

IFRS 17 – Latest Developments

DUBLIN SEMINAR

12 NOVEMBER 2018

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 Milliman

Today's speakers

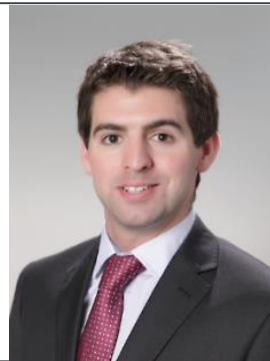
- Andrew Kay
Dublin



- Amritpal Khangura
Life Technology
Solutions (London)



- Eamon Comerford
Dublin



- William Hines
Boston



Today's agenda

1. Industry readiness & EFRAG update
2. Latest news from the TRG
3. Emerging market practice and practical considerations

COFFEE BREAK

4. IFRS 17 data and technology considerations
5. Q&A Panel Discussion

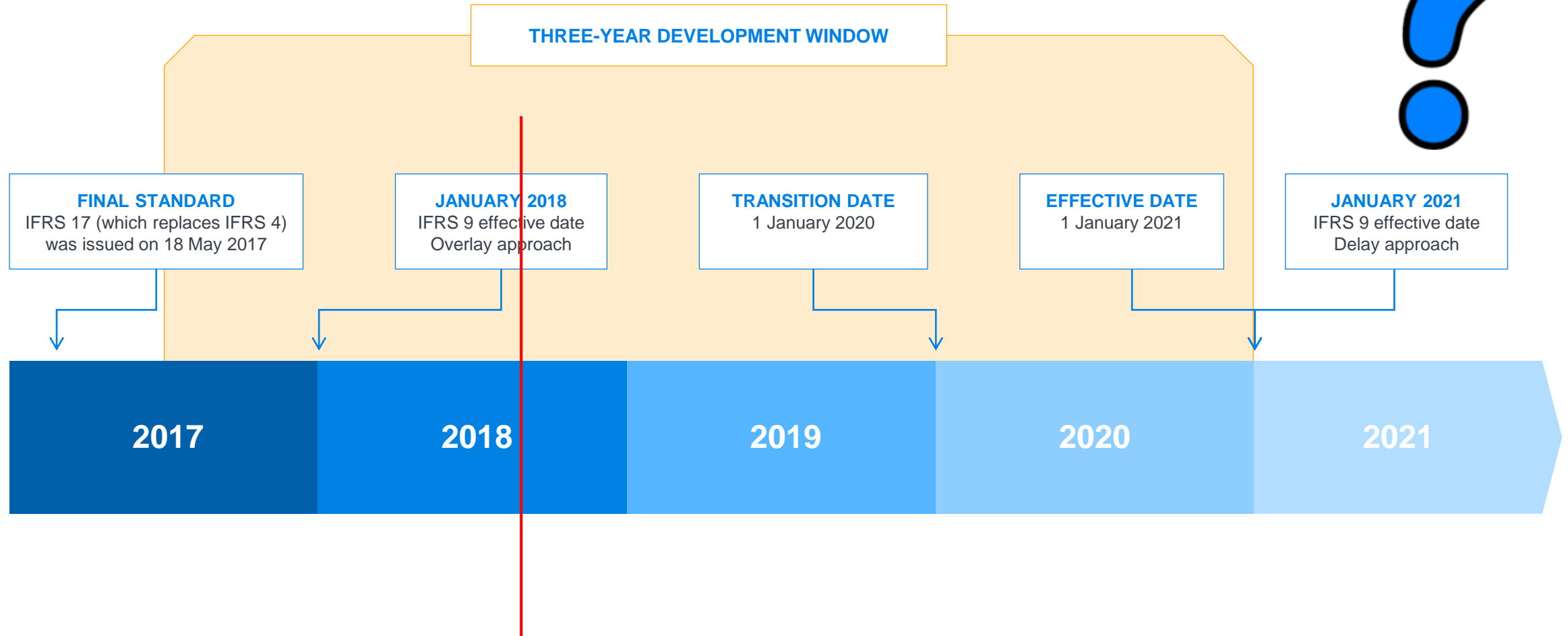
Drinks / Canapés reception

Introduction

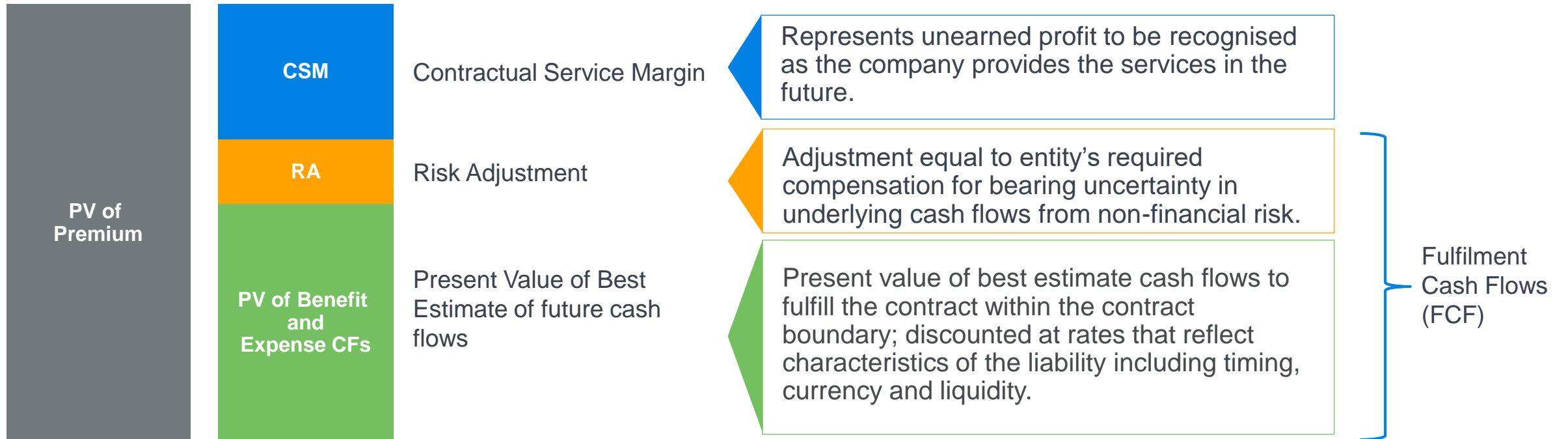
Andrew Kay
Dublin



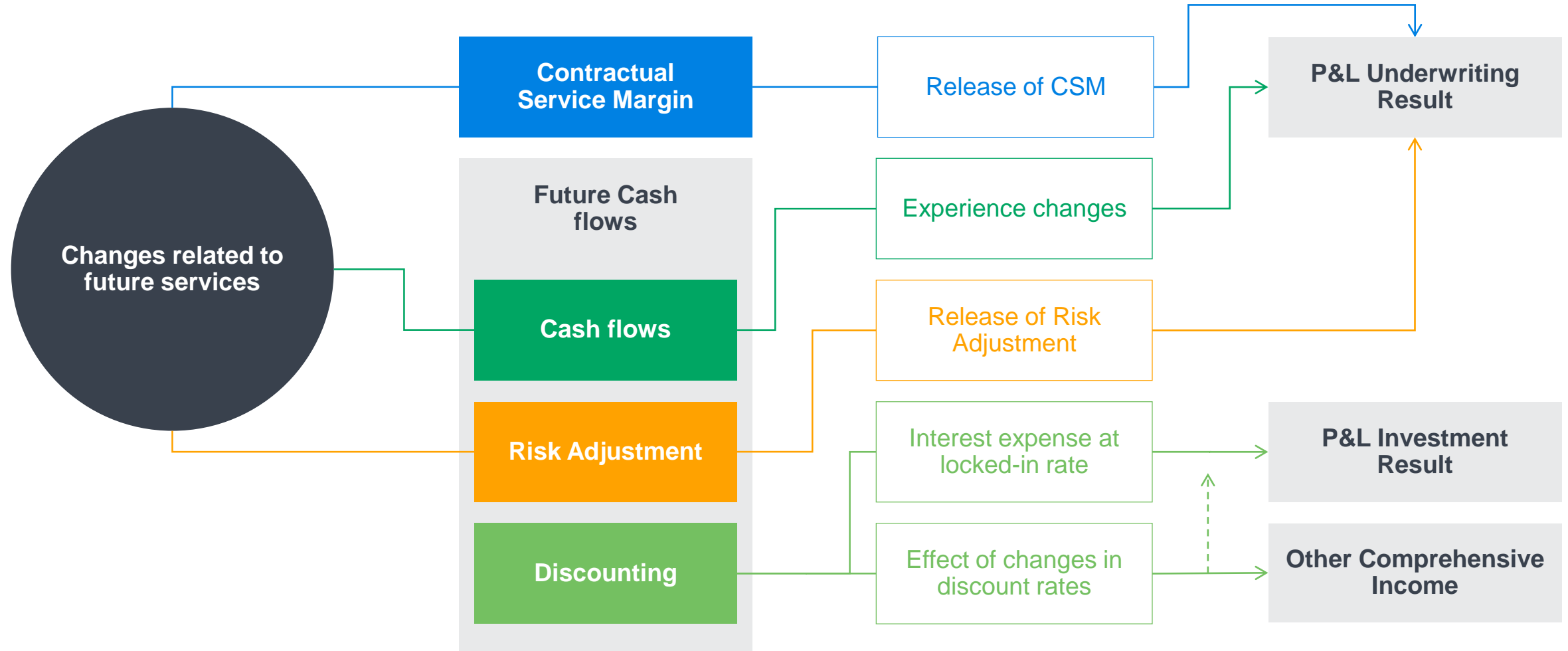
Timelines for IFRS 17 and IFRS 9



Initial Calibration of General Model



Subsequent Measurement & Impact on P&L



What's been happening?

