



Network of Consulting Actuaries UK

IFRS 17 – an actuarial perspective

Presented by Thomas Bulpitt

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Today's agenda



Overview of IFRS 17

- Scope and unit of account
- Measurement models

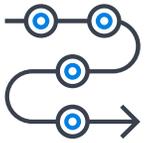


Implementation Progress



Industry Developments

Today's agenda



Overview of IFRS 17

- **Scope and unit of account**
- **Measurement models**



Implementation Progress



Industry Developments

Overview of IFRS 17

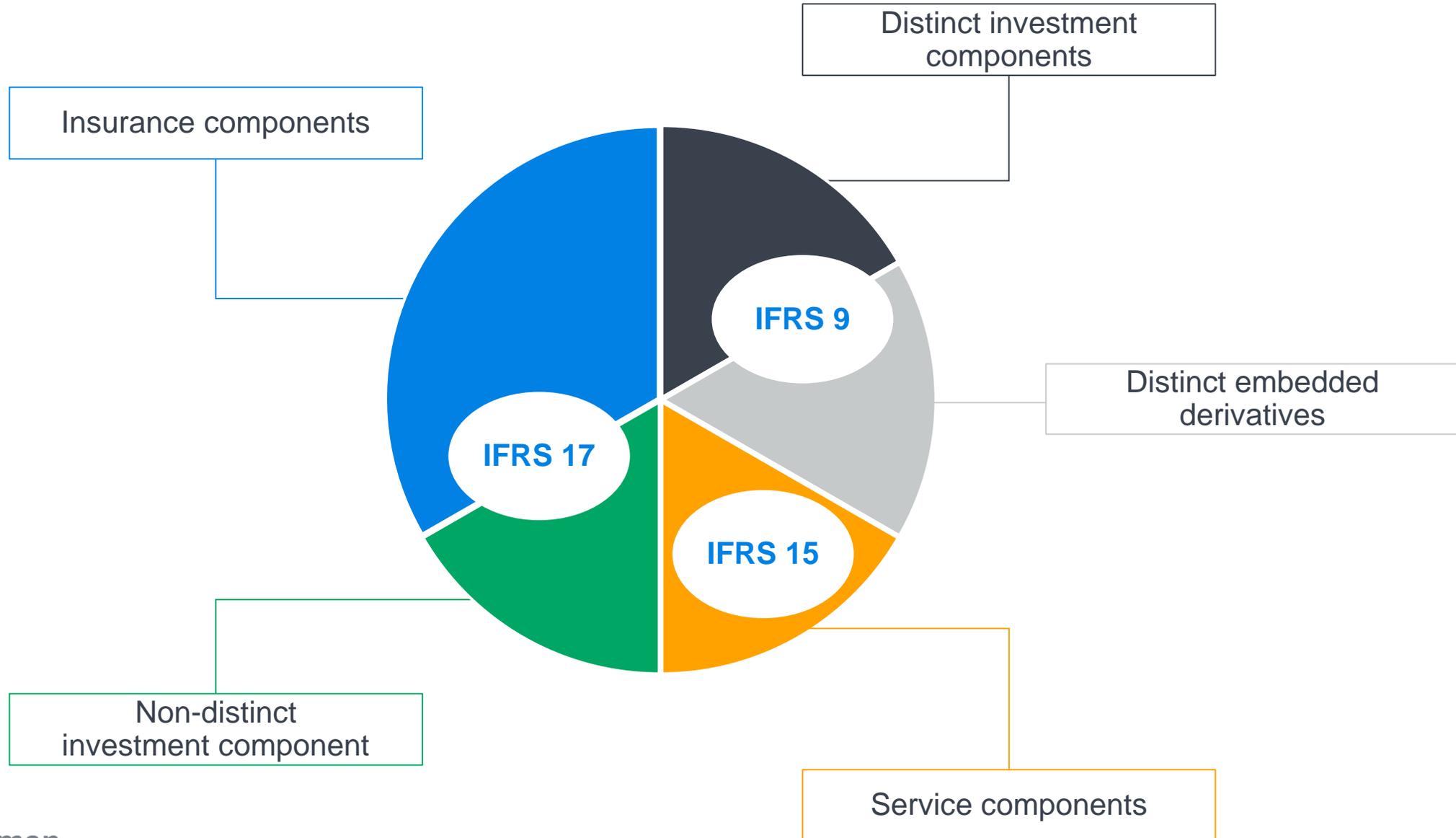
Scope and unit of account

What and how is IFRS 17 applied?

