for remaining coverage of contracts with a significant financing component within a group of contracts where the PAA is applied, as per paragraph 56, the cash flows might be discounted. The discount rate is always the locked-in rate (paragraph B72(d)). The locked-in yield curve is equal to the curve for those situations where the OCI option is used for groups of insurance contracts for which changes in assumptions that relate to financial risk do not have a substantial effect on the amounts paid to policyholders. See question 5.36.

1. **When required, which discount rates are used for onerous contracts?**

If the group of insurance contracts becomes onerous (as per paragraph 57 (b)), the difference between the carrying amount of the liability using PAA (paragraph 55) and the GMA (applying paragraphs 33-37 and paragraphs 36-92) should be calculated. As discussed in previous questions, the calculation of liability values under the general measurement model is conducted at either the current rate or the locked-in rate depending on the purpose for which discounting is required.

1. **When required, which discount rates are used for the liability for incurred claims?**

For incurred claims, discount rates are used unless cash flows are expected to be paid or received in one year or less from the date the claims are incurred (paragraphs 59). In this case the GMM is used without a CSM, which is not applicable for the liability for incurred claims. The calculation of liability values under the GMM is conducted at either at the current rate or the locked-in rate at the date the claim incurred.

**Locked-in rates**

1. **What interest rate is accreted on the CSM?**

For contracts without direct participating features, the interest rate accreted on the CSM is based on the discount rates determined at initial recognition for cash flows that do not vary based on the return of financial underlying items (paragraphs B72(b)). It may include an illiquidity premium. This is henceforth referred to as the locked-in curve.

IFRS 17 is not specific about the method to roll forward the curve. One approach might be to derive each year’s discount factors with the forward rate for that year, from the locked-in curve. This forward rate would be the rate to accrete on the CSM.

If there are direct participating features, the entity’s share of the profit is discounted (paragraphs B74b).

1. **What interest rate is used to measure the changes in the CSM?**

If there are no direct participating features in the contract, the interest rate used to measure the changes in CSM is the same as the interest rate described in 34.

1. **What is the locked-in yield curve when the OCI option is used for groups of insurance contracts for which changes in assumptions that relate to financial risk do not have a substantial effect on the amounts paid to policyholders?**

For groups of insurance contracts for which changes in assumptions that relate to financial risk *do not* have a substantial effect on the amounts paid to policyholders, if the entity plans to recognise insurance finance income or expenses in other comprehensive income, the change in the present value of the cash flows presented in the P&L is based on the locked-in curve. That means that the discount rates are determined on the yield curve at the date of initial recognition of the group of contracts or the date of the claims (paragraphs B72 (e)(iii), applying paragraph 36 to cash flows that do not vary based on the returns on any financial underlying items. This is a risk free rate, if necessary, including an illiquidity premium if this is applicable for the insurance cash flows.

1. **What is the locked-in rate for groups of insurance contracts for which changes in assumptions that relate to financial risk have a substantial effect on the amounts paid to policyholders?**

For groups of insurance contracts for which changes in assumptions that relate to financial risk *do* have a substantial effect on the amounts paid to policyholders, if the entity plans to recognise insurance finance income or expenses in other comprehensive income, discount rates are used that allocate the remaining revised expected finance income or expenses over the remaining duration of the group of contracts at a constant rate.

1. **Can a single equivalent discount rate be used instead of the locked-in discount curve?**

Any proposed use of a single discount rate (which produces an equivalent adjustment to the cash flows as the use of a discount rate curve which contains rates explicit for the range of potential cash flow timings) would be expected to be subject to producing results materially similar to those produced using rates which meet the requirements in relation to timing discussed above (and for all reporting periods that the rates impact – i.e. current as well as future reporting periods).

1. **How is the average locked-in curve determined for a group of contracts?**

While current discount rates are calculated as of the reporting date, a methodology needs to be chosen to develop the locked-in curve for a group of contracts.

If the purpose of the locked-in curve determination is the calculation of the CSM at issue for a group of contracts then options might be viable include, but are not limited to:

1. Calculating the CSM at issue for each contract within the group using the discount curve at each contract’s respective issue date – i.e. a single curve would not be used. This, however, might be an impractical implementation option.
2. Calculating the CSM at issue for the group of contracts as at the date of initial recognition using the discount curve as the date of initial recognition. This is thought to be consistent with the guidance because the guidance refers to the date of initial recognition for the group and not the date of initial recognition of individual contracts. See paragraph 25 for the definition of the date of initial recognition of a group.
3. Calculating the CSM at issue for the group as at the date of initial recognition using a weighted average discount curve (paragraph B73). To apply this approach suitable weights would need to be defined as they are not specified in the guidance. One potential option for weighting might be to use the measure of coverage units.

The methodology for calculating the locked-in curve across one or more reporting periods would be driven by the option chosen above. As per paragraph B73 a weighted average discount curve might be created with a potential option that might exist for weighting being the measure of coverage units.

* If options a or c, above, were chosen then the locked-in curve would be a weighted average curve of the specific curves used (i.e., the curves to be weighted would be from the actual issue dates).
* If option b, above, was chosen then locked-in curve would be a weighted average curve of the curves at the date of initial recognition. That is, there would only be a single curve based on a single day from each reporting period which would then be weighted using the selected measure.

When calculating weighted average discount curves, one approach might be to weight on discount factors.

**References [ NB these will all be in one place once final chapters completed]**

EIOPA. (2017). Technical documentation of the methodology to derive EIOPA’s risk-free interest rate term structures. *EIOPA-BoS-15/035*.

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# Chapter 6 – Risk Adjustments for Non-Financial Risks

6.A. What does this chapter address?

This Chapter considers the criteria and measurement of the risk adjustment for non-financial risk required as part of the General Measurement Approach under IFRS 17 including the purpose and general requirements of the risk adjustment, what risks would typically be covered and specific considerations in determining the risk adjustment. This note discusses how to reflect risk mitigation as risk mitigation in a pool, diversification, risk sharing, catastrophic and other infrequent events, qualitative risks considerations, use of different approaches by line of business, and general considerations in selecting and calibrating a risk adjustment approach. For detailed risk adjustment methods and how to apply them, reference is made to the IAA Monograph on Risk Adjustments. This Chapter also covers high level disclosure requirements including confidence level disclosure, and issues around allocation of risk adjustments to a lower level.

6.B. Which sections of IFRS 17 address this topic?

Paragraphs 37, 101, 117-119 and B87-B91 provide guidance on this topic

6.C. What other IAA documents are relevant to this topic?

To support the selection of an approach or approaches for estimating the risk adjustment, an educational *IAA Monograph: Risk Adjustments under IFRS 17* has been produced. The main intention of the Monograph is to provide focus on methodologies and approaches, to document and build on common approaches that have been developed so far, and to explore ways in which IFRS 17’s entity-specific approach may be incorporated into them

## What is a risk adjustment?

Under IFRS 17, insurance contract liabilities are principally measured as defined in paragraph 32:

“*On initial recognition, an entity shall measure a group of insurance contracts at the total of:*

*(a) the fulfilment cash flows, which comprise:*

*(i) estimates of future cash flows (paragraph 33–35);*

*(ii) an adjustment to reflect the time value of money and the financial risks related to the future cash flows, to the extent that the financial risks are not included in the estimates of the future cash flows (paragraph 36); and*

*(iii) a risk adjustment for non-financial risk (paragraph 37).*

*(b) the contractual service margin, measured applying paragraph 38–39*.”

The “risk adjustment for non-financial risk” is a defined term in IFRS 17

Appendix A states - “*the compensation an entity requires for bearing the uncertainty about the amount and timing of the cash flows that arises from non-financial risk as the entity fulfils insurance contracts*”. A similar definition is also included in paragraph 37.

In this Chapter, the term “risk adjustment” refers to the “risk adjustment for non-financial risk”, as defined in IFRS 17. In other contexts, risk adjustments may be referred to as risk margins.

This Chapter primarily discusses the risk adjustment for non-financial risk of insurance contracts accepted by the entity. The risk adjustment for ceded reinsurance (referred to as reinsurance held in IFRS 17) is governed by paragraph 64. The application of risk adjustments for ceded reinsurance is discussed in Chapter 10 – Reinsurance of this IAN.

## What is the purpose of the risk adjustment in IFRS 17 fulfilment cash flows?

Paragraph B87 states:

 *The risk adjustment for non-financial risk for insurance contracts measures the compensation that the entity would require to make the entity indifferent between:*

1. *fulfilling a liability that has a range of possible outcomes arising from non-financial risk; and*

*(b) fulfilling a liability that will generate fixed cash flows with the same expected present value as the insurance contracts*.

As such, it measures the value of a liability, related to unexpected costs, that the entity places on the uncertainty and variability inherent in insurance cash flows.

* + 1. **What should the risk adjustment do?**

The risk adjustment is meant to inform users of the financial statements about the liability value that the entity places on the uncertainty and variability (see Question 6.9) of insurance cash flows. As IFRS 17 provides only the principles regarding how this should be done, it will be important to those who determine and rely on such values that the quantification of such a liability value be based on methodologies and/or approaches that are robust and are a fair reflection of this value.

As most users only see what is published in the entity’s financial statements, it is important that these liability values, and changes in such values, are based on an adequate understanding of the basis on which the risk adjustment is determined and of any changes in that basis. This understanding will underlie the entity’s ability to provide appropriate disclosures as required by IFRS 17. The entity’s understanding will enhance its communications, enable consistency to be recognised and allow relevant comparisons to be made, as appropriate.

An important aspect of the communications among those responsible for determining an entity’s risk adjustment is the explanation and insight regarding how the entity’s views with respect to the compensation it requires for bearing risk and uncertainty has been incorporated in the determination of the risk adjustment. Such communications will be expected to reflect a thorough understanding of the entity’s views as regards risk aversion, risk diversification and the uncertainty surrounding the values being estimated.

* + 1. **What are the IFRS 17 requirements for risk adjustment?**

IFRS 17 does not provide guidance on appropriate techniques and methods to set the risk adjustment. In paragraph 37, it simply requires that

*An entity shall adjust the estimate of the present value of the 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*.

The application guidance states, in paragraph B91, that a risk adjustment should possess the following 5 characteristics:

* 1. “risks with low frequency and high severity will result in higher risk adjustments for non-financial risk than risks with high frequency and low severity;
	2. for similar risks, contracts with a longer duration will result in higher risk adjustments for non-financial risk than contracts with a shorter duration;
	3. risks with a wider probability distribution will result in higher risk adjustments for non-financial risk than risks with a narrower distribution;
	4. the less that is known about the current estimate and its trend, the higher will be the risk adjustment for non-financial risk; and
	5. to the extent that emerging experience reduces uncertainty, about the amount and timing of cash flows, risk adjustments for non-financial risk will decrease and vice versa.”

It should be noted that the risk adjustment relates only to non-financial risks inherent in the insurance contract and its cash flows. Paragraph B86 states that

 “*The risk adjustment for non-financial risk relates to risk arising from insurance contracts other than financial risk. Financial risk is included in the estimates of the future cash flows or the discount rate used to adjust the cash flows. The risks covered by the risk adjustment for non-financial risk are insurance risk and other non-financial risks such as lapse risk and expense risk (see paragraph B14).”*

Risks reflected through the use of market consistent inputs are excluded. Other non-financial risks that may not arise directly from the insurance contracts, such as asset-liability mismatch or general operational risks, should not be reflected in the risk adjustment for non-financial risks. (See question 6.8 for a fuller discussion of which non-financial risks are considered.)

This general guidance means that there is no single right way for an entity to set the risk adjustment. In general, there are other important considerations that will be relevant to how an entity determines its approach to estimating the risk adjustment:

* consistency with how the insurer assesses risk from a fulfilment perspective
* practicality of implementation and ongoing re-measurement
* translation of risk adjustment for disclosure of an equivalent confidence level measure

Therefore, a variety of methods are potentially available, although their ultimate usage depends on the extent to which they meet the criteria above, given the specific circumstances of the company. Potential methods include, but are not limited to, quantile techniques such as confidence level or CTE, cost of capital techniques, or even potentially simple techniques such as directly adding margins to assumptions or scenario modelling.

* + 1. **What is the role of actuarial input on risk adjustment?**

In actuarial terms the risk adjustment is intended to reflect the value of the uncertainty inherent in the insurance cash flows under the contract. It is expected that actuarial input, both quantitative and qualitative, will be needed.

This actuarial input falls into four parts and can

* assist in understanding and assessing the risk aversion of the entity (its attitude toward risk see questions 6.10 & 6.11), as it relates to the uncertainty and variability of insurance cash flows, and in understanding the extent to which the entity considers “*the degree of diversification benefit the entity includes when determining the compensation it requires for bearing that risk*” [paragraph B88(b)].
* provide quantitative measures to help evaluate the variability inherent in the insurance contracts being valued and the uncertainty which underlies such quantitative measures.
* assist in designing an approach to assess a value in terms of the compensation for bearing risk that reflects the entity’s risk aversion, in the context of the relevant risks, and in the context of the diversification affecting the compensation for such risks.
* provide explanations and insights to help in communicating the understandings and judgements involved, such that the entity’s board and management can have the appropriate level of direction and oversight regarding how the risk adjustment is determined.
	+ 1. **What is the role of judgement?**

Judgement may be needed for a variety of reasons:

* in the selection of the approach to estimate the risk adjustment,
* in the assessment of the entity’s risk aversion,
* in the estimation and assessment of variability and uncertainty, depending on the data available,
* in the assessment of diversification, depending on the complexity of the business written, and
* in the assessment of how risk aversion interacts with variability and uncertainty in the determination of the risk adjustment.

In general, it will be important that the entity’s board and management properly understand the process and the judgements used to determine the entity’s risk adjustment and how their oversight and management roles and responsibilities are being satisfied.

* + 1. **What does “risk” mean in this Chapter?**

The word “risk” can have a variety of meanings, in the context of insurance.

* It can mean the two-sided risk that an outcome be greater or less than the estimated expected value of that outcome, as a result of variability and uncertainty. This is the meaning intended in this Chapter. To emphasize this, this Chapter sometimes refers to “risk (variability and uncertainty)”.
* It can mean the one-sided risk that an outcome will be worse than its expected value.
* It can refer to the subject of the insurance.
* It can refer to the insured events.

In this Chapter variability refers to the statistical variation inherent in the insurance process. This is amenable to statistical analysis of experience data. Given enough data, it can be quantified in terms of the variance and higher moments of a suitable probability distribution.

The concept of uncertainty is used here to depict a concept of risk that is broader than statistical variability. Some common aspects of uncertainty can include:

* Uncertainty in the estimates of expected value, variance and higher moments of a probability distribution. This uncertainty can be quantified as part of the statistical analysis.
* Uncertainty in the choice of probability distribution. Complex insurance processes seldom conform exactly to standard probability distributions. It may only be possible to partially quantify this uncertainty by considering alternate distributions.
* Uncertainty in the experience data will arise when the data contain more or fewer extreme events than normal. The selection of a suitable probability distribution may assist in quantifying this uncertainty.
* Uncertainty also arises because future circumstances can vary from the past. Environmental changes, technological changes and societal changes are all reasons why distributions based on past experience may need to be interpreted cautiously as guides to the future. Appropriate adjustments from past to future experience are a matter of judgement and introduce uncertainty into both the projected expected value and its variability.

How to appropriately reflect to these sources of variability and uncertainty in the risk adjustment depends on the extent of the data and on the materiality of the potential impact on the result from the viewpoint of the reporting entity. In some cases, it may be appropriate to analyse the details extensively. Alternatively, it may be appropriate to undertake more limited analysis and to reflect other aspects of uncertainty based partly or wholly on judgement. Where data are limited, it may be necessary to rely very heavily on judgement. In assessing the extent of analysis which may be appropriate, judgement is needed as to the balance between the effort involved in undertaking deeper analysis versus whether the deeper analysis will result in a change in the estimates used to reflect risk and uncertainty that is both material and statistically meaningful.

* + 1. **What risks should be considered?**

As discussed in question 6.4, paragraph B86 requires risk to be split between financial and non-financial risk and considered separately.

Paragraph B89 states that

*“The purpose of the risk adjustment for non-financial risk is to measure the effect of uncertainty in the cash flows that arise from insurance contracts, other than uncertainty arising from financial risk. Consequently, the risk adjustment for non-financial risk shall reflect all non-financial risks associated with the insurance contracts. It shall not reflect the risks that do not arise from the insurance contracts, such as general operational risk*.”

Furthermore, financial risk is defined in Appendix A as:

“*The risk of a possible change in one or more of a specified interest rate, financial instrument price, commodity price, currency exchange rate, index of prices or rates, credit rating or credit index or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract.”*

Under these definitions, the risk adjustment for non-financial risk would include the uncertainty created by the following risks to estimates of the future cash flows

* Claim occurrence, amount (including inflation risk), timing and development;
* Lapse, surrender, premium persistency and other policyholder actions;
* Expense risk, including inflation risk, associated with costs of servicing the contract;
* External developments and trends, to the extent that they affect insurance cash flows.

For the risk adjustment associated with reinsurance held – see Chapter 10.

The risk adjustment for non-financial risk would NOT include the uncertainty created by the following:

* Operational risk
* Asset-liability mismatch risk
* Price or credit risk on underlying assets

In some instances, there may be interactions between financial variables and non-financial variables that impact expected cash flows, making the distinction between financial risk and non-financial risk less clear. For instance, policyholder behaviour may be influenced by investment performance where there are linkages between investment returns and credited rates / contractual values. In this instance, the expected cash flows reflect this influence.  The risk of policyholder behaviour being different than what is reflected in estimates of the expected cash flows would be considered non-financial risk. A further example is spread compression risk due to earned / credited rate differences where crediting rates are discretionary. The risk of this discretionary spread compression being different than what is reflected in the estimates of expected future cash flows would again be considered a non-financial risk.

* + 1. **What is risk aversion?**

Risk aversion is an entity’s reluctance to accept risk (variability and uncertainty), particularly as respects unfavourable outcomes. To overcome this aversion, entities typically expect compensation for bearing risk. The greater the risk aversion, the greater the expected compensation required.

* + 1. **How can the actuary assess and express an entity’s risk aversion?**

The entity’s board is responsible for its risk policy, including its policy on risk aversion. In some cases, the actuary may be able to draw on an explicit risk policy, such as that adopted by the entity’s Board, which would typically be developed in consultation with the entity’s Chief Risk Officer and/or enterprise risk committee.

In other cases, discussions with the entity’s board and management may be appropriate. Topics for discussion that the actuary may find useful include:

* comparison with similar entities in the market;
* discussion of stress scenarios, both short and long term;
* the entity’s underwriting and pricing policy and practices;
* the entity’s approach to self-assessment of solvency risk with respect to capital needs and capital management; and
* the entity’s reinsurance policy and practices.
	+ 1. **What allowance should be made for risk diversification and what level of aggregation should be used?**

The risk adjustment for non-financial risk reflects in paragraph B88(a), inter alia, “*the degree of diversification benefit the entity includes when determining the compensation it requires for bearing that risk”*. Note the degree and structure of risk diversification are to be included within the entity’s assessment of compensation.

Paragraph B88(a) uses the term *diversification*, suggesting a bottom-up approach to determining the required compensation, but does not preclude a top-down approach. If an entity uses a top-down approach, the entity can determine the total compensation that it requires for bearing non-financial risk and then allocate or apportion it. For example, the entity may allocate its risk compensation to whatever level of subdivision is required for financial reporting purposes. With this process, the extent of aggregation of the business risks for which the entity determines its total required compensation for bearing risk is the equivalent of the extent of aggregation of business over which diversification is reflected.

This aggregation encompasses all of the insurance contracts that the entity elects to include in setting its compensation for bearing risk. For example, an entity may elect to aggregate all of the insurance contracts that it writes.

A practical issue arises when evaluating the risk adjustment for the insurance written on a gross basis, i.e., without regard to reinsurance ceded.  In principle, the compensation required for bearing risk would typically first consider the net risk for the entity, with due consideration given to the entity’s use of reinsurance held as a financial resource available to the entity.  Consequently, the entity’s risk aversion will implicitly reflect its views as respects its net risk.  To meet the requirement in IFRS 17 to estimate the risk adjustment associated with reinsurance held, it is necessary to reflect the differences in risk on a net basis versus on a gross basis, but maintain the entity’s views regarding required compensation.  The objective is to *“represent the amount of risk being transferred by the holder of the group of reinsurance contracts to the issuer of those contracts”* as required by paragraph 64.

