Non-Bank Financial Institutions Regulatory Authority Inception Meeting
IFRS 17 Accounting Standard - Training

Presented by:

Ezekiel Macharia – FIA, FeASK

Chief Actuary and Managing Director,
Kenbright Actuarial & Financial Services Limited

14th March 2023

Agenda

Talking Points

- About Us
- Project Team
- Scope of Work
- Approach & IFRS17 Background
- Project Plan

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About Us

About Us

Kenbright Actuarial & Financial Services Limited (KAFS)

Kenbright Holdings Limited

- *Established in 1993 and operates in the East African market*

Kenbright Actuarial & Financial Services Limited (KAFS)

- *Subsidiary of Kenbright Holdings Limited – established in 2015*

- Second in the entire African continent to be accredited for Quality Assurance by the Institute and Faculty of Actuaries (UK)

Project Team

Team Composition

Project Team

Training team - Kenbright staff

Lead Actuary & Trainer - Ezekiel Macharia, FIA
Insurance & Regulatory Expert – Sammy Makove ,MBS
Assistant & Engagement Lead – Mwanamkulu Hasa Mlawa, AIA

Life and General Insurers Corporate Clients

- *25% of the entire Kenyan General Insurance Market*
- *15% of the entire Ugandan Insurance Market*
- *10% of the entire Tanzania General Insurance Market*

Team Composition

Project Team

- Team Leader & Lead Trainer
- Over 15 years' experience in insurance consulting
- Undertaken Kenyan Market Industry survey on IFRS 17 preparedness in association with the Association of Kenya Insurers.
- Appointed actuary for several insurers in Kenya including Jubilee (largest insurer in east Africa)

Ezekiel Macharia
Project Lead

- Engagement Leader & Assistant Trainer
- Over ten years experience in insurance consulting
- Leading IFRS 17 consultant for East Africa insurers.

Mwanamkulu Mlawa
Assistant Project Lead

- Former IRA commissioner
- Over 40 year in insurance regulatory
- Developed and reviewed regulatory impact of IFRS 17 for the IRA of Kenya

Sammy Makove
Insurance & Regulatory Expert

Support Staff

Support the technical team in:
- Training reports preparation
- Data and feedback collation

Scope of Work

Scope of Work

Project Objectives

IFRS 17 Standard training to NBFIRA Staff

- The potential implications for insurers applying IFRS 17;
- Considerations of the adoption of IFRS 17 for regulatory and supervisory purposes based on the guidance of the Insurance Core Principles (ICPS) of the IAIS
- The need for supervisors to understand the impact and steps to ensure preparedness and adequate supervisory oversight of transition and implementation
- Current NBFIRA regulatory capital requirements and its adequacy or lack thereof for the IFRS 17 regime
  - Develop & implement an industry engagement strategy
  - NBFIRA developing an IFRS 17 implementation plan
- Assist in developing a Guidance Note to be shared with the industry

Key Staff
Training

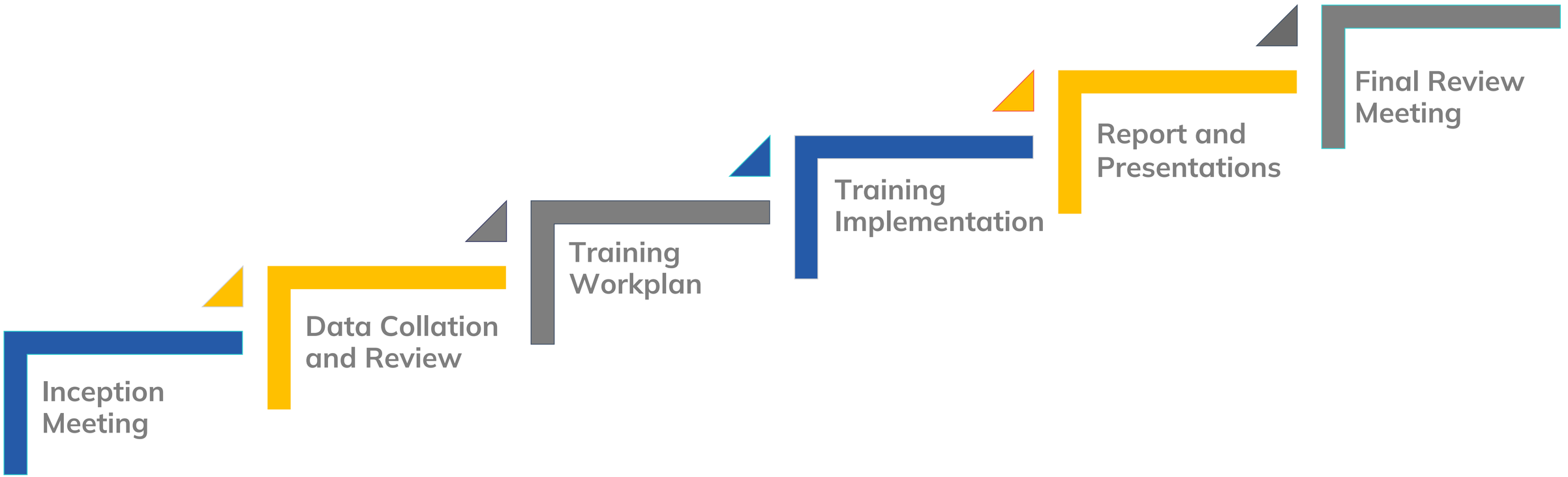
Training is relevant to the following key staff

- Board of Directors
- Internal Audit
- CEO
- Insurance
- Strategy
- Risk Management
- I.T
- Human Resource & Administration
- Finance

Approach & IFRS17 Background

Approach

Project Methodology

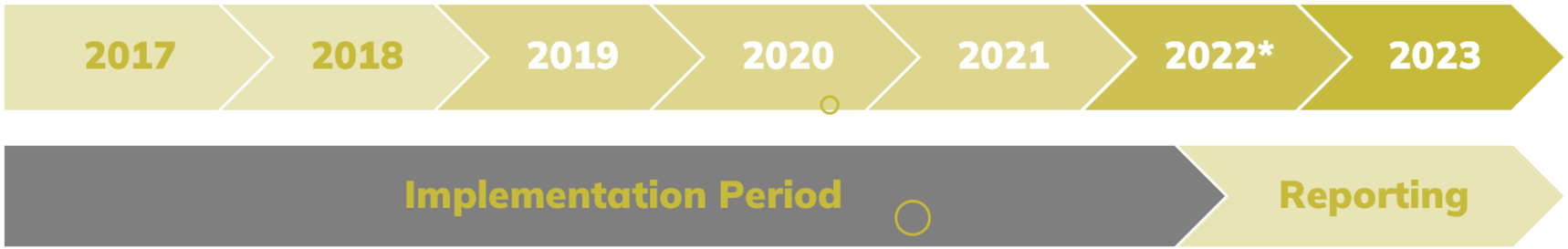


History of IFRS17

IFRS17 Standard is issued in Year 2017

Testing, Parallel Runs

Effective 1 Jan 2023



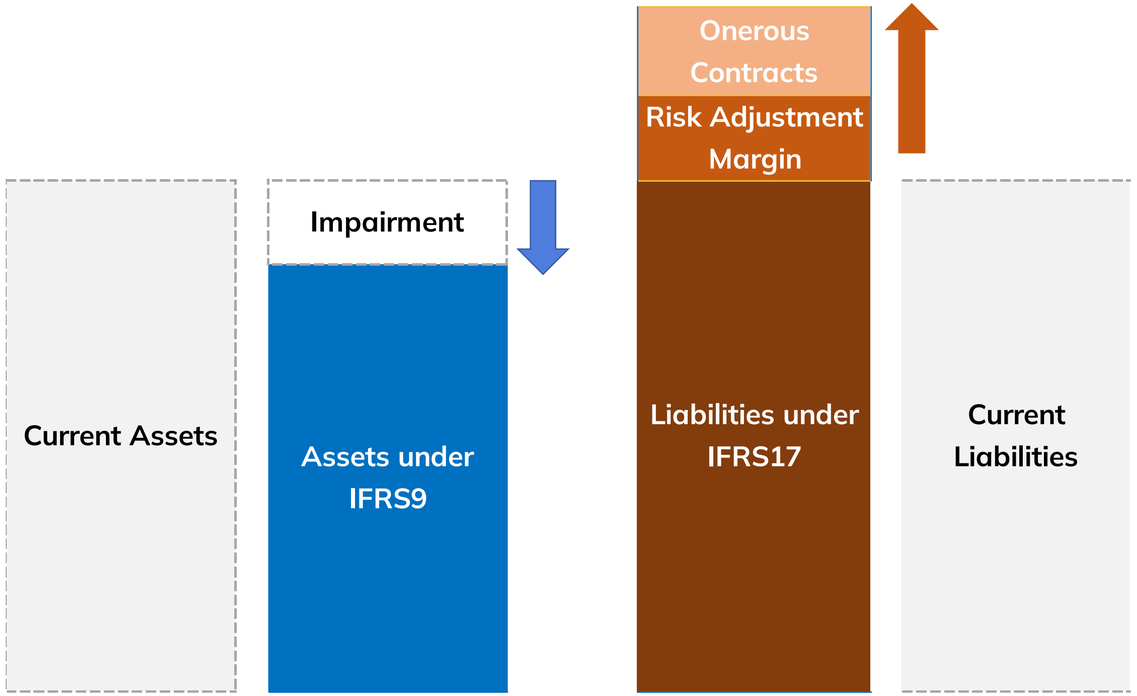
**Comparative period starts from 1 Jan 2022.*

March 2020: Extension of implementation from Y2022 to Y2023

Key Changes

Technical Changes

- **Asset & Liability changes:** Companies are expected to apply IFRS 9 Financial Instruments (“IFRS9”) and IFRS 17 Insurance Contracts (“IFRS17”) simultaneously on 1 Jan 2023.