Scope of IFRS 17

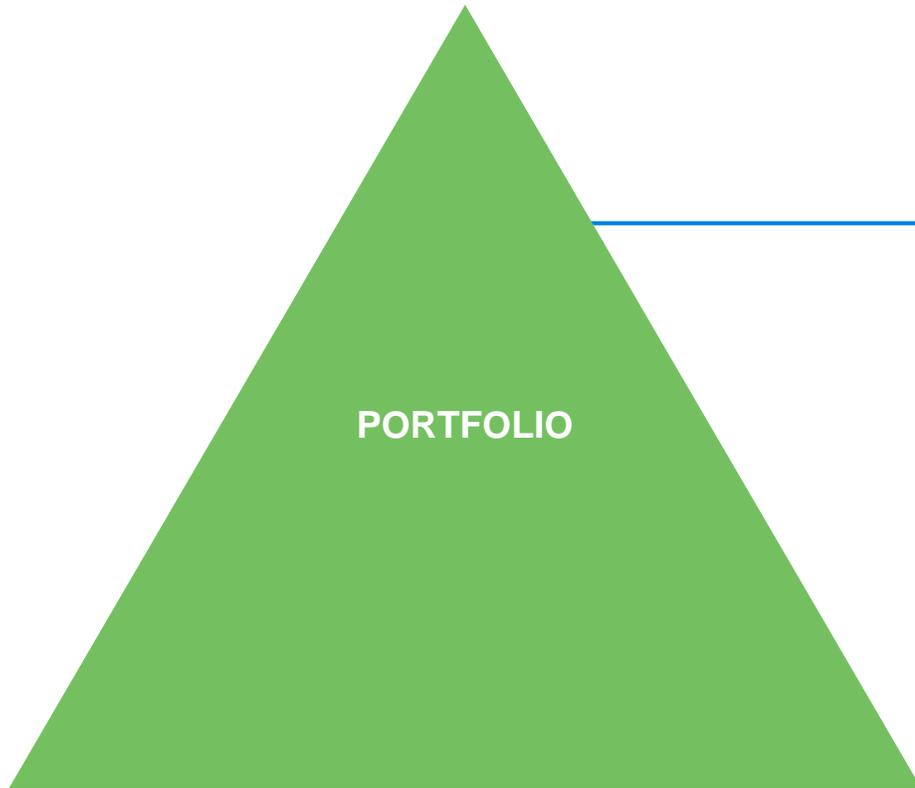
- 1 Insurance contracts issued
- 2 Reinsurance contracts issued
- 3 Reinsurance contracts held
- 4 Investment contracts with discretionary participation features*