In some cases, the gross risk measurement might be approximately proportional to the net risk measurement and therefore the gross risk adjustment can be estimated by using a simple scaling factor applied to the net risk adjustment.  In other cases, there may be quantitative and qualitative aspects of the risk and uncertainty such that the reinsurance held provides a very effective means of risk mitigation.  For example, the value to the entity from the risk mitigation provided by its reinsurance held may be significantly greater than a simple scaling factor proportional to a selected risk measure.  In such cases, it may be appropriate to consider other benchmarks or risk measures that are consistent with the entity’s risk aversion (reflecting that its risk is mitigated via reinsurance) and also to consider the entity’s estimate of its costs to retain, or replace, the reinsurance held.

If the bottom-up approach to risk adjustment is adopted, the total net required compensation for variability and uncertainty is an important check on the result of this process.

The risk adjustment may reflect the impact of diversification of non-financial risk across all of the insurance contracts that the entity selects. This may be the aggregation of all contracts to take account of all possible diversification benefits. However, where risk adjustment values are reported for sub-groups comprised of specific contracts or cohorts of business, the entity will consider how it should reflect its compensation for bearing risk – at a sub-group level where diversification is considered only within the sub-group of contracts – or at the parent or group level where such compensation would be apportioned or allocated to each sub-group.

* + 1. **What allowance should be made for large and/or infrequent and/or atypical events?**

The risk adjustment is intended to fully reflect all of the uncertainty and variability in insurance cash flows, incorporating allowance for all possible outcomes in proportion to their respective probabilities. Where such events or combinations of events are not represented in the experience data, judgement may be needed as to how great an allowance is needed. Conversely, where such events are present, judgment may be needed as to whether they are over-represented.

In suitable cases, it may be possible to fit a probability distribution that makes due allowance for extremes, based on observed experience, but the suitability of the chosen probability distribution is also a matter of judgement. It is often helpful to model extreme outcomes separately from other events.

* + 1. **What allowance should be made for risk sharing mechanisms?**

Risk sharing mechanisms may include:

* participation;
* investment linkage;
* deductibles and excesses;
* profit sharing;
* retrospective experience rating; and
* prospective experience rating schemes, such as no-claim discounts.

No allowance should be made for prospective experience rating outside the contract boundary, as this does not relate to current contracts and is better regarded as part of the underwriting process for subsequent contracts.

Risk sharing arrangements can affect the contractual insurance cash flows between the insurer and the policyholder. Such cash flows may be contingent on insurance claims or other factors which may lessen the risk and variability of the entirety of the insurance cash flows. The risk adjustment will reflect all of these contract cash flows, with due consideration to the contingencies involved.

* + 1. **What is the compensation that the entity requires for bearing risk?**

The compensation that the entity requires for bearing risk is a matter of judgement, which is ultimately exercised by the management of the entity and governed by the Board of the entity. In many cases, this will be informed by risk management expertise but, ultimately, the judgement is a Board responsibility, based on management (and possibly actuarial) advice.

Such judgements about compensation and risk are perhaps made regularly by entities in relation to the profit margin priced into their insurance policies. Examples of how such profit margins are expressed can be observed in a variety of ways, such as:

* an overall required profit margin on business written;
* a target rate of return or margin over risk-free on total assets, capital or equity;
* different profit margins on different classes of business; depending on perceived risk;
* a target probability which may be used for solvency assessment that losses will not exceed a given percentage of net assets;
* an analysis of the net assets and margin over risk-free return required to support the total business, on a basis such as a target probability that those assets will prove adequate and a rate of return commensurate with that risk;

It is not, however, necessarily appropriate simply to apply the profit margin basis to estimate the risk adjustment. While a profit margin would seem to be a reasonable benchmark, in many cases there are considerations that go into selecting a profit margin that would not be consistent with the IFRS 17 measurement objectives for risk adjustments. For example, operational and asset-liability matching and investment risks that are not directly related to cash flows to the policyholder might be included in the profit margin but would not be considered in the risk adjustment. In addition, the criteria for risk adjustments is expressed as an amount which would make the entity indifferent between “risky” cash flows and fixed cash flows. Profit margins frequently reflect different objectives, such as desired market share and market competitiveness, expected profits returns to shareholders, policyholder dividend considerations, and pricing sensitivities, which may not be relevant considerations for the risk adjustment.

* + 1. **How should qualitative risk characteristics be reflected**

Paragraph B89 requires that *“… the risk adjustment shall reflect all non-financial risks associated with the insurance contract …”* and paragraph B91(d) that “*the less that is known about the current estimate and its trend, the higher will be the risk adjustment …”.* These provisions require that allowance for qualitative risk characteristics is to be incorporated into the risk adjustment. By their nature, incorporating such factors into the assessment of the overall level of risk requires judgement.

The first step is to assign a value to the level of risk and to assess the degree of correlation with measurable risks. In simple cases, it may be appropriate to assume that the risks are independent of one another, i.e., they are orthogonal, and can be approximated by combining the standard deviations as the square root of the sum of the squares. There are concerns that the analyses of the risk involved will provide an adequate basis for more sophisticated adjustments. However, if the qualitative risks are well enough understood, it may be possible to incorporate allowance for correlation and skewness effects.

Actuaries are often confronted with situations for which information to develop assumptions for risk, including probability models, is limited. This is most frequently the case with new markets, new risks, long duration risks, and risks involving extreme or remote events, but unanticipated circumstances (“unknown unknowns”) can arise almost anywhere.

There is no single appropriate approach to reflect qualitative considerations. However, it is clear that IFRS 17 provides direction for each entity to choose one or more techniques that appropriately reflect the data, the information and the results from the models available, including the risk strategy of the management, and the extent of the uncertainty. It is important that the technique used appropriately captures the potential compensation for bearing the risk. (For example, a simple technique, such as adding a margin based on the estimated standard deviation may not fully allow for the risk of very low frequency but high severity outcomes. A scenario testing approach might perform better, provided suitable extreme scenarios are included. Modelling using a suitably skewed probability distribution may be another approach.)

Both simple and complex techniques may be appropriate, depending on the nature of the uncertainty, the materiality of the uncertainty, and the structure of the underlying modelling available. For example, where uncertainty is material, and is characterised by a very low frequency and high severity risk profile and probability models are available, such a risk could be captured by introducing a state or regime switch into the model.

Since, by their nature, qualitative risks cannot be measured directly, the quantification effect is based largely on judgement. Where the impact of qualitative risks could be material, and since the responsibility for the risk adjustment lies with the entity, it may be desirable for the actuary to discuss these risks with the entity.

Qualitative risks are seldom symmetrical. Because of this, it may be appropriate to make an adjustment, based on judgement, to the risk adjustment solely on the basis of knowledge of the risks involved and any observed experience that could be relevant.

* + 1. **What disclosures and explanations are required?**

Paragraph 93 states that “*The objective of the disclosure requirements is for an entity to disclose information in the notes that, together with the information provided in the statement of financial position, statement(s) of financial performance and statement of cash flows, gives a basis for users of financial statements to assess the effect that contracts within the scope of IFRS 17 have on the entity’s financial position, financial performance and cash flows. …”*

The disclosures required are set out in paragraphs 93-96. Paragraphs 97-132 set out the required “explanation of recognised amounts”. For the most part, these disclosures relate to amounts that are inclusive of risk adjustments and are discussed in other Chapters. The specific requirements in respect of risk adjustments are:

* “*For insurance contracts other than those to which the premium allocation approach described in paragraph graphs 53–59 or 69–70 has been applied, an entity shall also disclose reconciliations from the opening to the closing balances separately for each of:: … (b) the risk adjustment for non-financial risk; …”* [Paragraph 101].
* *“Where the premium allocation approach has been applied, the applicable paragraph s requiring explanation of recognised amounts are 98-100 and 102-105. Of these, risk adjustment for non-financial risk is mentioned in each of paragraph s 100 and 104”*
* *“An entity shall disclose the significant judgements, and changes in those judgements, that were made … (c)(ii)to determine the risk adjustment for non-financial risk …”* [Paragraph 117]
* *“An entity shall disclose the confidence level used to determine the risk adjustment for non-financial risk. If the entity uses a technique other than the confidence level technique for determining the risk adjustment for non-financial risk, it shall disclose the technique used and the confidence level corresponding to the results of that technique.”* [Paragraph 119].
	+ 1. **What explanations and disclosures should be included in the actuary’s communications?**

While there is no stated requirement in IFRS 17 that the risk adjustment will be determined by an actuary, the work products and input of actuaries are very likely to be relied upon to develop, review and maintain the risk adjustment values. An important objective of the actuary’s communications in this regard is to assist the entity in developing its IFRS 17 disclosures and to enable the Board and management to better understand the way in which the actuary has undertaken his or her work. Key elements of these communications, relative to risk adjustments, may include a discussion on:

* the background to the disclosures required;
* how the compensation the entity requires for bearing risk has been quantified;
* how the entity’s risk aversion has been assessed and incorporated in considering the entity’s required compensation for bearing risk;
* how risk and uncertainty has been identified, quantified and translated into a risk adjustment;
* how qualitative and unknown risks have been allowed for, including of their relative importance, within the risk adjustment;
* the impact of reinsurance and other risk transfer or mitigation considerations;
* any uncertainty in relation to recoverability of reinsured amounts;
* how risk diversification has been considered, within and across product lines, geographic divisions, etc.; and
* the insurer’s net risk profile and how this is appropriately reflected in the difference between the gross and reinsurance risk adjustments.
	+ 1. **What are appropriate methods to allocate risk adjustments calculated at a more aggregated level to the contract level?**

IFRS 17 does not require the risk adjustment to be directly determined at the contract level, but it may need to be allocated to a lower level of aggregation than the level at which it is initially determined, for various purposes (e.g., CSM, liability for onerous contracts).

Any method that will lead to the same total risk adjustment, were the risk adjustment directly determined at the lower level of aggregation, is appropriate to more finely allocate the risk adjustment. Such methods reflect the key drivers of the risk adjustment calculation. For example, if the risk adjustment reflects components separately determined for insurance risk, policyholder behavior risk, and expense risk, the allocation methodology would use risk drivers that appropriately attribute the impact of each of these risks to the lower levels of aggregation.

* + 1. **What are appropriate ways to determine confidence levels for disclosure when not directly available from the risk adjustment calculations?**

In order to determine confidence levels, it is necessary to be able to locate the value of the Fulfillment Cash Flow of a portfolio of insurance contracts on the probability distribution of the present value of the cash flows for that portfolio. If that probability distribution is not explicitly derived as part of the valuation process, some method or model might be needed to estimate the percentiles of that combined portfolio distribution at the amount that reflects the risk adjustment. The extent of the analysis needed for such estimation is likely to require judgement.

For large issued insurance portfolios, there may be sufficient evidence about the tail of the probability distribution.

In other cases, the form of the probability distribution might be selected based on judgement and the paragraph meters for that probability distribution might be selected by judgement based on what is considered appropriate for the purpose of this disclosure.

It is important to note that the sensitivity of the resulting confidence level to the chosen probability distribution increases as the confidence level increases.

The relevant part of the probability distribution may be defined in terms or two of more quantiles that straddle the Fulfillment Cash Flow based on evidence and judgements which would explain the values chosen for those quantiles.

* + 1. **What other considerations are relevant when estimating and communicating confidence levels?**

Different actuaries providing advice on confidence levels for similar reserves for similar risks may reach very different conclusions depending on the assumptions and methodology followed and on the judgement applied.

External users are likely to place significant importance on the confidence level disclosure and compare entities to their peers. As a result, this is an area where the actuary can help management understand and communicate the issues and challenges related to this important estimate and the appropriate explanation associated with this disclosure.

Estimating the confidence level disclosure will depend on how well the aggregate probability distribution is understood. When the moments of the probability distribution can be estimated, the relative uncertainty related to such estimates increases with the order of the moment estimated. Consequently, there are risks associated with interpreting the confidence level disclosure with a false sense of precision in such estimates. This risk can be mitigated by providing a better understanding around the qualitative considerations involving the level of subjectivity and judgement involved in estimating the confidence level.

In determining the confidence level using a particular technical method there are additional considerations related to how well the method reflects the full range of outcomes, and whether the method used is stable over time, is fairly representative of ongoing conditions, and can be replicated.

As the degree of uncertainty (in the confidence level estimate) increases, the need for judgement increases and, with it, the need to better understand and communicate, to the entity, both the uncertainty and the way in which judgement has been exercised.

* + 1. **What is the appropriate granularity for disclosure of confidence levels?**

Paragraph 119 requires disclosure of the confidence level associated with the risk adjustment.  There is no requirement to estimate or disclose confidence levels at any level of granularity.  However, the reporting of the confidence level does not specify whether the amount reported is on a net-of-reinsurance basis.  The entity’s reported risk adjustment is required on a gross level as a liability.  If the entity has reinsurance held, the entity also separately reports the risk adjustment associated with reinsurance held.  The entity’s net risk adjustment is not reported as a separate item.

IFRS 17 does not provide guidance as to whether the disclosure of a confidence level was intended to be on a net-of-reinsurance basis.  The estimation of separate confidence levels for disclosure that correspond to the gross risk adjustment (liability) and the reinsurance held risk adjustment (asset) may present significant technical issues and may not provide the relevant information intended.  In particular, the net risk adjustment is simply computed by subtracting the risk adjustment for reinsurance held from the risk adjustment for gross liabilities.  This is fully consistent with how the risk adjustment for reinsurance held is estimated (gross minus net = ceded).

* + 1. **To what extent is it appropriate to use analyses and measurements made for other purposes, such as pricing, embedded value, regulatory reporting or capital modelling?**

IFRS 17 does not mandate particular technique(s) to determine risk adjustments, nor does it specifically limit the techniques that may be used, or provide examples of appropriate techniques.

The primary requirement in the application guidance is that “The risk adjustment for non-financial risk for insurance contracts measures the compensation that the entity would require to make the entity indifferent between:

1. fulfilling a liability that has a range of possible outcomes arising from non-financial risk; and
2. fulfilling a liability that will generate fixed cash flows with the same present value as the insurance contract.” (B87)

While it may often be desirable to make use of analyses conducted for other purposes, the conclusions drawn from such analyses are seldom transferrable. Such conclusions depend on the perspective and purpose for which they are required. Risk adjustments are set in a fulfilment perspective in comparison to expected values (e.g., central estimates or best estimates) that are required to represent unbiased mean values. This is not necessarily true of measurements set in other contexts. The underlying rationales of market, entry and exit values and of pricing are clearly different. This means that pricing and exit value assessments of the liability may not be appropriate ways to calibrate risk adjustments.

Internal capital models that are developed within regulatory frameworks (and/or for pricing purposes) may provide a good reference for how the entity views and assesses risk. Therefore, the techniques used to measure risk and develop risk adjustments for IFRS 17 can be compared against the techniques and measurements used under such other frameworks as a means to assess for reasonableness, and to potentially leverage the underlying analyses for both purposes. However, the resulting risk adjustments would be determined based solely on the IFRS 17 criteria.

Regulatory solvency capital adequacy models that align well with how an entity views and assesses risk may, similarly, be potentially leveraged in the development of appropriate IFRS 17 techniques to measure and assess risk. However, IFRS principles for the valuation of insurance contract liabilities are not based on the solvency requirements of an insurer, so they can only be leveraged to the extent they generally reflect how the entity views and assesses risk. Having said this, regulatory capital adequacy requirements do place constraints on the entity, and are likely to influence its views.

A further complication is that both internal and regulatory capital requirements are there to cover all of the risks faced by the entity, while the risk adjustment in the Fulfilment Cash Flows excludes risks outside the insurance contract (such as operational, asset and asset-liability mismatch risks) and risks reflected through the use of market consistent inputs (see question 6.9). Even where regulatory minimum capital is built up in an additive structure, it does not necessarily follow that the insurance components of such a structure fully represent the insurance risks, since the underlying relationships are unlikely to be fully additive.

* + 1. **To what extent are “simple and sufficient” approaches to risk adjustment appropriate?**

There is no requirement to use a single model for all the business or all the risks. An entity may use a mix or blend of methods to set risk adjustments across different businesses provided such an approach makes appropriate allowance for diversification and is done in a way that can be reasonably disclosed and explained to external auditors and is relevant to users (which is likely the biggest hurdle to a mixed model approach).

Consideration could be given to running more complex models at a higher level of aggregation (and perhaps less frequently) and then simplified into factor matrixes to use at a more granular level in the valuation.

# Chapter 7 – Contractual Service Margin (CSM)

What does this chapter address?

This Chapter considers the requirement under IFRS 17 to set up a Contractual Service Margin (CSM) at outset for each group of insurance contracts, including the aggregation of contracts, the subsequent measurement including the allocation of revenue to future periods in line with the provision of services and the treatment of loss component for “onerous contracts”.

Which sections of IFRS 17 address this topic?

Paragraphs 38-39 and B96 – B119 provide guidance on this topic. BC218 – BC221 also provides background on the subject.

What other IAA documents are relevant to this topic?

**TO FOLLOW later in 2018**

# Chapter 8 – Contracts with Participation Features and Other Variable Cash Flows

What does this chapter address?

This Chapter considers the recognition, measurement and presentation of participating features, particularly in the case of contracts with direct participation features, as well as for other cash flows subject to the discretion of the insurer or linked to indices, including the criteria to be met for those classifications

Which sections of IFRS 17 address this topic?

Paragraphs f-h and Bx-By provide guidance on this topic. BC z-z also provides background on the subject.

What other IAA documents are relevant to this topic?

Anything to include?

**TO FOLLOW later in 2018**

# Chapter 9 – Premium Allocation Approach

9.A. What does this chapter address?

This Chapter considers the use of the Premium Allocation Approach (PAA) under IFRS17 including the criteria to be met for an insurance contract to choose this method, the measurement approach and the differences between this approach and the General Measurement Approach. The Chapter focuses on the “liability for remaining coverage”. The measurement of the contract liability from the point of occurrence of an insured event includes the “liability for incurred claims” which follows the requirement of the General Measurement Approach discussed in other chapters.

9.B. Which sections of IFRS 17 address this topic?

Paragraphs 53-59 and BC288 – BC295 provide guidance and background on this topic.

9.C. What other IAA documents are relevant to this topic?

None

1. **What is the Premium Allocation Approach?**

The Premium Allocation Approach (PAA), which is set out in paragraphs 53-59, is a simplification of the measurement basis in IFRS 17 paragraphs 32–52 (referred to in this chapter as the General Measurement Approach (“GMA”), as defined in Chapter 3 of this IAN), which an entity may use to measure the liability for remaining coverage, if it reasonably expects that the PAA would produce a measurement for a group of contracts that would not differ materially from the one that would be produced applying the GMA or if the coverage period of each contract in the group is one year or less. The IASB has stated there is only one model, the GMA for measuring insurance contracts. Entities have the option of using the PAA as an approximation for measuring contracts over the remaining coverage period, for a group of contracts that meet the criteria in paragraph 53. (See question 9.2 below).

The PAA primarily applies to the liability for remaining coverage, the obligation that relates to the unexpired portion of the coverage period. With exception of a couple of simplifications under the PAA (paragraph 59), the liability for incurred claims is measured under the GMA, which is discussed in chapters 4 through 7 of this IAN.

Chapter 7 covers the Contractual Service Margin (CSM), which is not applicable to liability for incurred claims, since the CSM is only part of the liability for remaining coverage.

The remainder of this chapter considers questions relevant to when and how the PAA may be used, in particular, see questions 9.10 and 9.11 for more information on how the liability for remaining coverage is measured under the PAA.

1. **When might an entity choose to use the PAA?**

Whilst the PAA represents a mathematical simplification of the GMA, whether it is more appropriate for an entity to implement the PAA will depend on the circumstances of each entity. For example, an entity may prefer to use the PAA where it can be implemented with fewer practical changes to existing systems and processes than might be required to develop an approach to implement calculating and reporting the CSM under the GMA. However, if not all an entity’s contracts may be eligible for the PAA, then an entity may need to consider whether there are benefits to implementing the PAA for eligible contracts and developing an approach to implementing the GMA for other contracts or whether to implement the GMA for all contracts.

The PAA is similar to the unearned premium approach used by many entities for reporting unexpired coverage under IFRS 4 and concurrent local GAAP reporting for short duration contracts. The PAA is not exactly the same as the unearned premium approach and adjustments will be required so entities may need to consider the benefits and disadvantages of implementing the PAA or the GMA for contracts that are eligible to use the PAA.

Considerations for entities in deciding whether to use the PAA might include, for example, the extent to which contracts are or are not eligible for the PAA; the extent to which existing systems and processes may or may not support reporting the PAA for eligible contracts; and the additional resource that may or may not be required to implement the GMA compared with PAA.

1. **What are portfolios and groups of contracts?**

An important concept to understand when reading this chapter is the level of aggregation under IFRS 17. This issue is discussed in more depth in chapter 3 – Estimates for Future Cash Flows and in chapter 7 - CSM.