IFRS 17 implementations

- Impact assessment
- Data gathering
- Assumptions
- Methodology
- Transition
- Systems and modelling

EFRAG

- Briefing papers (transition, reinsurance, CSM release, aggregation)
- Case studies, surveys
- Report planned for Q4 2018

TRG

- Unbundling
- Contract boundaries
- Acquisition expenses
- Coverage units
- Risk Adjustment
- ...

EFRAG update

Draft Endorsement Advice

European Financial Reporting Advisory Group

- Prepared various papers covering aspects of European public good that will form part of the endorsement advice on IFRS 17
 - Potential impact on insurance markets
 - Financial stability
 - Long term investment
 - Costs and benefits of IFRS 17
- Papers broadly positive on IFRS 17
- 93% of industry respondents to a global survey think that the benefits of IFRS 17 will outweigh the costs

Issues identified by EFRAG

European Financial Reporting Advisory Group

- Key outcome was a letter to the IASB, highlighting six areas that the EFRAG Board thinks “merit further consideration by the IASB”:

Acquisition costs

CSM
amortisation

Reinsurance

Transition

Level of
aggregation

Balance sheet
presentation

Other issues noted by EFRAG

Measurement

Operational
complexity

Implementation Timelines

- Interpretation
- Resources
- IT solutions

Timeline debate

Industry
(CFO Forum,
Insurance
Europe, Global)

- Industry concerns that need to be addressed – technical, operational, systems
- A 2-year delay is required – no expectation of slowing of implementation projects

ESA's
(ESMA, EBA,
EIOPA)

- IFRS 4 issued in 2005 was a temporary measure
- Inconsistent accounting practices, does not facilitate transparent and comparable accounts
- Necessary for financial stability, integration
- Caution against further delays

EFRAG

- Conducted significant outreach with constituents, who have raised concerns
- Identified topics that merit further consideration by the IASB

IASB response

Board meeting papers

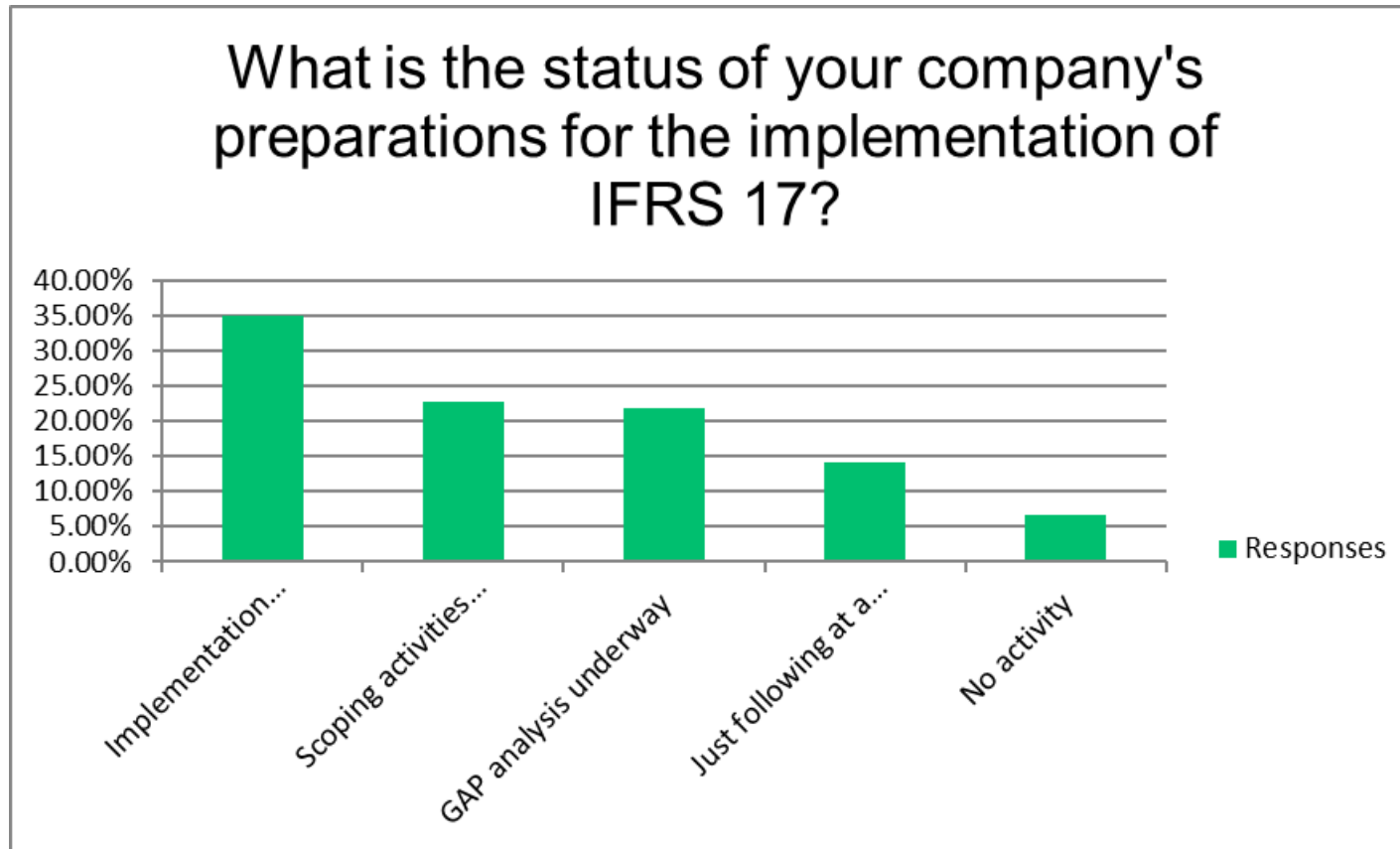
- October paper
 - Noted it would consider whether industry concerns indicate the need for changes
 - Criteria – should not:
 - Lose useful information
 - Disrupt implementation processes
- November paper
 - Should the effective date be deferred to 1 Jan 2022?
 - If so, should the IFRS 9 exemption be amended?

