



Institute
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IFRS 4 Phase II: Understanding the financial and practical impacts for reserving

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Overview

- Objectives
- Timelines
- Premium Allocation Approach
- Risk Adjustment
- Contractual Service Margin
- Discounting
- Reinsurance
- Presentation and Other Comprehensive Income
- Q & A

Objectives

1. Highlight key areas of the ED which may raise challenges in the run up to 2021

- Onerous contracts test under the Premium Allocation Approach (PAA)
- Calculation of Risk Adjustment and group level
- New presentation under IFRS 4

2. Discuss outstanding areas of uncertainty in the ED

- Mainly Life focussed
- However, discounting long term liabilities eg PPO's would be affected

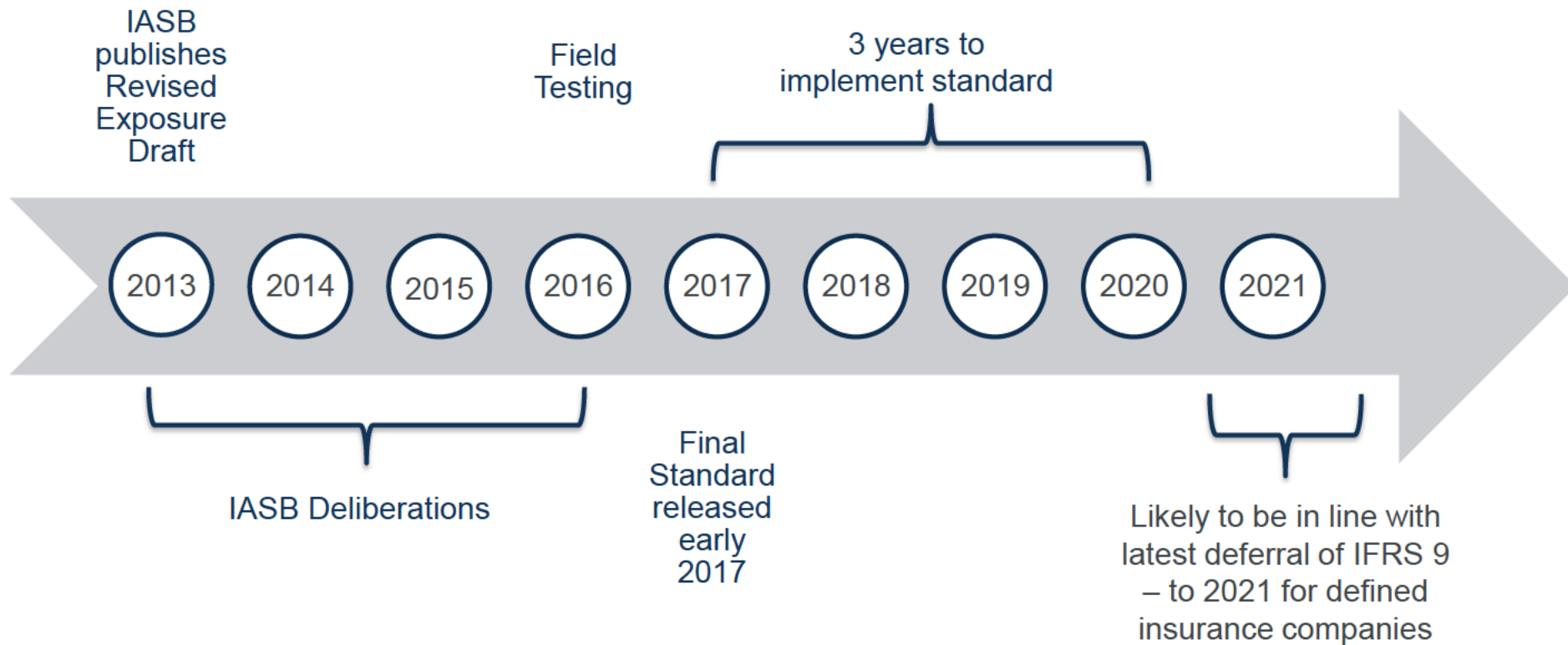
3. Synergies and differences to Solvency II and existing processes

- Impact on data, modelling assumptions, modelling processes and general ledger due to differences in the measurement approach, risk adjustment and new disclosures.

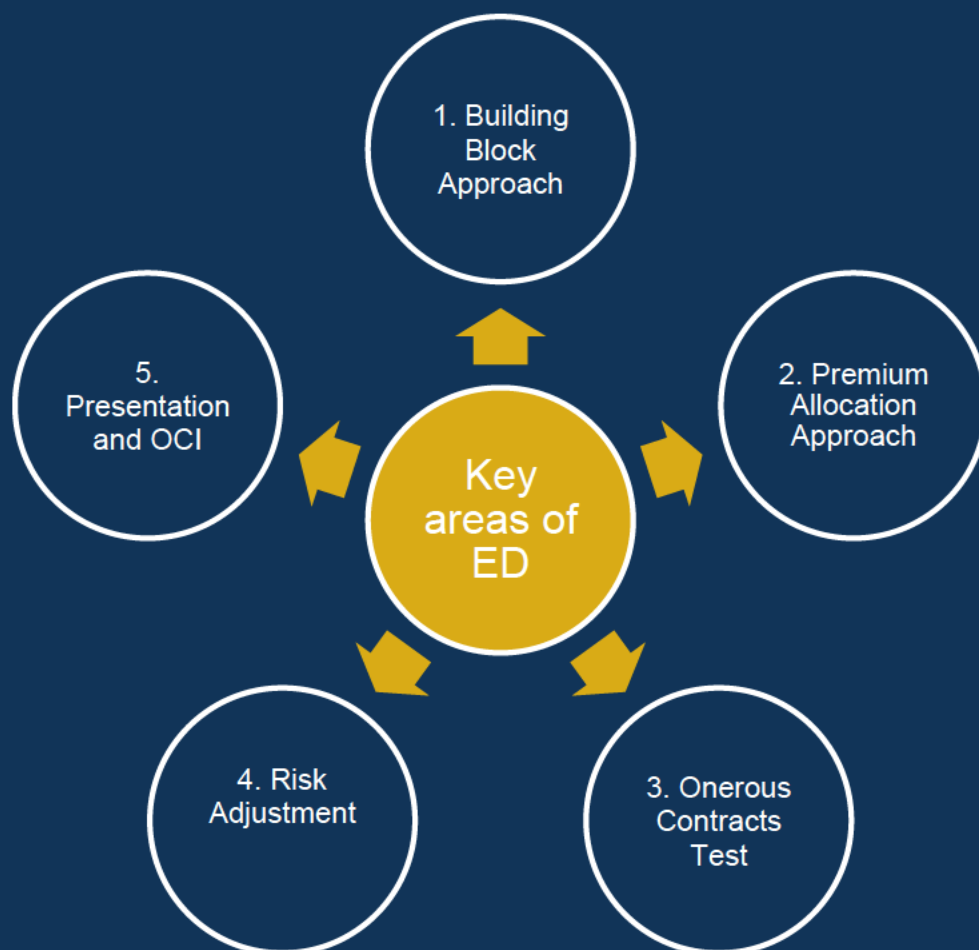
4. Key considerations in implementing IFRS 4 Phase II

- Example of how to apply the PAA
- Impact of the key areas of the ED

Timelines



Objective 1: Highlight key areas of the ED which may raise challenges in the run up to 2021