Briefly, insurance contract liabilities under IFRS 17 are measured on the basis of portfolios, further divided into groups of contracts. Portfolios comprise contracts subject to similar risks and managed together. Within a portfolio, groups are required for:

* contracts onerous at initial recognition;
* contracts that have no significant probability of becoming onerous; and
* other contracts.[Need to ensure this is consistent with what we say in CSM (chapter 7) once dratted]

Finer grouping is allowed within each of these and is required if a group might otherwise include contracts issued more than one year apart.

Note also that, within a group, it is acceptable to perform some or all of the calculations on the basis of individual contracts. The results of such calculations may then be combined, in accordance with the groups these contracts fall into.

1. **When can the PAA be applied?**

# The PAA can be applied if the conditions in paragraph 53 are met. Paragraph 53 states

# *An entity may simplify the measurement of a group of insurance contracts using the premium allocation approach set out in paragraphs 55–59 if, and only if, at the inception of the group:*

1. *the entity reasonably expects that such simplification would produce a measurement of the liability for remaining coverage for the group that would not differ materially from the one that would be produced applying the requirements in paragraphs 32–52; or*
2. *the coverage period of each contract in the group (including coverage arising from all premiums within the contract boundary determined at that date applying paragraph 34) is one year or less.*

While the PAA is intended primarily for groups of short-duration contracts, it is allowed whenever it provides a good approximation to the GMA (paragraph 53(a)). It is, however, qualified by paragraph 54 (see question 9.5).

Paragraph 53(b) allows the PAA to be used for groups of contracts with a coverage period of one year or less, regardless of whether it provides a good approximation. The length of the coverage period depends on the contract boundary (see question 9.8). The vast majority of non-life insurance contracts fall within this exemption. However, longer-term annual renewable contracts may also fall within this exemption, if the contract boundary lies at the next renewal date.

Use of the PAA is optional. The GMA can always be used, even where the PAA is allowed. The PAA was introduced mainly to provide a simplified approach for non-life insurance contracts and short-duration risk insurance more generally. It might be suitable for many single-premium contracts. It may also be suitable for regular-premium contracts, where each premium is commensurate with the risk for the corresponding period of coverage. For more complex contracts, it may not prove simpler in application than the GMA, particularly if the time value of money must be allowed for.

Another consideration is consistency. An entity writing non-life insurance contracts may prefer to go to some extra effort in testing if the PAA can approximate the GMA in order to use the PAA for a small number of more complex contracts. This might allow such an entity to use consistent reporting of the whole business and remove the additional burdens of measurement under the GMA in the pre-claims period. Conversely, an entity writing life insurance contracts may prefer to use the GMA, rather than the PAA, for simpler contracts, for consistency with how most of its contracts will be measured and presented.

1. **When is the PAA not allowed?**

The PAA cannot be applied in circumstances outlined in IFRS 17 paragraph 54 which state:

*The criterion in paragraph 53(a) is not met if at the inception of the group an entity expects significant variability in the fulfilment cash flows that would affect the measurement of the liability 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 contracts.*

The PAA may not produce a reasonable approximation to the GMA in the following scenarios, noting this is not intended to be an exhaustive list:

|  |  |
| --- | --- |
| **Scenario** | **Reasoning** |
| Patterns of the expected incurred claim costs and the release of the risk adjustment are significantly different, during the coverage period. | The PAA approach reduces the liability for remaining coverage in line with the pattern for incurred claim costs while the GMA would consider the impact of both in the relevant building blocks potentially leading to significant differences in the value of the liability for remaining coverage under the PAA versus the GMA over the coverage period. |
| The pattern of expected incurred claim costs is strongly uneven and the CSM is significant under the GMA. | The CSM is released in accordance to the insurance service provided which is based on coverage units for the duration of coverage. If the coverage provided by a contract is the same over the coverage period, then the CSM would be expected to be amortized evenly for each coverage period. For the PAA, a strongly uneven pattern of expected incurred claims would result in an uneven pattern of premium allocated to each period. The size of the CSM would then determine the significance of this difference. |
| The longer the expected payout pattern is for the coverage and / or the higher the interest rate environment. | Significant variability in the cash flows may occur during the coverage period if the time value of money is a major component of the underlying building blocks of the GMA. For very long payout patterns, such as excess workers’ compensation coverage, even a small change in a low interest rate environment could significantly change the value of the liability for remaining coverage. In a high interest rate environment, interest rates tend to be more volatile, and discount can make up a significant portion of the liability for remaining coverage even for shorter tailed non-life business.  |
| In a high interest rate environment where there is no significant financing component and the premium is due within a year of providing the relevant coverage.  | In this situation an entity is not required under the PAA to reflect the time value of money in the liability for remaining coverage but would be required to do so under the GMA. |
| In a high interest rate environment where there is significant financing component.  | In this situation an entity is required under the PAA to reflect the time value of money in the liability for remaining coverage using a discount rate locked in an initial recognition. A high interest environment tends to be volatile and an entity that used the GMA without a locked in discount rate may produce a significantly different answer for the liability for remaining coverage than the PAA. |
| There is a significant investment, service or other non-insurance component to the contract, or there is a significant profit sharing component. | These are complications for which the PAA was not designed to handle and where it might not approximate the GMA. |
| The cost of any embedded options or derivatives is significant | Paragraph 54 (a) of the standard tells us that increasing amounts of embedded derivatives is an example of where variability in the fulfillment cash flows could be significant.  |
| Coverage is deferred | While the PAA might require the liability for remaining coverage to accrete interest, the longer the deferral period the greater the mismatch is likely to occur between the underlying building blocks of the GMA and the PAA’s liability for remaining coverage. The GMA will continue to update expectations of future cash flows while the PAA will only adjust for changes in the timing for incurred claims in the coverage period per paragraph B127.  |
| Longer duration contracts generally | For many reasons already highlighted, the longer the contract the greater the variability can be in the fulfillment cash flows under the GMA. |
| Situations were there can be significant changes in the initial “written” premium which could include: Cancellation of policies within the coverage period Lapses through non-payment of future premiums, when premium has been paid upfront Contractual premium audits during the coverage period Reinstatement provisions that could result in additional future premium | Under the PAA premium is allocated based on the passage of time or incurred claims if the expected pattern of release from risk is significantly different from the passage of time. It does not explicitly reflect cancellations or return of premium, nor future premium from reinstatements or other sources on an expected value basis. Paragraph B126 requires an entity to recognise revenue under the PAA by allocating “expected” premium receipts to each coverage period. No clarity is given on the measurement basis for “expected” premium receipts. The GMA on the other hand, reflects premium cash flows on an expected value basis, and changes in them during the coverage period for the liability for remaining coverage as expectations change. |
| Contracts with level expected incurred claims and non-level indirect expenses | The PAA would allocate the premium evenly over the contract period while the GMA would recognise the non-level nature of the indirect expenses in the fulfillment cash flows.  |

1. **For contracts greater than 12 months in length, is it necessary to test whether the PAA is an approximation of the GMA?**

The standard does not explicitly require a test to demonstrate that the PAA is an approximation of the GMA. to Relevant stakeholders, such as an entity’s auditors, however, might expect the entity to justify its use for contracts with more than 12 months coverage. The justification required depends on the circumstances, although paragraph 54 suggests that the criterion is evaluated only at inception looking at the measurement of the *“liability for remaining coverage during the period before a claim is incurred”*.

For single premium contracts that run for only a few months more than a year, it may be sufficient to demonstrate that there is no obvious reason why the PAA would not be a good approximation to the GMA over the coverage period.

In some simple circumstances, it may be possible to demonstrate mathematical equivalence between the PAA and the GMA. This may be the case, for example, for single premium contracts, if the expected incurred cost is level over the coverage period, the risk adjustment is a flat percentage of the fulfilment cash flows and the PAA reflects the time value of money.

For a longer term group of single premium contracts, it may be desirable to perform a few sample calculations on both bases, in order to confirm that they produce similar results in terms of revenue and expected profit in each coverage quarter.

Where there are future premiums, or any other features that may invalidate the use of the PAA (see question 9.5 above), it may be desirable to undertake more exhaustive testing. If this is unduly laborious, it may be an indication that the PAA might not be appropriate to use.

If limited testing does not clearly indicate that the PAA is a good approximation, and PAA presentation is strongly preferred for such reasons as consistency with the rest of an entity’s business, it may be necessary to undertake parallel calculations to confirm a reasonable approximation.

1. **When is a group of contracts recognised?**

The recognition criteria for groups under the PAA are the same as for the GMA. Under paragraph 25 a group is recognised at the “*earliest of the following:*

1. *the beginning of the coverage period of the group of contracts;*
2. *the date on which the first payment from a policyholder in the group becomes due; and*
3. *for a group of onerous contracts, when the group becomes onerous.”*

The first criterion is how many entities that write short duration contracts recognise contracts under local GAAPs and IFRS 4 prior to the effective date of IFRS 17. The second criterion would be triggered if any premium deposit, installment or the full amount is due prior to the start of the coverage period.

1. **What is the contract boundary?**

The contract boundary is defined by paragraph 34, and discussed in Chapter 2 of this IAN.

The significance of the contract boundary in the context of the PAA lies in whether the contract has a coverage period of one year or less and is therefore automatically eligible for the PAA. For many non-life insurance contracts, neither insurer nor insured is obliged to renew, so the contract boundary is clear.

The situation is rather less clear for compulsory insurances, where the right of the insurer to set a premium that *fully* reflects the risk is compromised in certain jurisdictions.

In cases of doubt, the actuary may seek guidance from the entity’s technical accounting group to reach a consensus on the issue.

1. **What is the initial measurement approach to the liability for remaining coverage?**

The initial measurement under the PAA is set out in paragraph 55(a).

##  *on initial recognition, the carrying amount of the liability is:*

## *the premiums, if any, received at initial recognition;*

## *minus any insurance acquisition cash flows at that date, unless the entity chooses to recognise the payments as an expense applying paragraph 59(a); and*

## *plus or minus any amount arising from the derecognition at that date of the asset or liability recognised for insurance acquisition cash flows applying paragraph 27.*

Under paragraph 59(a), if the coverage period is 12 months or less the entity “*may elect to recognise any insurance acquisition cash flows as expenses when it incurs those costs*.” This may cause a material difference between the PAA and the GMA for the liability for remaining coverage which is why it is only permitted when the coverage period is less than 12 months and the safe harbor election of the PAA can be made.

Onerous contract liabilities are discussed below (see question 9.14).

For non-life insurance business, on a single premium basis where the premium is paid on or before initial recognition, if the option in paragraph 59(a) is not taken, the overall effect is that of an unearned net premium. Instead of an initial unearned premium (UEP) equal to the written premium, less an initial deferred acquisition cost equal to the deferrable acquisition costs (DAC), the initial UEP is effectively net of acquisition costs and there is no DAC asset.

While initially thought of as an UEP model, the PAA’s initial measurement criteria will not provide users of the financial statements with as much information as an unearned premium model grossed up for acquisition expenses and any premium owed. The PAA, through approximating the GMA of netting cash inflows and outflows, will not include the future inforce exposure by the amount of premium owed.

If the 59(a) option is taken, the initial UEP is equal to the premium due, but with no DAC. The effect of this is that the net liability is greater than under previous approaches by the amount of DAC that is not recognised.

This measurement approach does not capture any expectation of policy cancellations, which if significant on premiums paid could result in overstating the liability, or for contracts with a coverage period of greater than 12 months the use of the PAA may not be appropriate per the requirements of paragraph 54 of IFRS 17.

1. **What is the subsequent measurement approach to the liability for remaining coverage?**

# The subsequent measurement under the PAA is also set out in paragraph 55(b) which states

## *at the end of each subsequent reporting period, the carrying amount of the liability is the carrying amount at the start of the reporting period:*

## *plus the premiums received in the period;*

## *minus insurance acquisition cash flows; unless the entity chooses to recognise the payments as an expense applying paragraph 59(a);*

## *plus any amounts relating to the amortisation of insurance acquisition cash flows recognised as an expense in the reporting period; unless the entity chooses to recognise insurance acquisition cash flows as an expense applying paragraph 59(a);*

## *plus any adjustment to a financing component, applying paragraph 56;*

## *minus the amount recognised as insurance revenue for coverage provided in that period (see paragraph B126); and*

## *minus any investment component paid or transferred to the liability for incurred claims.*

As set out in B126, insurance contract revenue is recognised ineach accounting period;

1. on the basis of the passage of time; but
2. 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.

Onerous contract liabilities and the circumstances under which the adjustment for the time value of money is required are discussed below (see questions 9.14 and 9.15).

In practice, it is possible to turn this procedure around. In the absence of onerous contract liabilities, the PAA liability is the (present) value of future revenue (less future premiums). For single premium contracts where future revenue is pro-rata (see question 9.12 below) and discounting can be ignored, it may be easier to think in terms of UEP and calculate premium revenue as UEP received at the start of the period, plus premiums received, minus UEP at the end of the period, similar to previous accounting practice.

1. **What acquisition expenses should be used in the initial measurement?**

# *Insurance acquisition cash flows* is a term defined in Appendix A of IFRS 17 Paragraph 59(a) Their amount is an accounting determination but would include commissions, underwriting costs and contract set up expenses. For each group, all of these expenses must be directly attributable to the portfolio of insurance contracts to which the group belongs. For more details see chapter 4 on Estimates of Future Cash Flows.

1. **How is revenue recognised for subsequent measurement periods?**

# Revenue recognition under the PAA is specified in paragraph B126.

##   *… 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:*

## *on the basis of the passage of time; but*

## *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.*

# In practice, unless there are particular reasons to expect an uneven pattern, a good starting point might be an *a priori* pro rata assumption, modified to the extent demanded by credible experience. There is an inherent tension between using the largest possible portfolio to maximize credibility and smaller sub-portfolios to detect intra-portfolio variations. The best balance is a matter of judgement.

# There is also the question of what does “differs significantly from the passage of time” mean. This is not defined by the standard although the term “significant” is often used in accounting frameworks to relate that something has more than a remote likelihood of causing a misstatement. This appears to be a lower threshold than something that is material, an item in accounting that would have an impact on the reader of the financial statement. Some may consider this a matter of accounting, rather than actuarial judgement, where the actuarial role is to provide the analysis on which that judgement can be based.

# Clearly the storm damage component of the premium for a home-owners policy in Queensland, Australia, where cyclone season typically falls between November and April, would differ significantly from the passage of time. But other perils insured under the policy may have no such pattern, or even offsetting patterns. Other types of policies may have more subtle seasonal effects that would, due to the large number of policies sold, have a significant impact on revenue. For example, auto policies in the northern states of the US incur 72-74% of incurred losses over the first 9 months of a calendar year with the remaining 26-28% being incurred over the last quarter with the inclement winter months. This difference is subtle in terms of ultimate loss but might have a significant impact on the revenue recognition and bottom line profit of the company if the premium was recognised in line with the expected timing of incurred claims.

1. **How should the liability for incurred claims be measured for contracts valued using the PAA?**

# The PAA is primarily a simplification of the measurement approach for the liability for remaining coverage under the GMA. However, there are a couple of minor simplifications that are permitted when measuring the claim liabilities, or the liability for incurred claims, if the contracts are initially measured under the PAA.

# The liability for incurred claims is measured using the GMA with one potential modification, the entity is not required to adjust future cash flows for the time value of money and the effect of financial risk if those cash flows are expected to be paid or received in one year or less from the date the claims are incurred, as per Paragraph 59 (b).

# The GMA allows for an entity to elect to lock-in interest rates for purposes of recognizing finance income or expenses over the life of a contract, with changes in market rates going through Other Comprehensive Income (OCI). Based on paragraphs B133 and B72 (e) (iii), an entity that has used the PAA for measuring the liability for remaining coverage and wishes to lock-in discount rates shall do so based on the incurred date of the claim liabilities, and not the initial contract recognition date as per the GMA. Effectively, for practical purposes, for each group of contracts this would imply the locked-in discount rate would be based on the average accident date of a period (quarterly or annual), if the average claim size is assumed to be uniformly distributed over the period.

1. **When and how should an onerous contract liability be recognised?**

# Onerous contracts, in the context of the PAA, are the subject of paragraphs 18 and 57.

## 18 *For contracts issued to which an entity applies the premium allocation approach (see paragraphs 53-59), the entity shall assume no contracts in the portfolio are onerous at initial recognition, unless facts and circumstances indicate otherwise. An entity shall assess whether contracts that are not onerous at initial recognition have no significant possibility of becoming onerous subsequently by assessing the likelihood of changes in applicable facts and circumstances.*

## 57 *If at any time during the coverage period, facts and circumstances indicate that a group of insurance contracts is onerous, an entity shall calculate the difference between:*

## *(a) the carrying amount of the liability for remaining coverage determined applying paragraph 55; and*

## *(b) the fulfilment cash flows that relate to remaining coverage of the group, applying paragraphs 33–37 and B36–B92. However, if, in applying paragraph 59(b), the entity does not adjust the liability for incurred claims for the time value of money and the effect of financial risk, it shall not include in the fulfilment cash flows any such adjustment.*

# Note that, in the first instance, this test is applied to a group of contracts within a portfolio. Unless there is reason to believe that the group may be onerous, it is not necessary to look further at inception whether there is a group of onerous contracts. The latter half of paragraph 18 would indicate that the entity would still need to consider at inception whether to categorize the contracts in the portfolio as belonging to a group that has no significant possibility of becoming onerous in subsequent periods or not, as described in paragraphs 16 (b) and (c), based on the likelihood of the facts and circumstances changing during the coverage period.

# Contracts may be onerous at issue or may become onerous later during the coverage period. The wording “*facts and circumstances indicate*” in this paragraph implies that an explicit test is not required. An explicit test is only needed when there is reason to believe that the portfolio containing the contracts may be onerous. This is clearly a matter of judgement. Possible indicators may include:

### a group of contracts in the portfolio that are known to be onerous at initial recognition;

### past losses in the portfolio;

### aggressive underwriting or pricing;

### unfavourable experience trends; and

### unfavourable external conditions.

# Groups of onerous contracts are identified by parallel GMA and PAA calculations. The excess of the GMA over the PAA liability is recognised as a loss in P&L and increases the liability for remaining coverage. The GMA liability is discussed in chapters 4 to 7, but may be modified in accordance with paragraph 57(b) to exclude discounting, if the corresponding liability for incurred claims is (or would be) undiscounted in accordance with paragraph 59(b).

# If at any time during the coverage period, facts and circumstances indicate that a group of insurance contracts is onerous, it is necessary to recalculate the difference between the GMA valuation of the liability for remaining coverage and the carrying amount (IFRS 17 paragraph 57).

# An onerous contract liability cannot arise for incurred claims, since these are not part of the liability for remaining coverage and are already valued at current fulfillment value under the GMA.

# Onerous contracts are discussed further in chapter 7 on CSM.

1. **When is an adjustment made to the liability for remaining coverage for the time value of money required, and how is the adjustment made?**

# Adjustment for the time value of money is subject to paragraph 56. An adjustment is required where there is a significant financing element to contracts in a group. It is optional to adjust the liability for remaining coverage, if the time between providing the relevant portion of insurance coverage and the due date for the corresponding premium is expected to be 12 months or less.

# The discount rates to be used are as determined at initial recognition of the contract. Interest rates are discussed further in chapter 5: Discount Rates.

1. **If the entity elects to use OCI for changes in interest rates in subsequent measurement periods for the liability for incurred claims, what is the locked-in discount?**

# If electing the OCI option to minimize the volatility from changes in interest rates in profit and loss, under the GMA the discount rate is locked-in at the start of the coverage period of the contract. The IASB has allowed for a practical difference with the PAA in paragraph B72 (e) (iii) whereby the discount rate is locked in based on the date incurred losses are recognised. Effectively, for practical purposes, for each portfolio of contracts this would imply the locked-in discount rate would be based on the average accident date of a period (quarterly or annual).

1. **How is ceded reinsurance dealt with under the PAA?**

# Under paragraph 69, the PAA may be used for ceded reinsurance contracts, if they meet the same criteria as for direct insurance contracts. For proportional reinsurance, this will be the case if the direct contract is eligible for the PAA assuming the coverage is on a losses occurring basis, where the reinsurer covers losses that occur for a defined period of time under the contract. This is not necessarily true for proportional reinsurance on a policies or risks attaching basis, where the reinsurer covers losses arising from policies written over a defined period of time. For example, if these reinsurance contracts attach policies over a one year period and the attaching policies are also written over a one year period then the reinsurance contracts would have a coverage period of two years and would not be automatically eligible for PAA based on coverage of one year or less.

# Conversely, non-proportional reinsurance is typically written on a losses occurring basis and may be eligible for the PAA, even if the underlying direct contracts are not, as long as the coverage period is one year or less. However, under a non-proportional reinsurance treaty, particularly catastrophe covers for tropical storms and other aggregate covers, the pattern of risk may differ significantly from pro-rata over time and therefore may not qualify for the PAA if the contracts had coverage periods in excess of one year.