Industry Readiness

Milliman Global Survey

Readiness

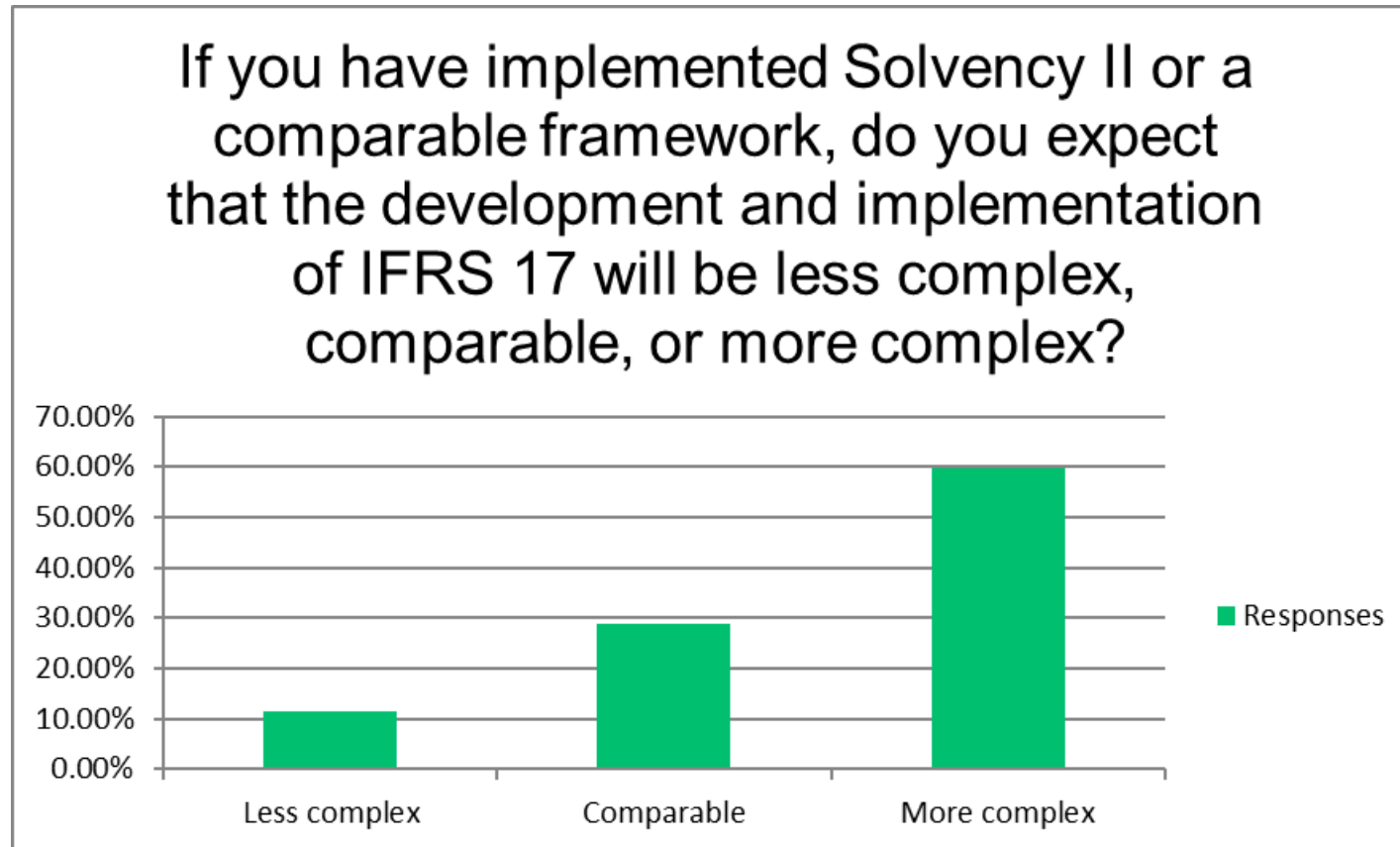
Preliminary survey results



- For those in implementation phase:
 - Further ahead on assumptions and methodology
 - Followed by actuarial modelling and IT, data quality, accounting systems
 - Lots of work to do on: transition, reporting, governance, strategy

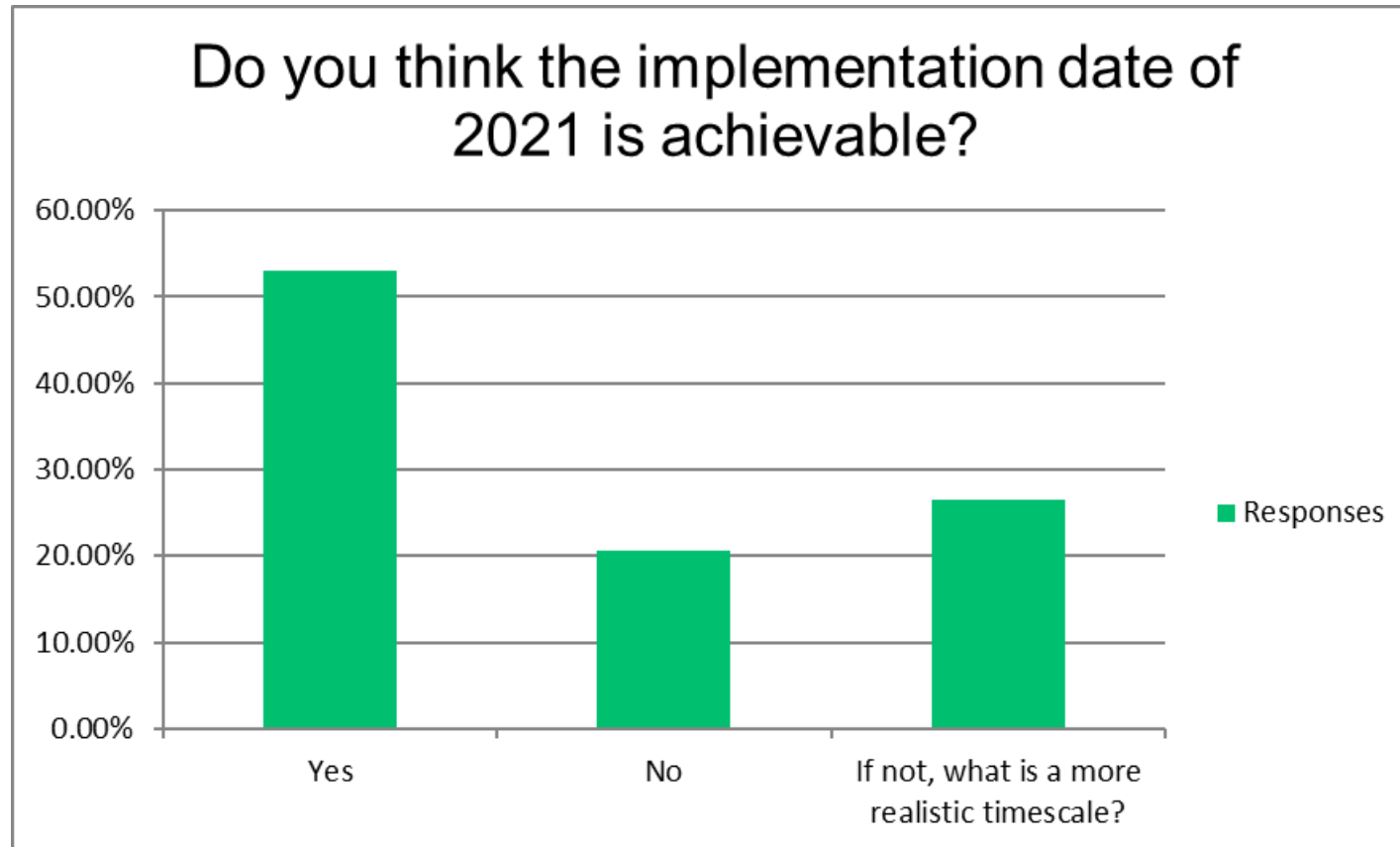
How complex?

Preliminary survey results



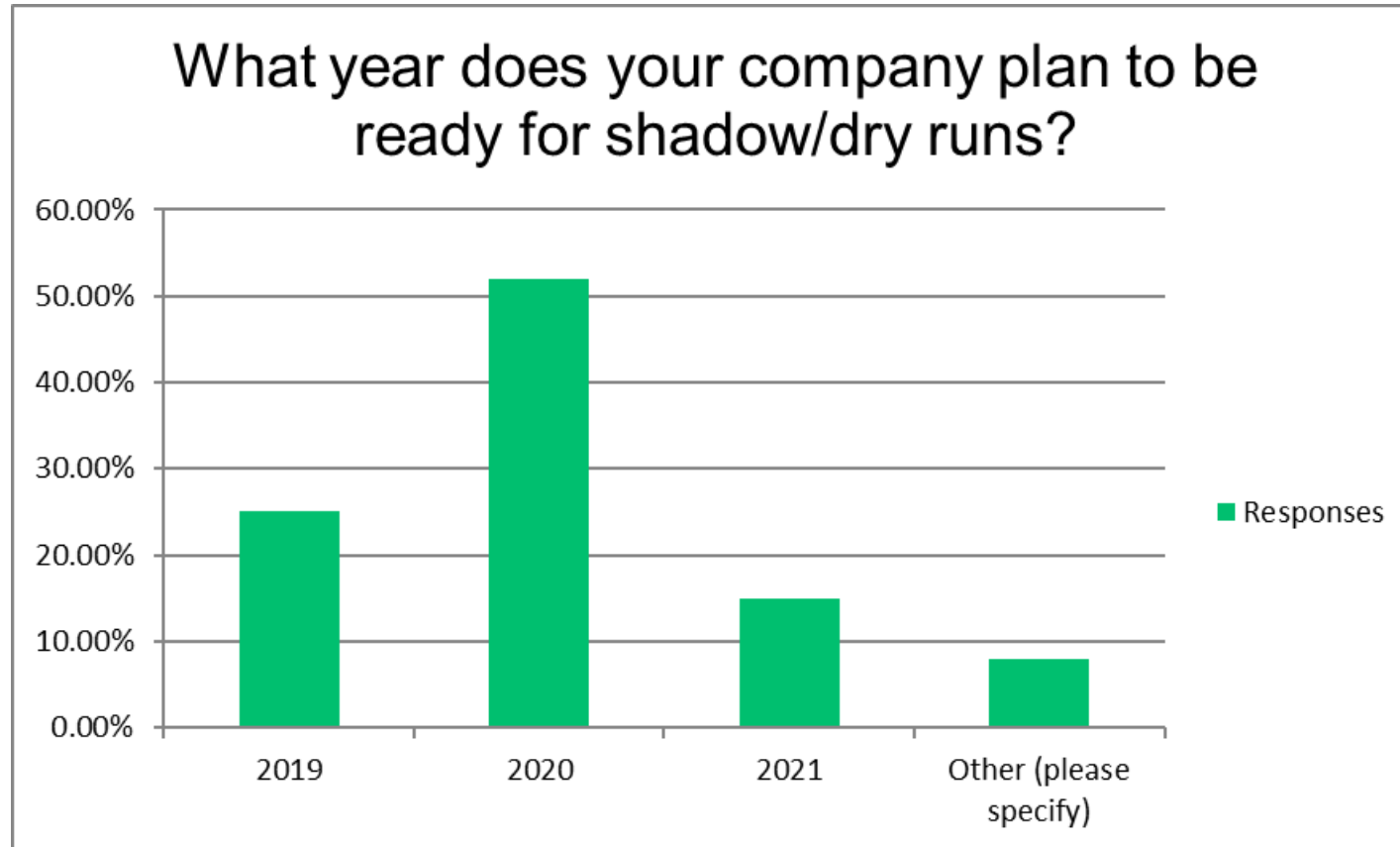
Timeline?