Key Changes

Technical Changes

- **Reinsurance contracts** are expected to be treated as **stand-alone** contracts independent of the accounting of the underlying insurance contract. This is different from the **current "mirroring approach".**

Key Changes

Technical Changes

- **Tax:** Impact of on-off IFRS17 transition profit or losses for tax purposes to mitigate potential tax demands to insurers.

- This is expected to affect life insurers more than general insurers.

Key Changes

Technical Changes

- **Onerous Contracts:** The market will need to come up with models that represent the pricing assumptions of the general products underwritten.

Key Changes

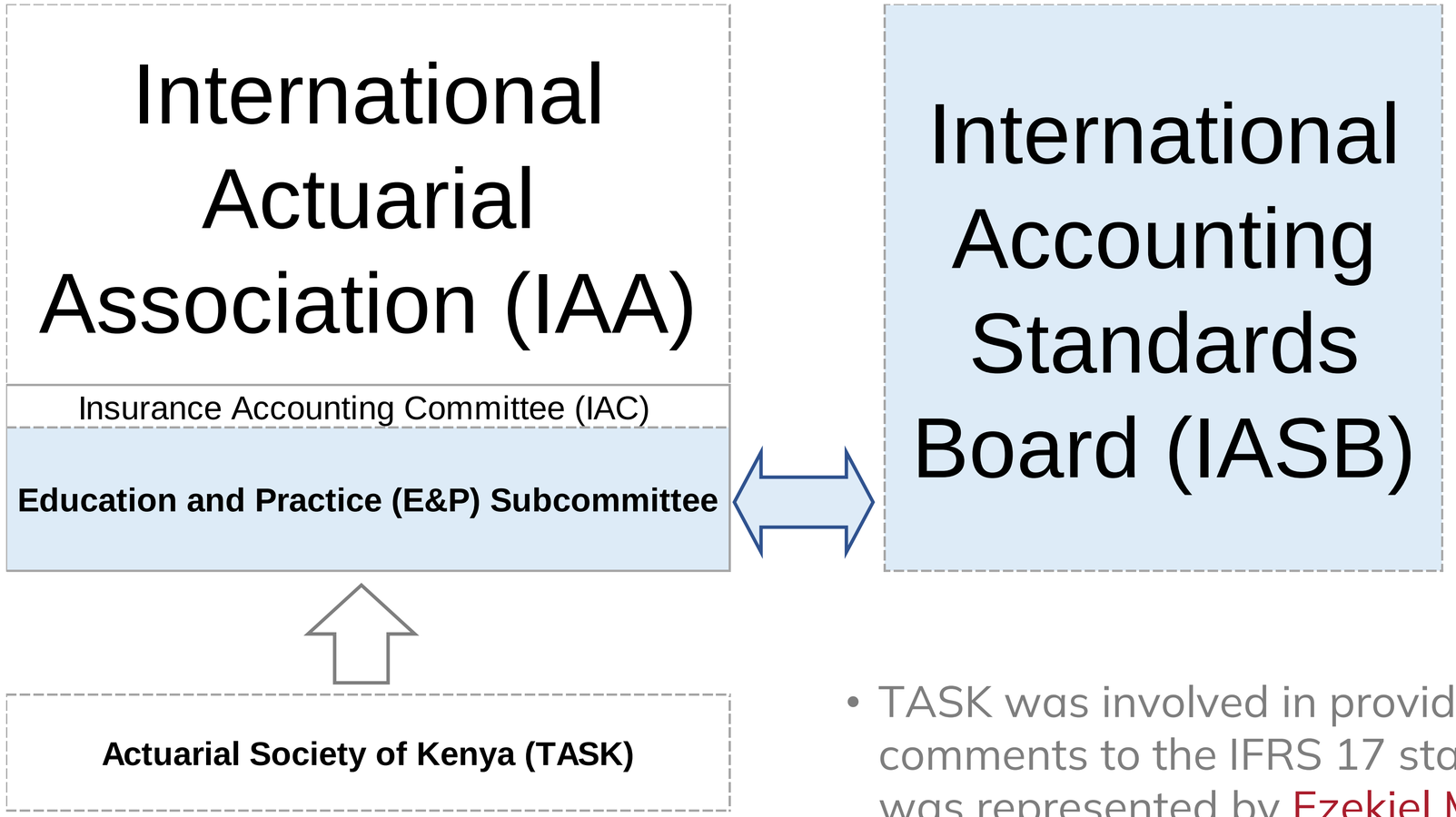
Operational Changes

- **Project Management & IT:** The IFRS17 project implementation is expected to take at least 5 months and some of the key requirements include integration to the General Ledger within the insurer's accounting system.
- **Policy Endorsements:** Any changes to a policy will require the old policy to be derecognised and the amended policy to be recognised as a NEW policy.
- **Amortization of acquisition costs (e.g. intermediary commissions for CAR & Bonds business):** Finance and Policy Administration will need to change to accommodate this feature.

OVERVIEW OF THE IFRS 17 MODELS

My Experience

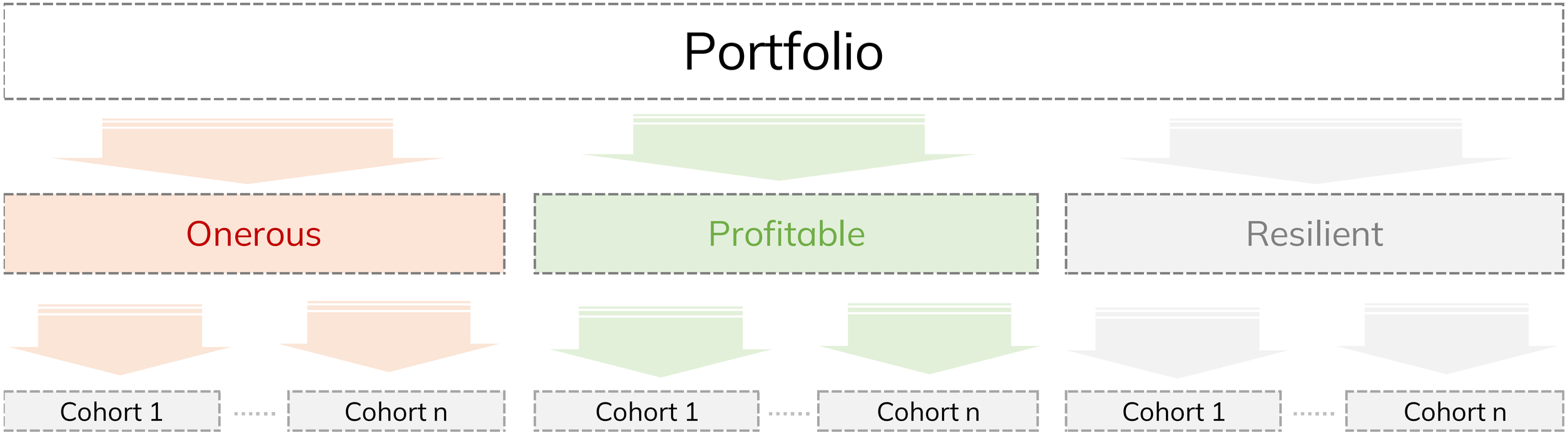
Involvement in IFRS17



- TASK was involved in providing comments to the IFRS 17 standard and was represented by Ezekiel Macharia and Seth Chengo through IAA.