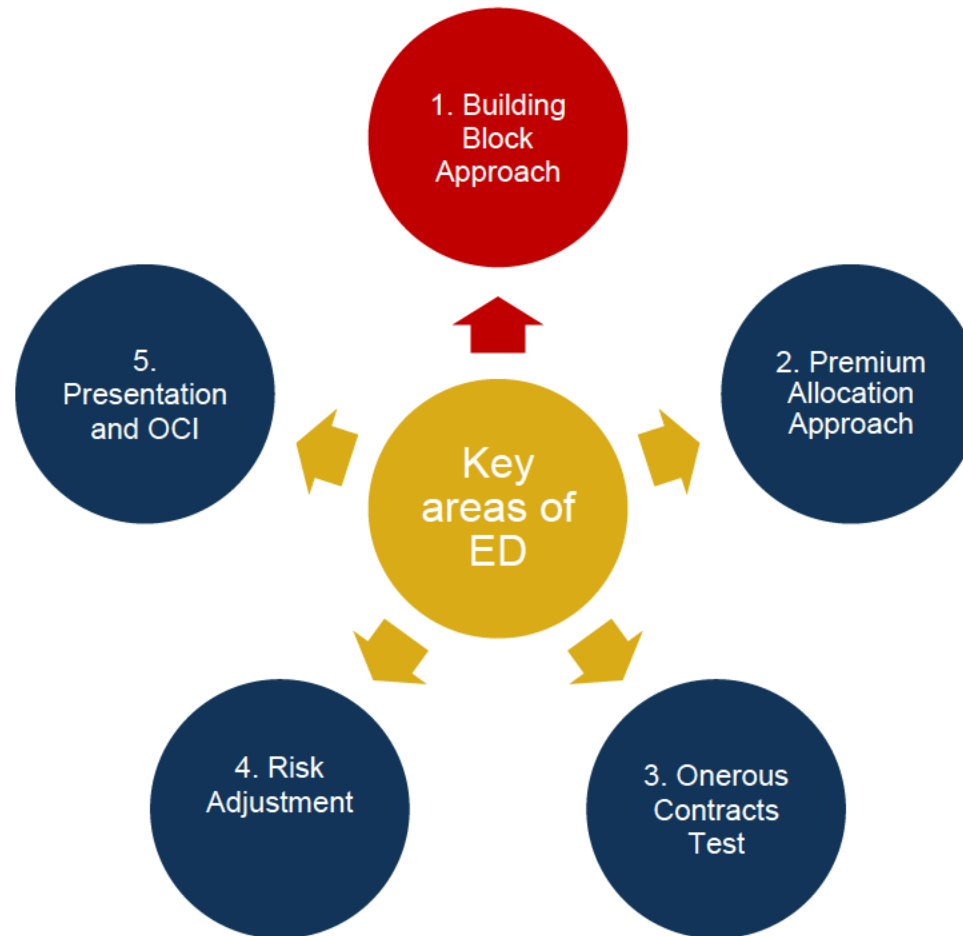
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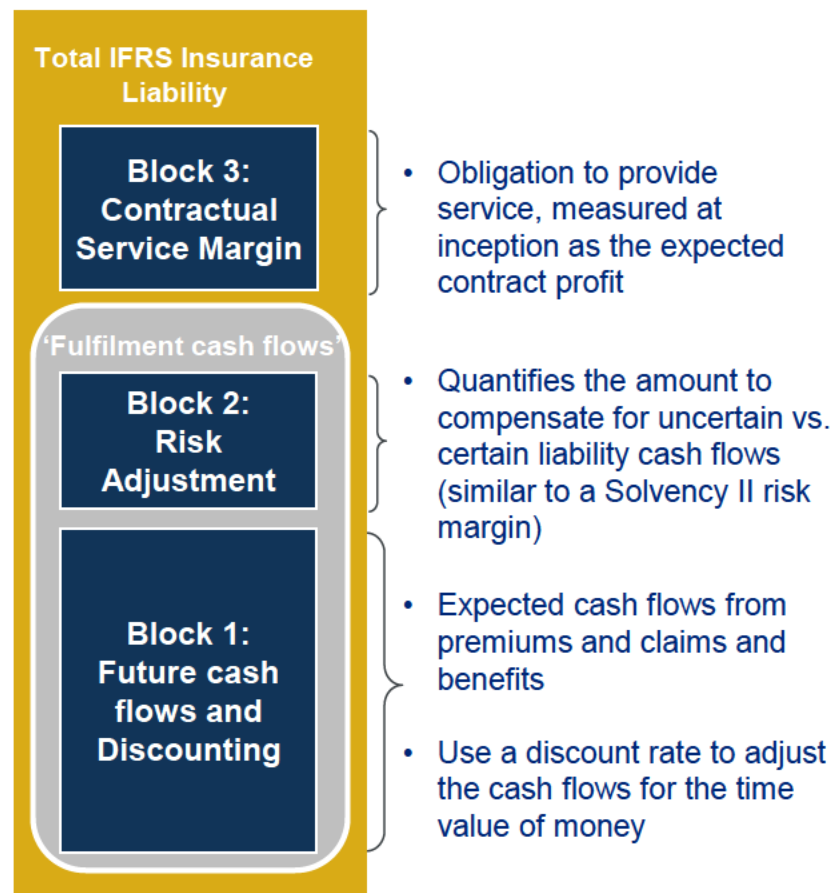
Building Block Approach ('BBA')



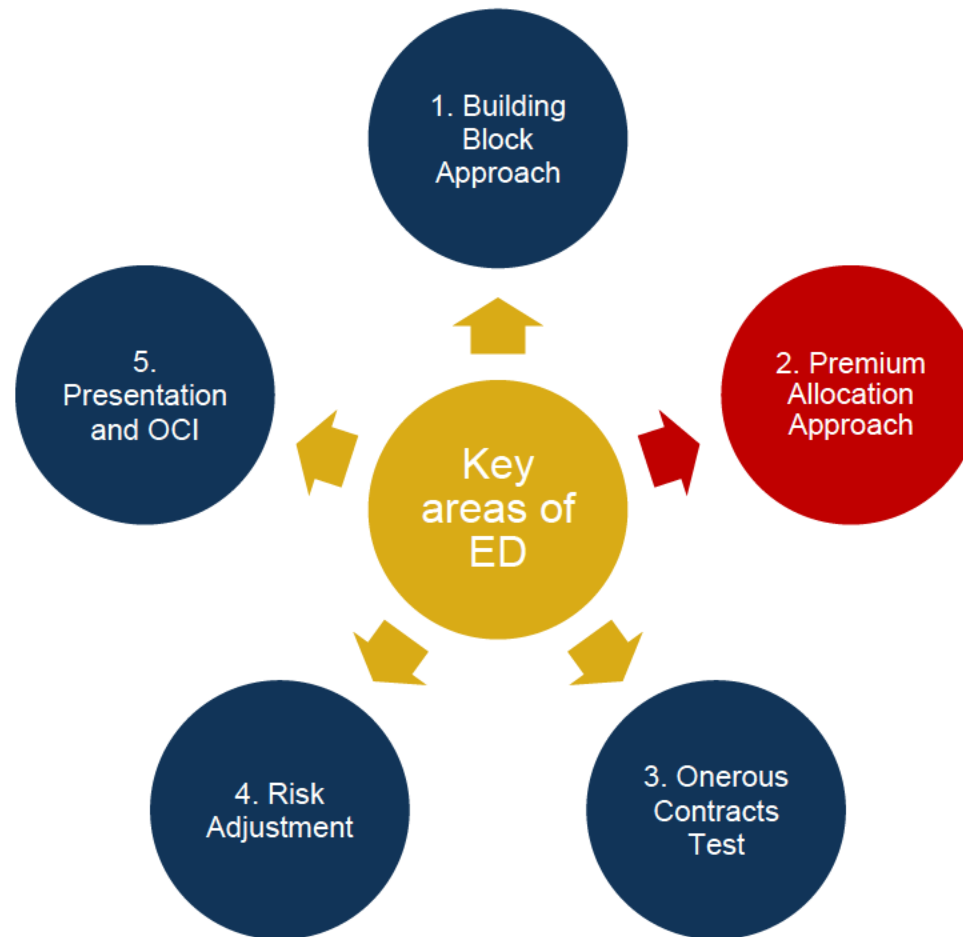
Building Block Approach ('BBA')

This approach is relevant for insurance contracts with a coverage period of more than one year. A simpler approach (Premium Allocation Approach) can be used over the coverage period only for contracts where the coverage is one year or less.