Preliminary survey results



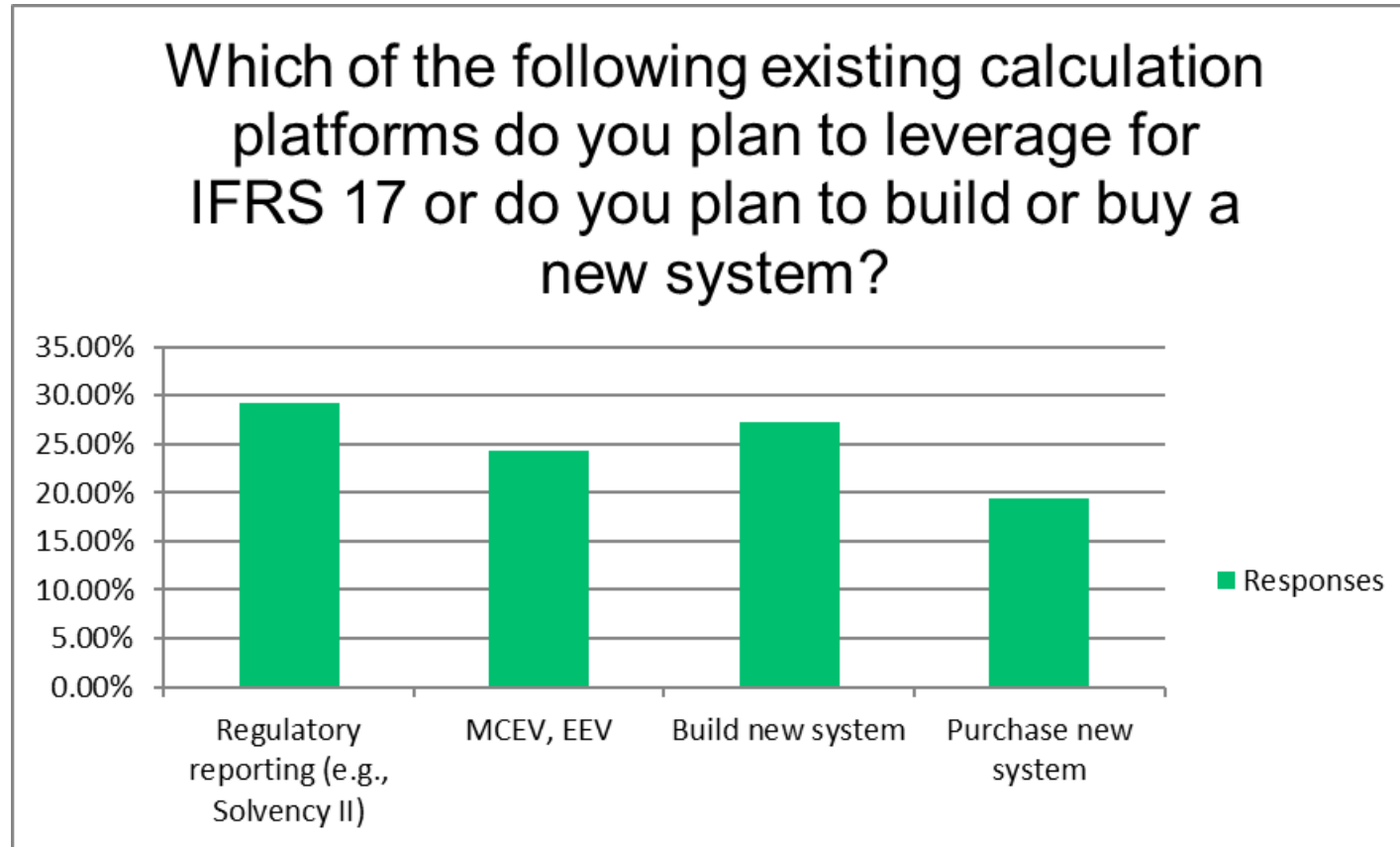
Dry runs?

Preliminary survey results

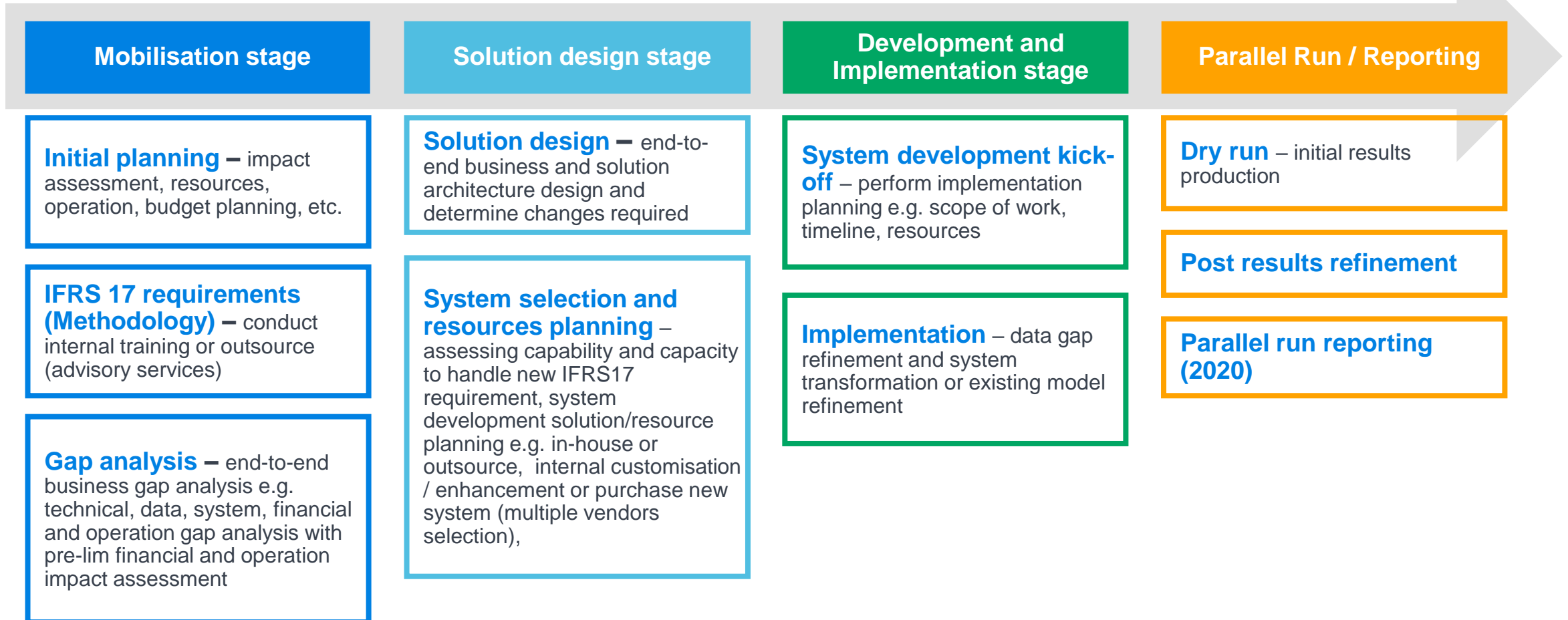
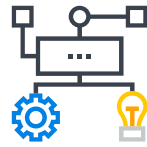


Systems?