Aggregation

Data Grouping



NOTES

1) Portfolio means insurance policies that have similar risks AND managed together

2) Onerous means Loss Making (needs to be determined at the beginning of the policy)

3) Resilient means that we are not sure if the policy will be profitable or loss making

3) Under Cohort, policies should not be more than one year apart

Measurement Approach

One Measurement Model & its modification & simplifications

- **There is only ONE measurement approach - The General Measurement Approach (GMM) / the Building Block Approach (BBA)**

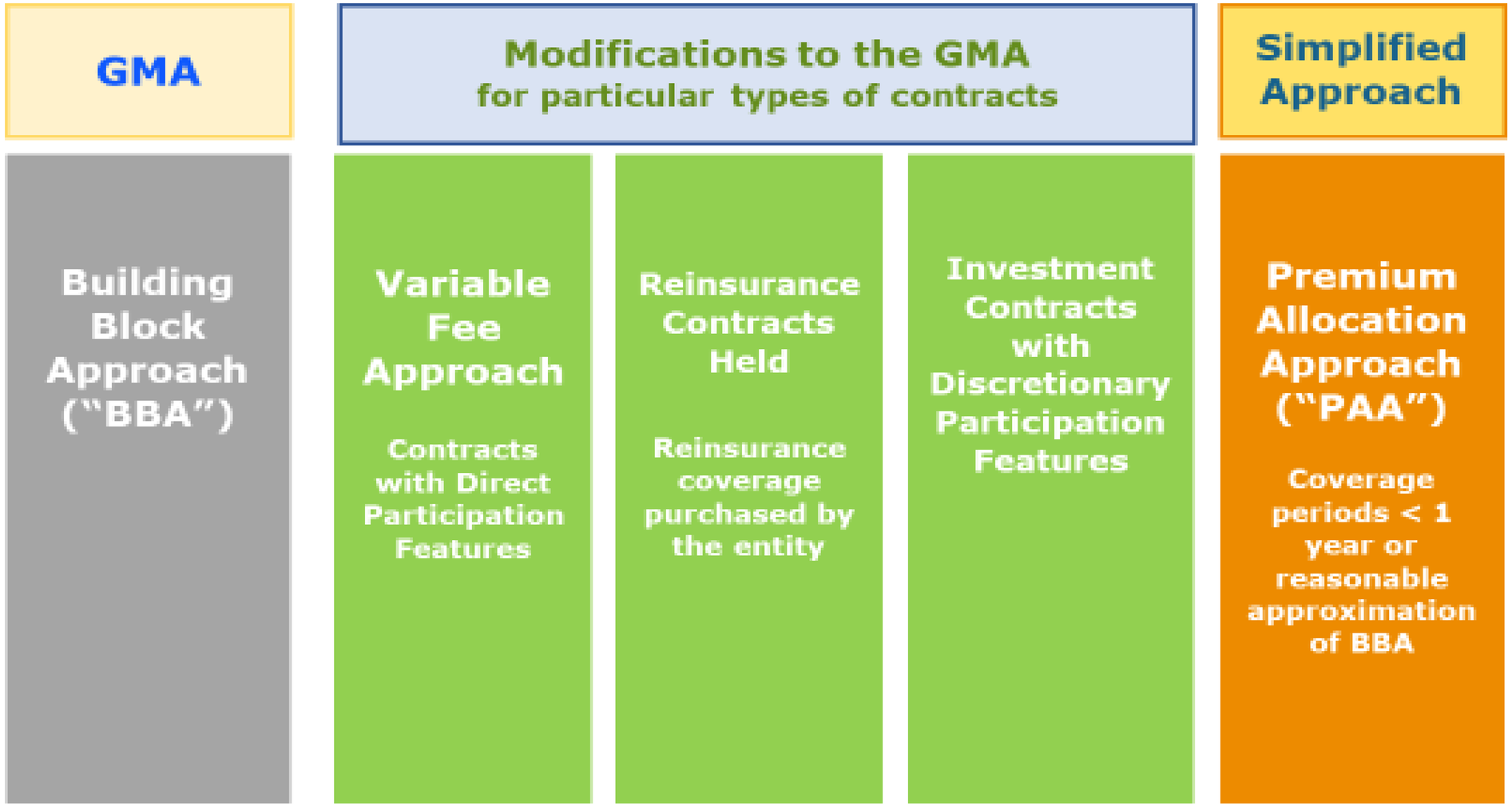
- The other approaches are (1) simplifications or (2) modifications to the main approach

    - **Simplification - Premium Allocation Approach (PAA)** – can be used (a) if the coverage of the contract is one-year or less or (b) if the measurement is not expected to materially deviate from the main approach *(a good approximation)*

    - **Modification – Variable Fee Approach (VFA)** – Modification in CSM to consider the insurer's share of the fair value of assets used in Direct Participating Contracts e.g. 'with-profit' life insurance policies

The IFRS 17 Models

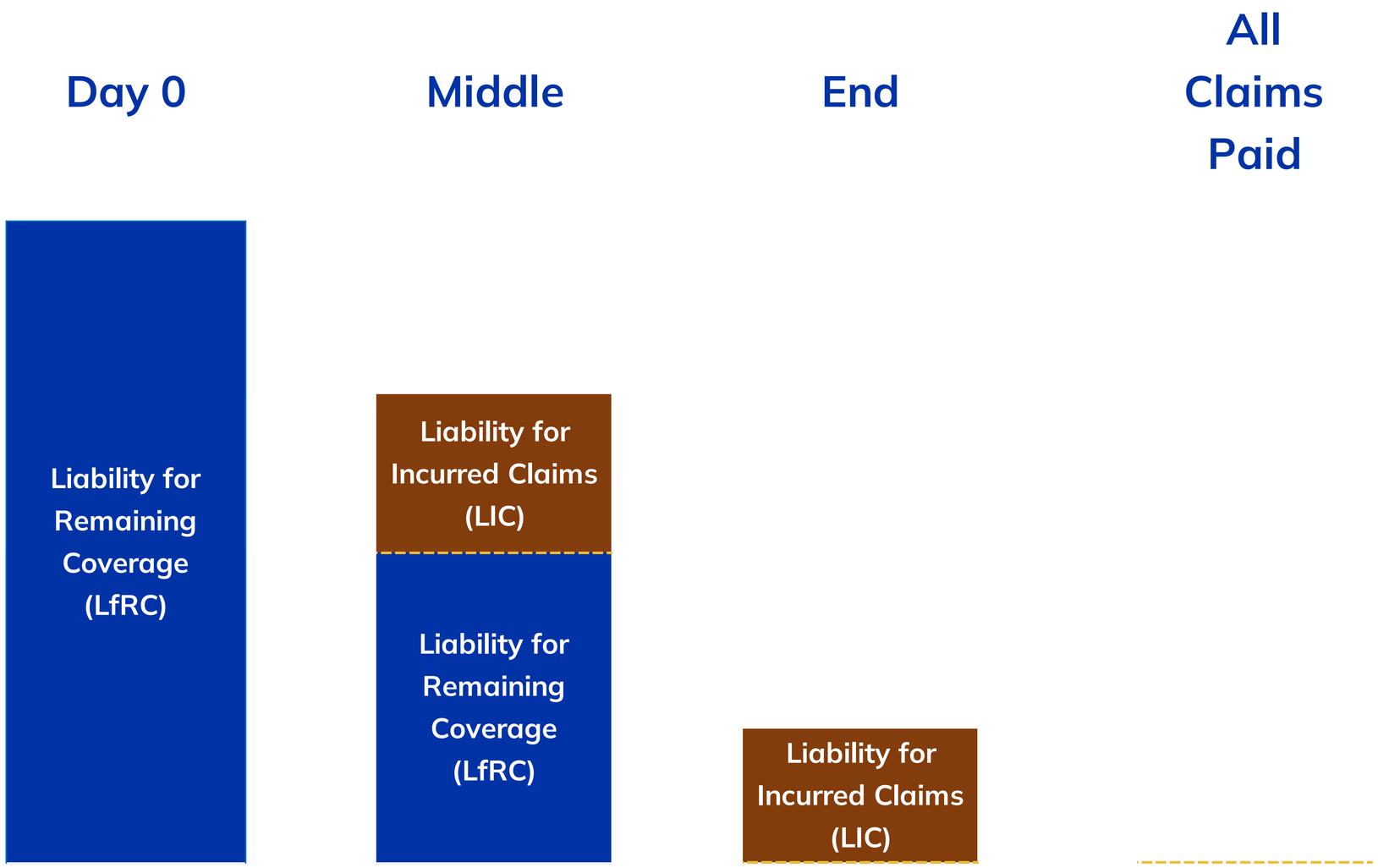
Modifications to the General Measurement Approach (GMA)