Bifurcation - investment components



Level of aggregation

Start at the portfolio level

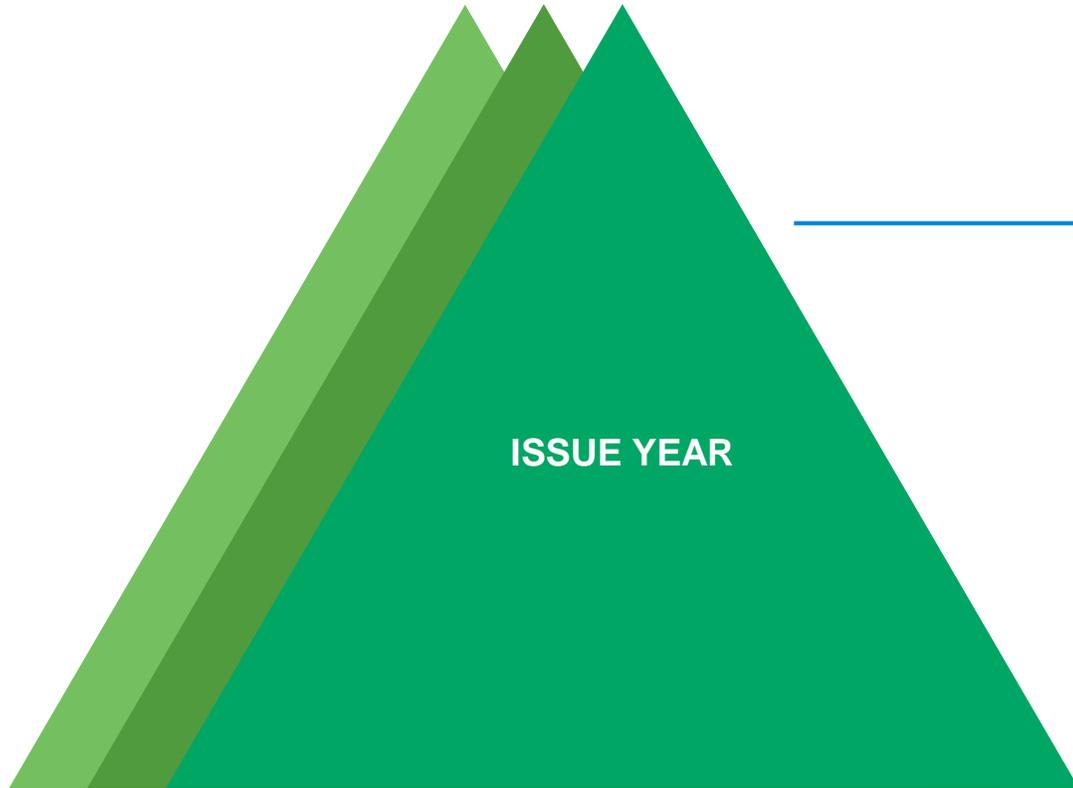


PORTFOLIO

Contracts that are subject to similar risks and managed together

Level of aggregation

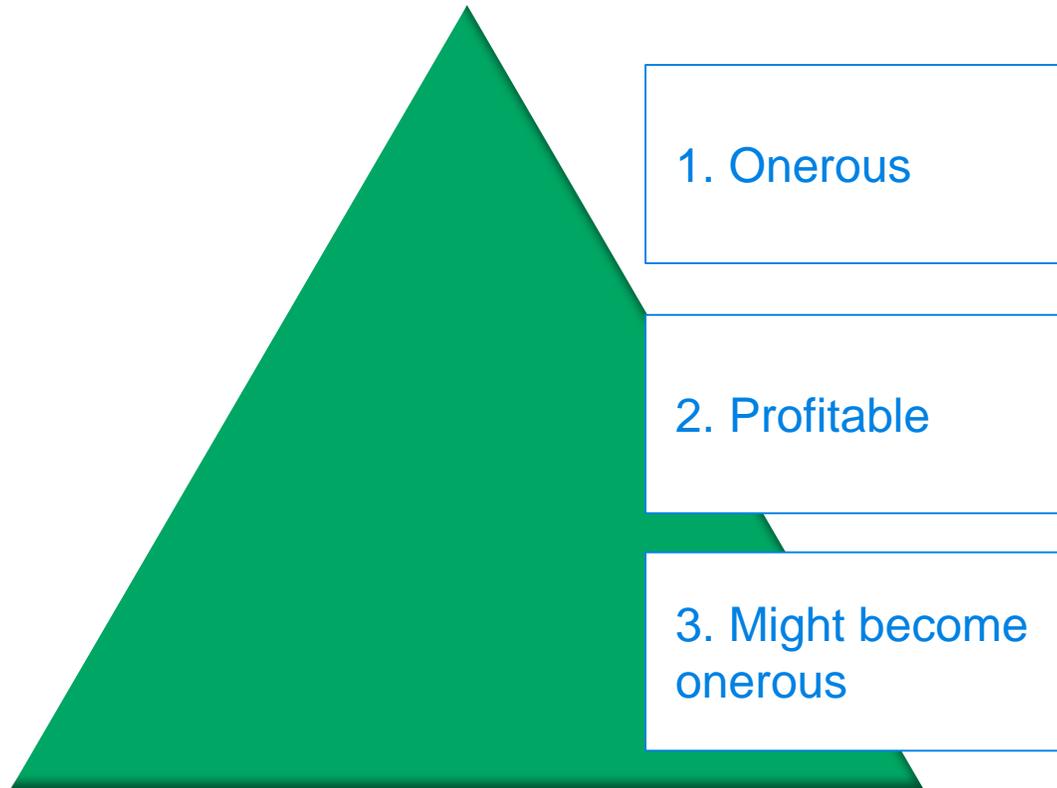
Yearly cohorts



Contracts issued more than 1 year apart cannot be in same group*

Level of aggregation

Minimum grouping for each yearly cohort



Exception

If a legal or regulatory restriction on entity's ability to reprice the product then contracts can be included in same group

Key issue

How to assess whether there is a significant possibility of becoming onerous in the future

Groups of contracts are the unit of measurement used in IFRS 17

Measurement Models

Measurement approaches

There are three measurement approaches in IFRS 17, depending on the type of insurance contracts being measured:



PREMIUM ALLOCATION APPROACH (PAA)

Simplified approach for short duration contracts (generally for coverage period up to one year)



VARIABLE FEE APPROACH (VFA)

Approach for contracts with direct participation features (e.g. unit-linked, with-profit contracts)



GENERAL MODEL (aka Building Block Approach or BBA)

Default valuation approach

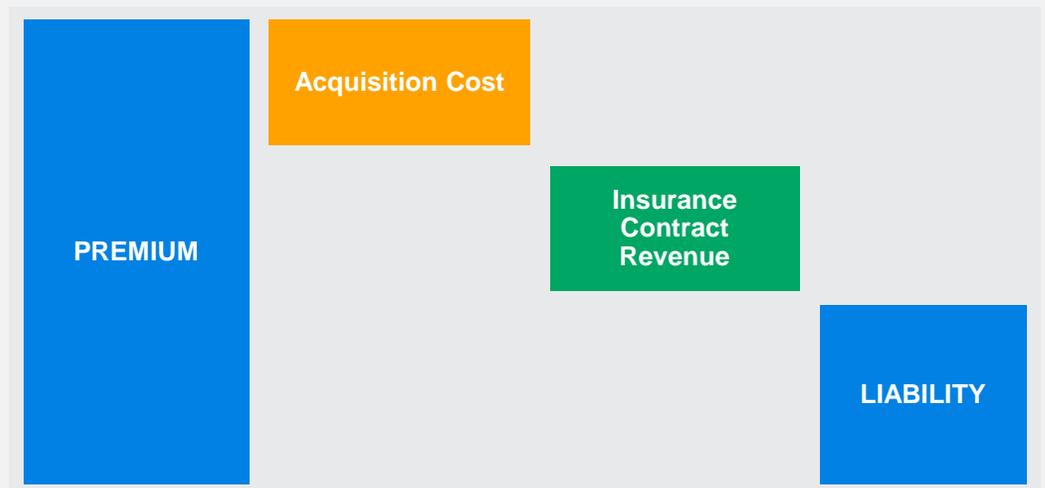
Premium Allocation Approach



- The PAA, as a simplified approach, can be applied in the following conditions:
 - The result provides a reasonable approximation of the General Model, specifically the entity shouldn't expect significant variability (e.g. due to options or other derivatives) during the period before a claim is incurred,
- or**
- The coverage period of the insurance contract at initial recognition (including coverage arising from all premiums within the contract boundary) is one year or less.