Preliminary survey results



IFRS 17 Development Roadmap



Milliman IFRS 17 Readiness Assessment Tool

IFRS 17 Readiness Assessment Tool for XYZ

Summary		% of questions completed	IFRS 17 Score
General	Background	<div style="width: 80%;"><div>80%</div></div>	Not applicable
	Project management	<div style="width: 75%;"><div>75%</div></div>	Not applicable
Valuation	Methodology	<div style="width: 72%;"><div>72%</div></div>	4.6
	Assumptions	<div style="width: 84%;"><div>84%</div></div>	3.2
	Transition	<div style="width: 78%;"><div>78%</div></div>	2.8
Governance and Strategy	Governance	<div style="width: 84%;"><div>84%</div></div>	2.4
	Data Quality	<div style="width: 52%;"><div>52%</div></div>	1.2
	Strategic Impacts	<div style="width: 81%;"><div>81%</div></div>	4.1
Reporting and Analysis	Reporting and Analysis	<div style="width: 75%;"><div>75%</div></div>	1.7
Other	Actuarial Modelling	<div style="width: 62%;"><div>62%</div></div>	3.3
	IT and Systems	<div style="width: 45%;"><div>45%</div></div>	2.7

Used for:

- Gap assessment
- Tracking progress
- Navigating the standard

Key - Level of readiness

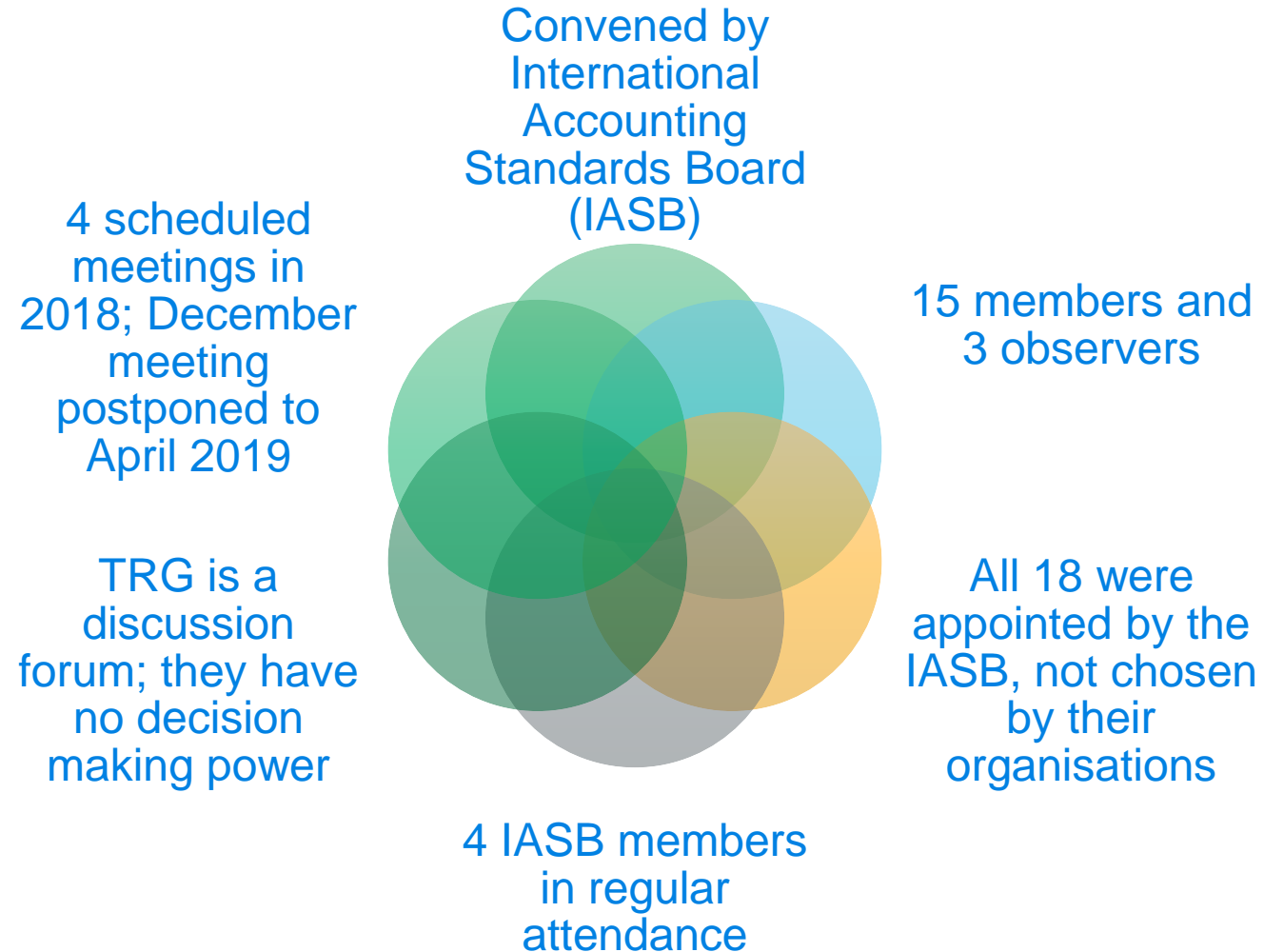
1	1 = No progress has been made
2	2 = Some progress made but a lot of work still required
3	3 = Partly progressed
4	4 = Significant progress made but some minor work still required
5	5 = Fully implemented to meet all requirements

Transition Resource Group (TRG) for IFRS 17

William Hines
Boston



TRG Background



TRG Background (2)

Agenda developed by IASB Staff

Issues for discussion are submitted by stakeholders to the IASB

Staff decides which issues are to be discussed at TRG

Focus is on situations where IFRS 17 language could have more than on interpretation

TRG Background (3)

81 issues submitted through September meeting

21 issues brought to TRG for discussion

Remainder was determined by the IASB staff:

- (a) can be answered applying only the words in IFRS 17;
- (b) do not meet the submission criteria; or
- (c) are being considered through a process other than a TRG discussion (such as a proposed annual improvement).

February TRG meeting issues

Separation of components of contracts

Contract boundary issues with repricing mechanism

Contract boundary issues including reinsurance contracts held

Acquisition cash flows at initial recognition and at transition

Coverage units for amortising Contract Service Margin (CSM)

Insurance acquisition cashflows when applying fair value at transition

May TRG meeting issues

Combination of
Insurance contracts

Risk adjustment for
non-financial risk on
consolidation

Contract boundary
issues on

- renewable contracts,
- exercise of options, and
- reinsurance contract held

Coverage units for
amortising the CSM

Summary of
implementation
challenges

September TRG meeting issues

Insurance risk
consequent to a
claim

Determining a
discount rate using a
top-down approach

Commissions and
reinstatement
premium in
reinsurance
contracts issued

Premium experience
adjustments related
to current or past
service

Cash flows that are
outside the contract
boundary at
inception

Recovery of
acquisition cash
flows

Premium waivers

Group Insurance
policies

Industry pools
managed by an
association

Annual cohorts for
contracts that share in
the return of a
specified pool of
underlying items

Coverage Units

- CSM is to be amortised in proportion to the services provided over the expected coverage period.
- Coverage units establish the amount of service provided for insurance.
- Investment components do not represent service provided.
- Coverage units reflect the likelihood of insured events occurring only to the extent that they affect the expected duration of contracts in the group; and
- Coverage units do not reflect the likelihood of insurance events occurring to the extent that they affect the amount expected to be claimed in the period.
- The use of the maximum level of cover and the expected level of cover in periods.

Reinsurance Contracts Held

- Issue was how to read requirements of IFRS 17 paragraph 34 regarding the boundary of an insurance contract with respect to reinsurance contracts held
- When does substantive right to receive services from the reinsurer end
 - When reinsurer has practical ability to reassess the risk and set a price that fully reflects the risk
- When does substantive obligation to pay amounts to reinsurer end
 - When insurer can terminate the contract
- Both ceding and assuming company need to be able to get out simultaneously to reach the contract boundary
- Boundary could include contracts that are expected to be issued in the future.
- Primarily affects the development of the CSM for reinsurance contracts held.

Risk Adjustment for Non-financial Risk

Situation is where an insurance group containing multiple legal entities must produce IFRS financial statements at both the entity and the group level.

Can the risk adjustment be different when reporting at the entity and group levels?