1. **How is assumed reinsurance dealt with under the PAA?**

# Paragraph 3 indicates that the standard applies to “insurance contracts, including reinsurance contracts” an entity issues. IFRS 17 does not explicitly differentiate between the treatment of inwards insurance and inwards reinsurance. Consequently, the PAA may be used if the reinsurance contract meets the requirements of paragraph 53.

# Under a non-proportional reinsurance treaty, particularly some catastrophe covers, such as those covering tropical storms, and other aggregate covers, the pattern of risk may differ significantly from pro-rata over time and therefore may not qualify for the PAA if the contracts had coverage periods in excess of one year.

1. **When and how does an entity bifurcate non-insurance features under the PAA?**

# Non-insurance features are treated in the same way under the GMA and the PAA. Bifurcation is discussed in chapter 2. After bifurcation, the insurance part of the contract is valued in the same way as a stand-alone contract.

1. **How are results presented under the PAA?**

# See chapter 11.

1. **How is transition to the new standard treated if the entity will measure its liabilities using the PAA?**

# Transition is discussed in chapter 16. The PAA is not explicitly mentioned in IFRS 17 Appendix C, which covers transition.

# It will usually be straightforward to apply the PAA retrospectively in accordance with paragraph C4 when the duration of most PAA contracts is one year or less. Retrospective implementation will require additional effort for contracts with coverage periods longer than one year.

1. **How are contract modifications handled under the PAA?**

# Contract modifications are the subject of paragraphs 72 and 73.

# Paragraph 72 indicates that when a contract is modified, “an entity shall derecognise the original contract and recognise the modified contract as a new contract”. It further notes that the “exercise of a right included in the terms of a contract is not a modification” but provides an exhaustive list of conditions that are considered contract modifications. These include a modification that would have changed the group to which the contract would have been assigned at inception or a modification that would have changed a contract being accounted for under the PAA to no longer being eligible for that simplification.

# Paragraph 73 is written in terms of the GMA, indicating that if none of the conditions are met under paragraph 72 the “entity shall treat changes in cash flows caused by contract modifications as changes in estimates of fulfillment cash flows by applying paragraphs 40-52”. Paragraphs 40-52 detail subsequent measurement under the GMA; therefore for contracts where the PAA is applied, it would seem appropriate to proceed by applying the guidance for subsequent measurement under the PAA that is in paragraph 55(b).

# See also chapter 12: Contract Modifications.

# Chapter 10 – Reinsurance

10.A. What does this chapter address?

This chapter provides background and suggested practice on the treatment of reinsurance under IFRS 17. The note covers both reinsurance ceded (referred to as reinsurance “held” in IFRS 17) and reinsurance assumed (referred to as reinsurance “issued” in IFRS 17). For consistency with IFRS 17 terminology, reinsurance “held” and “issued” will be used in this note. Retrocession contracts are included in the definition of reinsurance contracts

It is not applicable to reinsurance contracts that are considered to be Financial Instruments under IFRS.

10.B. Which sections of IFRS 17 address this topic?

All references in IFRS 17 that refer to insurance contracts also apply to reinsurance contracts unless otherwise indicated by specific reference to reinsurance issued or held. For reinsurance held, paragraphs 60-70 contain specific criteria only applicable to reinsurance held.

10.C. What other IAA documents are relevant to this topic?

None

* + - 1. **When is IFRS 17 used to account for reinsurance contracts?**

A Reinsurance contract is an insurance contract where one entity (the reinsurer) takes on all or part of the insurance risks issued by another entity. When an entity sends risks to another entity it is known as reinsurance ceded. When an entity receives risks from another entity it is known as reinsurance assumed. Where there is significant insurance risk transfer, the reinsurance contract is considered as an insurance contract under IFRS, and IFRS 17 is applicable. This applies to both reinsurance held (the IFRS 17 terminology for a reinsurance ceded contract) and reinsurance issued (the IFRS 17 terminology for a reinsurance assumed contract).

IFRS outlines the criteria to determine whether there is significant insurance risk transfer under the contract (see question 10.2 below). Where a contract fails these criteria, IFRS 17 does not apply, and the reinsurance is treated as a financial instrument.

* + - 1. **What constitutes significant insurance risk transfer for reinsurance?**

For IFRS purposes to determine if IFRS 17 is applicable, for each reinsurance transaction that a company has in place, an assessment needs to be made as to whether there is significant insurance risk transfer under the contract. The criteria are covered in detail in paragraphs B7-B23. See Chapter 2 – classification of contracts.

Under IFRS, an insurance contract is one under which one party accepts significant risk, other than financial risk, from another party by agreeing to compensate the other party if a specified uncertain future event (the insured event) adversely affects the other party.

Under IFRS, the insurance risk is significant whenever an insured event could cause the insurer to pay significant additional benefits in any scenario, excluding scenarios that lack commercial substance (i.e. have no discernible effect on the economics of the transaction). IFRS specifically says this condition may be met even if the insured event is extremely unlikely or even if the expected (i.e. probability-weighted) present value of contingent cash flows is a small proportion of the expected present value of all the remaining contractual cash flows

For reinsurance, there are two specific exceptions to the above general principles

* Lapse, persistency or expense risk would not normally meet the criteria for insurance risk outlined above as, under paragraph B14, the payment an underlying policyholder is entitled to is not contingent on these items. However, where this risk is mitigated by an entity by using a contract to transfer some of all of these risks to another party, this second contract is considered as insurance risk to the assuming entity (paragraph B15). Therefore they can be considered as insurance risk for the entity that has assumed the risk and has reinsurance issued but not for the entity that has ceded the risks of underlying contracts and has reinsurance held.
* Even if a reinsurance contract does not expose the issuer of the contract to the possibility of a significant insurance loss, the contract is still deemed to transfer significant insurance risk if it transfers substantially all of the insurance risk relating to the reinsured portions of the underlying insurance contracts (paragraph B19). Therefore they can be considered as insurance contracts for both the entity issuing the contract and the entity that holds the reinsurance.

***THE BALANCE OF THIS NOTE IS APPLICABLE ONLY TO REINSURANCE CLASSIFIED AS INSURANCE CONTRACTS UNDER IFRS***

**Reinsurance Held - (Questions 10.3 – 10.15)**

* + - 1. **How is reinsurance held presented in the IFRS statement of financial position and statement of financial performance?**

Where an entity has entered into reinsurance contracts to cede insurance risk associated with underlying insurance contracts (either direct insurance contracts or reinsurance contracts issued), the reinsurance held contracts are recognized and presented on the balance sheet as groupings of reinsurance contracts held that are assets and groupings of reinsurance contracts held that are liabilities. This means that for the statement of financial position, the reinsurance held is separated from the underlying insurance contracts (paragraph 78). Similarly, for the statement of financial performance, the income and expense from reinsurance held are shown separately from the expenses and income of the underlying insurance contracts (paragraph 82).

* + - 1. **Does reinsuring insurance contracts impact the recognition of the underlying insurance contacts?**

No, reinsurance does not impact the recognition of the underlying insurance contracts even when all, or substantially all, the risks are re-insured. As per paragraph 75, “when an entity buys reinsurance, it shall de-recognize the underlying insurance contract(s) when, and only when, the underlying insurance contract(s) is or are extinguished”.

* + - 1. **Does reinsuring insurance contracts impact the valuation of the underlying insurance contracts on the IFRS balance sheet?**

In principle, under IFRS 17, the valuation of insurance contracts issued by an entity is not impacted by entering into reinsurance contracts to mitigate risks in the contracts issued. The insurance contracts continue to be valued on a gross basis. Therefore the estimates of future cash flows of a group of underlying insurance contracts would usually be the same regardless of whether there is reinsurance held associated with these obligations. This also applies to the entirety of the fulfilment cash flows and the CSM.

The risk adjustment for non financial risk for a group of insurance contracts issued is also not directly impacted by specific reinsurance held against the risks of these contracts. However, the risk adjustment may reflect the potential use of reinsurance to diversify risk as under paragraph B88 (a) it states that “*the risk adjustment for non-financial risk also reflects “the degree of diversification benefit the entity includes when determining the compensation it requires for bearing the risk*”. Therefore, an entity’s approach to diversifying its risk exposure, including potential use of reinsurance, may impact the gross risk adjustment. However, this would be an indirect impact based on the entity’s approach to risk diversification rather than direct linkage for a specific reinsurance held treaty.

* + - 1. **How are reinsurance contracts held measured?**

The measurement of reinsurance held is represented by the fulfilment cash flows associated with the reinsurance held contract. It is separately determined from the valuation of the fulfilment cash flows of the underlying gross insurance liabilities, however, paragraph 63 requires consistency between the assumptions used in the two sets of fulfilment cash flows (see question 10.9).

This introduces the possibility of an accounting mismatch between the valuation of reinsurance held and the valuation of the underlying insurance contracts whose risk is being reinsured. For example, the underlying insurance contracts may qualify as insurance contracts with direct participation features, whereas reinsurance contracts do not qualify. This would lead to differences in the accounting model approach to the CSM related to treatment of changes in the discount rate due to changes in financial assumptions, and the accretion of interest.

In addition there may be differences in grouping of contracts and contract boundaries.

* + - 1. **Does the asset or liability for reinsurance held have a CSM?**

Assuming the PAA is not being used, a CSM is determined for a reinsurance contracts held using a similar approach as for other insurance contracts. However, there is a key difference in that the CSM can both reduce the reinsurance held asset (i.e. present value of reimbursements from the reinsurance contract exceed the present value of reinsurance premiums) and therefore defer recognition of profit from the reinsurance contract, or increase the reinsurance held asset (i.e. present value of reinsurance premiums exceeds the present value of reimbursements from the reinsurance contract) and therefore defer recognition of losses from the reinsurance contract.

This means that the concept of an ‘onerous’ reinsurance held contract does not exist (see paragraphs 29 (b), 61 and 65). The rationale is that a net loss from the reinsurance contract would usually represent a commercial expense of purchasing reinsurance and would normally be spread over the period in which the service is received.

However, where there is a change in the fulfilment cash flows of a group of underlying insurance contracts that does not adjust the CSM for this group, the insurer similarly does not adjust the CSM on the reinsurance held asset for changes in fulfilment cash flows associated with these same underlying insurance contracts (see paragraph 66 (c) (ii)). This applies only for subsequent measurement, not for initial measurement.

This means that where an entity has transferred risk to a reinsurer, there is an attempt for subsequent measurement to create consistency in how changes in the fulfilment cash flows associated with the risks transferred is treated in the CSM of the reinsurance held and the gross insurance liabilities. However, there is no attempt to create similar consistency at initial measurement.

* + - 1. **How is counter party risk of non-performance by the issuer of reinsurance contracts reflected in reinsurance contracts held?**

In determining the fulfillment cash flows, the estimates of future cash flows for the reinsurance contracts held are reduced by an allowance for reinsurance counter party failure to fulfill the contractual obligations (paragraph 63). This allowance would reflect not only potential reinsurance counter party failure due to defaults (i.e. credit events), but would include allowances for disputes resulting in reduced payments as well reflecting the effects of collateral. Default allowances would normally reflect the current financial condition and credit standing of the reinsurance counter party, as well as the potential for these conditions to change over time,

Further, non-performance risk is to be considered in the risk adjustment

If the allowance for non-performance in the fulfillment cash flows is changed, then the change does not adjust the contractual service margin (paragraph 67).

* + - 1. **Would the future cash flow assumptions for business covered by reinsurance held be the same as the future cash flow assumptions used for the same business in the underlying insurance contract valuation?**

Paragraph 63 states that *“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.”* This means that assumptions related to policyholder behavior or insured decrements (e.g. mortality rates, morbidity rates, policyholder claims assumptions) would be consistent between the underlying insurance contract valuation and where these assumptions are used to help determine the value of the reinsurance held. Other assumptions, such as expenses may be different.

In addition, other variables and determinants of the cash flows, including the contract boundary, may be different depending on the terms of the reinsurance

* + - 1. **Would grouping of business for reinsurance held be the same as contract grouping used for the same business in the gross insurance liabilities?**

The grouping for business covered by reinsurance held may be different than the contract grouping for the same underlying business in the gross insurance liabilities.

Under IFRS 17, contracts are required to be grouped. In addition, the general approach is that unless a contract contains components that would be within the scope of another standard if they were separate contracts, the contract is contemplated as the most basic unit of account.

A reinsurance contract is a single contract, even though it may consist of cessions of many underlying insurance contracts.

Because reinsurance contracts already aggregate risk and consolidate underlying contract exposures, it may in some circumstances make sense to make use of the permission to have one (reinsurance) contract in a group.

The grouping requirements for insurance contracts outlined in IFRS 17 paragraphs 14 – 24 also apply for reinsurance, with exception that for reinsurance contract held there is an additional paragraph 61 to account for the fact that reinsurance contracts cannot be onerous. Paragraph 61 states that “*An entity shall divide portfolios of reinsurance contracts held applying paragraphs 14 – 24, except that the reference to onerous contracts in those paragraphs shall be replaced with a reference to contracts on which there is a net gain on initial recognition. For some reinsurance contracts held, applying paragraphs 14 – 24 will result in a group that comprises a single contract*”.

* + - 1. **What are the considerations when a reinsurance held contract may cover multiple years of underlying insurance contracts or risk attachments?**

For reinsurance held, a single reinsurance held contract may cover multiple years of underlying contract cessions or risk attachments. Some reinsurance held contracts, in addition to covering existing risks / cessions, are open to accepting future cessions / risk attachments. This leads to the question, when measuring the value of an existing group of reinsurance held contracts at a point of time T, what future cessions / risk attachments after time T are reflected in the modeling of the future cash flows in the fulfillment cash flows.

There are several relevant paragraphs in the standard.

Paragraph 33 states that “*An entity shall include in the measurement of a group of insurance contracts all the future cash flows within the boundary of each contract in the group*”

Paragraph 34 states that “*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 services (see paragraphs B61-B71). A substantive obligation to provide 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 for coverage up to the date when the risks are assessed does not take into account the risks that relate to periods after the reassessment date”*

The implications of the above paragraphs in the standard might best be given by examples.

Consider 2 possible non proportionate reinsurance held contracts, each of the sake of simplicity, considered a separate “group” of 1 contract.

Contract A is a reinsurance contract held where existing risks are covered until they expire at guaranteed rates. The treaty is open to new risk attachments but the reinsurer can terminate accepting new risks at any time

The implication is that at any valuation date T, the insurer would project future cash flows related to the existing risk attachments at time T, and would not project future risk attachments. At time T+1, the cash flows of the reinsurance contract held would include the projections of cash flows for all risk attachments up to time T+1 (i.e. risks that attach between T and T+1 would be included)

Contract B is a reinsurance contract held where. existing risks are covered until they expire at guaranteed rates. The treaty is open to new risks at guaranteed rates for at least the next 3 years, after which the reinsurer can terminate accepting new risks

The implication is that at any valuation date T, the insurer would project future cash flows related to the existing risk attachments at time T, and would also project future risk attachments for risks for the next 3 years. At time T+1, the cash flows of the reinsurance contract held would include the projections of cash flows for all risk attachments up to time T+1 , including true up of cash flows for actual versus expected for risk attachments between T and T + 1, plus updated projected cash flows for future risk attachments for the next 2 years.

There are other implications to be considered.

* The future cash flows included may impact the ability to use the PAA (Premium Allocation Approach). Where a reinsurance contract is intended to cover multiple years of cessions / risk attachments, the PAA may be more difficult to apply for contracts where the coverage period for the underlying contract is only 1 year, but new risks attach after the inception date.
* The IFRS 17 application guidance states that, when determining the discount rates for initial recognition, “an entity may use weighted-average discount rates over the period that contracts in the group are issued, which applying paragraph 22 cannot exceed one year” [paragraph B73]. When a reinsurance contract covers multiple cession years, the interpretation that discount rates may only be averaged taking into account the initial year that a contract is inforce may produce an economic mismatch when a reinsurance contract is open for multiple years and new cessions are added in subsequent years after the initial contract year
* There are additional considerations related to the cash flows to include in the modelling for proportionate reinsurance contracts (see questions 10.12 and 10.13)
	+ - 1. **Are there special considerations for the initial recognition of proportionate Reinsurance Held?**

There are additional considerations related to proportionate reinsurance held contracts.

Paragraph 62 states that “*Instead of applying paragraph 25, an entity shall recognize a group of reinsurance contracts held: (a) if the reinsurance contracts held provide proportionate coverage – at the beginning of the coverage period of the group of reinsurance contracts held or at the initial recognition of any underlying contract, whichever is later; and (b) in all other cases – from the beginning of the coverage period of the group of reinsurance contracts held*.”

Two potential interpretations of Paragraph 62(a) for proportionate reinsurance have been put forward. The first interpretation is that the additional consideration that there is no recognition until at least the first underlying contract is recognized applies only to the initial recognition of the group of reinsurance held contracts. It does not impact which cash flows are modeled once the group of reinsurance held contracts is initially recognized – that is, all future cash flows expected to be within the contract boundary are modeled regardless of whether the underlying contracts have been recognized. The second interpretation assumes that this additional consideration is broader and means that only cash flows associated with underlying contracts that have been recognized are modeled (ie future cash flows associated with underling cessions that have not yet been recognized are not modeled).

At this time there is no consensus on which interpretation to follow.

Under Paragraph 62(b), for non proportionate reinsurance all future cash flows expected to be within the contract boundary are modeled without reference to the status of underlying contracts.

**[This will be updated if / when consensus is achieved]**

* + - 1. **What is a proportionate reinsurance coverage?**

Proportionate reinsurance is not a defined term in IFRS 17. In the Basis for conclusions, which is not a part of the standard, there is a reference to the distinction between proportionate versus non proportionate reinsurance [paragraph BC304]. “*In some cases, the reinsurance contract held covers the losses of separate contracts on a proportionate basis. In other cases, the reinsurance contract held covers aggregate losses from a group of underlying contracts that exceed a specified amount”*.

* + - 1. **How is the reinsurance held risk adjustment for non financial risk determined?**

Normally a risk adjustment would intuitively be thought of as increasing a liability and decreasing an asset. However for reinsurance, to eliminate the mismatch with the underlying insurance contract valuation, the risk adjustment for reinsurance held increases the absolute value of the reinsurance held amount. If this is an asset, then it increases the value of the asset.

A specific definition for the determination of the risk adjustment for reinsurance contracts held is provided in IFRS 17 that replaces the general definition used for insurance and reinsurance contracts issued in paragraph 37 of the standard. Under the definition for reinsurance held, the quantum of the risk adjustment for non financial risk represents the amount of risk being transferred by the holder of a group of reinsurance contracts to the issuer of those contracts (paragraph 64|).

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 appropriate risk adjustment for the reinsurance held can usually be determined most easily based on the difference between these amounts.

* + - 1. **Can the Premium Allocation Approach (PAA) be used for reinsurance contracts held?**

Yes, reinsurance contracts held are eligible for the PAA provided they meet the criteria to use the approach (paragraph 69). The criteria to use the PAA, such as coverage period of the contracts in the group, need to reflect the contractual terms of the reinsurance contracts held in the group, and not the underlying insurance contracts.

**Reinsurance Held and Reinsurance Issued (Questions 10.16 – 10.18)**

* + - 1. **Would the contract boundary used for reinsurance issued and reinsurance held for the same contract necessarily be the same**

The contract boundary may be different. Provisions in the reinsurance treaty concerning rate adjustment, termination etc may lead to different contract boundaries. As an example, if a contract allows the entity issuing the reinsurance an annual full and unilateral right to adjust reinsurance premiums without restriction, it is likely to be considered a one year contract by the issuing entity. However, for the assuming entity, it may be modelled as a longer duration contract reflecting the best estimate of the behaviour of the issuing company with respect to future rate adjustments.

* + - 1. **How are contractual options such as recapture, cancellation, or commutation treated in developing reinsurance cash flows?**

The cash flows would reflect characteristics of the reinsurance contract. Frequently reinsurance treaties contain options that may be exercised at the discretion of the party holding or issuing the contract. The cash flows might assume that the entities issuing and holding the reinsurance contract each exercises its control over such options to its advantage taking into account any other considerations with respect to expected behaviour. Advantage would be determined based on the assumptions used in the valuation.

* + - 1. **Can Reinsurance contracts qualify as insurance contracts with direct participation features?**

Reinsurance contracts, including both reinsurance held and reinsurance cannot qualify as insurance contracts with direct participation features (paragraph B109). Therefore, they cannot use the CSM approach outlined for contracts with direct participation features.