LIC & LfRC

IFRS17 views on Liabilities

Life of a Policy



LIC & LfRC

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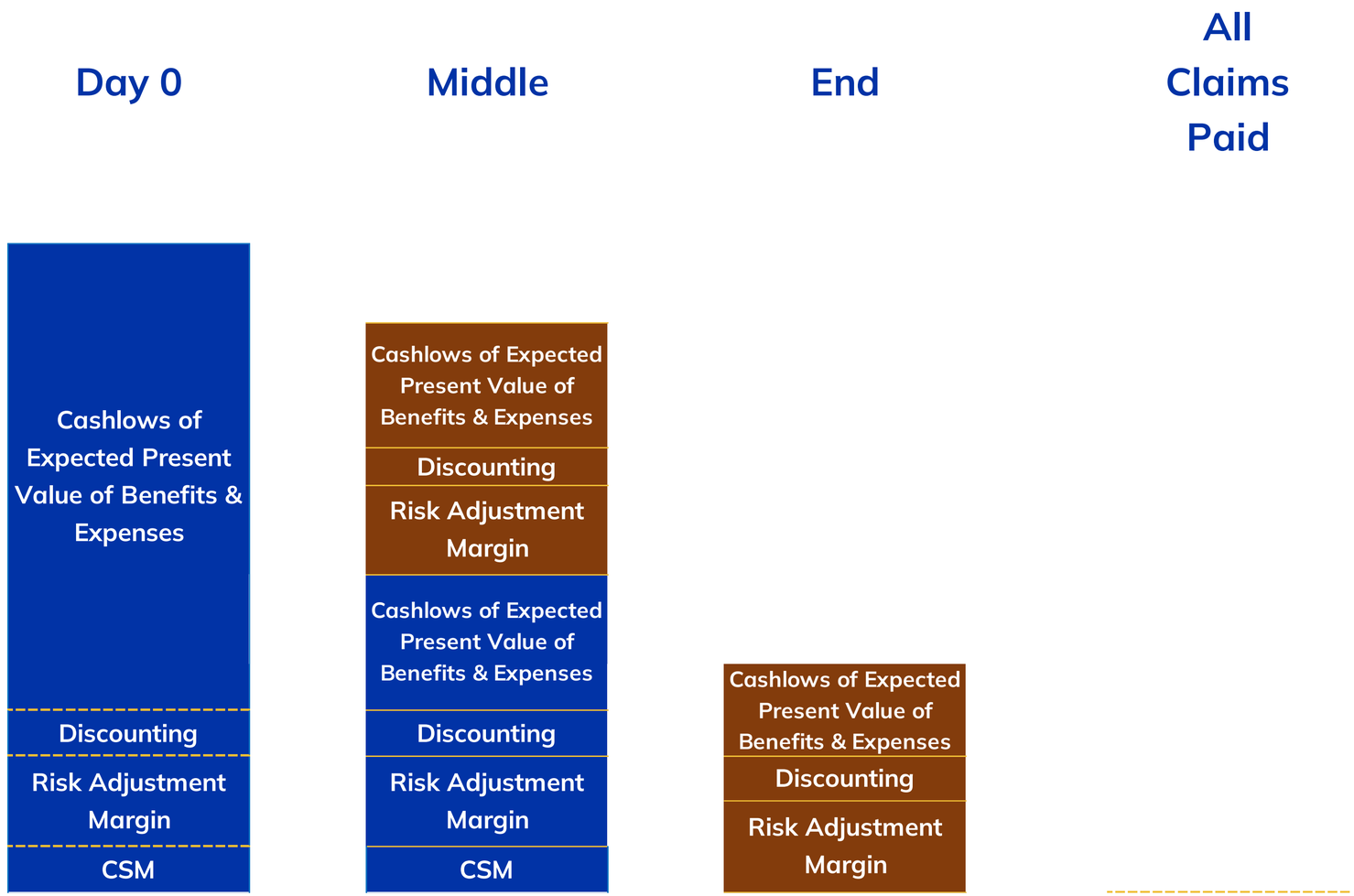
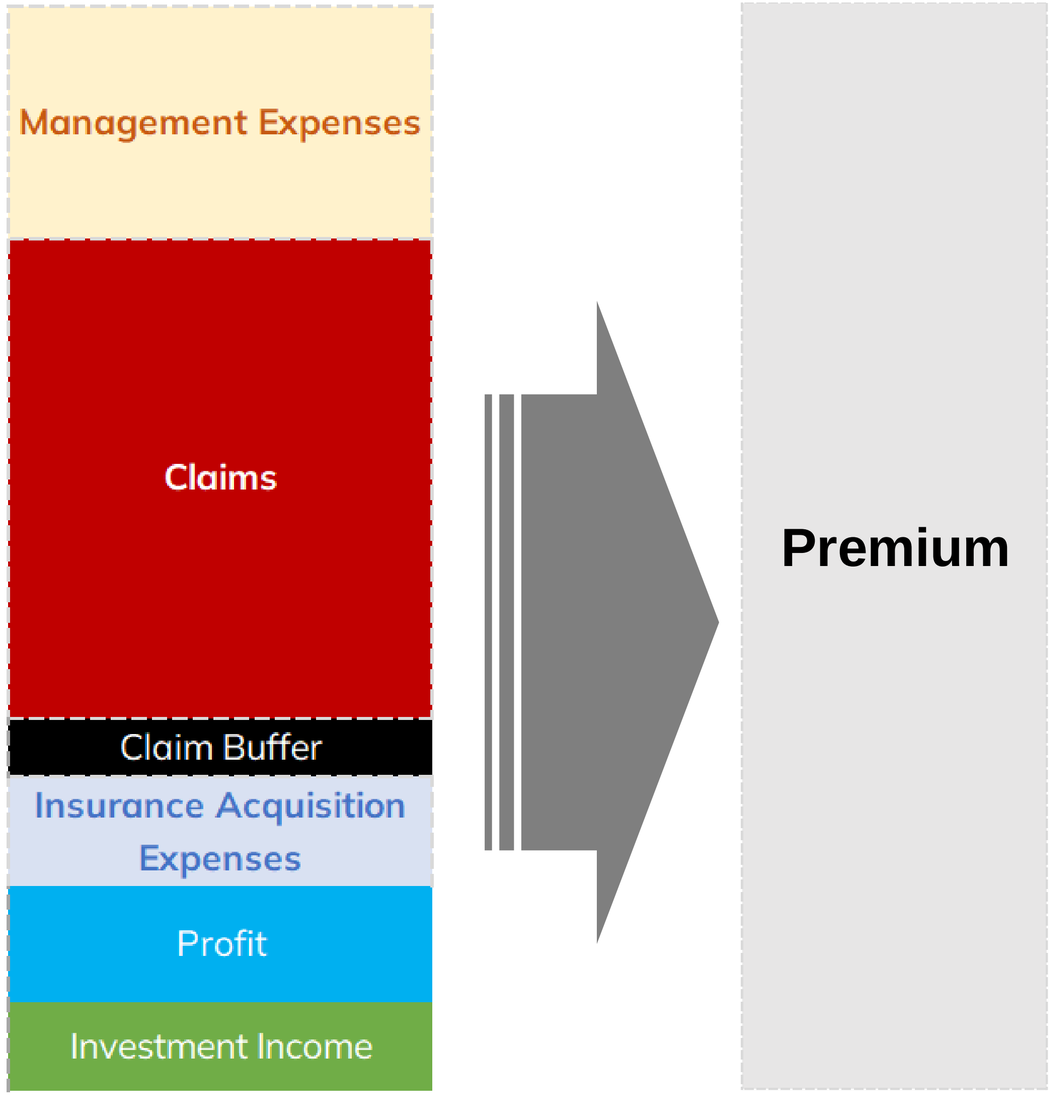


Insurance Policies

Translating IFRS17 to the Actuarial Pricing Process

- Insurance policies are priced using models that ensure the premium paid by the customer is sufficient to cater for the total expected cash outflows *(including profit)*



Cashflows in IFRS17

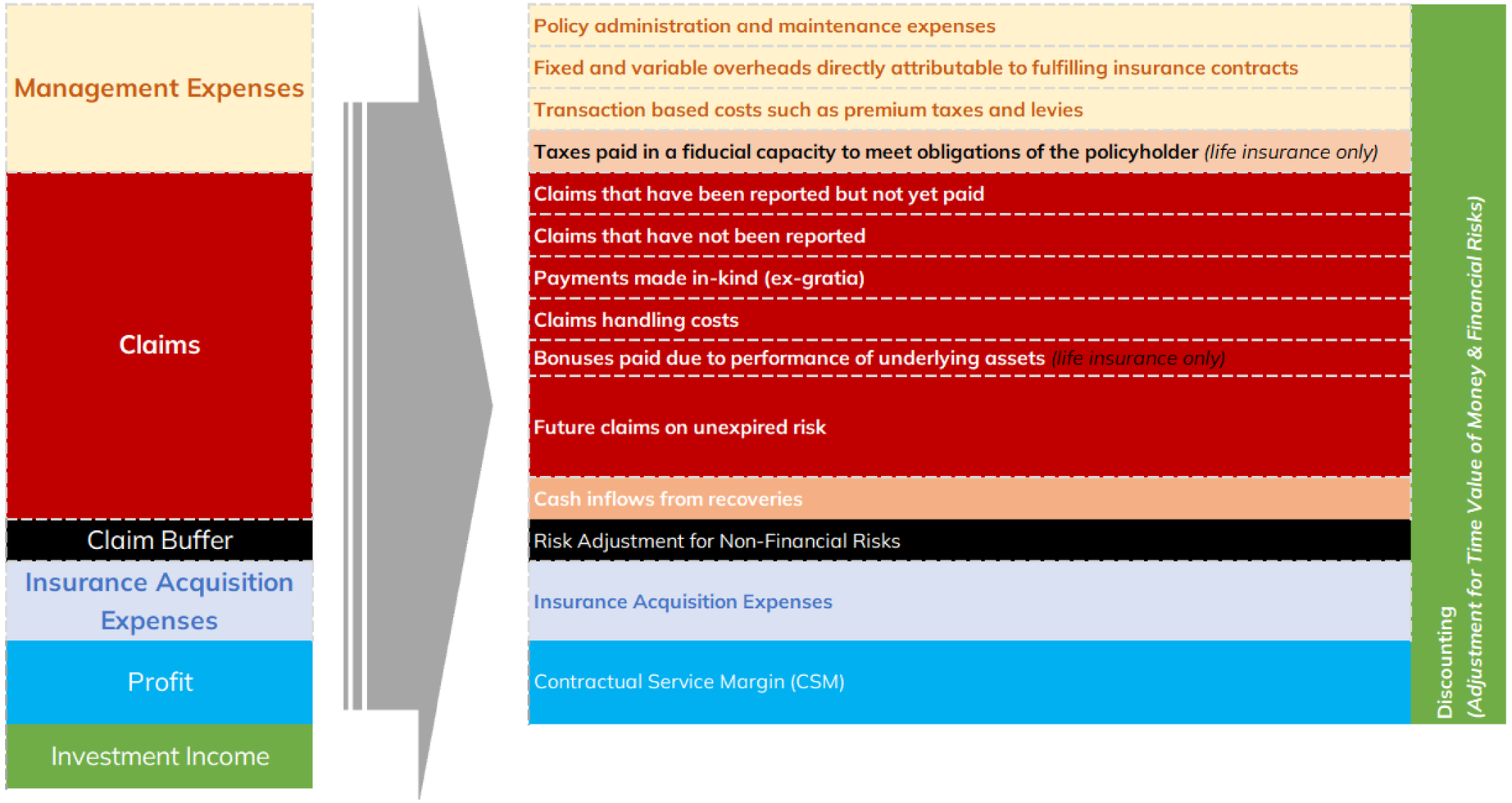
New Requirements

Key considerations

- Cashflows should be discounted to cater for the **time value of money**
- Present value of cashflows should be **probability weighted** to get (mean/ expected) values
- Cashflows should be **unbiased / Best Estimates**