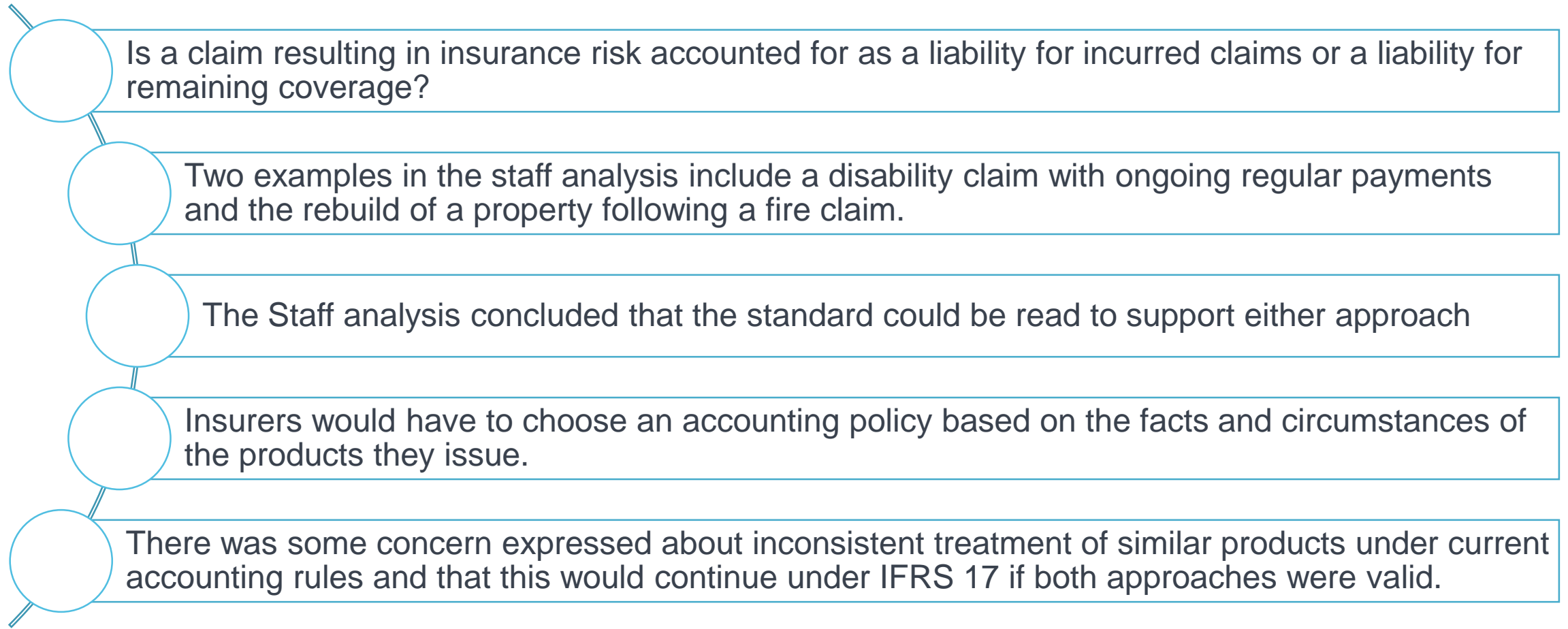
The IASB staff and Board members say no.

They believe there is only one measurement that can be used and it is at the level of the entity that actually issues the contract.

TRG members noted that in practice insurers do consider different risks at the group level versus the subsidiary level.

Can allocate diversification from group level to the entity level.

Insurance Risk after Incurred Claim



Emerging market practice and practical considerations

Eamon Comerford
Dublin



Areas of focus

1. Classification
2. Aggregation
3. Transition
4. Risk adjustment
5. Discount rates

Classification

- Scope of IFRS 17 largely unchanged from IFRS 4
- IFRS 17 applies to:
 - Contracts with significant insurance risk
 - Investment contracts with discretionary participation features
- Some companies taking the opportunity to revisit some UL classifications
- **36%** of companies have indicated in our Milliman IFRS 17 survey that they will re-determine “significant insurance risk” for some of their business

Aggregation

Setting portfolios



- Generally, insurers going with a “less is more” approach on this

Aggregation

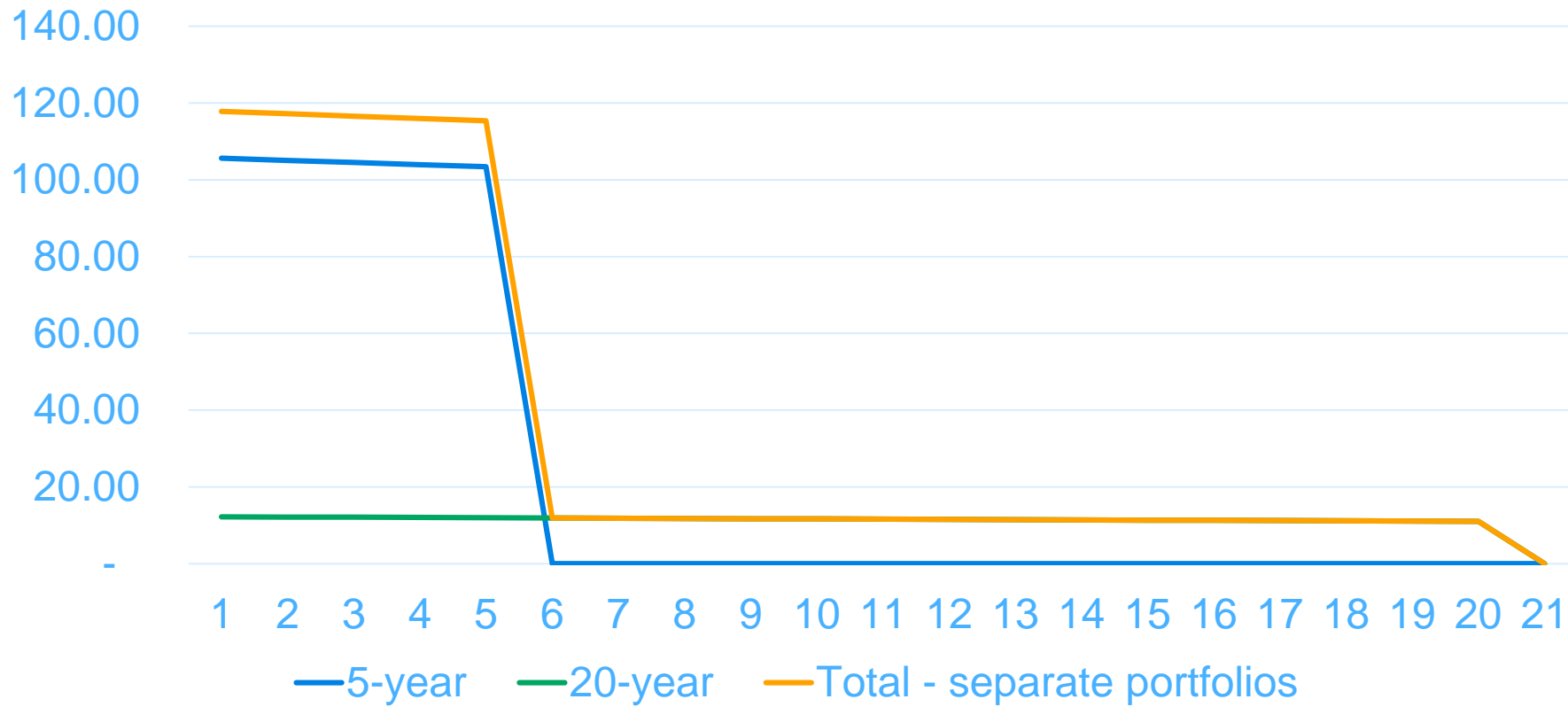
Setting portfolios

- But...simplicity may not always give an optimal outcome
- Example:
 - A company writes 100 5-year term contracts and 100 20-year contracts in a given year
 - Initial CSM for 5-year contracts: 500
 - Initial CSM for 20-year contracts: 200
 - Using policy count as coverage units
 - 2% lapse rate before maturity