* + - 1. **How should renewal of a reinsurance contract with a contract boundary at renewal be treated?**

Under IFRS 17, two interpretations have been put forward for the situation where a reinsurance contract with a contract boundary is extended beyond the original term through the exercise of contractual terms – for example, renewal of a fully cancellable reinsurance treaty with non-guaranteed premiums. Under one interpretation, the renewal would extend the contract boundary of the original contract and the impact reflected as changes in the fulfillment cash flows of the contract. Under the second interpretation, the renewal would be treated as a new contract with a new contract boundary.

The treatment as a change in fulfillment cash flows of an existing contract is based on the following considerations:

* It is be consistent with Paragraph B64 which states that *“in determining the estimates of future cash flows at the end of a reporting period, an entity shall reassess the boundary of an insurance contract to include the effect of changes in circumstances on the entity’s substantive rights and obligations”* .
* It is consistent with the approach outlined in paragraphs 72 and 73 for treatment of various forms of contract modifications. Under these paragraphs, such renewal impacts would not meet the threshold for recognition of a new contract and would be considered as changes in the estimates of fulfillment cash flows. interpretation is based on the modification and de recognition paragraphs 72 and 73 .Under paragraphs 72, there is the statement that “*the exercise of a right included in the terms of a contract is not a modification”*,. As such, changes in cash flows due to exercise of contractual rights would be considered as changes in the estimates of fulfillment cash flows by applying paragraphs 40-52 and not a new contract event.
* While paragraph 35 states that *“an entity shall not recognize as a liability or as an asset any amounts relating to expected premiums or expected claims outside the boundary of the insurance contract. Such amounts relate to future insurance contracts”,* this requirement is interpreted to mean that such cash-flows are not currently considered, but such assessment is not permanent and can change as substantive rights and obligations change.

The treatment as a new contract is based on a stricter interpretation of the paragraph 35 statement that *“an entity shall not recognize as a liability or as an asset any amounts relating to expected premiums or expected claims outside the boundary of the insurance contract. Such amounts relate to future insurance contracts”.*

At this time, there is no consensus on which interpretation to follow.

**[This will be updated if / when consensus is achieved]**

**Reinsurance Issued (Questions 10.20 – 10.22)**

* + - 1. **How is reinsurance issued presented on the IFRS balance sheet?**

Where an entity has entered into reinsurance contracts to assume risk and obligations, the value of these contracts is shown on the balance sheet as part of the insurance liabilities or assets, with contracts grouped into those that are assets, and those that are liabilities.

* + - 1. **Are there special considerations for reinsurance issued liabilities?**

In general, reinsurance issued business, once classified as insurance risk is treated consistently in approach with all other gross insurance liabilities issued.

Data issues are frequently more prevalent for reinsurance issued business than for underlying insurance business, as the reinsuring entity is further removed from the underlying risks than the ceding entity, and is reliant on the entity company for underlying data on insured risks. This means that there is frequently more use of approximations both in terms of data and modeling approach. It is important that actuaries performing valuations of reinsurance issued business understand the impact of approximations made and be able to assess their reasonableness.

* + - 1. **What are the considerations when a reinsurance issued contract may cover multiple years of underlying insurance contracts or risk attachments?**

For reinsurance issued, a single reinsurance held contract might cover multiple years of underlying contract cessions or risk attachments, so that in addition to covering existing risks / cessions, treaties might be open to accepting future cessions / risk attachments.

This leads to the question, when measuring the value of an existing group of reinsurance issued contracts at a point of time T, what future cessions / risk attachments after time T should be reflected in the modeling of the future cash flows in the fulfillment cash flows.

The considerations and relevant paragraphs in the standard are similar to reinsurance held as covered in question 10.11.

**Other Questions**

* + - 1. **What additional explanations and disclosures may be included in the actuary’s report related to reinsurance?**

The objective of additional disclosure requirements is to enable the Board and management to better understand the way in which the actuary has undertaken his or her work. Key elements of this related to reinsurance, may include:

* discussion of the impact of reinsurance as part of risk mitigation considerations to determine the company’s risk profile;
* discussion of any uncertainty in relation to recoverability of reinsured amounts;
* discussion of the insurer’s net risk profile and how this is appropriately reflected as the difference between the gross and reinsurance risk adjustments.

# Chapter 11 Presentation

11.A. What does this chapter address?

This Chapter considers the general requirements for presentation of financial information under IFRS contained in IAS 1 as well as the specific additional requirements in IFRS 17; including amounts to be shown, disclosures to be made and required reconciliations. This Chapter discusses these additional requirements including required and excluded elements of the financial statements, what constitutes revenues and expenses, how experience variances are presented, what is to be reported in the Statement of Financial Performance versus Other Comprehensive Income, the level of aggregation to be used in presentation and disclosure, and required reconciliations

11.B. Which sections of IFRS 17 address this topic?

Paragraphs 78-92 provide guidance on this topic. BC328 – BC342 also provides background on the subject.

11.C. What other IAA documents are relevant to this topic?

**TO FOLLOW later in 2018**

# Chapter 12 Contract Modifications and Derecognition

12.A. What does this chapter address?

This chapter considers the treatment under IFRS 17 of contract modification to insurance contracts, including re-insurance contracts, de-recognition including on transfer to third parties.

It discusses what is a contract modification? and which of these:

* result in the derecognition of the original contract and recognition of the modified contract as a new contract for a deemed premium; and
* can simply be treated as a change in estimates.

The chapter also describes:

* a possible approach for determining the deemed premium when the modification is treated as a cancellation and replacement of the original contract;
* as well as their application under the premium allocation approach.

12.B. Which sections of IFRS 17 address this topic?

Paragraphs 72 to 77 provide guidance on this topic. BC 316-322 also provides background on the subject.

12.C. What other IAA documents are relevant to this topic?

None

Overview

Change in contract?

No contract modification

Change due to exercising of contractual right(s)?

yes

no

No contract modification

Specified modification per paragraph 72

yes

no

Reflect as change in cash flow estimates

no

yes

De-recognition of original contract

Recognition of new contract as per paragraph 77

What is a contract modification?

1. What is a contract?

Refer to Chapter 2 “Classification of Contracts and Contract Boundaries”. – NB chapter 2 will follow later in 2018

1. How does IFRS 17 define a Contract Modification?

As a change to the legally enforceable terms of the contract, for example, either by agreement between the parties to the contract or by change in law or regulation (see paragraph 72). Note that the exercise of any rights or options available under the contract, by one or both parties, are not contract modifications (see paragraph 72) and form part of the expected cash flows of original contract.

1. What is a contract modification?

For IFRS 17 purposes, the following examples would appear to be (note that these examples are not a complete or exhaustive list):

1. a contract modification:
2. an increase or decrease in the nature or level of benefits under the contract, if this does not arise from an option available to either the insurer or policyholder under the contract and hence requires the agreement of both to take effect (this does not include any requirement to notify the other party in order to exercise the option). Note these could include changes to extend or reduce the period of cover under the contract (i.e. affect the contract boundary) - unless they arise from the exercise of an option under the contract, or they only effect coverage beyond the contract boundary (refer Chapter 2 - Classification of Contracts and Contract Boundaries)
3. the addition or removal of benefits under the contract, if these do not arise from an option available to either the insurer or policyholder under the contract and hence requires the agreement of both to take affect;
4. the addition or removal of coverages under the contract, if these do not arise from an option available to either the insurer or policyholder under the contract and hence requires the agreement of both to take affect;
5. the addition or removal of options or guarantees available under the contract, if adding or removing these options or guarantees is not a contractual right available under the contract, i.e. they require the agreement of both parties to take affect;
6. any change to premiums that does not arise from an exercise of a contractual right i.e. that requires the agreement of both insurer and policyholder to take affect;
7. any change of reinsurance contracts terms and conditions requiring the consent of both parties
8. by change to contractual terms arising from change in regulation;
9. not to be a contract modification:
10. the exercise of any options available to the policyholder under the terms of the contract (or law), within the contract boundary, that do not require the agreement of the insurer (this does not include any requirement to notify the other party in order to exercise), for example:
* an option to renew the contract under the terms of the contract without further underwriting;
* an option to surrender the contract or to cease paying premiums while still receiving benefits under the contract;
* exercise of a contractual right to suspend and later resume cover under the contract without a new risk assessment
* option to increase cover on renewal e.g. with consumer price index or at other times under the contract (e.g. guaranteed future insurance options) without further underwriting;
* contracts arising from guaranteed insurability options as these form part of the original contract terms and are neither a new contract nor a contract modification (e.g. guaranteed annuitisation option under a deferred annuity contract);
1. the exercise of any options available to the insurer under the terms of the contract (or law), within the contract boundary, that do not require the agreement of the policyholder (the need to notify the other party to exercise the option does not mean their agreement is required, unless they have right to refuse the exercise of the option), for example:
* changes to premium or benefits permitted under terms of the contract, law or regulation. Note, where the insurer has the right or practical ability to change the premium in such that it re-prices the contract in a way that the payment of that premium is outside of the boundaries of the contract, refer to chapter 2 - Classification of Contracts and Contract Boundaries, then it creates a new contract which is to be measured as such;
1. How are changes that are not contract modifications treated?

Changes that are not contract modifications (see question 12.3) above) form part of the expected cash flows under the contract (see Chapter 4 – Estimates of Future Cash Flows) so long as they are within the contract boundary (see Chapter 2 - Classification of Contracts and Contract Boundaries). That is both when:

1. measuring it upon initial recognition under paragraphs 32 et. al., paragraphs B61 and B62; and
2. upon subsequent measurement under paragraph 40.
3. What about the exercise of a contractual option to add features that are outside the contract boundary?

A special case occurs if there is a contractual right to add new features to the original contract which are outside the contract boundary (e.g. because underwriting is carried out for the new feature using the information available when the new feature is added).

IFRS 17 treats cash flows outside the contract boundary as relating to future insurance contracts (paragraph 35) and the new feature could be treated as a new contract. This may not be practicable, where the new feature is not distinct (i.e. the cash flows of the new feature and the original contract are highly interrelated),

If not distinct, then the addition of new features that are outside of the contract boundary (e.g. because they can be underwritten at the time of exercise at appropriate price for the change in insurance risk) might be treated as a contract modification at the time of addition, as the ability to underwrite the new feature effectively means the consent of both parties is required. An example of such a feature is the reduction of payment limits (with risk assessment for the reduction) that occurs in in German Health insurance.

If the contract modification is not specified modification under paragraph 72, then paragraph 73 applies, i.e. the contract is not de-recognized and the changes in cash flows caused by the modification are treated as changes in estimates of fulfilment cash flows.

Specified Modifications

1. Which are the specified contract modifications that result in the derecognition of the original and recognition of the modified contract as a new contract?

These are those contract modifications specified in paragraph 72, hereinafter referred to as “specified contract modifications”. The discussion in the Basis for Conclusions (see BC317 – BC320) indicates that these criteria in paragraph 72 capture modifications that IASB sees as resulting in significantly different accounting treatment, e.g. the modified terms would have caused differences in the applicability of IFRS17, or the separation of components, or the contract boundary (only if substantially different) at initial measurement., or the applicability of the measurement model of the original contract.

The specified criteria are, if the contract had been written at inception as modified, it would:

* not have been classified as an insurance contract (see Chapter 2 - Classification of Contracts and Contract Boundaries); or
* have been included in the different group from the one it was included in at initial recognition; or
* had a substantially different contract boundary; or
* different components would have been separated, resulting in a different insurance contract for IFRS 17; or
* if the premium allocation approach was applied to the contract and it no longer qualifies (see Chapter 9 - Premium Allocation Approach); or
* now qualifies (or ceases to qualify) for treatment as an insurance contract with direct participation features.
1. What is the definition of a portfolio and group (and provide examples)?

Refer to the Chapter 7 - Contractual Service Margin.

1. How do contract modifications or the exercise of options available under the contract influence the contract boundary?

The contract boundary is re-assessed in each reporting period (see paragraph B64) and ends when the criteria of paragraphs 34 are fulfilled (see Chapter 2 - Classification of Contracts and Contract Boundaries).

1. What qualifies as a substantially different contract boundary?

The intent in setting the criteria in paragraph 72 was to capture those contract modifications that would result in a significantly different accounting treatment (see BC317-BC320) for the modified contract had the new terms always applied and only those contract modifications (see BC320). This indicates that a possible the criteria for assessing if the change in contract boundary is substantial might be the impact on accounting treatment.

A contract modification that changes the contract boundary in such a way that the modified contract:

* no longer qualifies for the premium allocation approach, when it was being accounted for under the premium allocation approach; or
* would have been included in a different group;

are clearly contract modifications that result in a significantly different accounting treatments, as they are captured under the other criteria in paragraph 72.

Other contract boundary changes that possibly could be considered to result in a significantly different accounting treatment are:

* a change such that the renewal of the contract is now outside the contract boundary (e.g. the modification gives the insurer the right to reprice the contract at renewal) so that the contract becomes eligible for the premium allocation approach upon renewal; or
* a change to the contract boundary that has a substantial effect on the contract’s CSMrelease pattern.

Note, if the criteria are the impact of the change in contract boundary of itself, the impact of any other modifications to the contract on the contract’s CSM release pattern would if material need to be excluded from this assessment. If the criteria are simply the change in the contract boundary itself, then a change that increased or decreased the contract boundary by 50% or more at inception of the contract, might be a substantial change, but one that changed it by 20% or less might not be a substantial change, e.g.

* The extension of a contract term from 20 years to 40 years might be substantial; and
* The extension of contract that provided coverage to age 60 to age 65 might not be substantial

Accounting for specified contract modifications

1. How are specified contract modifications accounted for?

The entity:

1. derecognizes the contract being modified from the group to which it was allocated at inception by:
* setting the contribution of its fulfilment value, including the risk adjustment and incurred claims, to the group to the group to zero (paragraph 76 (a));
* adjusting the number of coverage units for expected remaining coverage (paragraph.76(c))
* adjusting the CSM of the group to the extent required by paragraphs 44(c) and 45(c) for the difference between:
* the reduction in fulfilment value of the group from setting that for the contract prior to modification to zero; and
* the premium it would have charged for a new contract issued at the date of contract modification with equivalent terms, net of any additional premium charged for the modification paragraphs 77(a)
* according to paragraphs 44(c) and 45(c), the CSM can only be adjusted to the extent that the adjustment does not exceed the margin. If there is a loss component already, paragraphs 44(c)(ii), 45(c)(iii) and 50(b) apply
1. recognises the modified contract as a new contract as at the date of modification under IFRS 17 assuming the net equivalent premium noted above was paid as at the date of modification (see paragraph 77(b)).
2. If the insurer does not have contracts with equivalent terms, how is the premium determined?

The premium is the price that the entity would have charged the policyholder if it had entered into a contract with equivalent terms at the date of the actual modification (see paragraph 77(a)(iii)). Note, this is not likely to be the same as the fair value of the modified contract, and the premium possibly could differ from fair value as follows:

1. it uses entity-specific assumptions for some inputs, including the degree of risk aversion, whereas fair value uses market participant assumptions in all cases;
2. it excludes the entity’s own non-performance risk, whereas fair value would include the entity’s own non-performance risk; and
3. it includes the entity’s targets for CSM, whereas fair value includes no such margin, although fair value implicitly includes a current value for any additional margin that market participants would require.

The assumptions used in determining the premium would usually be consistent with those used in determining the liability arising from the modified contract at the date of actual modification, except for the CSM.

For example, the premium might be determined as sum of:

* the fulfilment cash flows (the unbiased expected present value of the future cash flows, excluding the premium being determined and including any taxes on the premium, acquisition costs for the modified contract, and an adjustment for risk (see chapter 4 Estimates of Future Cash Flows);
* any other elements not included in fulfilment cash flows under IFRS 17 that the entity would normally include in setting premiums, e.g. general overheads and costs not directly attributable to a portfolio of insurance contracts and charge for capital; and
* a CSM after allowing for any elements not included in fulfilment cash flows, that reflects the entity’s current approach to profit targets when pricing for similar business.

Other contract modifications

1. What other types of contract modifications are there?

Apart from specified contract modifications, other contract modification that does not qualify as significant, examples may include:

* Addition or Removal of benefits, where they do not cause the contract to fall into another portfolio and hence different group;
* Increase or reduction in benefits, where they don’t change grouping; or
* Extension or reduction of contract term, with no substantial change in benefit levels, provided this does not materially change the contract boundary or change eligibility for PAA.
1. How are other contract modifications accounted for?

Contract modifications not specified in paragraph 72 are accounted for by treating the resulting changes in the fulfilment cash flows (i.e. best estimate liability, risk margin and liability for incurred claims) as a change in estimates as per paragraphs 40-52 and 73.

Derecognition

1. When can contracts be derecognized?

Only when all obligations under the contract are extinguished, this includes not only the liability for future coverage but also for incurred claims arising from past coverage (see paragraph 74(a)).

This can also occur when:

* A specified contract modification occurs (see questions 12.6 to 12.9 above), in this case the modified contract is treated as a new contract which assumes all obligations arising from the contract pre and post modification;
* A contract is transferred to a third party (see paragraph 77), this applies only when the contract is transferred as whole including any obligation for incurred claims arising from past coverage, otherwise the contract in full has not been extinguised and can not be derecognised as per paragraph 74
1. How are any contracts transferred to a third party derecognised?

In a similar way to the derecognition of a contract upon a significant contract modification that is the contract being transferred is derecognized from the group to which it was allocated at inception by:

* setting the contribution of its fulfilment value (including the risk adjustment) and incurred claims to the group to zero;
* adjusting the number of coverage units (see paragraph.76(c))
* adjusting the CSM of the group for the difference between:
* the reduction in fulfilment value of the group from setting that for the contract prior to modification to zero; and
* the premium charged by the third party for transfer of the contract.
1. How are contracts derecognised other than due to a significant contract modification or transfer to a third party?

In a similar way to the derecognition of a contract upon a significant contract modification, that is the contract being transferred is derecognized from the group to which it was allocated at inception by:

* setting the contribution of its fulfilment value (including the risk adjustment) and incurred claims to the group to zero;
* adjusting the number of coverage units (paragraph 76(c))
* adjusting the CSM of the group for the reduction in fulfilment value of the group from setting that for the contract being derecognized.
1. What if only the obligation for future coverage is transferred to a third party

In this case, the contract does not qualify for derecognition under paragraph 77 and is treated as a contract modification.

Application to Reinsurance and Premium Allocation Approach

1. How are modifications to reinsurance contracts accounted for?

Reinsurance contracts are insurance contracts and the modifications to them are accounted for in the same way as for other insurance (paragraph.4), see also chapter 10 - Reinsurance.

1. How do modifications to underlying insurance contracts affect the subsequent measurement of the reinsurance contract?

To the extent that they change the expected cash flows under the reinsurance contract, they are included in the change in the future cash flows that arises from a difference between the current and previous estimates of the future cash flows that relate to future coverage and other future services under the reinsurance contract when re-measuring the reinsurance contract (as per paragraphs.40-46 and 60-68).

1. How are contract modifications and derecognition accounted for under the PAA?

Where a contract continues to qualify for PAA following a contract modification the requirements of paragraphs 73, 76 and 77 are applied as follows:

1. For specified contract modifications, as per the answer to Q14, they are still treated as a change in estimates per paragraphs 40-52, but as modified by paragraphs.53 – 59 (PAA). Under PAA changes in estimates would only impact the liability for incurred claims as per paragraph 40 (b) which applies to PAA as well as the general model. However, if the contract modification where to cause the group of which it is a part to be viewed as onerous, paragraphs 57 and 58 would apply and liability for remaining coverage would also change as per these paragraphs.
2. For specified contract modifications, the answer to Q11 applies, modified for PAA as follows:
3. derecognizes the modified contract from the group of which it is part by setting the contribution of its carrying value to the group including liability for incurred claims to zero, consistent with paragraph 76 (a); and
4. recognizes the modified contract as a new contract as at the date of modification under IFRS 17 assuming the premium it would have charged for a new contract issued at the date of contract modification with equivalent terms, net of any additional premium charged for the modification paragraph 77(a)(ii) was received as at the date of modification paragraph 77(b).
5. When derecognizing a contract, the answer to Question 12.17 applies, modified for PAA as per (b) (i) above.
6. When derecognizing a contract upon transfer to another party, the answer to Question 12.17 applies, modified for PAA as per (b)(i) above.
7. What if a modified contract was part of an Onerous Group?

If the modification is not specified in paragraph 72, then paragraph 73 applies and the changes in estimates of fulfilment cash flows are treated in accordance with paragraphs 50 & 51 in the same way as any other subsequent change in fulfilment cash flows under IFRS 17.

If the modification is specified in paragraph 72, then it is treated as per paragraphs 74-77, see Question 12.10 above and there is no CSM to be adjusted in respect of the Onerous Group to which the contract was allocated at inception, but as noted in Question 12.10 it is allocated to the loss component as required by paragraphs 44(c)(ii), 45(c)(iii) and 50(b) unless measured under PAA.

# Chapter 13 – Business Combinations and Portfolio Transfers

13.A. What does this chapter address?