- Measurement model uses a **"building block" approach**
- Measurement objective is to quantify the notion of the insurer's "fulfilment of obligations under the contract"
- Measurement is **current – assumptions** must not be "locked-in", *except the discount rate used to calculate CSM*
- **Discount rate** can be developed from market interest rates using either a "top down" or "bottom up" approach
- Discount rates based on market interest rates whose **characteristics match** those of the liability
- **Contractual service margin (CSM)** eliminates the recognition of any future accounting profit at inception



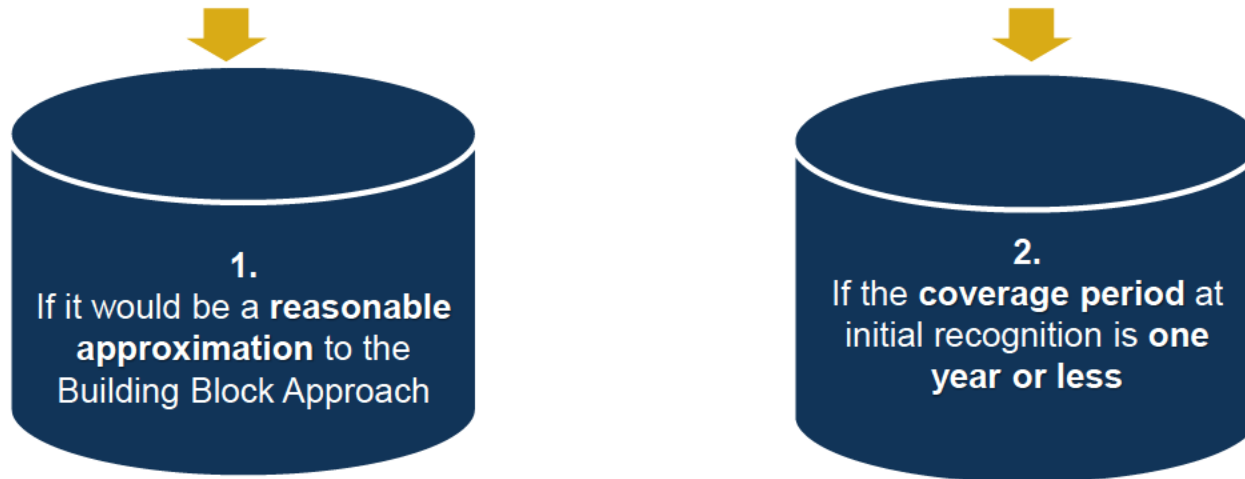
Premium Allocation Approach ('PAA')



Premium Allocation Approach ('PAA')

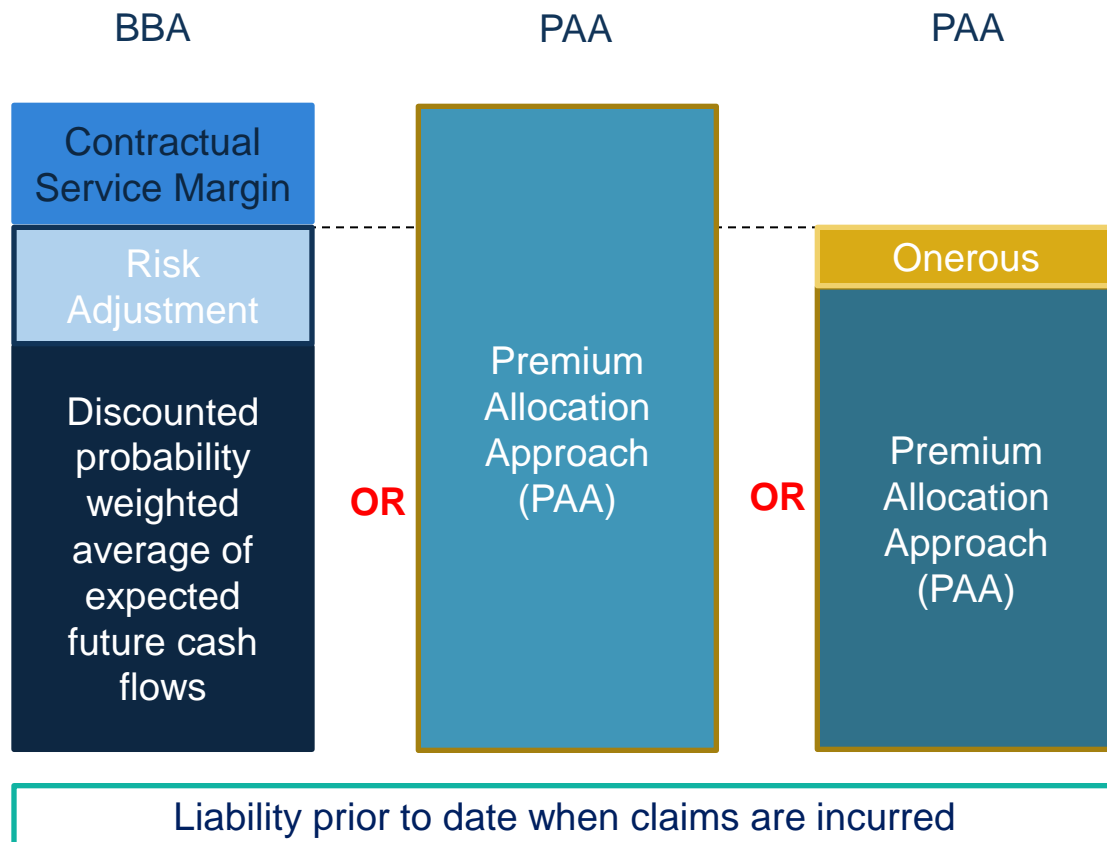
The Premium Allocation Approach (PAA) is a simplified approach to measuring the value of insurance contracts.