Aggregation

Setting portfolios

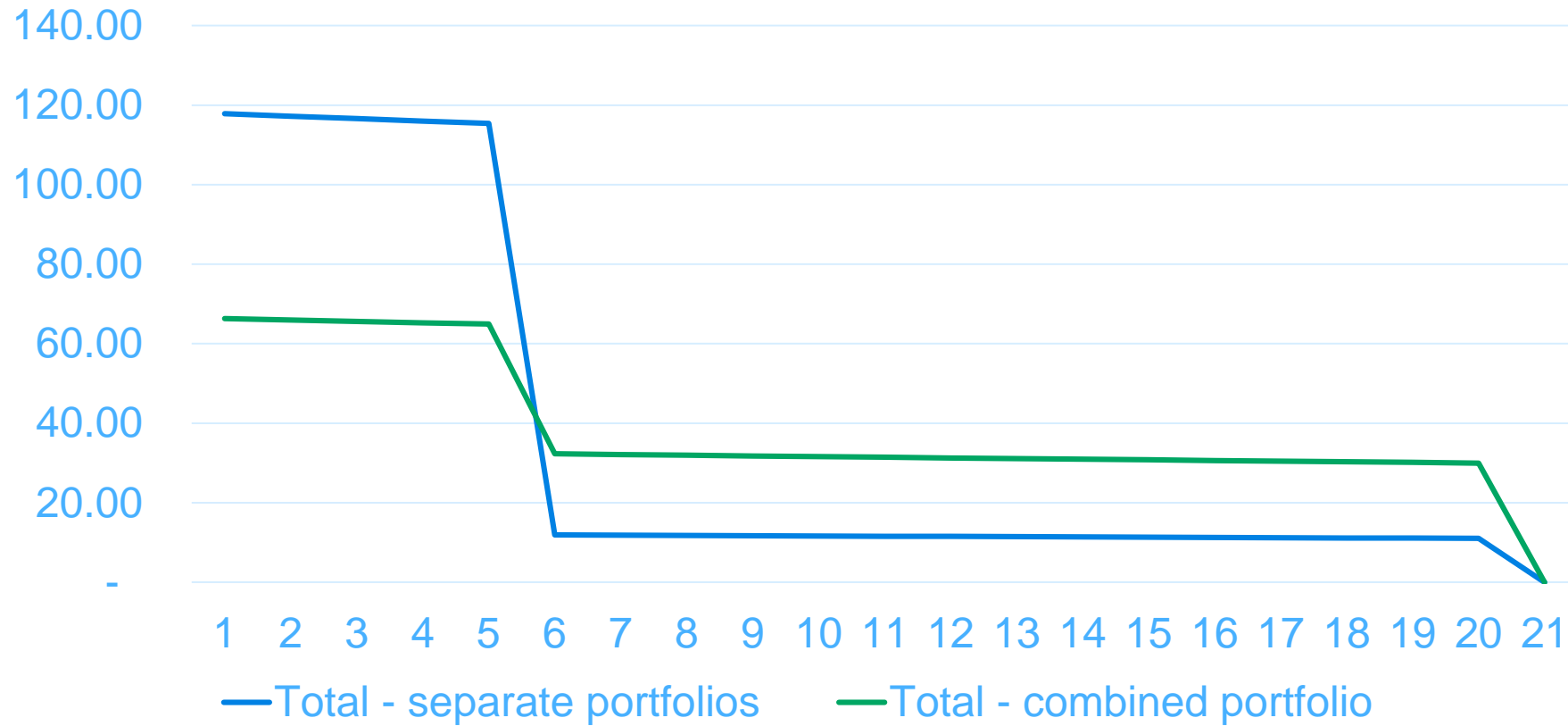
Profit pattern - separate portfolios



Aggregation

Setting portfolios

Profit pattern: separate vs. combined portfolio

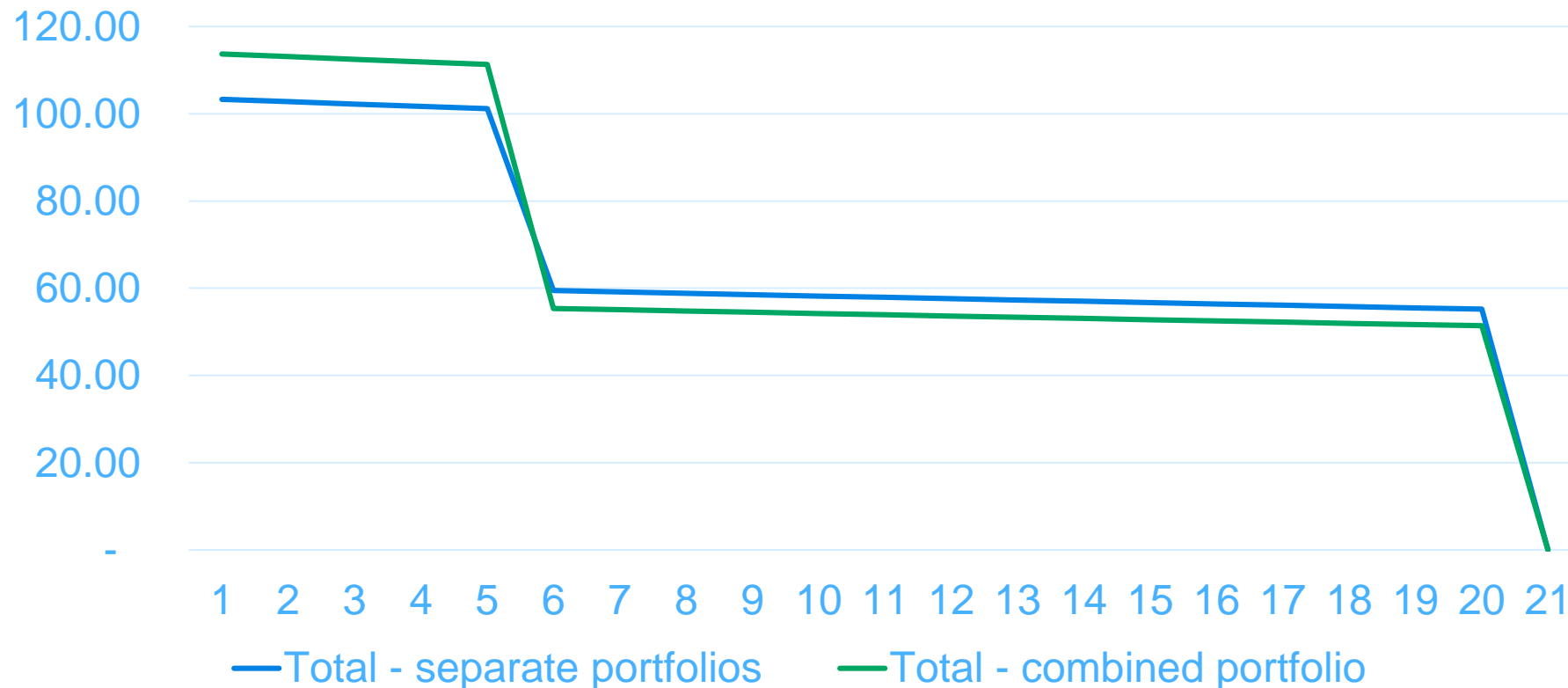


Aggregation

Setting portfolios

- Let's say instead that:
 - Initial CSM for 5-year contracts: 200, Initial CSM for 20-year contracts: 1000

Profit pattern: separate vs. combined portfolio



Aggregation

Identifying profitability groups

- Must split contracts in portfolio at initial recognition into:

1. Onerous contracts

Survey: 6%

3. Other profitable contracts

Survey: 33%

2. Profitable contracts without significant possibility of becoming loss-making

Survey: 60%

Aggregation

Identifying profitability groups – How?

- If have “reasonable and supportable information” that contracts will be in a particular group, don’t need to assess at contract level
- Important as losses on onerous contracts recognised immediately but profits spread over contract term – typically don’t want onerous contracts!
- Approaches:
 - Could do very sophisticated analysis to split contracts into the three groups – set probability level for “significant possibility” then do stress testing of contract profitability at inception
 - Simpler approach - Use pricing reports / profit testing / VNB information. If known cross subsidies (e.g. blocks of small policies are loss making) would need to separate

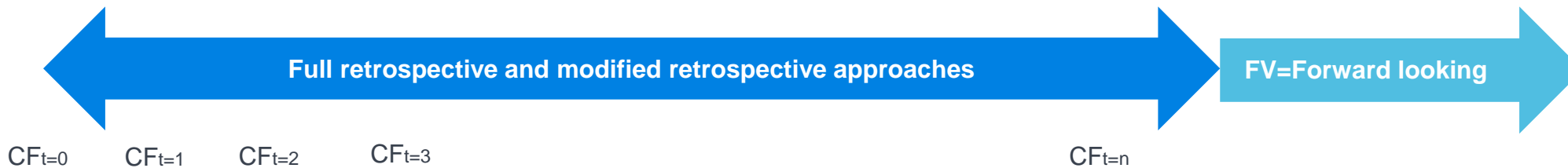
Transition – three approaches

Approaches - recap

Full retrospective approach	Modified retrospective approach	Fair value approach
<ul style="list-style-type: none"> Required where not 'impracticable' Requires day 1 data and assumptions and full history to date of transition If impracticable, choose between modified retrospective and fair value approach 	<ul style="list-style-type: none"> Retrospective with simplifications to address data gaps Simplifications can be applied on a piecemeal basis 	<ul style="list-style-type: none"> Comparison of fulfilment value to IFRS 13 fair value Could result in limited CSM and hence future profits Determination of fair value of insurance contract is unclear