IFRS17 Cashflows

Translating IFRS17 from the Actuarial Pricing Process



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IFRS17 Cashflows

Translating IFRS17 from the Actuarial Pricing Process

NBFIRA Non-Bank Financial Institutions Regulatory Authority

IFRS17 CASHFLOWS

- Policy administration and maintenance expenses
- Fixed and variable overheads directly attributable to fulfilling insurance contracts
- Transaction based costs such as premium taxes and levies
- Taxes paid in a fiducial capacity to meet obligations of the policyholder *(life insurance only)*
- Claims that have been reported but not yet paid
- Claims that have not been reported
- Payments made in-kind (ex-gratia)
- Claims handling costs
- Bonuses paid due to performance of underlying assets *(life insurance only)*
- Future claims on unexpired risk
- Cash inflows from recoveries
- Risk Adjustment for Non-Financial Risks
- Insurance Acquisition Expenses
- Contractual Service Margin (CSM)

Discounting *(Adjustment for Time Value of Money & Financial Risks)*

IFRS17 LIABILITIES

Liability for Incurred Claims (LIC)

- Claims that have been reported but not yet paid
- Claims that have not been reported
- Payments made in-kind (ex-gratia)
- Cash inflows from recoveries
- Bonuses paid due to performance of underlying assets *(life insurance only)*
- Claims handling costs
- Risk Adjustment for Non-Financial Risks

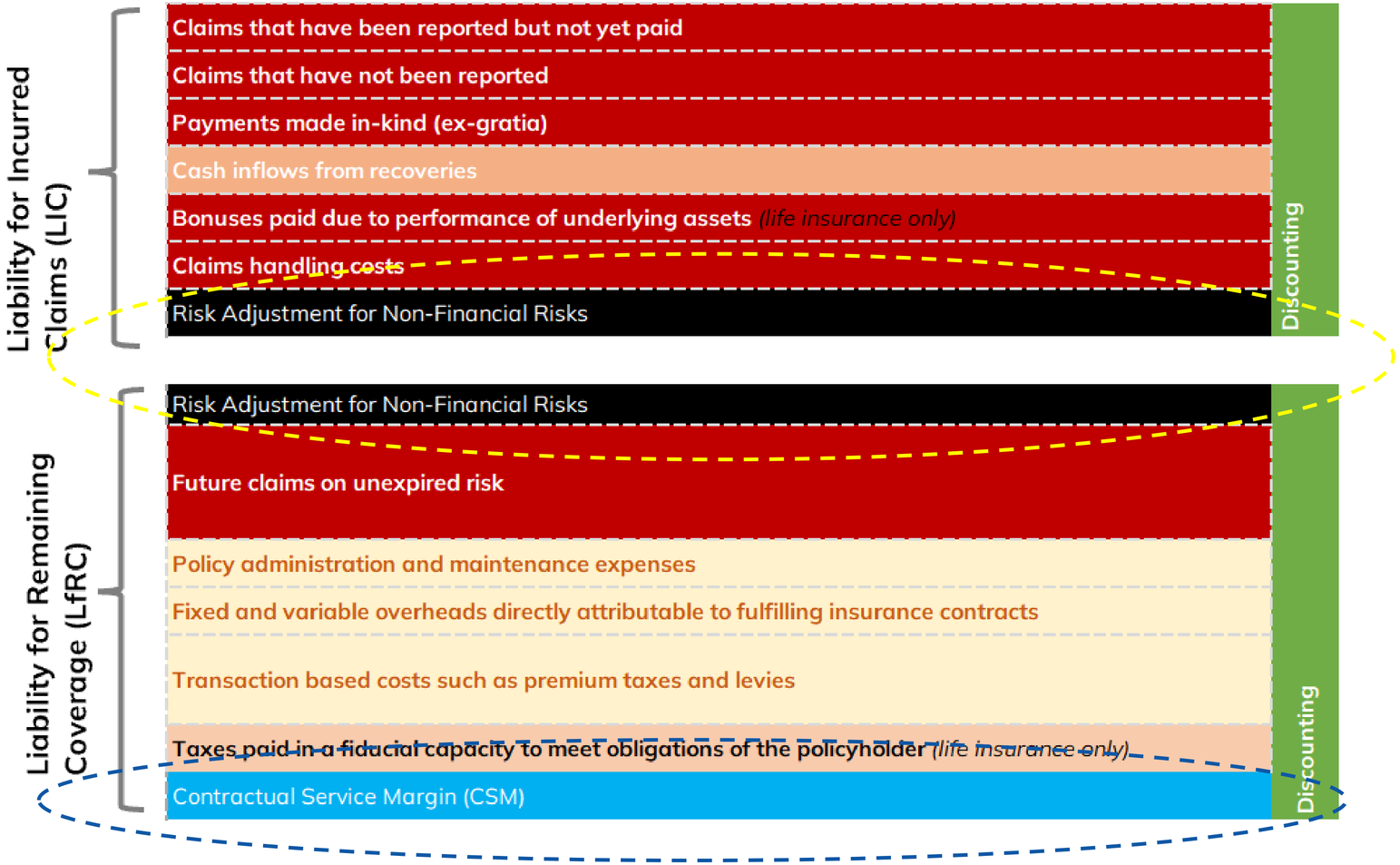
Discounting

Liability for Remaining Coverage (LfRC)

- Risk Adjustment for Non-Financial Risks
- Future claims on unexpired risk
- Policy administration and maintenance expenses
- Fixed and variable overheads directly attributable to fulfilling insurance contracts
- Transaction based costs such as premium taxes and levies
- Taxes paid in a fiducial capacity to meet obligations of the policyholder *(life insurance only)*
- Contractual Service Margin (CSM)

Discounting

CSM & Risk Adjustment



- **Risk adjustment for non-financial risk** serves as the compensation for the insurer due to uncertainty on the amount and timing of the cash flows expected.

- **Contractual Service Margin (CSM)** represents the unearned profit.
- If there is no profit, the contract is onerous and a **loss component** is calculated

CSM

Movement

CSM at the End of Period

CSM at Start of Period

-

amount recognised as insurance revenue because of the transfer of service

+

changes in fulfilment cash flows relating to future service

+

value of interest accretion & currency exchange differences

+

effect of any new contracts

- This Example, relates to a contract without direct participation features

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CSM

Movement

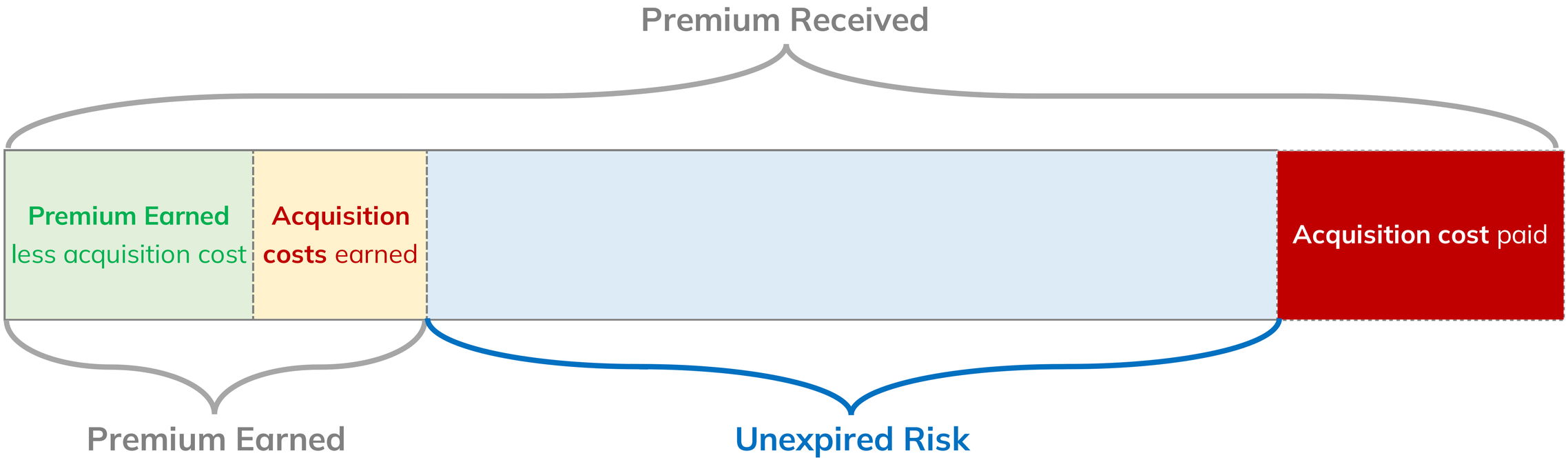
NBFIRA Non-Bank Financial Institutions Regulatory Authority

Which changes in fulfilment cash flows qualify for adjusting the CSM?