When to use the Premium Allocation Approach:



3. The PPA can also be used if components of the Building Block Approach would **not** have **significant variance** during the period before a claim

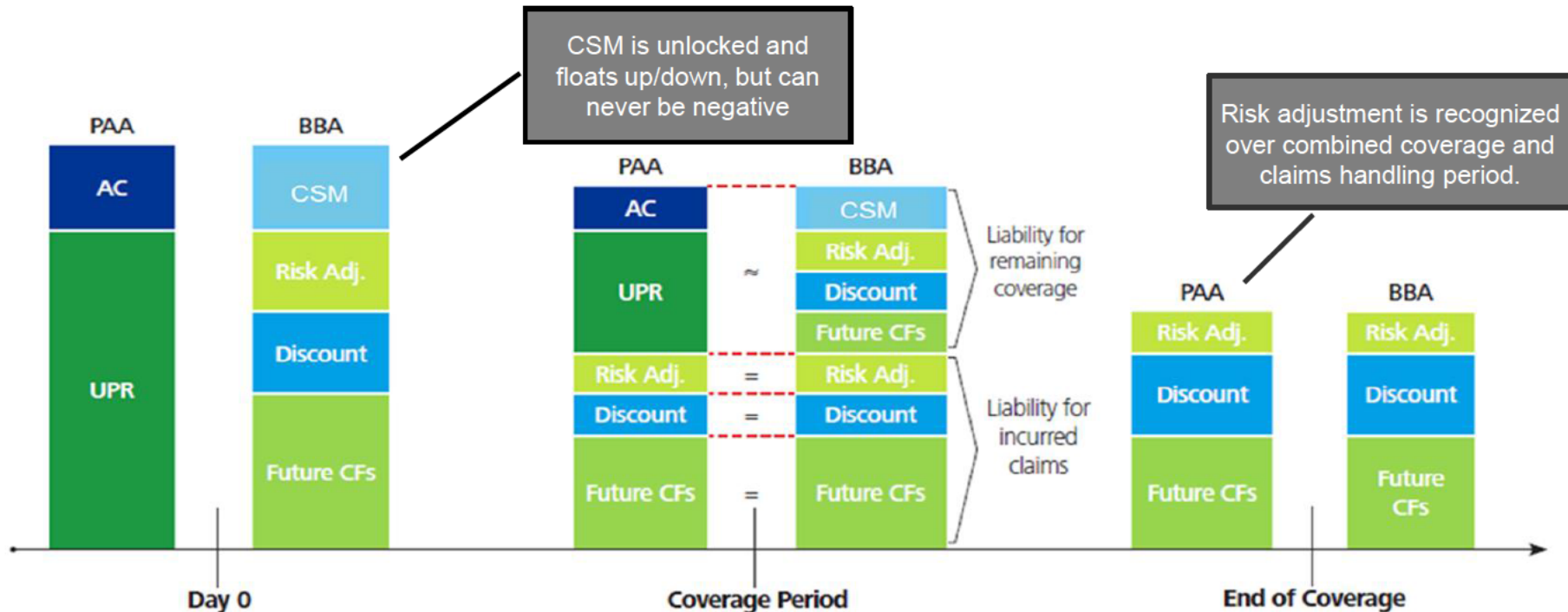
PAA: Measurement of Unexpired Risks



On subsequent measurement:

- Premium Allocation reduces systematically over the coverage period
- Contractual service margin (CSM) reduces linearly over coverage period
- CSM can be adjusted for changes in estimates of future cash flows and risk adjustment for future claims

PAA: Comparison of balance sheet measurement



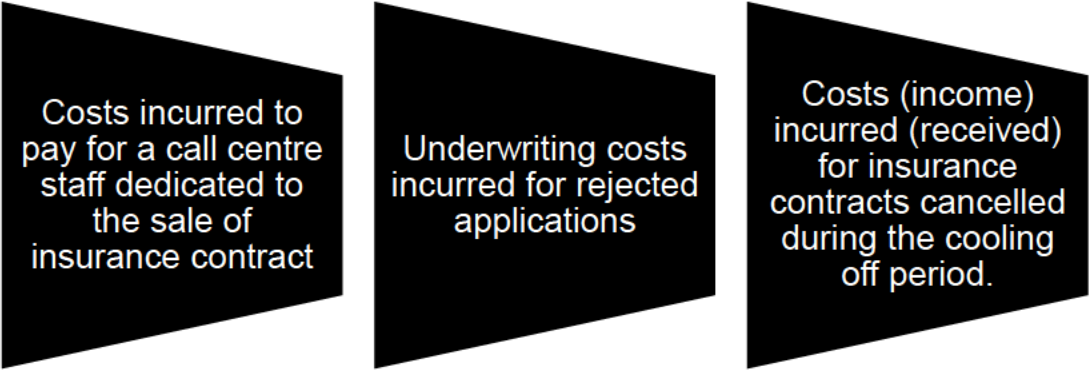
Acronym Key

AC	Acquisition costs
UPR	Unearned premium reserve
BBA	Building block approach
PAA	Premium allocation approach
CFs	Cash flows

Practical problems from pre-coverage cash flows

The new IFRS captures acquisition costs incurred to assemble the portfolio rather than restricting them to successfully sold policies. Acquisition costs for unsuccessful sales need to be accumulated in the system to be taken into account in the CSM calculation for the period.

For example:



Costs incurred to pay for a call centre staff dedicated to the sale of insurance contract

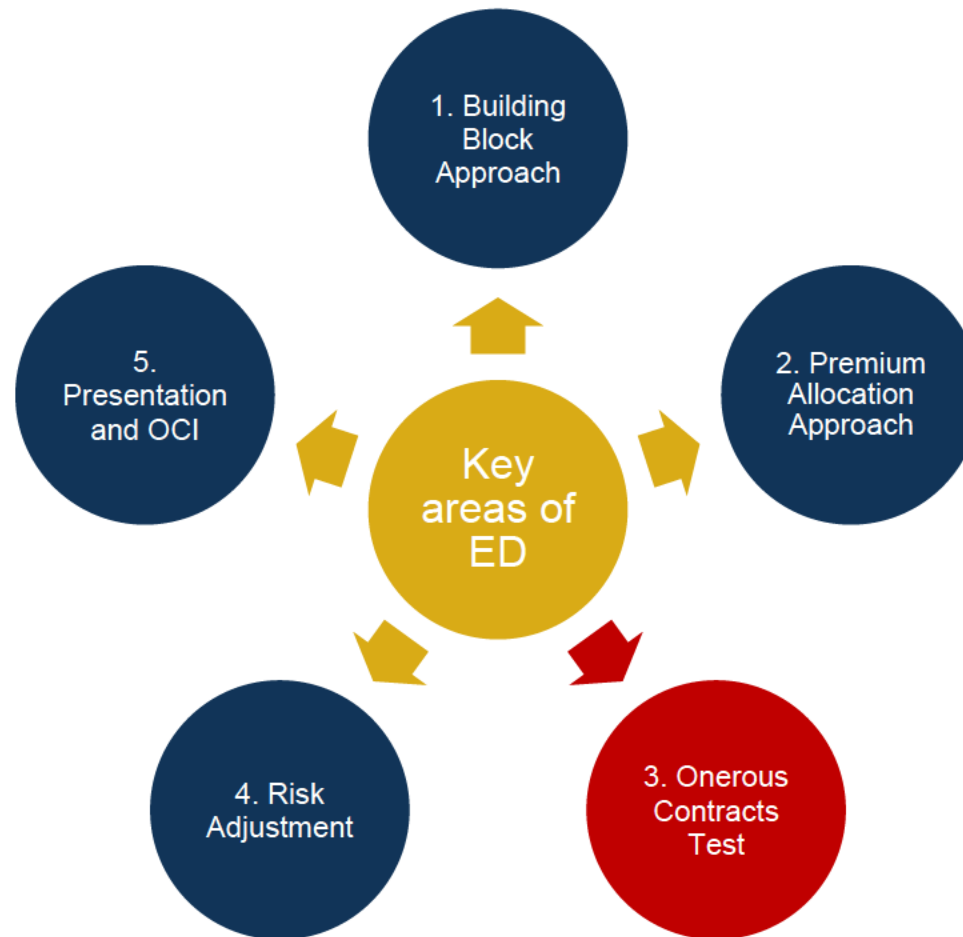
Underwriting costs incurred for rejected applications

Costs (income) incurred (received) for insurance contracts cancelled during the cooling off period.