SHORT TERM PRE-CLAIM LIABILITIES

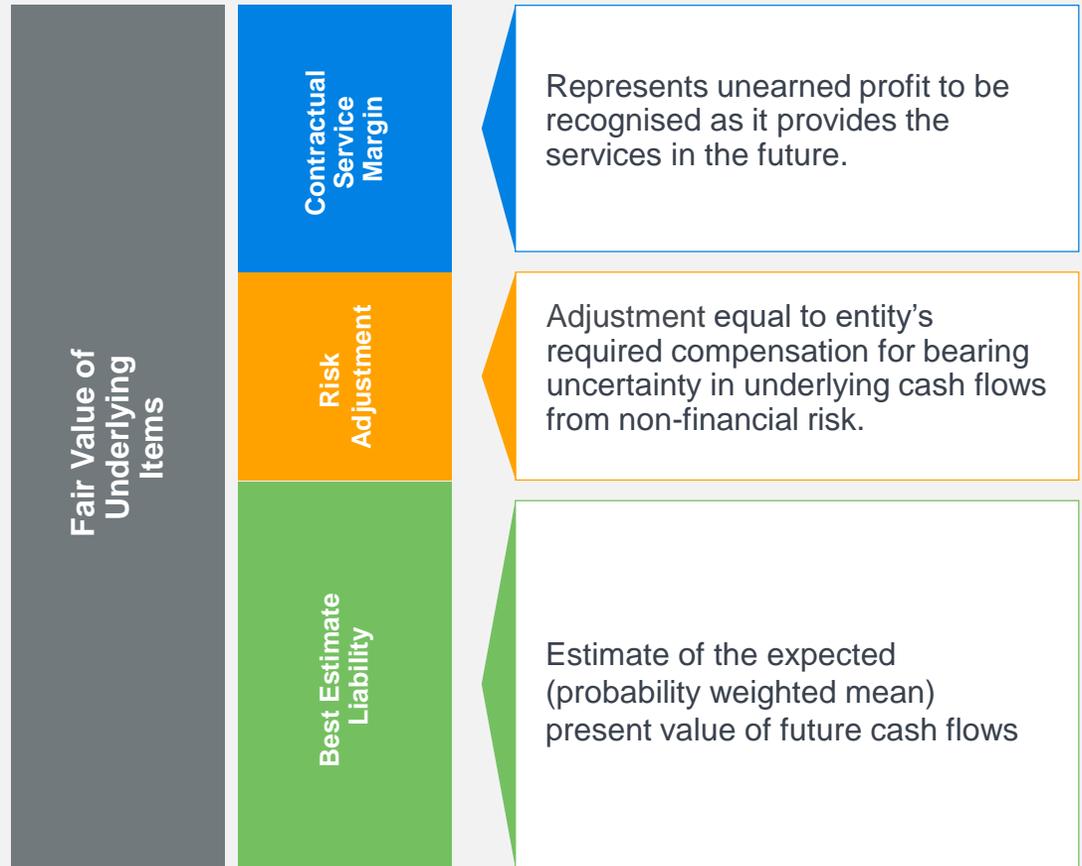
- Implicit CSM and Risk Adjustment
- Decrease by passage of time
- No discounting of future cash flows



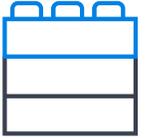
Variable Fee Approach



- The VFA is applied to contracts with “Direct Participation Features”
- A contract has “Direct Participation Features” if:
 - the contract terms specify that the policyholder shares in the returns of a clearly defined pool of underlying items
 - the entity expects to pay the policyholder a substantial share of fair value returns on the underlying items
 - the entity expects a substantial portion of any change in the amounts to be paid to the policyholder to vary with the change in the fair value of the underlying items
- Underlying items
 - can be anything
 - must be specified in the contract and be enforceable
 - the entity does not need to hold it
 - cannot change it in retrospect
- Reinsurance contracts cannot be direct participating contracts



General Model



Default valuation approach

- Applies to all insurance contracts to which the PAA or VFA do not apply.
- This will include non-linked, non-profit business

Present Value
of Premium

Contractual
Service
Margin

Risk
Adjustment

Best Estimate
Liability

Represents unearned profit to be recognised as it provides the services in the future.

Adjustment equal to entity's required compensation for bearing uncertainty in underlying cash flows from non-financial risk.

Estimate of the expected (probability weighted mean) present value of future cash flows