	Item	Unlock CSM?
Change in present value of cash flows related to future coverage and other services	Experience adjustments arising from premiums received in the period that relate to future service, and related cash flows such as insurance acquisition cash flows and premium-based taxes, measured at the locked-in discount rates	Yes
	Changes in estimates of the present value of the future cash flows in the liability for remaining coverage (e.g., assumption changes), measured at the locked-in discount rate	Yes
	Differences between the actual and expected investment component paid in the period, measured at the locked-in discount rate	Yes
	Contract holder info changes	Yes
	Contract feature changes	Yes
	Change in value of underlying items, if applicable	No
	Risk adjustment for non-financial risks that relate to future service	Yes
Change in estimates that do not relate to future service	Time value of money and financial risks	No
	Change in estimates of fulfilment cash flows in the liability for incurred claims	No
	Experience differences on current period cash flows	No

Simplification

Premium Allocation Approach (PAA)



- Usage: Annual Premium - Group Life, Group Credit & Group Mortgage

Simplification

Premium Allocation Approach (PAA)

Premium Paid on first day (Cash & Carry)

				Earnings Per Month			Cumulative Earnings			PAA	OLD METHOD: IFRS4 Liabilities		OLD METHOD: IFRS4 Assets	
	Premium Received	Acquisition Cost Paid	Premium Received less Acquisition Paid	Premium Earned	Acquisition Cost Earned	Premium Earned less Acquisition Cost Earned	Premium Earned	Acquisition Cost Earned	Premium Earned less Acquisition Cost Earned	Unexpired Risk	UPR	Commision Payable	DAC	Receivable
	(A)	(B)	(C = A - B)	(D)	(E)	(F = D - E)	(G)	(H)	(I - G - H)	(J = C - I)				
Policy Purchase	**120,000**	**12,000**	**108,000**									12,000		
End of Month														
Jan				10,000	1,000	9,000	10,000	1,000	9,000	99,000	110,000		11,000	0
Feb				10,000	1,000	9,000	20,000	2,000	18,000	90,000	100,000		10,000	0
Mar				10,000	1,000	9,000	30,000	3,000	27,000	81,000	90,000		9,000	0
Apr				10,000	1,000	9,000	40,000	4,000	36,000	72,000	80,000		8,000	0
May				10,000	1,000	9,000	50,000	5,000	45,000	63,000	70,000		7,000	0
Jun				10,000	1,000	9,000	60,000	6,000	54,000	54,000	60,000		6,000	0
Jul				10,000	1,000	9,000	70,000	7,000	63,000	45,000	50,000		5,000	0
Aug				10,000	1,000	9,000	80,000	8,000	72,000	36,000	40,000		4,000	0
Sep				10,000	1,000	9,000	90,000	9,000	81,000	27,000	30,000		3,000	0
Oct				10,000	1,000	9,000	100,000	10,000	90,000	18,000	20,000		2,000	0
Nov				10,000	1,000	9,000	110,000	11,000	99,000	9,000	10,000		1,000	0
Dec				10,000	1,000	9,000	120,000	12,000	108,000	0	0		0	0

Simplification

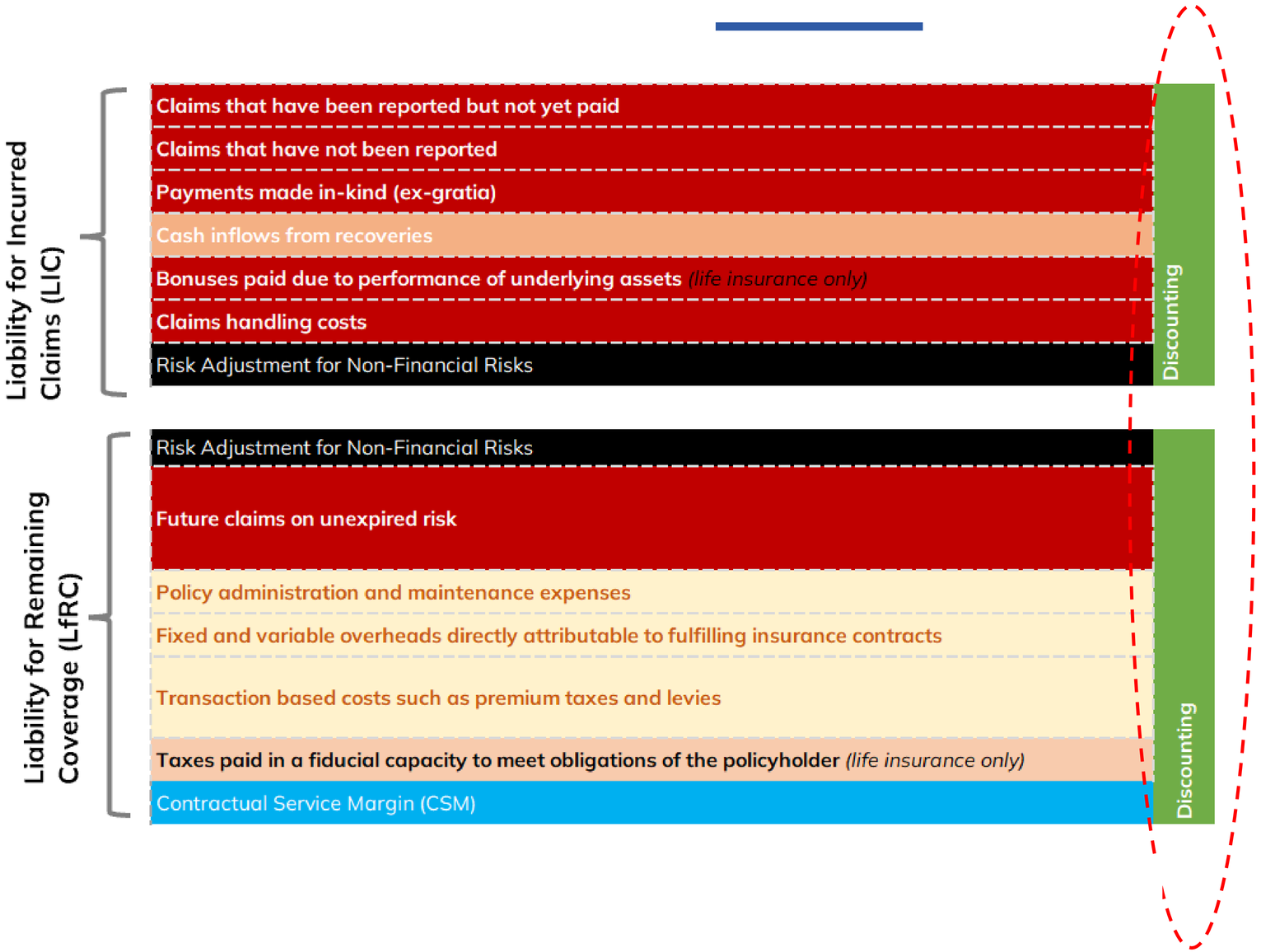
Premium Allocation Approach (PAA)

Premium Paid at the end of the third month

				Earnings Per Month			Cumulative Earnings			PAA	OLD METHOD: IFRS4			
											Liabilities		Assets	
	Premium Received	Acquision Cost Paid	Premium Received less Acquisition Paid	Premium Earned	Acquisition Cost Earned	Premium Earned less Acquisition Cost Earned	Premium Earned	Acquisition Cost Earned	Premium Earned less Acquisition Cost Earned	Unexpired Risk	UPR	Commision Payable	DAC	Receivable
	(A)	(B)	(C = A - B)	(D)	(E)	(F = D - E)	(G)	(H)	(I - G - H)	(J = C - I)				
Jan			0	10,000	1,000	9,000	10,000	1,000	9,000	-9,000	110,000	12,000	11,000	120,000
Feb			0	10,000	1,000	9,000	20,000	2,000	18,000	-18,000	100,000	12,000	10,000	120,000
Mar	120,000	12,000	108,000	10,000	1,000	9,000	30,000	3,000	27,000	81,000	90,000		9,000	0
Apr			0	10,000	1,000	9,000	40,000	4,000	36,000	72,000	80,000		8,000	0
May			0	10,000	1,000	9,000	50,000	5,000	45,000	63,000	70,000		7,000	0
Jun			0	10,000	1,000	9,000	60,000	6,000	54,000	54,000	60,000		6,000	0
Jul			0	10,000	1,000	9,000	70,000	7,000	63,000	45,000	50,000		5,000	0
Aug			0	10,000	1,000	9,000	80,000	8,000	72,000	36,000	40,000		4,000	0
Sep			0	10,000	1,000	9,000	90,000	9,000	81,000	27,000	30,000		3,000	0
Oct			0	10,000	1,000	9,000	100,000	10,000	90,000	18,000	20,000		2,000	0
Nov			0	10,000	1,000	9,000	110,000	11,000	99,000	9,000	10,000		1,000	0
Dec			0	10,000	1,000	9,000	120,000	12,000	108,000	0	0		0	0

DISCOUNT FACTORS

Discount Factors



Discount Factors

WHY?