Conclusion for implementation planning: Only directly attributable acquisition costs are allowed under IFRS 4 Phase II – and so R&D costs must be excluded

Onerous Contracts Test



Onerous Contracts

An entity shall recognise an onerous contract liability if, at initial recognition or subsequently, facts and circumstances indicate that the group of insurance contracts containing the contract is onerous. This applies for both BBA and PAA methods for future coverage.

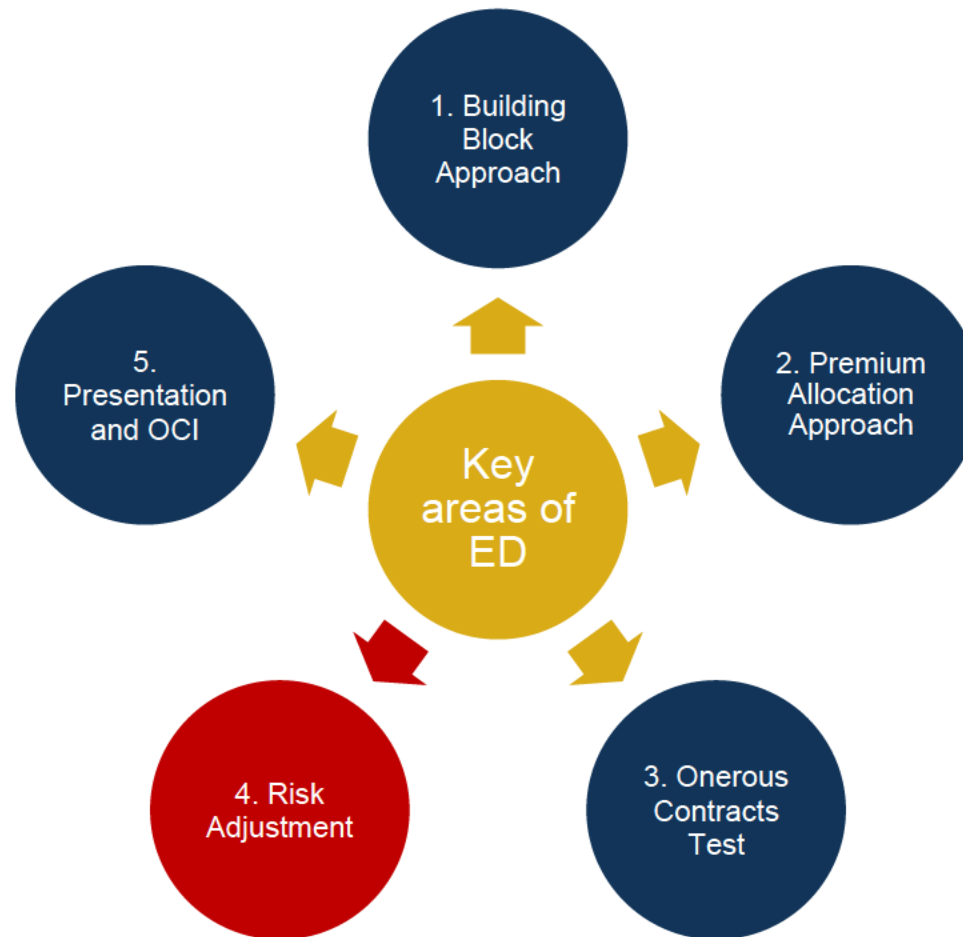
An Onerous Contract:

A contract is onerous if the expected present value of the future cash outflows from the insurance contract plus risk adjustment exceeds the expected present value of future cash inflows and the carrying amount of the liability for the remaining coverage period.

Testing to check if a contract is onerous should be done at group level

If significant financing component exists, time value of money needs to be accounted for

Risk Adjustment

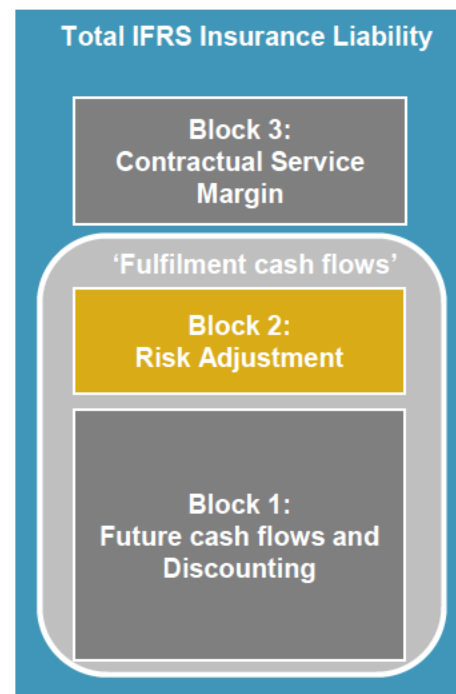


Risk Adjustment - Overview

Risk adjustment

The risk adjustment is the compensation the insurer requires to make it indifferent between the present value of the uncertain cash flows and the present value of certain cash flows.

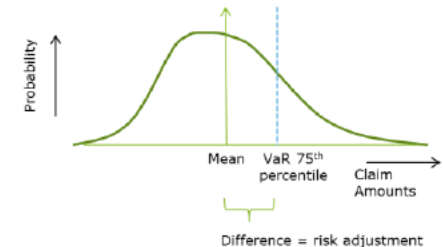
- Risk adjustment methodology has to meet principles defined in the standard.
- We consider here three methods that meet these principles:
 1. Value at Risk (VaR)
 2. Tail Value at Risk (TVaR)
 3. Cost of capital (CoC)
- Regardless of the method chosen, a confidence level equivalent (VaR) must be calculated and disclosed.
- There are similarities between the Solvency II risk margin and the IFRS 4 Phase II risk adjustment. Insurers are largely expected to leverage the Solvency II risk margin calculation to use for IFRS 4 Phase II.



Risk Adjustment – considered methods

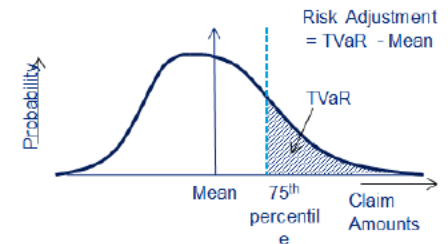
Value at Risk (VaR)

- Also known as a confidence interval method
- Uses an interval with a certain likelihood to include the desired outcome to provide an indication of the reliability of an estimate
- This method expresses uncertainty in terms of the extra amount that must be added to the expected value so that the probability that the actual outcome will be less than the amount of the liability (including the risk adjustment) over the selected time period equals the target level of confidence.



Tail Value at Risk (TVaR)

- The TVaR is the probability weighted average of losses in excess of the selected confidence level.
- The selected risk adjustment is the difference between the TVaR and the mean.
- Using this method to estimate the risk adjustment attributes a greater weighting to more extreme losses in the total technical provisions.