This Chapter considers the requirements under IFRS 17 when accounting for insurance contracts or liabilities for incurred claims acquired in a business combination or a portfolio transfer, and in particular the need to use the fair value of the contracts as the initial consideration. This Chapter considers the interaction between IFRS 17 and the more general guidance found in IFRS 3 Business Combinations and discusses aspects of business combinations, such as the determination of goodwill and the recognition of intangible assets

13.B. Which sections of IFRS 17 address this topic?

Paragraphs 39, 108, and B93 - 95 provide guidance on this topic. Paragraph B5 may be relevant. Appendix D of IFRS 17 delineates concomitant amendments to IFRS 3 *Business Combinations*.

13,C, What other IAA documents are relevant to this topic?

None

1. What are the requirements of IFRS 17 for insurance contracts acquired in a business combination or in a transfer of contracts that do not form a business?

IFRS 17 provides guidance on the treatment of contracts acquired in a business combination or in a transfer of contracts that do not form business combination. The distinction between a business combination and a transfer of contracts that does nor form a business is discussed below. The application of the broader, non-insurance specific, guidance relating to business combinations and other acquisitions of assets or liabilities is discussed further in later sections of this chapter. The insurance-specific guidance in IFRS 17 relates to determining the initial Contractual Service Margin (CSM) for acquired contracts. According to paragraphs B93-B95

* the recognition date of the acquired contracts is the date of the business combination or of the transfer
* the initial consideration for the contracts acquired is a proxy for the premiums received. The consideration excludes amounts paid for any other assets or liabilities acquired in the transaction. In a business combination, the initial consideration is the fair value of the contracts (see Chapter 15 - Fair Value)
* the CSM for acquired contracts is calculated using the consideration as a proxy for the premium paid or received on the acquisition date. In a business combination, if the contracts are onerous, the difference between the consideration for the contracts and the fulfillment cash flows is recognized as part of goodwill. If the transfer of contracts does not form a business combination, the entity records a loss for the difference and establishes a loss component for the contracts.

The implication of these paragraphs is that the general requirements of IFRS 17 apply to insurance or reinsurance contracts acquired in a business combination or a transfer and that the fair value of the contracts is used in the determination of goodwill in a business combination. The effect of this implication is that the entity examines contracts acquired in a business combination or a portfolio transfer to determine which are in the scope of IFRS 17, and then applies the guidance in IFRS 17 on measurement, presentation and disclosure to those contracts. There is not a presumption that a contract is insurance at the recognition date, even if it had been classified as insurance by the seller. For example, contracts that had been determined to be insurance contracts at the time that they originated, but, at the acquisition date, no longer transfer significant insurance risk, may not be in the scope of IFRS 17 for the purposes of the acquirer. See also Chapter 2 – Classification of Contracts.

As noted, consideration is used in determining the CSM for contacts that do not use the Premium Allocation Approach (PAA). For contacts that use the PAA, the consideration represents the remaining unallocated premium of the relevant contracts.

Liabilities for claims incurred on contracts issued by the entity do not have a CSM. Nonetheless some entities may decide that the difference between the fair value and the fulfillment cash flows of claims liabilities acquired in a business combination or in another transfer is deferred and amortized. IFRS 17 can be construed to mean that the acquisition of claims liabilities constitutes the issuance of a contract that transfers the risk of adverse development to the acquirer. In some cases the fair value and the fulfillment cash flows do not differ. In these cases the adjustment for risk represents the full amount of the potential for future profit. In other cases the fair value exceeds the fulfillment cash flows. This difference can be viewed as the part of the consideration that compensates the acquirer for the service provided. Hence, the difference is a CSM and it is amortised over the coverage period, the period over which the claims are expected to be adjudicated.

It is possible that the fair value of acquired insurance contracts, either for remaining claims for claims liabilities, does not exceed the fulfillment value. This situation might occur, for example, if the market conditions were such that the market participants required a margin for risk and profit that was less that the entity’s adjustment for risk. In this situation the acquired contracts are onerous. If the contracts are acquired as part of a business combination, the amount by which the fulfillment value exceeds the fair value is considered in the calculation of goodwill. If the acquisition of the contracts is not part of a business combination, the entity recognizes a loss for the difference and establishes a loss components, as it would for contracts it issues.

The guidance in IFRS 17 for acquired insurance and reinsurance contracts is consistent with the general guidance in IFRSs for business combinations. Most of the relevant guidance for business combinations is found in IFRS 3, *Business Combinations* (IFRS 3). Additional relevant guidance is in IFRS 13 *Fair Value Measurement (IFRS 13),* in IAS 12 *Income Taxes,* and in IAS 38 *Intangible Assets.* The guidance in these IFRSs that may affect accounting for business combination or portfolio transfers is discussed further below.

1. What is a business combination and how does it differ from a portfolio transfer?

IFRS 17 does not define the terms “business combination”. There is guidance for determining if a transaction is a business combination in IFRS 3, as discussed further below. For the purposes of this IAN, a portfolio transfer is a transaction involving contracts in the scope of IFRS 17 that may not constitute a business combination. Although not stated as such, the distinction likely makes no difference to the measurement of the assets or liabilities, except when the contracts are onerous, but it may affect the goodwill and the tax accounting associated with the transaction.

1. What are the general requirements for determining if a transaction is a business combination?

IFRS 3 in effect defines a process that involves:

* Determining the nature of the transaction; i.e., determining whether it is a business combination or a different type of transaction,
* Applying the acquisition method of accounting to transactions that are business combinations
* Recognising and measuring the identifiable assets acquired and liabilities assumed
* Recognising and measuring goodwill or a gain from a bargain purchase.

The following questions expand on these topics and on related matters.

IFRS 3 defines a business combination as “A transaction or other event in which an acquirer obtains control of one or more businesses.” It goes on to state that transactions referred to as “true mergers” or “mergers of equals” are also business combinations. A “business” is an integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing a return in the form of dividends, lower costs or other economic benefits directly to investors or their owners, members or participants. The “acquirer” is the entity that obtains control of the acquired. Appendix B of IFRS 3 provides further guidance on determining if the transaction constitutes the acquisition of a business and on identifying the acquirer.

For accounting purposes when there is a business combination, the “acquirer” is not always the entity which legally acquirers the other entity. Under a “reverse acquisition”, the entity whose stock is being legally acquired is the “acquirer” for accounting purposes, while the entity which is legally the acquirer becomes the “acquired” for accounting purposes. For example, this can occur where a larger entity arranges to have itself bought by a smaller entity, perhaps due to a preference to utilize the common stock characteristics of the smaller entity. The actuary may want to rely on their principal’s accounting experts to determine who the acquirer and acquired entities are for accounting purposes.

1. What if the transaction is not a business combination?

IFRS 3 excludes from its scope the acquisition of an asset or a group of assets that does not constitute a business. In such cases the acquirer shall identify and recognize the individual identifiable assets acquired (including those assets that meet the definition of, and recognition criteria for, intangible assets in IAS 38 Intangible Assets) and liabilities assumed. The cost of the group shall be allocated to the individual identifiable assets and liabilities on the basis of their relative fair values at the date of purchase. (IFRS 3.2(b)). This guidance presents the possibility that the initial value of acquired assets or liabilities is different from their fair values.

1. How can the guidance in IFRS 3 for determining if a transaction is a business combination be applied to a transaction that involves contracts in the scope of IFRS 17?

One can conclude from IFRS 3 that the necessary conditions for defining a transaction involving insurance contracts as business combinations are:

1. the portfolio or group of contracts must constitute a business or be part of a business; and
2. control over the portfolio must be obtained as a result of the transaction.

The addition of individual or multiple contracts to an entity’s book of business in a single transaction may not be sufficient to qualify as a business combination. The act of issuing contracts is unlikely to be considered an acquisition or a business combination. For example, the issuance of several individual contracts to a single owner (e.g., as in the case of corporate-owned life insurance) or purchases of individual contracts in a secondary market (e.g., viatical settlements) would not be considered a business combination. A business combination may include the right to issue future contracts using the same distribution system associated with the purchased block. However, any values directly associated with such rights to issue contracts are not reflected in the liabilities or other values of acquired contracts but may be recognised as intangibles associated with the business combination, as discussed further below. Even without the transfer of the right to issue future contracts, the potential of the net cash flows associated with a portfolio of insurance contracts to generate profits may be sufficient for it to be deemed a business.

The transfer of a block of business from one entity to another may be considered a business combination if the acquirer obtains control of the associated contracts. An acquisition is distinct from a reinsurance transaction, other than novation or assumption reinsurance, since an acquisition transfers control over all aspects of contracts, whereas a reinsurer has at most limited control over the contracts reinsured. For example, an insurer may buy an individual line of business of a multi-line entity by buying certain assets, taking on its obligations through assumption reinsurance and taking control of the sellers’ distribution system. The insurer in this example does not buy the shares of the seller, but nonetheless has acquired a business and would account for the transaction as a business combination.

1. What are the transition rules applying to business combinations or portfolio transfers that occur(ed) before the effective date of IFRS 17?

The general guidance in IFRS 17 for transition applies to contracts in the scope of IFRS 17 acquired in a business combinations or other transfer. As discussed above, the recognition date of the acquired contracts is the date of the business combination or of the portfolio transfer. Hence the transition does not require the entity to go back to the origination of the contracts, but rather to the date the entity acquired them.

There may be business combinations that occurred before the effective date of IFRS 3 or that were acquired before the first-time adoption of IFRS. The IFRSs allow some exceptions to the application to IFRS 3 to these transactions. For example, if a company deemed a business combination to be a merger under guidance in effect before IFRS 3, the initial value of the contracts acquired may not have been their fair value. The acquisition date for these contracts is the transaction date, nonetheless, not the original inception date. IFRS 17 nonetheless seems to require that the initial value for transition be the fair value at the acquisition date (see paragraph C4a), whether the full retrospective or simplified approach is used, or at the transition date, if the fair-value approach is used. There may be less evidence about the fair value of contracts at the acquisition date for these transactions (those for which acquired contracts had not been measured at fair value on the acquisition date.) than for contracts that the entity measured at fair value on the acquisition date. The actuary may find that the simplified or fair-value approach is more appropriate for these contracts.

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**Appendix to Chapter 13**

**What are the general requirements of IFRS 3 for accounting for a business combination?**

IFRS 3.4 requires the acquisition method of accounting to be applied to business combinations within its scope. The acquisition method views a business combination from the perspective of the acquirer. The acquirer purchases the assets and assumes the obligations of the seller. The measurement of the acquirer’s assets and liabilities that existed before the acquisition is not affected by the transaction.

IFRS 3.5 describes the acquisition method as comprising four steps:

1. Identifying the acquirer,
2. Determining the acquisition date,
3. Recognising and measuring the identifiable assets acquired and the liabilities assumed,
4. Recognising and measuring goodwill or a gain from a bargain purchase.

Identifying the acquirer and determining the acquisition date are sometimes complex matters that do not require actuarial expertise. These issues are not in the scope of this IAN. Guidance can be found in IFRS 3.7, which in turn refers to IFRS 10 *Consolidated Financial Statements*, and in IFRS 3, B11-B14.

**What is the guidance in IFRS 3 for recognizing and measuring identifiable assets acquired and liabilities assumed in a business combination?**

IFRS 3 requires the identifiable assets acquired and liabilities assumed in a business combination to be measured at fair value at the acquisition date.(IFRS3.10 and 3.18) There is an emphasis on recognizing all identifiable assets acquired and liabilities assumed, reflecting the Board’s desire for entities to fully consider the difference between identifiable intangible assets and goodwill. The treatment of goodwill (see further below) is different from the treatment of intangible assets with definite lives and the allocation of the purchase price among these items affects the emergence of future profits.

To qualify for recognition, identifiable assets and liabilities acquired

* must meet the definition of assets or liabilities (IFRS3.11); and
* must be part of what the acquirer and the acquiree exchanged in the business combination rather than the result of a separate transaction (IFRS 3.12). Examples of separate transactions that do not constitute part of the business combination include settlement of pre-existing relationship between the acquirer and acquiree and remuneration to employees or former owners of the acquiree for future services***.***

Applying the recognition principles may result in recognition of assets or liabilities that the seller had not recognised in its financial statements. The application of the recognition and measurement concepts in IFRS 3 for intangible assets and other acquired liabilities is discussed below. The recognition and measurement of tangible assets, such as assets arising from ceded reinsurance invested assets, is not in the scope of this IAN. It is worth noting that there are some exceptions to the use of fair value measurement; for example, liabilities from retirement benefit plans are measured according to IFRS guidance for pension liabilities.

**What are some examples of intangible assets arising from a business combination involving contracts in the scope of IFRS 17 and what are the accounting requirements?**

Several potential intangible assets could arise from a business combination involving contracts issued by insurers. These include, but are not limited to:

* renewal periods for short-duration contracts
* distribution systems or relationships
* customer relationships
* service agreements
* brand names, trademarks, and copyrights
* proprietary software or technology
* licenses to transact insurance business
* product approvals and registrations
* value of liability guarantee

The following paragraphs provide descriptions of some of the more common intangible assets identified in combinations of insurance entities and some related considerations. The first step is, as already noted, to determine if the intangible asset can be recognized. If so, the entity must determine the asset’s fair value and the appropriate technique for the amortization of the asset. Full development of common valuation and amortisation methods is beyond the scope of this IAN. While specific possible amortisation approaches are described for these assets, it should be kept in mind that IAS 38 provides that the amortisation period used should reflect the pattern in which an asset’s future economic benefits are expected to be consumed by the entity. If that pattern cannot be determined reliably, the straight-line method should be used. There is also the possibility that some intangible assets have indefinite lives, and hence the intangible asset would not be amortised, but rather tested for recoverability, referred to as testing for impairment. The actuary may wish to consult with accountants and other professionals, such as valuation experts, for assistance in determining which other potential intangible assets should be recognised, and how they should be measured and amortised and tested for impairment.

*Value of renewal periods for short-duration contracts (sometimes also referred to as “customer lists” for short-duration contracts)*

A common situation in non-life insurance is the establishment of an intangible asset related to the value of potential renewals of short-duration contracts. The fair value may be based on market pricing benchmarks if such transactions and related benchmarks are reasonably well established for the market in which the acquired business resides. Such benchmarks in at least some markets are based on a percentage of the premiums in-force or a percentage of annual premium writings. Absent such benchmarks, the fair value may be based on the expected future distributable earnings from renewal contracts, usually net of the cost of capital, discounted at a market discount rate commensurate with the risk of the cash flows. Among the methods for amortisation that have been used are:

1. in relation to expected distributable earnings used to derive the fair value estimate; and
2. based on expected premiums from future renewals.

*Value of distribution systems/relationships*

The value associated with a distribution system may be significant, especially for distribution arrangements involving contingent commissions, business processing or purchases of third-party intermediaries. Fair values of such systems can be derived from cash flow models and from valuation specialists. Two of the possible amortisation methods that have been used for future business are 1) in relation to expected distributable earnings, and 2) proportional to new business premiums.

*Customer relationships and customer list – long duration contracts*

Selling unrelated contracts to existing customers may provide the basis for an intangible asset or it may be included in goodwill, depending on the facts and circumstances. Care should be taken not to double count the value the asset related to a customer relationship and the value of a distribution system, if the considerations relate to the same future contracts and cash flows.

*Service agreements*

When an seller has entered into third-party contracts for certain services like claims administration, the acquirer must consider whether an intangible asset might exist. There may be an intangible asset for the service component of investment or insurance contracts when this component is separated for recognition and measurement. Due consideration is given to whether the terms of such agreements are at, below or above current market rates. The intangible asset, if any, may relate to the amount in fees that represent an above-market margin.

Amortisation methods used for such intangibles include:

1. in relation to the net revenue (fees charged less costs to provide the service) earned for providing the service; and
2. on a straight line basis over the contract period.

*Brand names, trademarks, copyrights*

The entity being acquired may have a legal right to certain items such as identifying names, slogans and logos that would qualify for separate recognition as intangible assets. Identifying the additional cash flows associated with such items may prove difficult. Amortisation would likely be based on the projected cash flows used to estimate the fair value. However, some legal rights may be renewable indefinitely leading to the conclusion that the intangible should not be amortised.

*Proprietary software or technology*

Some insurers have developed expert systems that can be separately recognised as having value. Such systems can include underwriting, distribution/cross selling, and investment management. Amortisation of such systems-related intangible assets is likely to be straight line over an assumed lifetime of the system.

*Licenses to transact insurance business*

IAS 38.88 requires entities to assess whether intangible assets have either a finite useful life or indefinite useful life. Licenses typically are considered to have an indefinite useful life, such that their value is not amortised over time (although they may be subject to an impairment test.). Their value is typically derived from market transactions for shell entities or from brokers in that market.

*Product approvals or registrations*

Product forms that have been approved for issue in certain jurisdictions can be determined to be intangible assets. The value could be viewed as the alternative cost to develop the same product and go through the approval process. Alternatively, the value could be viewed as something more if the product is in a niche market with limited access. Amortisation of the value could be based on the anticipated revenues expected from the sales of the new product.

*Value of Liability Guarantees*

Business combinations sometimes include guarantees regarding the claims liability run out, such as a guarantee to reimburse the acquirer for losses above a certain amount. The actuary should consider whether such a guarantee is an identifiable asset that should be recognized at its fair value. The actuary may wish to treat the guarantee as a reinsurance asset and to measure the guarantee using its current accounting policies for reinsurance, in which case the difference between the recorded asset and the fair value of the guarantee is an intangible asset or liability. This treatment is consistent with the accounting for indemnification assets, as given in IFRS 3.28 and 3.57.

**How does the entity account for goodwill or for a gain from a bargain purchase?**

IFRS 3 requires recognition of goodwill as of the acquisition date. Goodwill is excess of the consideration transferred over the net of the identifiable assets and liabilities acquired. Identifiable assets here include those intangible assets which have been recognized in connection with the acquisition. Goodwill implicitly includes intangible assets that do not satisfy the criteria for recognition. (IFRS 3.32)

Because consideration may include not only cash, but equities, future consideration or other types of compensation, the determination of the value of consideration can become complex. IFRS 3 provides some guidance on determining the value of consideration transferred. Of particular note is the fact that transaction costs, such as legal, advisory or accounting fees associated with the transaction are not part of the consideration.

Goodwill represents a payment made by the acquirer in anticipation of future economic benefits from assets that are not capable of being individually identified, recognised or reliably measured individually. The value of goodwill need not be justified, but is subject to tests of impairment. Goodwill is not amortised. Goodwill is to be measured subsequently at the amount recognised at the acquisition date less any accumulated impairment losses. The goodwill carrying amount must be tested for impairment in accordance with the requirements of IAS 36, *Impairment of Assets* (IFRS 3.B63).

The excess of the consideration transferred over the net of the identifiable assets and liabilities acquired may be negative. In this case, the acquirer reassesses the fair value of acquired assets and liabilities to be sure that all acquired assets and assumed liabilities have been identified, recognised and measured properly. If, after making adjustments for the reassessment, the excess remains negative, a bargain purchase is said to have occurred. There is no goodwill. The gain on the business combination is recognised in the acquirer’s profit and loss in the period in which the acquisition takes place (IFRS 3.33 – 3.36).

**Can there be a deferred tax asset or liability as a result of a business combination or other transfer?**

The guidance for deferred taxes is found in IAS 12 *Income Taxes.* The fair value of acquired assets and abilities assumed in a business transaction may be different from the tax value of the respective assets or liabilities. Temporary differences arise when the tax bases of the identifiable assets acquired and liabilities assumed are not affected by the business combination or are affected differently. For example, the initial value of insurance contracts acquired in a business combination is fair value but the tax basis of the contracts may remain at the basis that it had to the seller. This difference is generally a taxable temporary difference which gives rise to a deferred tax asset or liability. (IAS 12.19) The deferred tax asset or liability is the amount of the difference multiplied by the tax rate that is expected to apply when the difference reverses. Hence the calculation may require a projection of the reversal of the difference, if it is necessary to reflect varying tax rates. There is however no discounting in the calculation of a deferred tax asset or liability.

The resulting deferred tax asset or liability affects goodwill (IAS 12.66). When a deferred tax asset or liability is recognized as a result of a difference between the fair value of an item and its tax value in a business combination, this difference is considered in the determination of the goodwill or the amount of the bargain purchase gain.

Note that the recognition of a deferred tax asset depends on the entity being able to assert that the asset is recoverable. A deferred tax asset is recognized for deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized. The carrying amount of a deferred tax asset is reviewed at the end of each reporting period. The entity reduces the carrying amount of a deferred tax asset to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilized. Any such reduction can be reversed to the extent that it subsequently becomes probable that sufficient taxable profit will be available for the asset to be utilized.