Best estimate – future cash flows

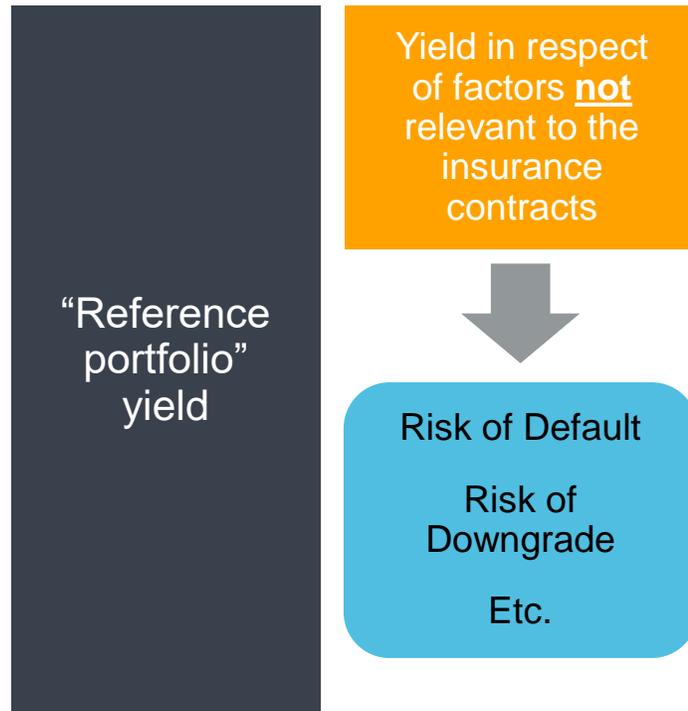
- Best estimate cash flows under all possible scenarios based on conditions as of the reporting date – captures the time value of options and guarantees
- Incorporate in unbiased way all reasonable and supportable information available without undue cost or effort about amount, timing and uncertainty of CFs
- Reflect perspective of entity as long as market variables are consistent with observable market prices for those variables
- Only include cash flows within boundary of contract
 - As long as company can compel policyholder to pay the premiums or has a substantive obligation to provide the policyholder with coverage
 - Until the company has the right or the practical ability to reassess the risks by changing the price or level of benefits
 - Only include cash flows directly attributable – includes allocation of directly attributable overhead expenses
 - May estimate cash flows at a higher level of aggregation than group of contracts

Best estimate – discount rate

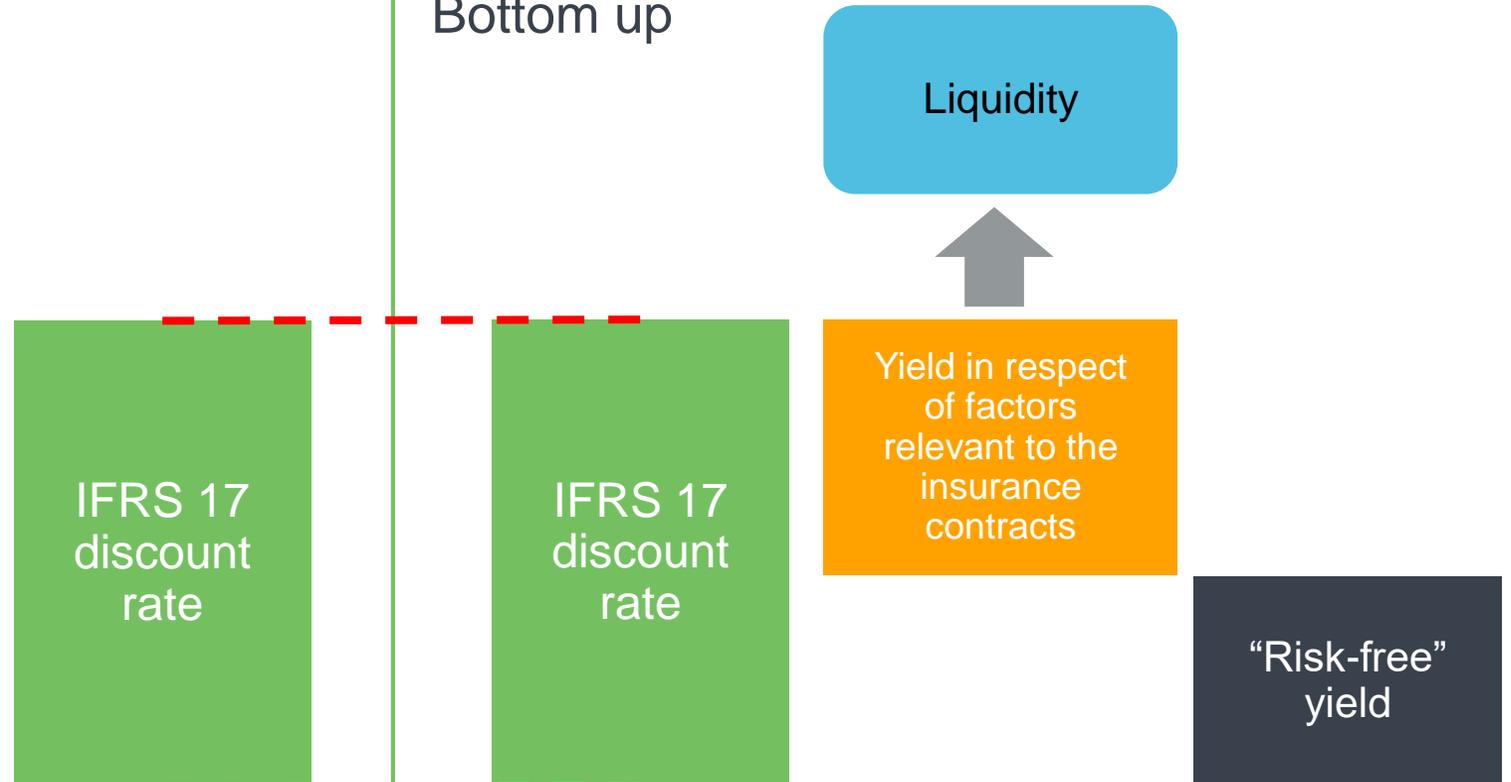
- Discount rates applied to the estimates of the future cash flows shall:
 - reflect time value of money,
 - reflect characteristics of the cash flows,
 - reflect liquidity characteristics of the insurance contracts
 - consistent with observable current market prices for financial instruments with cash flows whose characteristics are consistent
 - exclude factors that influence market prices but do not affect the future cash flows of the insurance contracts
- Own credit risk should be disregarded
- Weighted average discount rates per annum (underwriting year) are acceptable
- If cash flows are dependent on underlying items (VFA) – discount rates need to reflect the variability of the cash flows
- If cash flows are not dependent on underlying items – can use top down or bottom up approach