Cost of Capital (CoC)

- Calculates the charge required for the costs of holding capital over the run-off of the current claims reserves to final settlement.
- Strongly established in market practice due to Solvency II and used widely for placing a value on commercial transactions across the insurance sector.
- Three key assumptions required for the CoC method:
 - An initial assessment of capital which reflects the risk profile of the claims reserves at the financial reporting date
 - A model for estimating the release for capital over the period to final settlement of the current claims reserves (including total technical provisions)
 - The rate per annum of the compensation required for bearing risk.

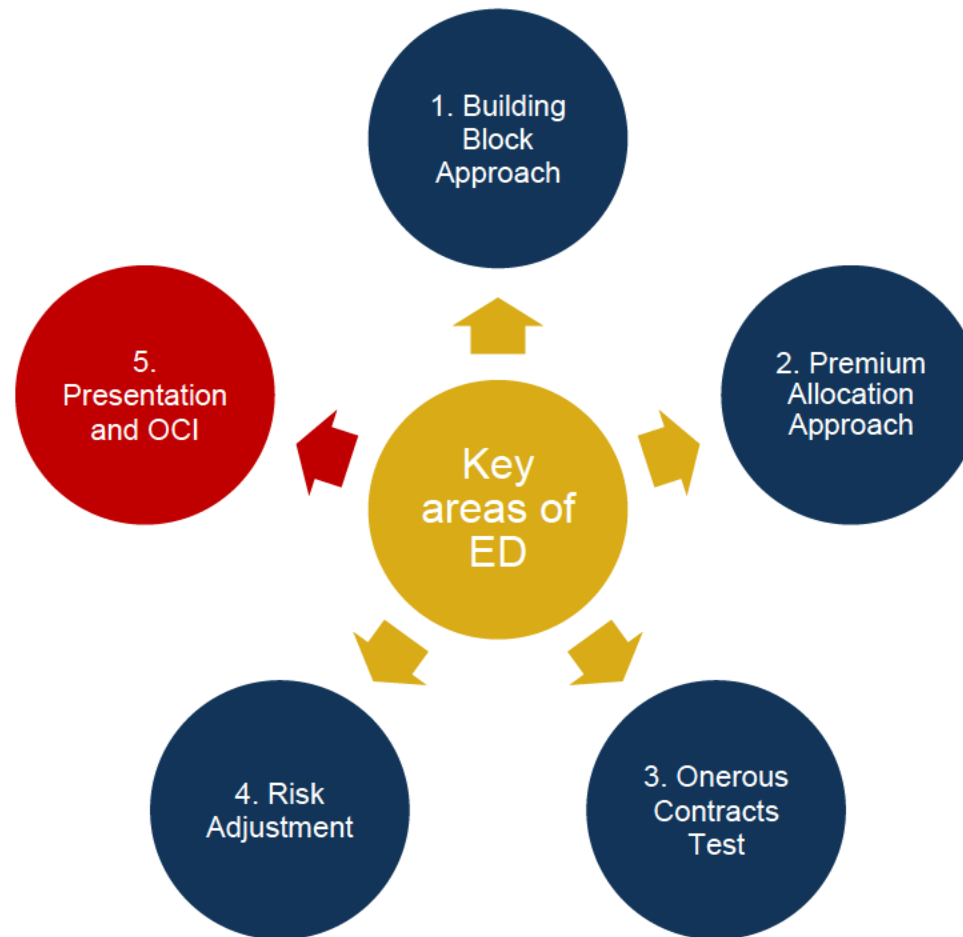
Risk Adjustment: Pros and Cons of each approach



Risk Adjustment: Pros and Cons of each approach

Benefits	Limitations
<ul style="list-style-type: none"> ✓ VaR: relatively easy to calculate and communicate ✓ VaR: use of this method is well established in the insurance market. ✓ TVaR: attributes more weight to the high cost low probability losses in the tail of the distribution. ✓ TVaR: applies fundamentally the same calculation technique as the mean estimate (but only applies to a truncated distribution in excess of the selected confidence level). ✓ CoC: already used to calculate SII risk margin ✓ CoC: implicitly account's for diversification effects ✓ CoC: easier to communicate than other methods ✓ CoC: provides stability of calculations across reporting cycles and largely does not suffer from over-reliance on historical data 	<ul style="list-style-type: none"> × VaR: provides limited information about the risk profile of the claims reserves and choosing a different confidence level can significantly vary the chosen risk adjustment × TVaR: increased model error as places more weight on the tail of the distribution which is least certain due to the low volumes of data available to model extreme risks × TVaR: Financial reporting objectives are to present a realistic and reliable estimate but TVaR focuses on extreme losses × TVaR: not established in market practice for financial reporting purposes × CoC: disclosed confidence level will not necessarily be consistent over time × CoC: risk adjustments are dependent on the required capital which is typically defined to be the excess capital required above the insurance liability (which is the best estimate liability plus the margins for uncertainty) × All: difficult to justify the accuracy of the calculations when the risk factors being considered do not follow clearly defined probability distributions. × All: over-reliance on historical data and may be highly dependent on the availability and credibility of that data. × All: Easier to implement within larger companies that have greater volumes of historic experience data. × All: This approach may not adequately establish margins for changes in experience assumptions or trends.

Presentation and OCI



Changes in presentation – Statement of comprehensive income

Current presentation format

The 2010 ED proposal of a 'summarised margin approach'

Gross written premium	X
Fees and commission	X
Net investment income	X
Net income	X
Policyholder claims	X
Change in insurance liability	X
Net policyholder claims and benefits incurred	X
Acquisition costs	X
Amortisation of acquired in-force business	
Administrative expenses	X
Total operating expenses	X
Profit or loss	X
Other comprehensive income	
Total comprehensive income	X

Changes in Risk adjustment	X
Changes in CSM	X
Experience adjustments and changes in estimates	X
Underwriting margin	X
Investment income	X
Interest on insurance contract liabilities	(X)
Investment Margin	X
Profit or loss	X

Insurance contract revenue	X
Incurred claims and expenses	(X)
Expenses	(X)
Amortisation of Acq. Costs	(X)
Changes in estimates and RA – claims	(X)
Unwind of prev. changes in est. – claims	X
Underwriting margin	X
Investment income	X
Interest on insurance contract liabilities based on P&L presentation rules	
contracts	(X)
Investment margin	X
Profit or loss	X
Effect of discount rate changes on insurance contract liabilities (OCI)	(X)
Total comprehensive income	X

Balance Sheet

Balance Sheet	
Bond	X
Cash	X
TOTAL ASSETS	X
Insurance Contract Liabilities	(X)
Loan	(X)
TOTAL LIABILITIES	(X)
Share Capital	X
Reserves	X
Other Comprehensive Income	
Assets	
Insurance contract liabilities	X
TOTAL EQUITY	
TOTAL LIABILITIES AND EQUITY	X

} IFRS 9

IFRS 4 Phase II

$$\sum(BB1 + BB2 + BB3)_{\text{at P\&L Discount Rate}}$$

+

Δ Liabilities using locked-in rate rather than the discount rate at reporting date

Objective 2: Discuss outstanding areas of uncertainty in the ED

- Will mainly impact life insurance companies
- However, General Insurers with PPO liabilities should consider the standard's approach towards discounting