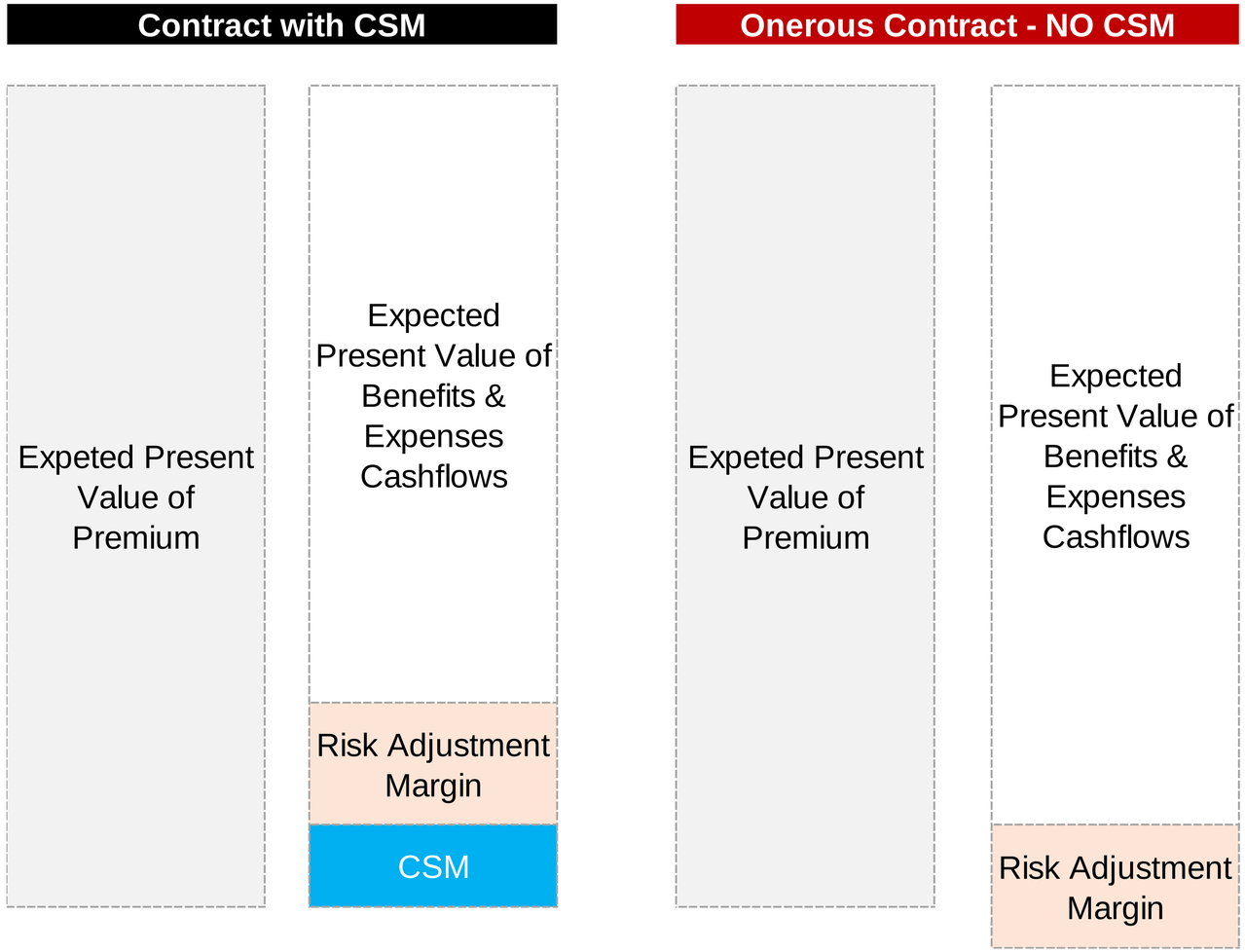
Why apply a discount factor in IFRS17?

- Discount factors on future cashflows represent:
  - Adjustment for the **time value of money**; and
  - **Financial risks** related to future cash flows.

> *“**Financial risk** is defined as “the risk of a possible future 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…”.”*

Impact of Discount Factor

Selection is important

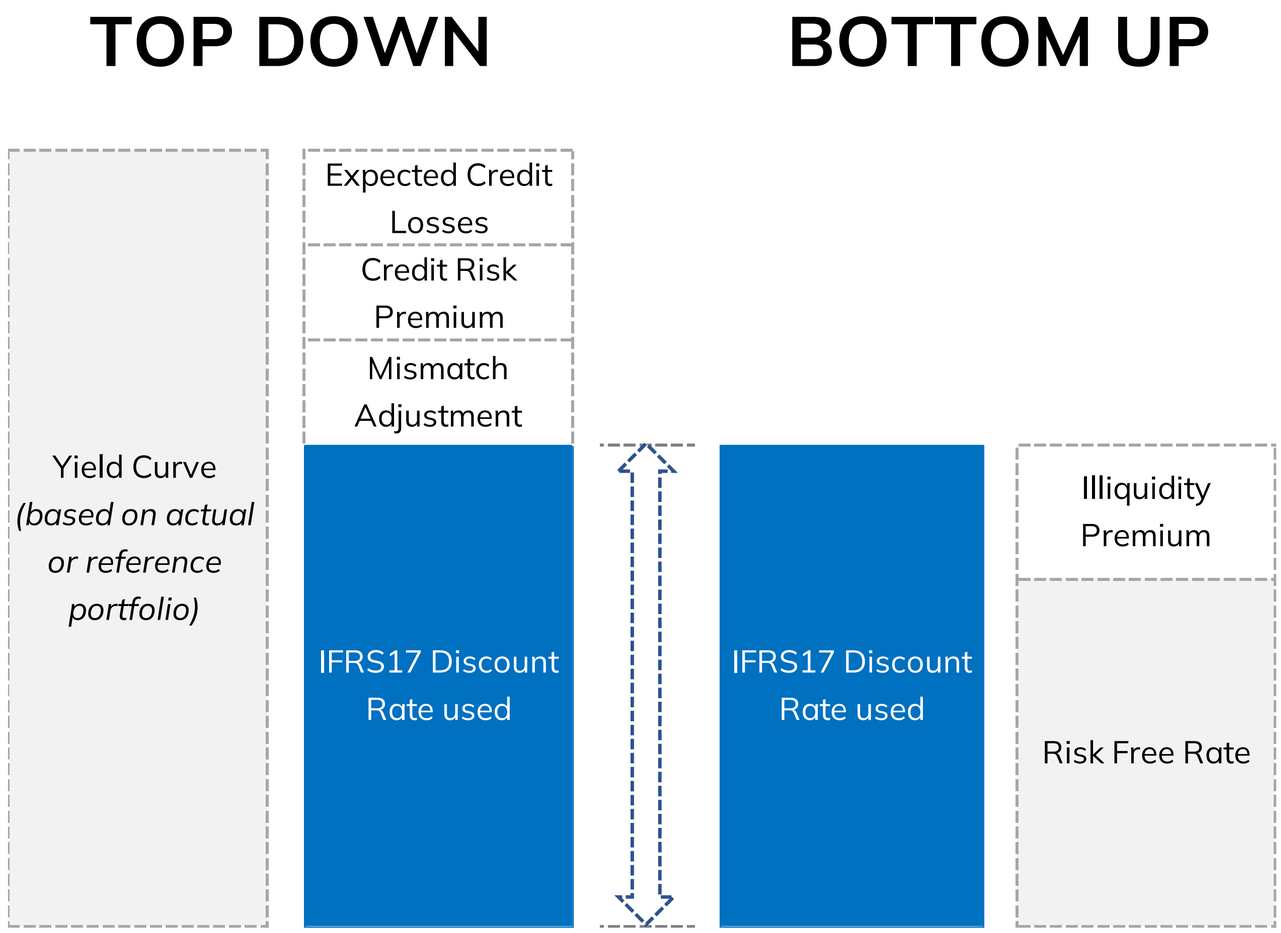


- The discount factor used will be very important because it will determine whether a policy is profitable or not.
- Where there is no CSM a loss component is calculated.
- Actuaries will be required to calculate the Risk Adjustment Margin for Non-Financial Risks
  (..more details in the next section..)

Discount Factor

Which approach should insurers use?