Discount rate – top down or bottom up

Top down



Bottom up



Risk adjustment - definition

- Adjustment to present value of future cash flows to reflect compensation the entity requires for bearing uncertainty as to amount and timing of cashflows due to non-financial risk
- Non-financial risk includes insurance risk and other risks such as lapse and expense risk but does not reflect risk that does not arise directly from the insurance contract e.g. operational risk.
- Reflects degree of diversification the entity includes when determining the compensation to require. For measurement on a more granular level it will be necessary to allocate the amount of diversification
- Reflects both favorable and unfavorable outcomes in a way that reflects the entity's degree of aversion to risk.
- The Standard does not specify a methodology or confidence level and so both must be determined by the entity

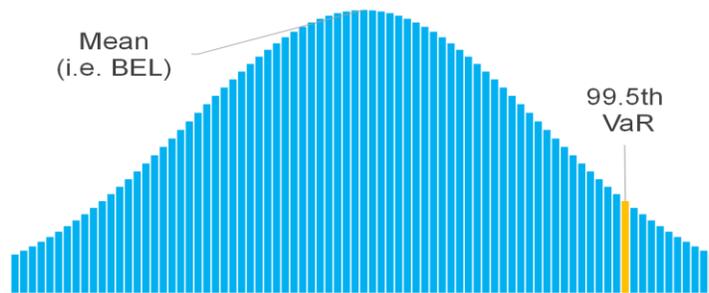
Risk adjustment – criteria

- The risk adjustment method chosen should satisfy the following criteria:
 - Low frequency/high severity risks should have higher risk adjustment
 - For similar risks, contracts with longer durations should have higher risk adjustments
 - Risks with a wider probability/heavy tail distribution will have a higher risk adjustment
 - The less that is known about the current level and trend, the higher the risk adjustment
 - If emerging experience reduces uncertainty about amount/timing, risk adjustments will decrease
- Need to disclose confidence level associated with risk adjustment if use another method.
- One possible approach is to benchmark with the Solvency II SCR (99.5% percentile) and assume that the underlying distribution is normal (99.5% percentile ~ 2.58 x standard deviations from the BEL)

Risk adjustment methods

Value at Risk

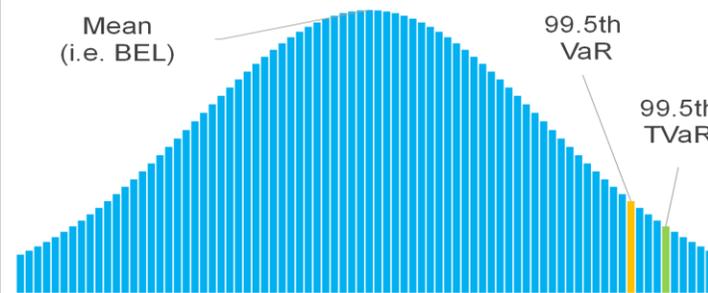
(or Confidence Interval Approach)



- Practical and simple method
- Possible to leverage Solvency II
- Must show as a comparative

Tail Value at Risk

(or Conditional Tail Expectation)



- Additional assumptions required for non-stochastic approaches
- Allows for shape of tail