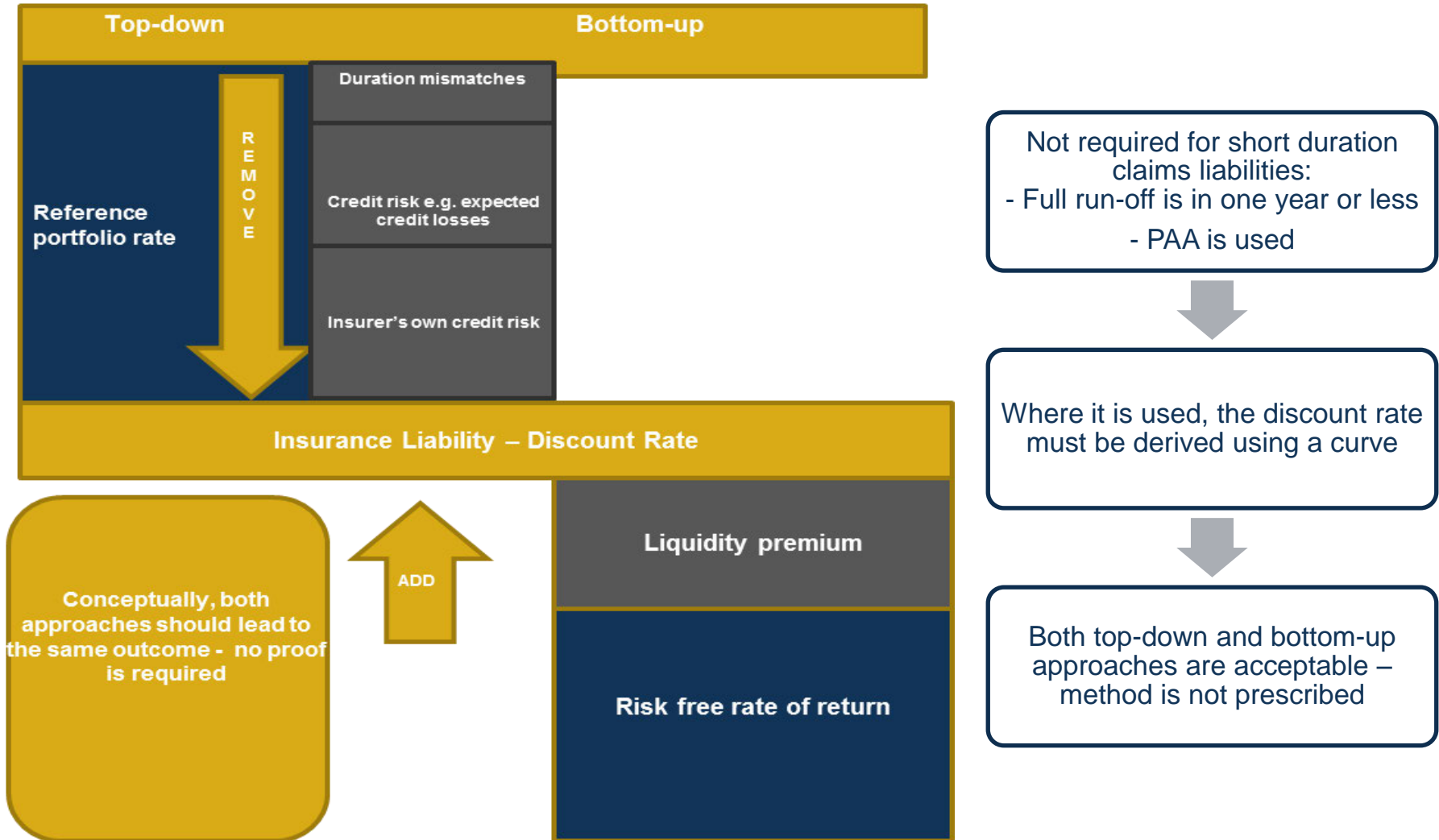
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Discounting: Top Down vs Bottom Up



Objective 3: Synergies and differences to Solvency II and existing processes

- Risk Adjustment
- Diversification Benefit
- Acquisition Costs
- Discounting
- Unit of Account
- Premium Allocation Approach and Onerous Contracts Test

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IFRS 4 Phase 2 vs Solvency II (1)

	IFRS 4 Phase II	Solvency II	Areas of Impact
Method adopted in calculating the Risk Adjustment	<ul style="list-style-type: none"> Allows insurers to adopt an approach that meets the principles as long as the confidence level and method is disclosed. Assumptions should be a true and fair reflection of the liabilities 	<ul style="list-style-type: none"> Cost of Capital approach must be used by insurers using a cost of capital rate of 6%. 	Medium Impact: Data, Actuarial systems, Assumptions will need to be reviewed and reparameterised
Diversification Benefit	<ul style="list-style-type: none"> Risk adjustment may be calculated and stored at the entity and Group Hold Co level, as the sum of the smaller entities can result in a different risk adjustment to the Group as a whole. 	<ul style="list-style-type: none"> Solvency II calculates the risk margin at a legal entity level. 	High Impact: Data, Actuarial systems
Directly attributable acquisition costs	<ul style="list-style-type: none"> Acquisition costs must be split into directly and indirectly attributable to new business. Indirect are taken straight to the P&L account. 	<ul style="list-style-type: none"> n/a 	Medium Impact: Insurers may not have systems in place at the required granularity Impact on general ledger, cost allocation systems

IFRS 4 Phase 2 vs Solvency II (2)

	IFRS 4 Phase II	Solvency II and entity wide (for risk adjustment)	Areas of Impact
Discounting	<ul style="list-style-type: none"> Yield curve may be determined using “top down” or “bottom up” 	<ul style="list-style-type: none"> EIOPA defined rates are used 	Low Impact: Lower impact on General Insurers. Bottom up approach or risk free rate is likely to be used.
Unit of Account	<ul style="list-style-type: none"> Portfolio level (for measurement, acquisition costs) or entity wide (for risk adjustment) Following derivation, all items must be allocated down to individual contracts / groups at inception to test for onerous contracts. Calculation of financial statement items is via aggregation of groups after inception. 	<ul style="list-style-type: none"> Pre-defined Solvency II classes 	Medium / High Impact: Must update data systems to be able to track different levels of granularity
Premium Allocation Approach	<ul style="list-style-type: none"> Simplified approach for General Insurers where the coverage period is less than 1 year. Additional test for onerous contracts required. 	<ul style="list-style-type: none"> n/a 	High Impact: Likely all General Insurers will use this approach, must allow for Onerous Contracts Test

Objective 4: Key considerations in implementing IFRS 4 Phase II (including examples)

- Current IFRS to IFRS 4 Phase II
- Application of Premium Allocation Approach
- How does the new presentation impact your business?
- Impact on Operating Models
- Summary of key implication issues