**What are the disclosure requirements related to business combinations?**

Disclosure guidance for business combinations is found in IFRS 3, B64-B67. The disclosures include both qualitative and quantitative notes that “enable users of [the entity’s] financial statements to evaluate the nature and financial effects of the business combination”. The disclosures do not supplant disclosures required by IFRS 4 or IFRS 17. It may be necessary to make some of the disclosures for the acquired business separately. Although not explicitly stated in IFRS 17 or in IFRS 3, these disclosures may apply to portfolio transfers as well.

# Chapter 14 – Embedded Derivatives

14.A. What does this chapter address?

This Chapter considers the requirements under IFRS 17 for the separation of certain derivatives embedded in contracts subject to the scope of IFRS 17. This Chapter discusses the issues which may arise in detecting and identifying embedded derivatives in such contracts which may need to be separated. Further information about embedded derivatives based on other IFRSs is found in the existing IAN 10 Embedded Derivatives.

14.B. Which sections of IFRS 17 address this topic?

Paragraphs 11c and B10 provide guidance on this topic.

14.C. What other IAA documents are relevant to this topic?

None

1. What is a derivative and an embedded derivative?

Derivatives and embedded derivatives are defined in IFRS 9 in paragraph 4.3.1. As in IAS 39, IFRS 9 differentiates between derivatives and embedded derivatives and accordingly references to “derivatives embedded in the contract” (as in paragraphs 54 (a) and 70 (a) of IFRS17 relating to the premium allocation approach) might be seen to refer to the definition of a derivative rather than to that of an embedded derivative.

Paragraph 4.3.3 of IFRS9 includes conditions for separating an embedded derivative, which are applicable according to paragraph 11 (a) of IFRS17 to insurance contracts and other contracts in the scope of IFRS 17. The guidance regarding definition of derivatives and embedded derivatives and the conditions for separation of those has not changed from those in IAS 39 and accordingly the contents of IAN 10 Embedded Derivatives referring to IAS 39 remains valid. This also applies to other aspects of accounting for embedded derivatives that are to be separated.

1. What are the IFRS 17 requirements on the accounting for derivatives embedded in the contract and embedded derivatives?

The requirements in IFRS 17 on the accounting for derivatives embedded in the contract and embedded derivatives are limited (see paragraph 11(a) as noted above).

IFRS 9 defines a derivative as a “financial instrument or other contract within the scope of” IFRS 9. Therefore the condition in IFRS 9.4.3.3 (b) (meeting stand-alone the definition of a derivative) might be seen as not met if the embedded derivative would be considered stand alone under IFRS 17 (see paragraphs B10 of IFRS17 and 2.1 (e) of IFRS9). The condition in paragraph 4.3.3 (c) of IFRS9 (fair value measurement of the entire contract) for separation might be seen to be met generally by contracts in the scope of IFRS 17 since the condition might be seen to refer explicitly to the measurement of the entire contract.

Paragraph B.4.3.1 of IFRS9 notes that paragraph 4.3.3 of IFRS9 “requires the entity to identify any embedded derivative, assess whether it is required to be separated from the host contract and, for those that are required to be separated, measure the derivatives at fair value at initial recognition and subsequently at fair value through profit or loss.”.

Embedded derivatives that are not required to be separated (under IFRS 9) are considered as part of the insurance contract and accounted for under IFRS 17.

1. Are the IFRS 17 requirements on embedded derivatives different from those in IFRS 4?

The requirements may be different.

Paragraph 8 of IFRS4 stated that, as “an exception to the requirements in IAS 39, an insurer need not separate, and measure at fair value a policyholder's option to surrender an insurance contract for a fixed amount (or for an amount based on a fixed amount and an interest rate), even if the exercise price differs from the carrying amount of the host insurance liability.” This exception is not included in IFRS 17. This might be seen as a requirement to separate embedded derivatives of that kind, if they meet the conditions in paragraph 4.3.3. of IFRS9

In addition, the IFRS 4 implementation guidance (IG3 and 4) provided 20 examples of products, some with and some without embedded derivatives requiring separation. The IFRS 4 implementation guidance has not been included in the implementation guidance to IFRS 17. As a consequence, there may be a difference in the scope of embedded derivatives requiring separation. This might require an assessment based on the nature of individual contract types.

Experience of applying IFRS 4 showed that in many countries the majority of insurance products do not contain embedded derivatives which require separation. It is unclear yet whether the mentioned changes might have a different result.

1. Are there specific disclosure requirements for embedded derivatives?

For embedded derivatives that are not separated and so are part of an insurance contract, there are no additional specific disclosure requirements in IFRS 17. For reference in IFRS 4, paragraph 39(e) specifically required that information about the exposure to market risk be disclosed if such embedded derivatives are not measured and presented at fair value through profit or loss.

For embedded derivatives that are separated, the disclosure requirements are as set out in IFRS 17.

# Chapter 15 – Fair Value

15.A. What does this chapter address?

This Chapter considers the use of the fair value measurement of insurance contracts for IFRS 17 including for business combinations or portfolio transfers and on transition if the fair value approach is chosen.

It discusses the determination of the fair value of insurance contracts in the context of the more general guidance on fair value measurement found in IFRS 13 Fair Value Measurement and of common insurance industry practices

15.B. Which sections of IFRS 17 address this topic?

Paragraphs 39 and B 93- 95 specify the use of fair value when contracts are acquired and paragraphs C5 and C20-24 discuss the use of fair value on transition.

15.C. What other IAA documents are relevant to this topic?

None

**15.1 When is fair value measurement applied to insurance contracts[[12]](#footnote-12)?**

In IFRS 17, fair value measurement is used:

1. at initial recognition of contracts acquired in a business combination. The fair value is determined as of the date of the acquisition. See Chapter 13 *Business Combinations and Other Transfers of Contracts,* and
2. on transition to IFRS 17 when the fair value approach (paragraph C5b) is used. The fair value is determined as at the transition date, which is usually the beginning of the period immediately preceding the date of initial application of IFRS 17. See Chapter 16 *Transition.*

For insurance contracts acquired in a business combination, IFRS 17 states that the fair value of the contracts is the consideration received for those contracts (paragraph B94). Business combinations may include other assets and liabilities in which case the consideration received for the insurance contracts needs to be determined separately from other assets and liabilities acquired, and may exclude certain factors that might be considered in a business combination (see Question 16.4).

This Chapter addresses fair value measurement in the context of business combinations where the consideration received for the insurance contracts is estimated and in the context of transition to IFRS 17. This Chapter may also be useful in the context of contracts acquired in a transaction that does not form a business combination where the fair value of groups of contracts is used to allocate the total consideration for the entire block of contracts to the groups.

Fair value measurement is also used to measure embedded derivatives that are separated from insurance contracts and for financial instruments issued by insurers, which are not in the scope of IFRS 17. These applications of fair value measurement are not addressed in this Chapter.

* 1. **What is the fair value of insurance contracts?**

IFRS 17 does not provide guidance on determining the fair value of insurance contracts, except as noted below in relation to a demand deposit floor. IFRS 13 *Fair Value Measurement* provides guidance when other IFRSs require fair value measurement, with certain exceptions. Insurance contracts are not specifically excluded from the scope of IFRS 13, and consequently IFRS 13 is relevant to insurance contracts.

IFRS 13 defines fair value as:

*“…the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.” (paragraph 9 of IFRS 13)*

A comprehensive discussion of IFRS 13 is beyond the scope of this Chapter. What follows are the relevant considerations of IFRS 13 as they apply to insurance contracts.

| IFRS 13 Fair Value Measurement |  |
| --- | --- |
| IFRS 13 requirement | Application to insurance contracts |  |
| The price may be observable but if it is not, it must be estimated (paragraph 2 of IFRS13). | Prices for insurance contracts are rarely observable. In most cases the fair value of insurance contracts needs to be estimated. See Question 15.3.  |  |
| Fair value is a market-based measurement, not an entity-specific measurement (paragraph 2 of IFRS13). Fair value should be measured using the assumptions that market participants would use (paragraph 22 of IFRS13).  | Measurement from the perspective of a market participant may be different from the measurement of fulfilment cash flows (Paragraph 57 of IFRS13). See Question 15.4 and Question 15.5.  |  |
| The objective is to estimate the price under current market conditions paragraph 2 of IFRS13). | Current market conditions refers not only to general economic conditions (e.g., interest rates) but also to the state of the market for transfers of insurance contracts, which may be difficult to determine. See Question 15.4. |  |
| The price is based on a hypothetical transaction in the principal market or, if there is no principal market, in the most advantageous market (paragraph 16 of IFRS13. | The distinction between the principal market and the most advantageous market for insurance contracts may not make a difference. Market participants are likely limited to other insurers or reinsurers that would be able to complete a transaction.  |  |
| The unit of account is determined in accordance with IFRS 17 (paragraph 14 of IFRS13 and is the level at which an asset or a liability is aggregated or disaggregated for recognition purposes (IFRS 13 Appendix A).  | In IFRS 17, the unit of account for recognition and measurement of the liability is *groups* of insurance contracts, as that is described in the standard. The fair value would similarly be measured by *groups* of insurance contracts.  |  |
| When a price for a liability is not available and the identical item is held by another party as an asset, fair value is measured from the perspective of market participant that holds the asset (paragraph 37 of IFRS13).  | For this purpose, policy owners generally are not considered to be market participants. Furthermore, the price associated with a viatical settlement may not be relevant to the measurement of fair value of a group of insurance contracts.  |  |
| Non-performance risk, (which includes consideration of credit standing) is reflected in the fair value measurement of a liability (paragraph 42 of IFRS13).  | Fair value measurement reflects non-performance risk of the entity, however, the measurement of fulfilment cash flows under IFRS 17 does not. See Question 15.5.  |  |
| There is a demand deposit floor on the fair value of financial liabilities (paragraph 47 of IFRS13) | IFRS 17 states that a demand deposit floor does not apply when the fair value of insurance contracts is determined. (paragraph B94 of IFRS 17 (business combinations) and C20 of IFRS17 (transition)) See Question 15.5.  |  |
| When price is not observable, the entity measures fair value using another valuation technique that maximizes the use of relevant observable inputs and minimizes the use of unobservable inputs (paragraph 3 of IFRS 13). An entity shall use valuation techniques consistent with one or more of the market approach, the cost approach and the income approach to measure fair value (paragraph 62 of IFRS 13). | Actuarial valuation techniques such as embedded values, actuarial appraisals and other present values techniques are consistent with the income approach to measure fair value (paragraph B19 of IFRS 13). See Question 15.3.  |  |
| IFRS 13 has a hierarchy of inputs to valuation techniques used to measure fair value. (paragraphs 72-90 of IFRS 13)Level 1: Observable quoted prices, in active marketsLevel 2: Quoted prices are not available but the input is based on observable market dataLevel 3: Unobservable inputs.The asset or liability being measured is characterized by the highest input level. | Fair value measurement of insurance contracts would usually require Level 3 inputs, especially with respect to non-market variables, and hence are likely to be characterized as Level 3.  |  |
| IFRS 13 has a number of disclosure requirements related to fair value measurement after initial recognition (paragraphs 91-99 of IFRS 13).  | Fair value measurement of insurance contracts only takes place at an initial date (acquisition date or date of first reporting on transition), and therefore the disclosure requirements of paragraphs 91-99 of IFRS 13 may have limited applicability.  |  |

* 1. **How is the fair value of insurance contracts calculated?**

IFRS 13 does not prescribe a valuation technique. In the context of a business combination, the entity may have an analysis of value that can form the basis of the fair value measurement, perhaps requiring adjustment to be consistent with the objective of an exit price.

The application guidance in Appendix B of IFRS 13 provides information about other possible valuation techniques. Among them are present value techniques (paragraphs B12-B30 of IFRS 13) for the fair value measurement of a stream of cash flows. These techniques share many characteristics with the IFRS 17 guidance on measuring fulfilment cash flows (e.g., paragraph B23 of IFRS 13) and therefore are candidates for the estimation of fair value of insurance contracts.

An approach to estimating fair value of a group of insurance contracts using a present value technique is to adjust the fulfilment cash flows of the group of insurance contracts in order to fulfil the objectives of IFRS 13. Adjustments to reflect the perspective of market participants (i.e., to move to an exit price) are discussed in Question 16.5.

IAS 13 does not specify that a fair value estimate be before-tax or after-tax. However, there is a general admonition that valuations should be internally consistent, with specific mention that this general principle means that after-tax cash flows are discounted with an after-tax rate, and pre-tax cash flows are discounted with a pre-tax rate.

**15.4 How would IFRS 13 Level 1 and 2 inputs (observable market information) be applied?**

Market transactions involving insurance contracts may provide information about fair value, and the estimated fair value should not be inconsistent with observable market information where available. However, it is unlikely that a direct relevant market price would be found.

Furthermore, the transaction price at which a group of insurance contracts is exchanged may include factors (such as those in paragraph B4 of IFRS 13) that would be ignored for the purpose of estimating the fair value of a group of insurance contracts. Factors specific to insurance contracts that would be ignored include, for example:

* Expected profits/losses associated with cash flows beyond the boundaries of the insurance contracts,
* Expected profits/losses associated with investment/service components that will be recognized and measured separately from the group of insurance contracts, and
* Expense, tax or other synergies that a particular market participant might expect to realize, but that would not be generally available in the principal market.

Information that would be relevant, if reasonably available, might include:

* Market view of expected expenses associated with fulfilling the obligations of the insurance contracts in the group,
* Market view of the cost of risk associated with taking on the obligations of the insurance contracts in the group, and
* Market view of the cost of reinsurance that would be required to take on the obligations of the insurance contracts in the group.

IFRS 13 requires the entity to maximize the use of relevant observable inputs (paragraphs 3, 36, 61 & 67 of IFRS 13). However, an entity need not undertake exhaustive efforts to obtain information about market participant assumptions and may use information that is reasonably available (paragraph 89 of IFRS 13).

* 1. **When using a present value approach, what adjustments would be made to fulfilment cash flows to satisfy the objectives of fair value measurement?**

When using a present value approach, the fair value of a group of insurance contracts can be seen as the fulfilment cash flows adjusted to take into account the perspective of market participants (i.e, move to an exit price).

Possible adjustments include the following:

* The discount rates applied to the estimates of future cash flows (paragraph B14c of IFRS13) are increased to reflect the entity’s own credit risk (paragraph B13f of IFRS13).
* Where consistent with market practice, the discount rates applied to the estimates of future cash flows are adjusted to reflect the perspective of market participants on the liquidity characteristics of the group of insurance contracts.
* Where different from the entity’s view, projected expense cash flows reflect the market view of the expenses associated with fulfilling the obligations of the group of insurance contracts. For example, where consistent with market practice, expense cash flows are increased to cover a reasonable level of general expenses (i.e., expenses not directly attributed to the portfolio to which the group of insurance contracts belongs.).
* Where different from the entity’s view, the risk adjustment for non-financial risk is adjusted to reflect a degree of risk aversion (paragraph B83b of IFRS 17) consistent with the market view.
* Where different from the entity’s view, the degree of diversification benefit (paragraph B83a of IFRS 17) included in the risk adjustment for non-financial risk is adjusted to be consistent with the market view.
* Where consistent with market practice (and where not otherwise reflected in the estimate of fair value), the risk adjustment is increased to include the cost of any regulatory requirements (e.g. minimum capital requirements) or other risks not covered in the fulfilment cash flows (e.g., asset-liability mismatch risk).
* Where consistent with market practice (and where not otherwise reflected in the estimate of fair value), the fair value is decreased to reflect expense, tax, or other synergies that would be available in the principal market.

* 1. **Can a group of insurance contracts be onerous on acquisition or at transition?**

A group of insurance contracts would be onerous if the fair value is less than the fulfilment cash flows. This would be unusual under the present value approach described in this Chapter, as most of the adjustments noted in Question 16.5 contribute to the fair value being higher than fulfilment cash flows. However, there may be circumstances in which market conditions conspire to make the fair value less than the fulfilment cash flows, so this possibility would not be disregarded.

**15.7 Are there any special considerations for estimating the fair value of insurance contracts with direct or indirect participation features?**

The general approach is the same as for contracts without participation features. Adjustments made to fulfilment cash flows (Question 16.5) would reflect the participation features of the insurance contracts. In particular, if discount rates applied to cash flows that vary based on the returns on underlying items have been adjusted to reflect that variability (paragraph B74b of IFRS 17), the discount rates used for fair value measurement would be similarly adjusted.

**15.8 Are there any special considerations for estimating the fair value of reinsurance contracts?**

The general approach is the same as for direct written contracts. The market for reinsurance contracts would be related to the market for the contracts that are reinsured, as transactions involving reinsurance contracts are usually part of transactions involving the reinsured contracts. With this perspective, the fair value of a group of reinsurance contracts can be viewed as the amount that brings the fair value of the reinsured (underlying direct) contracts to the net fair value of the direct contracts combined with the reinsurance contracts. In other words, the fair value of a group of reinsurance contracts is the difference between the fair value of the underlying direct contracts (ignoring reinsurance) and the fair value of the underlying direct contracts combined with the reinsurance contracts.

# Chapter 16 – Transition

16.A. What does this chapter address?

This Chapter considers the use of the fair value measurement of insurance contracts for IFRS 17 including for business combinations or portfolio transfers and on transition if the fair value approach is chosen. It discusses the determination of the fair value of insurance contracts in the context of the more general guidance on fair value measurement found in IFRS 13 Fair Value Measurement and of common insurance industry practices.

16.B. Which sections of IFRS 17 address this topic?

Appendix C provides guidance on this topic.

16.C. What other IAA documents are relevant to this topic?

None

**Overview**

1. **Where does the IASB describe the requirements for transition of the in-force insurance contracts from current accounting standards to IFRS 17?**

The effective date, requirements and approaches are described in Appendix C of IFRS 17 and the accompanying Basis for Conclusions.

1. **What is the effective date of IFRS 17?**

IFRS 17 applies to annual reporting periods beginning on or after 1 January 2021, with early application permitted. The start of the annual reporting period in which an entity first applies IFRS 17 is called the date of initial application. Some jurisdictions may adopt other effective dates.

1. **What IFRS 17 comparative information is required?**

There is a requirement to provide IFRS 17 financial statements (comparatives) as of the beginning of the period immediately preceding the date of initial application.

The dates that follow apply for entities with quarterly financial reporting and a date of initial application of 1 January 2021. Analogous dates would apply in other situations.

On 31 March 2021 the entity will report the following on the new IFRS 17 basis:

* the 31 December 2019 statement of financial position
* the statement(s) of financial performance for the 3-month period ending 31 March 2020
* the 31 March 2020 statement of financial position will not be presented, but will be necessary to the extent needed to prepare the 31 March 2020 statement(s) of financial performance
* the 31 December 2020 statement of financial position
* the statement(s) of financial performance for the 3-month period ending 31 March 2021
* the 31 March 2021 statement of financial position

Further, on 31 March 2021, the entity will disclose the impact of the change in accounting standards.  This disclosure will be as of 31 December 2019.

1. **Can more than one year of IFRS 17 comparative information be presented?**

Yes, an entity is permitted to present more than one year of IFRS 17 comparative information (paragraphs C25-C28). The beginning of the earliest adjusted comparative period presented (which would be the beginning of the period immediately preceding the date of initial application when only one year of comparative information is presented) is called the “transition date”.

1. **If provided, how is comparative information for earlier periods presented?**

If the comparative information and disclosures for earlier periods are adjusted by applying IFRS 17, Question 16.2 above applies. If the comparative information and disclosures for earlier periods are unadjusted, paragraph C27 requires the entity to “clearly identify the information that has not been adjusted, state that it has been prepared on a different basis, and explain that basis.”

1. **If the implementation of IFRS 9 is deferred until 1 January 2021, what is the interaction with the IFRS 17 comparative financial statements?**

IFRS 9 does not require comparative financial statements. However, the implementation of IFRS 9 (e.g., the designation of assets) might be different under IFRS 17 than under the current financial reporting standards. If so, the IFRS 17 comparative financial statements would be presented assuming the implementation of IFRS 9 that is consistent with IFRS 17. Assuming the above timeline with one year of comparatives, the re-designation of assets under IFRS 9 would be as of 31 December 2019 for the purposes of IFRS17 comparatives only.

1. **If IFRS 9 is implemented before IFRS 17, are financial assets re-designated when IFRS 17 is implemented?**

The guidance for re-designation and related disclosures is in paragraphs C29-C33. If there are assets designated as fair value through profit or loss to avoid an accounting mismatch, that designation must be revoked if the accounting mismatch no longer exists under IFRS 17. Otherwise, re-designation of assets is permitted but not required.

As described in question 16.3 above, the IFRS 17 comparative financial statements would be presented assuming the implementation of IFRS 9 that will be adopted with IFRS 17.