Cost of Capital

$$CoC * \sum_t PV(RC_t)$$

CoC = internal cost of capital rate

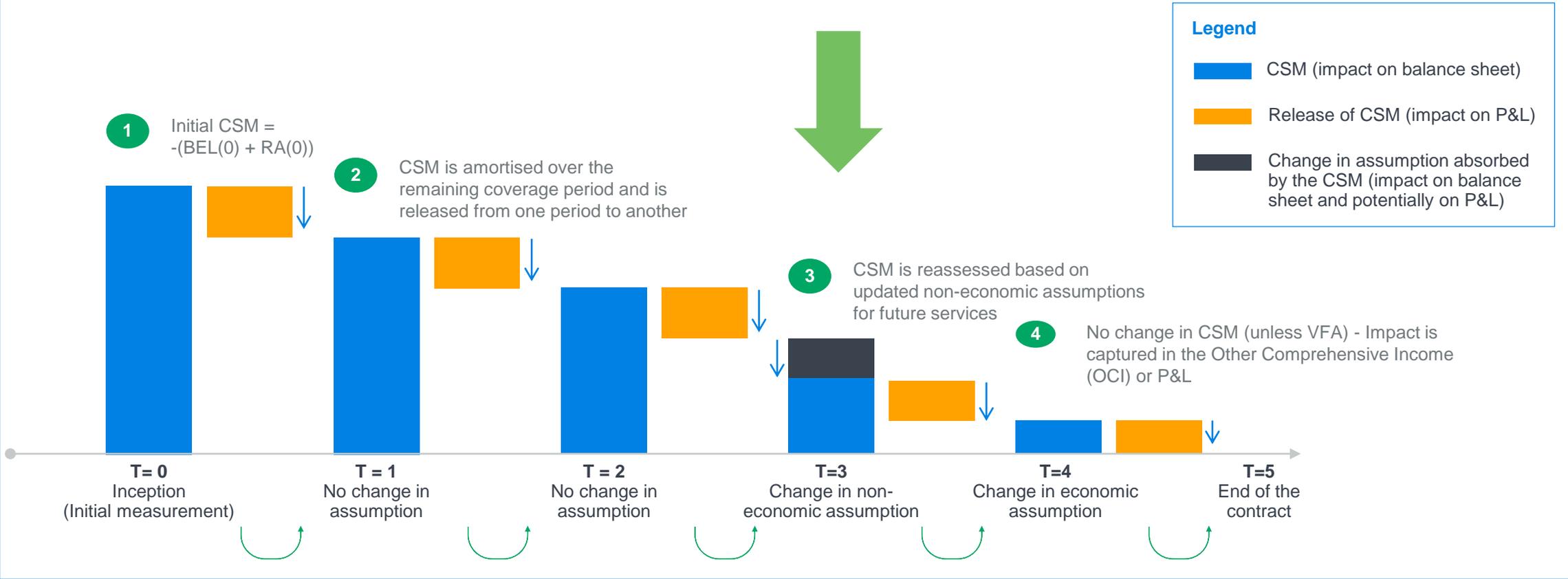
$PV(RC_t)$ = risk capital for non-financial risk, at time t , discounted at an appropriate discount rate

- Possible to leverage Solvency II

Contractual Service Margin

- Excess of consideration charged for the contract over the risk-adjusted expected present value of the fulfilment cash outflows – i.e. the profit
- CSM is a measure of the service the entity would perform in fulfilling the contract. Therefore, don't recognise an immediate gain, but instead recognise gain over time as the entity satisfies its obligation.
- The contractual service margin can not be negative.
- Amortised in line with “coverage units” that represent the provision of insurance services to the policyholder
 - $\text{CSM released in year } t = (\text{expected release of coverage units in year } t) / (\text{sum of expected coverage units in all years})$
- CSM unlocked for changes in estimates of future cash flows related to providing future service that derive from non-financial risks.
- CSM not unlocked for changes in discount rates

General Model example: Contractual Service Margin



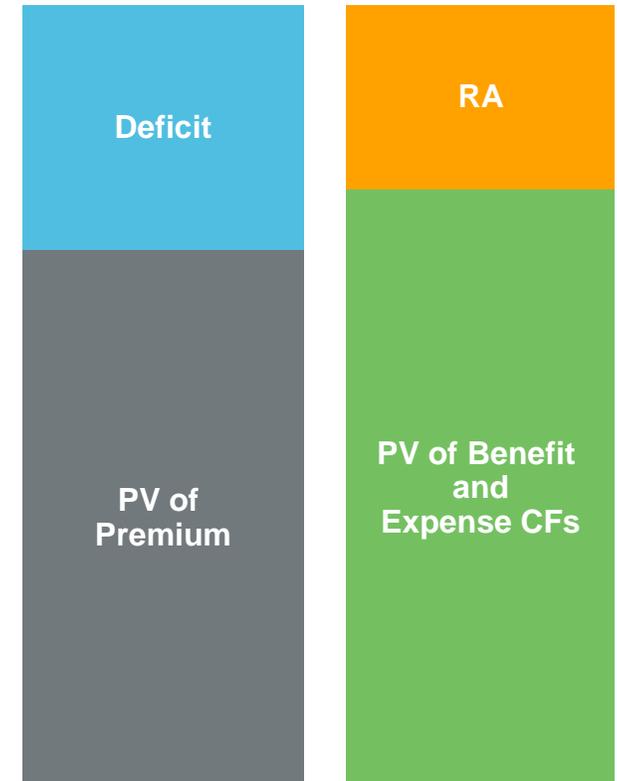
Onerous Contracts

At inception

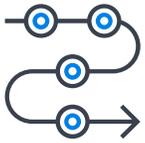
- A contract can be onerous at inception. In that case the deficit is recognised as a loss.

During the lifetime of a contract

- The CSM can decrease to zero due to unfavourable changes in cash flows. Change is recognised via CSM until it is depleted.
- Additional losses are recognised as losses and off balance-sheet a negative CSM is administered.
- If the contracts becomes profitable again due to favourable changes, first the recognised losses need to be earned back. When the losses are earned back a new CSM can be created.