1. Highlight key areas of the ED which may raise challenges in the run up to 2021

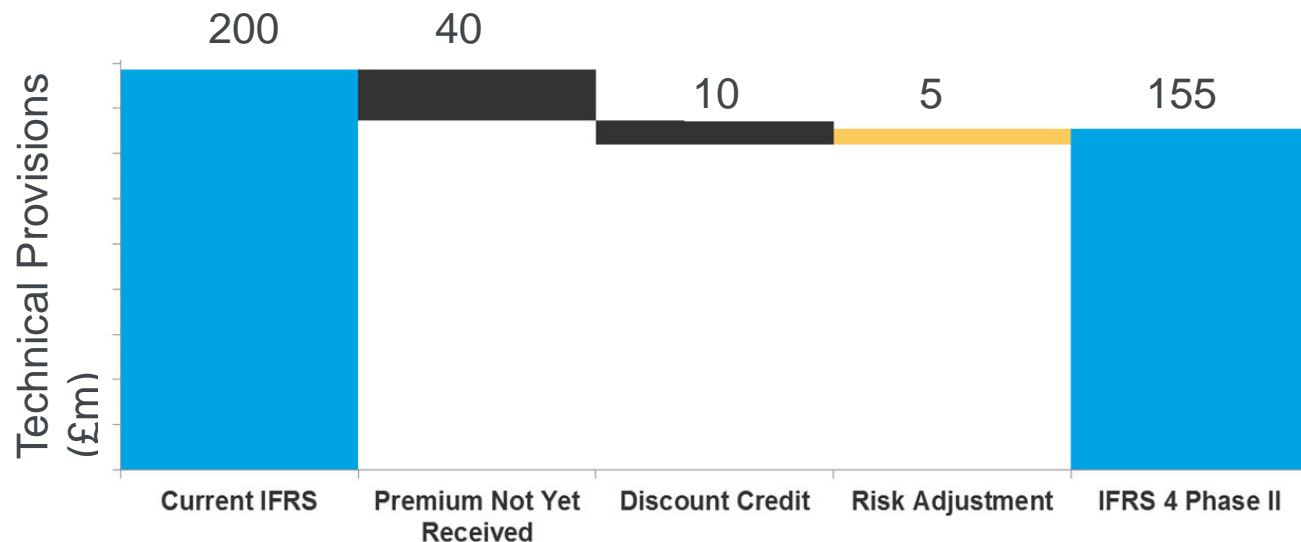
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Current IFRS to IFRS 4 Phase II

Single Year Policies – Current IFRS to IFRS 4 Phase II Bridging Analysis



Source of change in reserves

Note that this assumes that the Current IFRS reserves are best estimate. Removal of prudence can be the largest item in the waterfall.

Example of Premium Allocation Approach

The example shows a portfolio of one year, single premium contracts, written uniformly during year one.

Current GAAP: Unearned Premiums Reserves (UPR) and Undiscounted Claims Reserves

T in years	0	1	2	3	4	5
Premium	0	1000	0	0	0	0
Earnings pattern	0%	50%	50%	0%	0%	0%
UPR	0	500	0	0	0	0
DAC	0	150	0	0	0	0
1 UPR net of DAC	0	350	0	0	0	0
2 Claims Reserve	0	225	375	225	75	0
Paid Claims and Expenses	0	75	150	150	150	75
3 Technical Provision net of DAC	0	575	375	225	75	0

1. Pre-claims reserves equal to UPR less DAC.

2. Post claims reserves differ from claims reserves by discount and risk adjustment.

3. Overall impact on technical provisions is driven by change in value of claims reserves.

IFRS 4 Phase 2: Using Premium Allocation Approach

T in years	0	1	2	3	4	5
Premium	0	1000	0	0	0	0
Pre-coverage acquisition costs	0	300	0	0	0	0
1 Pre-claims Reserves	0	350	0	0	0	0
Accreted interest	0	0	0	0	0	0
2 Post-claims Reserves	0	233	389	233	80	0
Paid Claims and Expenses	0	75	150	150	150	75
Unwind of discount*	0	3	9	9	5	1
Change in RA	0	23	16	-16	-15	-8
3 Technical Provisions	0	583	389	233	80	0

Impact on Operating Models for Insurers



- **Data and Processes**

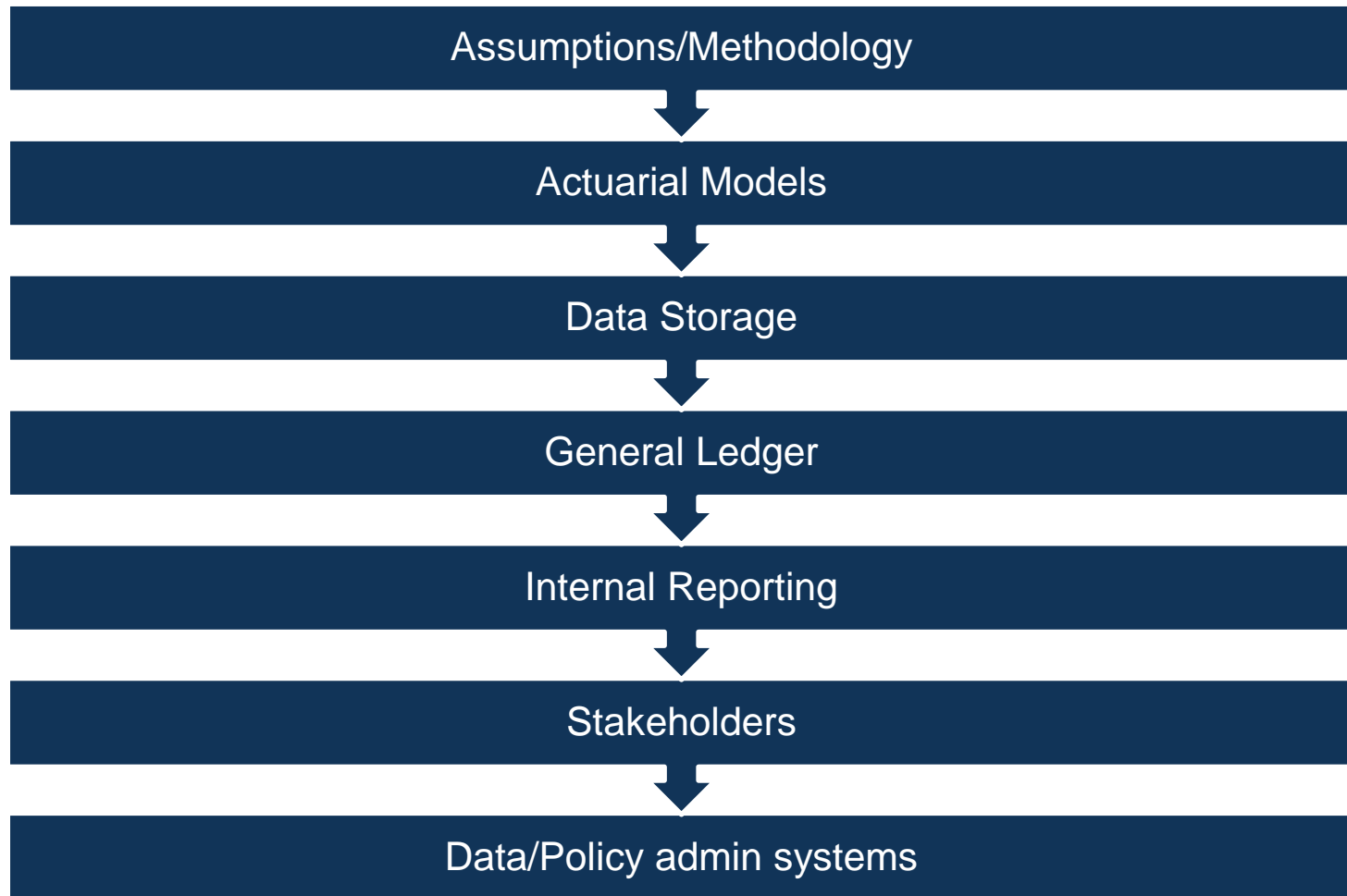
- **Disclosure Requirements**

- **External Communication with Stakeholders**

- **Working Day Timetable**

- **Internal Communication**

Summary of Implications for Insurers



Questions

Comments

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