Yield Curve Construction



Discount Factors

Key Considerations

Key rules on selecting the discount factors:

- Discount rates applied to cash flows reflect (i) the **characteristics** of the cash flows and (i) the **liquidity** characteristics of the insurance contracts

> *“ Factors affecting **liquidity** include (a) Policy Exit Costs such as surrender charges / penalties, (b) Inherent value / Build up of value and (c) Exit Value*
>
> ***Annually renewable Group Life / Group Credit insurance contracts**, whose design builds negligible exit / build up value (on renewal) and no exit costs, are considered more liquid compared to life insurance contracts that have a longer contract boundaries.* ”

Discount Factors

Key Considerations

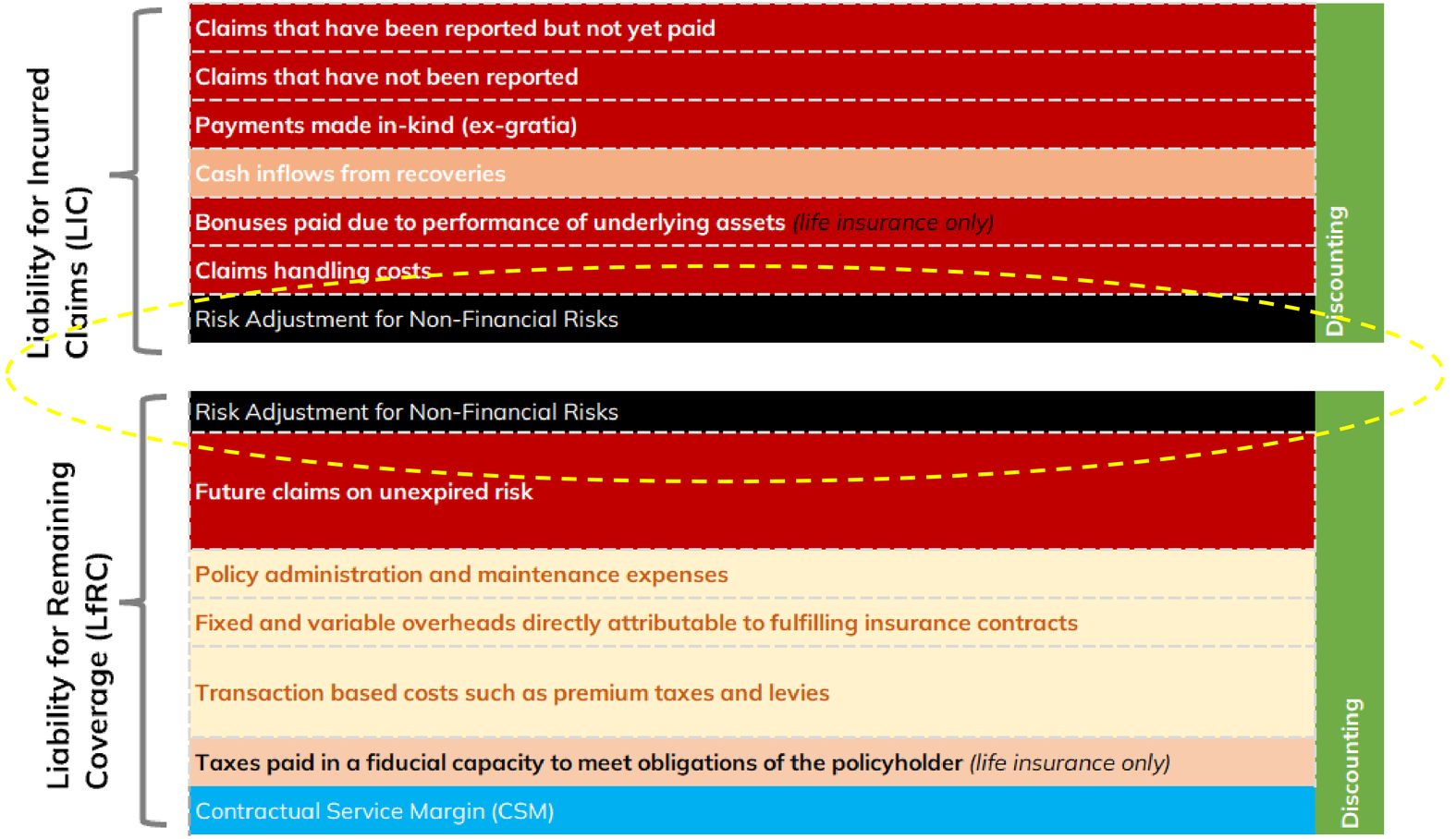
Key rules on selecting the discount factors:

- Discount rates should be reflective of whether the future cash flows vary based on the returns on any financial underlying assets (e,g. unit linked policies).

- Use of **Locked-In Discount Rates** *(at date of Initial Recognition)* vs **Current Discount Rates** will depend on approach used. Variable Fee Approach (VFA) uses current discount rates that are linked to the investment return of the underlying assets.

RISK MARGIN

Discount Factors



Risk Margins

Calculation

Methodology – Risk Margin

- **Quantile Methods:** Confidence Levels – Value at Risk (VaR), Conditional Tail Expectation (CTE, Tail Value at Risk (TVaR) and Multiple of Standard Deviation
- **Cost of Capital Method**
- **Discount Related Methods** – Risk Adjusted Discount Rate and Deflector Adjusted Cashflows
- **Explicit Assumption** – Explicit margin with a range

Risk Margins

Insurance Policies

Characteristics of Risk Margins

- The less that is know about an estimate the higher the risk margin
- Low Frequency / High Severity Risks (e.g., Fire Insurance) should have higher risk margins than High Frequency / Low Severity risk (e.g., Medical Insurance)
- For similar risk, contract that persist for a longer timeline should have a higher risk margin
- Risks with wider probability distribution should have a higher risk margin than risks with narrower distribution
- Risk margins should decrease with emerging experience reducing uncertainty.

Risk Margins

Data

Data Considerations

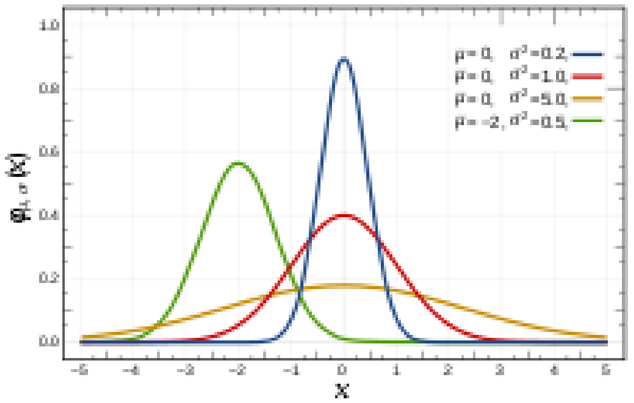
- Availability of representative data for use in choosing the probability models and setting the assumptions;
- Credibility and relevance of available data;
- Stability of data
- Data for testing & validation of models and their parameters;
- Emerging data to update the models – the future might be different from the past

Risk Margins

Probability Distribution

Attributes of the Probability Distribution

- A mathematical representation of the insurance risk – this will depend on the insurance class, duration of risk and availability of industry wide data
- Regular calibration with representative data;
- Ability to capture the volatility of the risk and presence of extreme events
- The more complex the model, the more that data is required



Risk Margins

Example

Explicit Assumption Approach

- Adjusting a mortality / morbidity table by a fixed rate %
- Using a minimum loss ratio increase to unexpired risks exposure
- Loading the discount rate by a certain proportion
- Using a different fixed percentage for each line business, e.g 6% of discounted current estimates for motor insurance and 12% for riskier insurance classes

Project Plan

Project Timelines

Workplan

- We propose to carry out the IFRS 17 Training in four (4) phases (the project period) over a duration of 30 weeks with Ezekiel Macharia as the Lead Trainer

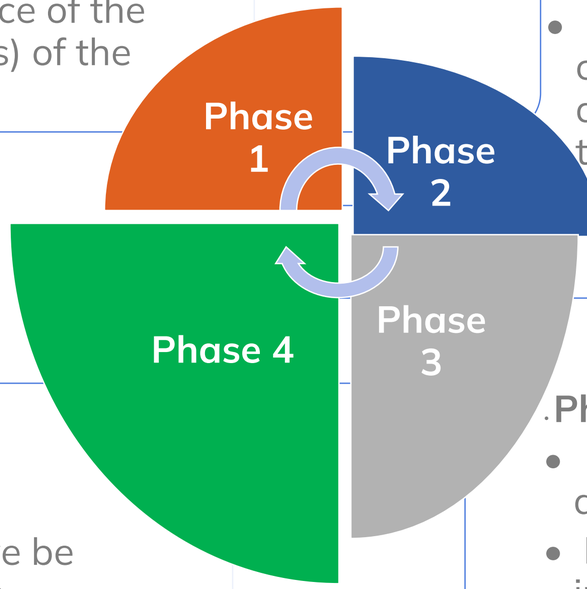
- A comprehensive Training workplan and training requirements will be agreed upon commencement of this assignment.

Project Timelines

Workplan

- **Phase 1 - Training on:**
- The potential implications for insurers applying IFRS 17;
- Considerations of the adoption of IFRS 17 for regulatory and supervisory purposes based on the guidance of the Insurance Core Principles (ICPs) of the IAIS

- **Phase 2 - Training on:**
- The need for supervisors to understand the impact and steps to ensure preparedness and adequate supervisory oversight of transition and implementation
- Current NBFIRA regulatory capital requirements and its adequacy or lack thereof for the IFRS 17 regime



- **Final phase**
- The **final phase** will involve be assistance in developing a Guidance Note to be shared with the industry.

Phase 3 - Training on
- Development & implementation of an industry engagement strategy
- NBFIRA developing an IFRS 17 implementation plan

Our Quality Assurance

Data collection tools – Feedback to be provided on system requirements and data quality improvement

Project Lead – Vast experience working within the industry and carrying out similar assignments

Peer Review & Quality Assurance - Will review all reports and ensure quality delivery at all stages of the project

Engagement Leader - responsible for ensuring seamless coordination and communication between all stakeholders involved throughout the process

Accredited by the QAS of the IFoA effective February 2021 as the second actuarial firm in Africa

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Questions?

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