1. **What time period does the transition guidance cover?**

The transition guidance applies to all insurance contracts in force at the transition date, which is 31 December 2019 in the above timeline. All insurance contracts issued after that date would be subject to IFRS 17.

1. **In addition to IFRS 17, what other guidance applies to transition?**

Implementing IFRS 17 is considered a change in accounting policy, so IAS 8 *Accounting Policies, Changes in Accounting Estimates and Changes in Accounting Policies* applies, except, per paragraph C3, the entity need not disclose the quantitative information required by paragraph 28(f) of IAS 8.

1. **What is the impact on previous business combination balances of paragraph C4(b) of IFRS17?**

Paragraph C4(b) requires the entity to derecognize all balances related to business combinations that would not have existed had IFRS 17 been in effect at the time of the business combination. For example, Value of Business Acquired (VOBA) balances will be derecognized, but goodwill balances will be unchanged at the transition date.

1. **What is to be measured or determined at transition?**

At the transition date, the following is required for each group of contracts:

* the carrying value of the liability (or asset), with separate measurement of the risk adjustment and the CSM or loss component,
* the “locked-in discount rate”, being the discount rate used for CSM accretion, and
* the accumulated OCI (if the OCI option is elected).
1. **How should these items be measured or determined?**

Appendix C describes three approaches for transition: full retrospective, modified retrospective and fair value.

The measurement of fulfilment cash flows at the transition date is a straightforward application of paragraphs 33-37. However, the CSM or loss component, the locked-in discount rate and the accumulated OCI all require information from the date of initial recognition, which may be many years before the date of transition. These items are therefore the focus of the transition guidance.

The following sections of this Chapter describe the identification of groups of contracts, the determination of the locked-in discount rate, the measurement of accumulated OCI, and the measurement of the CSM or loss component under the three approaches (full retrospective, modified retrospective, fair value).

1. **How does the entity decide which approach to use for each group of contracts?**

As set out in IFRS17, the full retrospective approach must be used unless it is impracticable to do so, in which case the entity must choose between the modified retrospective approach and the fair value approach. However, if reasonable and supportable information necessary to apply the modified retrospective approach is not available, the fair value approach must be used.

1. **How does the entity identify groups of contracts at transition?**

Paragraphs 14-24 describe the criteria for identifying groups of contracts. Under the full retrospective approach, identification of groups requires the assessment of these criteria as at the date of initial recognition of the contracts in each group. If this information is not available, the full retrospective approach would not be used. Identification of groups under the modified retrospective approach and the fair value approach are described in later sections of this Chapter.

1. **What other information is needed to use the full retrospective approach?**

See the next section of this Chapter. If any material information is not available, the full retrospective approach would not be used.

1. **Would multiple approaches be used on a single group of contracts?**

No, only one approach would be applied to a group of contracts.

1. **What does impracticable mean?**

IAS 8 states:

*“Applying a requirement is impracticable when the entity cannot apply it after* ***making every reasonable effort*** *to do so. For a particular prior period, it is impracticable to apply a change in an accounting policy retrospectively or to make a retrospective restatement to correct an error if:*

1. *the effects of the retrospective application or retrospective restatement are not determinable;*
2. *the retrospective application or retrospective restatement* ***requires assumptions about what management’s intent would have been in that period****; or*
3. *the retrospective application or retrospective restatement* ***requires significant estimates of amounts and it is impossible to distinguish objectively information*** *about those estimates that:*
4. *provides evidence of circumstances that existed on the date(s) as at which those amounts are to be recognised, measured or disclosed; and*
5. *would have been available when the financial statements for that prior period were authorised for issue from other information.”*

Effectively, this means that the entity must demonstrate that although it has made every reasonable effort to gather the necessary information to enable it to determine the required elements retrospectively, that information is not available, or not available in a form that would enable it to be used without undue cost and effort. Information might be unavailable for a variety of reasons including:

* the information is no longer in the entity’s possession;
* the information is available but outside the entity’s normal retention policy and so might not be complete;
* the entity has the information but is unusable because of technological constraints.

Paragraph BC378 gives examples of items needed for retrospective application for which measurement would often be impracticable.

1. **Are separate disclosures required for groups using different approaches?**

Yes. Paragraphs 114-116 describe the required disclosures.

1. **After transition, can new contracts be added to the groups established at transition?**

The disclosure requirements of paragraphs 114-116 would prohibit new contracts being added to groups measured at transition using the modified retrospective approach or the fair value approach.

1. **What is different for groups of insurance contracts with (vs. without) direct participation features?**

The locked-in discount rate is not needed for CSM accretion or future CSM adjustments and so is only required if the OCI option is elected.

1. **What is different for groups of contracts measured using the premium allocation approach?**

For the liability for remaining coverage, there is no risk adjustment or CSM or loss component to be determined at transition. Also, the locked-in discount rate is not needed.

1. **What is different for incurred claims liabilities?**

There is no CSM or loss component to be determined at transition. The locked-in discount rate is not needed for CSM accretion or future CSM adjustments and so is only required if the OCI option is elected.

1. **What is different for groups of reinsurance contracts?**

There is never a loss component for groups of reinsurance contracts. This is true even if (per paragraph 66(c)(ii)) losses are recognized in profit and loss (rather than adjusting the CSM) to mirror the treatment applying to a group of underlying direct contracts.

**The Full Retrospective Approach**

1. **Are simplifications and approximations permitted when applying the full retrospective approach?**

The full retrospective approach involves looking back to the date of initial recognition and determining the liability (and in particular, the CSM or loss component) on that date as if IFRS 17 had been in effect. Then, to determine the CSM or loss component at the transition date, the CSM or loss component at the date of initial recognition would be adjusted through time as described in paragraphs 43-45 (CSM) and 50-52 (loss component).

Simplifications and approximations are permitted if they do not have a material impact on the results. If any material information is not available, the full retrospective approach would not be used.

1. **How are groups of contracts identified?**

Paragraphs 14-24 describe the criteria for identifying groups of contracts. Under the full retrospective approach, identification of groups requires the assessment of these criteria as at the date of initial recognition of the contracts in each group.

1. **How is the locked-in discount rate determined?**

The locked-in discount rate is the discount rate that would have been established at the date of initial recognition as described in paragraph 36.

1. **How is the liability (and in particular, the CSM or loss component) determined at the date of initial recognition?**

Actual policy data for the contracts in the group would be used. Information (e.g., assumptions, pre-coverage acquisition expenses) required to estimate future cash flows, the risk adjustment and the CSM or loss component would, to the extent possible, be consistent with the information that would have been available at the date of initial recognition, without the use of hindsight.

In particular, the risk adjustment at the date of initial recognition should reflect the assessment of risk from the perspective of the entity as at the date of initial recognition. As noted in question 16.26 above, the discount rate would be the discount rate that would have been established at the date of initial recognition as described in paragraph 36.

1. **How is the CSM or loss component measured at the transition date?**

The CSM or loss component at the transition date would be measured by taking the CSM or loss component at the date of initial recognition (determined as in question 16.27 above) and adjusting through time as described in paragraphs 43-45 (CSM) and 50-52 (loss component) of IFRS 17.

1. **Should contracts that are not in-force at the transition date, but which at the date of initial recognition would have been included in the group of contracts as determined in question 16.25 above, be included in the retrospective calculation?**

Yes. All contracts that were in the group at the date of initial recognition would contribute to the determination of the liability at the date of initial recognition. Furthermore, cash flows and coverage units associated with these contracts would contribute to the adjusting through time of the CSM or loss component described in question 16.28 above.

1. **What pattern should be used for CSM amortisation between the date of initial recognition and the transition date?**

The adjustments made to the CSM or loss component would, to the extent possible, be consistent with the information that would have been available at the date each adjustment would have been made, without the use of hindsight. However, per paragraph C3(b), for groups of contracts with direct participation features, the option described in paragraph B115 (to reflect the economic offset of derivatives in profit and loss rather than the CSM) would not be applied.

The adjustments to the CSM or loss component would be made as at each reporting date between the date of initial application and the transition date. If the resulting CSM or loss component would be materially similar, adjustments could be made less frequently, (e.g., annually).

1. **If the OCI option is elected, how is the accumulated OCI at the transition date measured?**

For groups of contracts for which changes in assumptions that relate to financial risk do not have a substantial effect on the amounts paid to the policyholder, the accumulated OCI at transition is the difference between the fulfilment cash flows measured using the locked-in discount rate and the fulfilment cash flows measured using the discount rate in effect at the transition date.

For groups of contracts for which changes in assumptions that relate to financial risk have a substantial effect on the amounts paid to the policyholder but which are not insurance contracts with direct participating features where the entity holds the underlying items (i.e., when paragraph 88 applies), the systematic allocation that would have been adopted at the date of initial recognition (per paragraph B132) would be determined and applied retrospectively to measure the accumulated OCI at transition.

For groups of contracts applying the premium allocation approach, the accumulated OCI at transition for the liability for incurred claims is the difference between the fulfilment cash flows measured using the discount rate in effect at the date the claim was incurred and the fulfilment cash flows measured using the discount rate in effect at the transition date.

For groups of contracts with direct participation features where the entity holds the underlying items (i.e., when paragraph 89 of IFRS 17 applies), the accumulated OCI at transition would be measured retrospectively applying paragraphs B134-B136.

**The Modified Retrospective Approach**

1. **When can the modified retrospective approach be used?**

When it is impracticable to apply the full retrospective approach to a group of contracts, the entity must choose to use either the modified retrospective approach or the fair value approach. However, the entity may only choose the modified retrospective approach if it can obtain reasonable and supportable information necessary to do so. If not, as per the requirements of IFRS17, the fair value approach must be used.

1. **What is the modified retrospective approach trying to achieve?**

The objective of the modified retrospective approach is to achieve the closest outcome to the full retrospective approach possible.

1. **How does the entity achieve this objective?**

The entity would maximize the use of information that would have been used to apply the full retrospective approach, though only to the extent that information is reasonable and supportable and available without undue cost or effort.

Appendix C of IFRS 17 describes specific modifications, each of which is permitted only to the extent that the entity does not have reasonable and supportable information to apply the full retrospective approach (per paragraph C8). The assessment of which modifications are permitted would be made for each modification for each group of contracts.

For the remainder of this section, “available information” should be read as “reasonable and supportable information that is available without undue cost or effort”.

1. **How are groups of contracts identified under the modified retrospective approach?**

If the information is available, groups of contracts would be identified applying paragraphs 14-24.

Paragraph 14 requires the identification of portfolios of insurance contracts, where a portfolio comprises contracts that are subject to similar risks and managed together. To the extent information is not available, one of the permitted modifications of the modified retrospective approach allows the entity to identify portfolios of contracts based on how its business is managed at transition.

Furthermore, insurance contracts with direct participation features would be in different portfolios than contracts without direct participation features. At the time of transition, information from the date of initial recognition about whether contracts would have met the definition of insurance contracts with direct participation features when they were issued may not be available. In this case, one of the permitted modifications of the modified retrospective approach allows the entity to use information available at transition to determine whether a contract meets the definition of an insurance contract with direct participation features, i.e., contracts would be included in a portfolio of insurance contracts with direct participation features if they meet the definition of insurance contracts with direct participation features at the date of transition.

Paragraphs 15-21 indicate that portfolios are split into three (or more if desired) groups based on the profitability of contracts at initial recognition. At the time of transition, information from the date of initial recognition about the profitability of contracts issued in past years may not be available. In this case, one of the permitted modifications of the modified retrospective approach allows the entity to use information available at transition to assess the profitability of contracts for the purpose of grouping. That is, information about the profitability of contracts currently being issued can be applied to similar contracts issued in past years. However, information available at transition is less likely to be useful the longer the period of time between initial recognition and transition. For contracts where the information at transition is not useful in assessing profitability for the purpose of grouping*,* the fair value approach must be used.

Paragraph 22 requires the groups determined per paragraphs 14-21 to be further divided so that contracts issued more than one year apart are not included in the same group. Paragraph C10 permits a modification of this requirement when information is not available. This modification allows the entity to group contracts issued more than one year apart to allow the application of the modified retrospective approach whenever reasonable and supportable information necessary to do so is available. For example, if reasonable and supportable information is only available for contracts issued within 5 years of the transition date and the entity wishes to use the modified retrospective approach for such contracts, the entity could establish two groups of contracts, viz., those issued within 5 years of the transition date (for which the modified retrospective approach would be applied) and those issued more than 5 years before the transition date (for which the fair value approach would be applied).

1. **How is the locked-in discount rate determined under the modified retrospective approach?**

If contracts issued more than one year apart are included in the same group (i.e., the modification in paragraph C10 is made), the entity is permitted to determine the locked-in discount rate using the discount rate in effect at the date of transition rather than the discount rate in effect at the date of initial recognition.

Otherwise, if available, the locked-in discount rate is the discount rate that would have been established at the date of initial recognition as described in paragraph 36.

If not available, one of the permitted modifications of the modified retrospective approach allows the entity to use the relationship between an observable yield curve and the current discount rate to estimate the discount rate as at the date of initial recognition as follows:

If there is an observable yield curve that approximates the current discount rate for at least three years before the transition date, that observable yield curve at the date of initial recognition would be used to determine the locked-in discount rate.

If such an observable yield curve does not exist, but there is an observable yield curve with a reasonably consistent spread to the current discount rate, the average spread between that observable yield curve and the current discount rate would be applied to that observable yield curve at the date of initial recognition to determine the locked-in discount rate. The average spread should be an average over at least three years before the transition date.

1. **How is the CSM or loss component at the transition date measured under the modified retrospective approach?**

The full retrospective approach would be used to the extent information is available. The following modifications are permitted to the extent information is not available:

***Insurance contracts without direct participation features***

* **Discretionary cash flows** - The entity would use information at the transition date (rather than the date of initial recognition) to determine how to identify discretionary cash flows for the purpose of applying paragraphs B94-B96. That is, the entity would use policies on discretionary payments that apply at the date of transition if the policies on discretionary payments that applied at the time of initial recognition are not available.
* **Future cash flows** – The future cash flows at the date of initial recognition would be estimated as the future cash flows at the transition date (or an earlier date if the information is available) adjusted by the cash flows that are known to have occurred between the initial recognition and the transition date (or earlier date). Such known cash flows would include cash flows related to all contracts that would have been in the group at the date of initial recognition, including contracts that are no longer in force at the transition date.
* **Risk adjustment** – The risk adjustment at the date of initial recognition would be estimated as the risk adjustment at the transition date adjusted by the expected release of risk before that date. The expected release of risk would be based on the release of risk for similar contracts the entity is issuing at the transition date.
* **CSM amortization** – The entity would estimate the amount of CSM recognized in profit or loss because of the transfer of services (paragraph 44(e7) between the date of initial recognition and the transition date by comparing the remaining coverage units (for contracts still in-force at the transition date) with the coverage units provided under the group of contracts before the transition date.
* **Loss component** – If there is a loss component at initial recognition, the entity would estimate the amount allocated to the loss component before the transition date using a systematic allocation consistent with the modifications adopted above.

***Insurance contracts with direct participation features***

The entity would measure the CSM at the transition date as the total fair value of the underlying items at the transition date minus:

* the fulfilment cash flows at the transition date, adjusted as described in paragraph C17(c ), and
* (if CSM), minus the amount of CSM that relates to service provided before the transition date, estimated by comparing the remaining coverage units with the coverage units provided under the group of contracts before the transition,
* (if loss component), adjust the loss component to nil and increase the liability for remaining covering by the same amount.

If information is not available to apply a permitted modification, the fair value approach must be used.

1. **If the OCI option is elected, how is the accumulated OCI at the transition date measured under the modified retrospective approach?**

For contracts with direct participation features where the entity holds the underlying items (i.e., when paragraph B134 applies), the accumulated OCI at transition would be the accumulated OCI on the underlying items.

Otherwise, the accumulated OCI at transition would be:

* the difference between the fulfilment cash flows measured using the locked-in discount rate and the fulfilment cash flows measured using the discount rate in effect at the date of transition, for contracts for which changes in assumptions that relate to financial risk do not have a substantial effect on the amounts paid to the policyholder, and
* nil, for contracts for which changes in assumptions that relate to financial risk have a substantial effect on the amounts paid to the policyholder.

Furthermore, if contracts issued more than one year apart are included in the same group (i.e., the modification in paragraph C10 is made), the entity is permitted to determine the accumulated OCI as nil.

Note that the accumulated OCI would be nil whenever (per the first paragraph of question 16.36 above) the entity chooses to determine the locked-in discount rate as the discount rate in effect at the date of transition.

**The Fair Value Approach**

1. **What is the fair value used for?**

The CSM or loss component at transition is determined as the fair value of a group of contracts at the transition date minus the fulfilment cash flows of the group as at the transition date.

1. **How are groups of contracts identified under the fair value approach?**

Per paragraphs C21-C22, the entity may choose to use the information available at transition rather than the information as at initial recognition to identify groups of contracts. This includes identifying portfolios of insurance contracts (see question 16.35 above).

Furthermore, per paragraph C23, the entity may choose not to apply paragraph 22 and thereby include contracts issued more than one year apart in a group.

Therefore, when applying the fair value approach at transition, the entity may identify portfolios of contracts based on how it manages the business at transition and determine there are three groups per portfolio (onerous, no significant risk of becoming onerous, other), with no division of those groups by year of issue.

1. **How is the locked-in discount rate determined under the fair value approach?**

Per paragraph C23, the entity may choose to determine the locked-in discount rate as the discount rate in effect at the date of transition.

Note that the same locked-in discount rate would apply to groups within the same portfolio.

1. **How is the fair value of a group of contracts as at the transition date measured?**

The fair value of a group of contracts is analogous to the consideration received/paid on portfolio transfer or business combination. It is the amount the entity would have to pay a third party to take on the obligations and risks of the group.

IFRS 13 Fair Value Measurement provides guidance on measuring fair value. See Chapter 15 Fair Value for guidance on the application of IFRS 13 to insurance contracts on transition to IFRS 17.

The fair value at the date of transition would use observable market information, assumptions, economic information, views on the cost of risk etc. as at the date of transition.

1. **How are the fulfilment cash flows of the group as at the transition date measured?**

The measurement of fulfilment cash flows at the transition date is described in paragraphs 33-37.

1. **If the OCI option is elected, how is the accumulated OCI at the transition date measured under the fair value approach?**

For contracts with direct participation features where the entity holds the underlying items (i.e., when paragraph B134 applies), the accumulated OCI at transition would be the accumulated OCI on the underlying items.

Otherwise, the entity can choose to set the accumulated OCI to nil, or to measure the accumulated OCI retrospectively if the information is available.

1. IFRSs refers to the ensemble composed by each individual International Financial Reporting Standard (IFRS), as issued by the IASB since 2001, and by each individual International Accounting Standard (IAS), as issued by IASB’s predecessor IASC before 2001, by each International Financial Reporting Interpretation Committee Interpretation (IFRIC), as issued by IFRIC, and by each individual Standard Interpretation Committee Interpretations (SIC), as issued by IFRIC’s predecessor SIC. All these terms are registered trademarks owned by the IFRS Foundation, owning as well the copyright of all IFRSs. [↑](#footnote-ref-1)
2. IASB, Preface to International Financial Reporting Standards (PRE), September 2010, PRE.6-7 [↑](#footnote-ref-2)
3. PRE.15 and IAS 1.16 [↑](#footnote-ref-3)
4. Measurement of Liabilities for Insurance Contracts: Current Estimates and Risk Margins [↑](#footnote-ref-4)
5. Stochastic Modelling – Theory and Reality from an Actuarial Perspective [↑](#footnote-ref-5)
6. Name of Risk Monograph once known [↑](#footnote-ref-6)
7. 7 The “building blocks” are:

	1. Fulfilment cash flows, comprising:
		1. estimates of future cash flows (paragraphs 33–35);
		2. an adjustment to reflect the time value of money and the financial risks related to the future cash flows, to the extent that the financial risks are not included in the estimates of the future cash flows (paragraph 36); and
		3. a risk adjustment for non-financial risk (paragraph 37).
	2. the contractual service margin, measured applying paragraphs 38–39.” (IFRS 17, Paragraph 32) [↑](#footnote-ref-7)
8. Other publications on the subject could help the practitioner to derive such a curve (for example: (EIOPA, 2017), (IAA, 2013)). [↑](#footnote-ref-8)
9. Note that the volatility adjustment is not compliant to IFRS 17. [↑](#footnote-ref-9)
10. In other frameworks, such as Solvency II, a similar concept is referred to as the “last liquid point” however IFRS 17 guidance does not contain this phrase [↑](#footnote-ref-10)
11. As stated before, one must be careful in distinguishing cash flows that do and do not vary based on the returns on any financial underlying items. [↑](#footnote-ref-11)
12. The term “insurance contracts” as used in this Chapter includes all contracts in the scope of IFRS 17 [↑](#footnote-ref-12)