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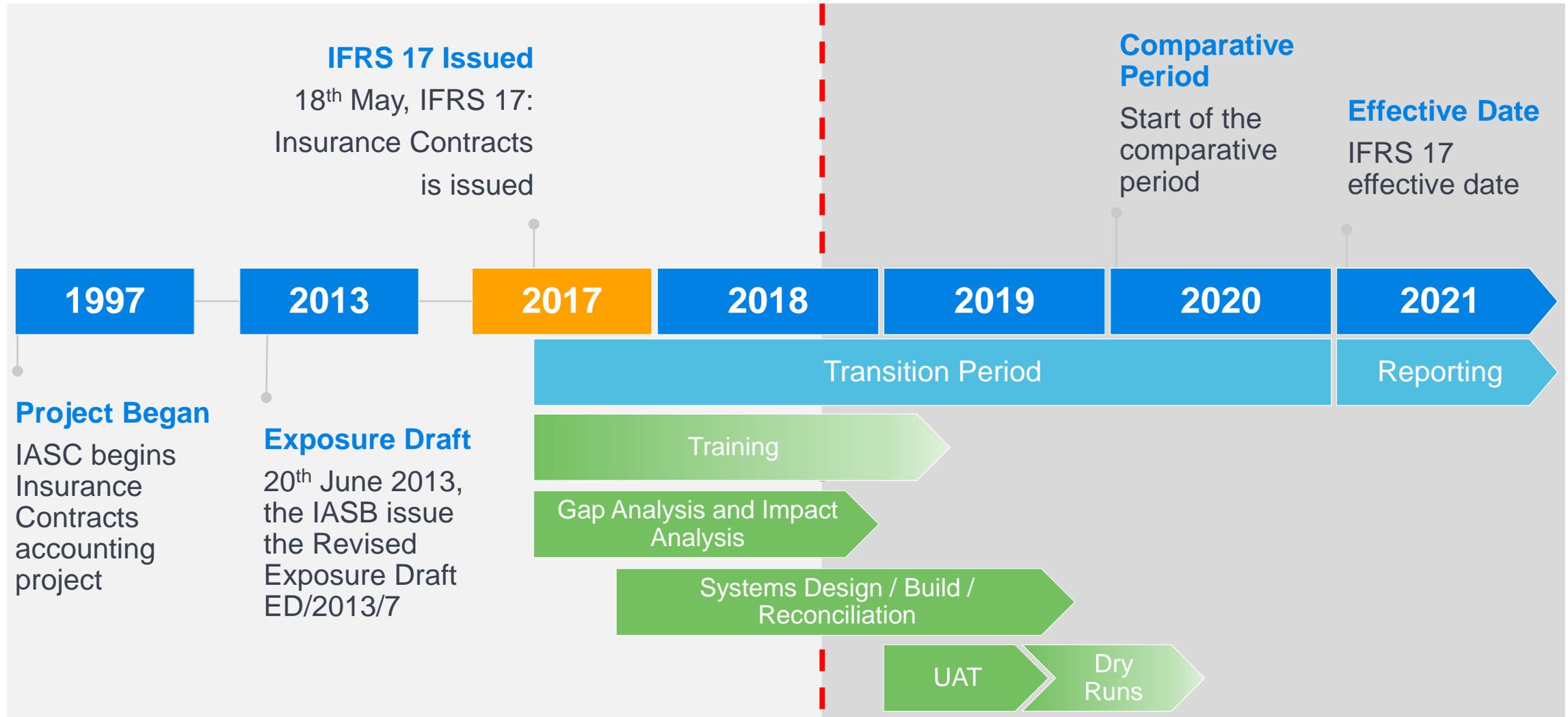
Implementation Progress



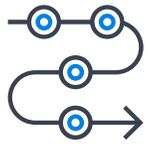
Industry Developments

Implementation progress

IFRS 17 Timeline



Today's agenda



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Implementation Progress



Industry Developments

Industry developments

Industry developments

IASB Transition Resource Group

- Group set up to assist the industry to implement the Standard
- Remit is to seek consensus on interpretation of the Standard
- Industry participants submit questions for discussion

EFRAG Technical Expert Group

- Responsible for issuing advice to the EU commission regarding endorsement of the Standard across the EU
- Consists of representatives from the Standard setters in key EU countries and expert practitioners

IASB Transition Resource Group

Recent issues

- Last meeting held on the 2nd May 2018
- Some of key issues discussed:
 - Coverage units:
 - TRG suggested that a standard approach should be “passage of time” i.e. policies in force but where this is not a good proxy other options could be explored
 - Savings contracts for which the VFA does not apply: CSM should be amortized in line with provision of both insurance and investment services e.g. a deferred annuity – this may lead to a change in the Standard
 - Granularity of information presented – disaggregating into profitable and non-profitable is not the way some insurers manage their businesses – this was touted as a “top concern or in the top three concerns” for a number of general insurers
 - Risk Adjustment: what does the Standard mean by an “entity”, the group or individual subsidiaries – the IASB Staff believe the Group level RA should be sum of their subsidiaries risk adjustments and therefore any allowance for diversification must be made at the individual subsidiary level
- Next meeting is over two days on the 26th / 27th September 2018
 - Papers yet to be released (at time of writing)

EFRAG Technical Expert Group

Recent developments

- EFRAG recently conducted an industry case study exercise. The CFO Forum presented its members' analysis of the key issues raised in the case study. The EFRAG Secretariat considered the issues and addressed them in a paper on 25 July 2018.
- Some of the issues raised:
 - Allocation of acquisition cash flows for contracts that are expected to renew
 - CSM amortization for contracts with investment and insurance components
 - Discount rates: should the CSM be amortized at locked-in or current rates?
 - Unbundling of multi-component contracts
 - Reinsurance mismatching in P&L
 - Approaches to transition: modified retrospective approach still too onerous
 - Operational complexities: business combinations; level of aggregation
 - Pressure on timeline: some case study respondents suggested that implementation should be delayed two years or more



Any questions?

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