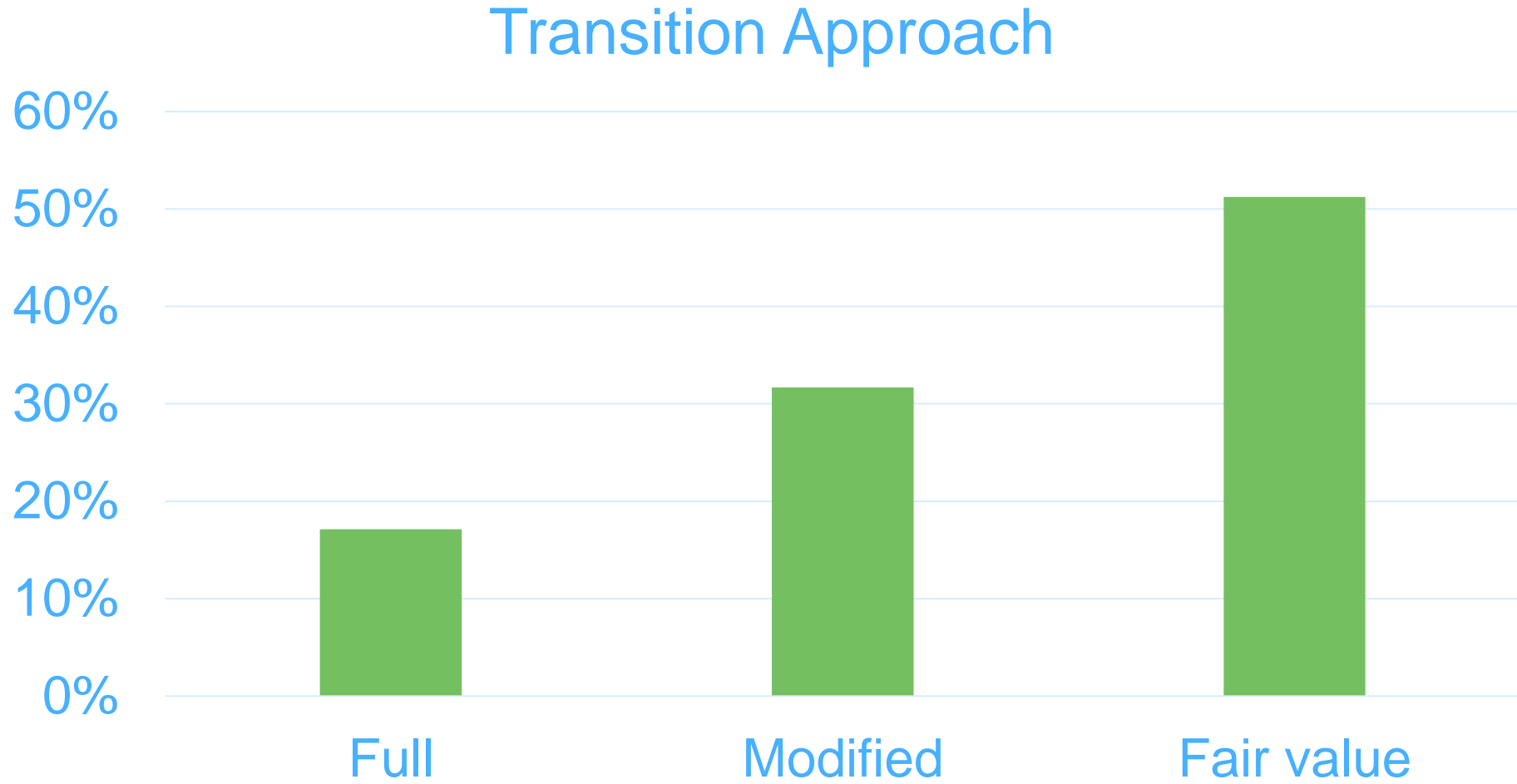
Inception

Transition



Transition

Approaches – Preliminary survey results



Transition

Approaches

- No simple approach!
- Frustration with inflexibility of retrospective approaches
- Most companies will pick a mix of approaches:
 - Apply full retrospective for business written between now and transition date and generally business written in last few years too.
 - Modified retrospective / fair value for older business, especially if materiality relatively low



Fair value vs Fulfilment cash flows

Many potential differences

	FCF	FV
Standard	IFRS 17	IFRS 13
Renewals	Not included	May be included i.e. different contract boundaries
Expenses	Directly attributable	All
Non-performance risk	Not included	Must be included

- Others
 - Discount rates
 - Risk adjustment, diversification benefits, cost of capital rate

Risk Adjustment

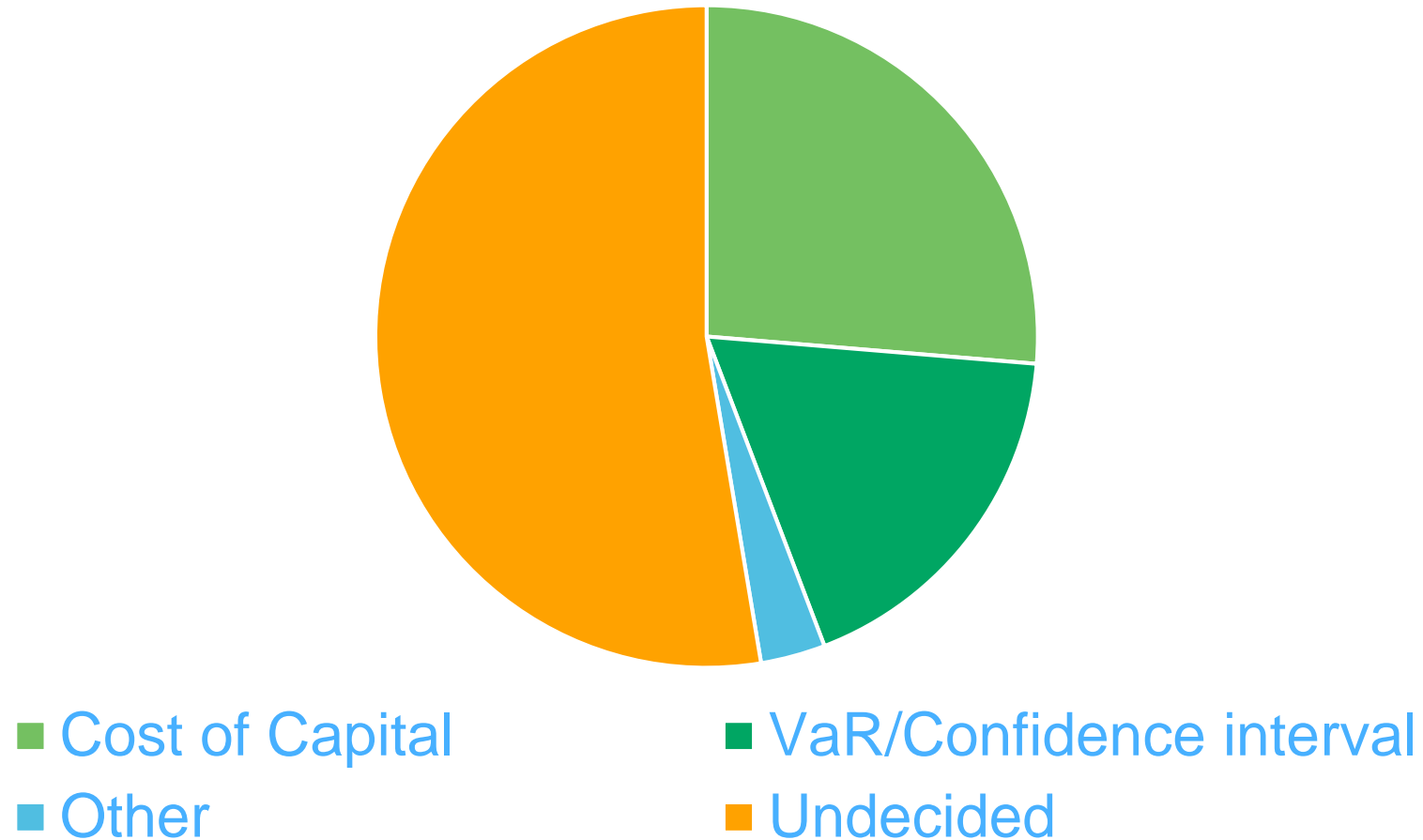
Approach

- Recap: similar concept as Solvency II risk margin but method and confidence level not specified
- Two possible approaches for most standard formula European insurers
 - Cost of capital
 - Quantile approach
- Possible calibration approach:
 - Benchmark with the Solvency II SCR stresses (99.5% percentile) and assume normality (99.5% percentile $\sim 2.58 \times \text{SD}$)

Risk Adjustment

Approach – Preliminary survey results

Risk adjustment method



Risk Adjustment

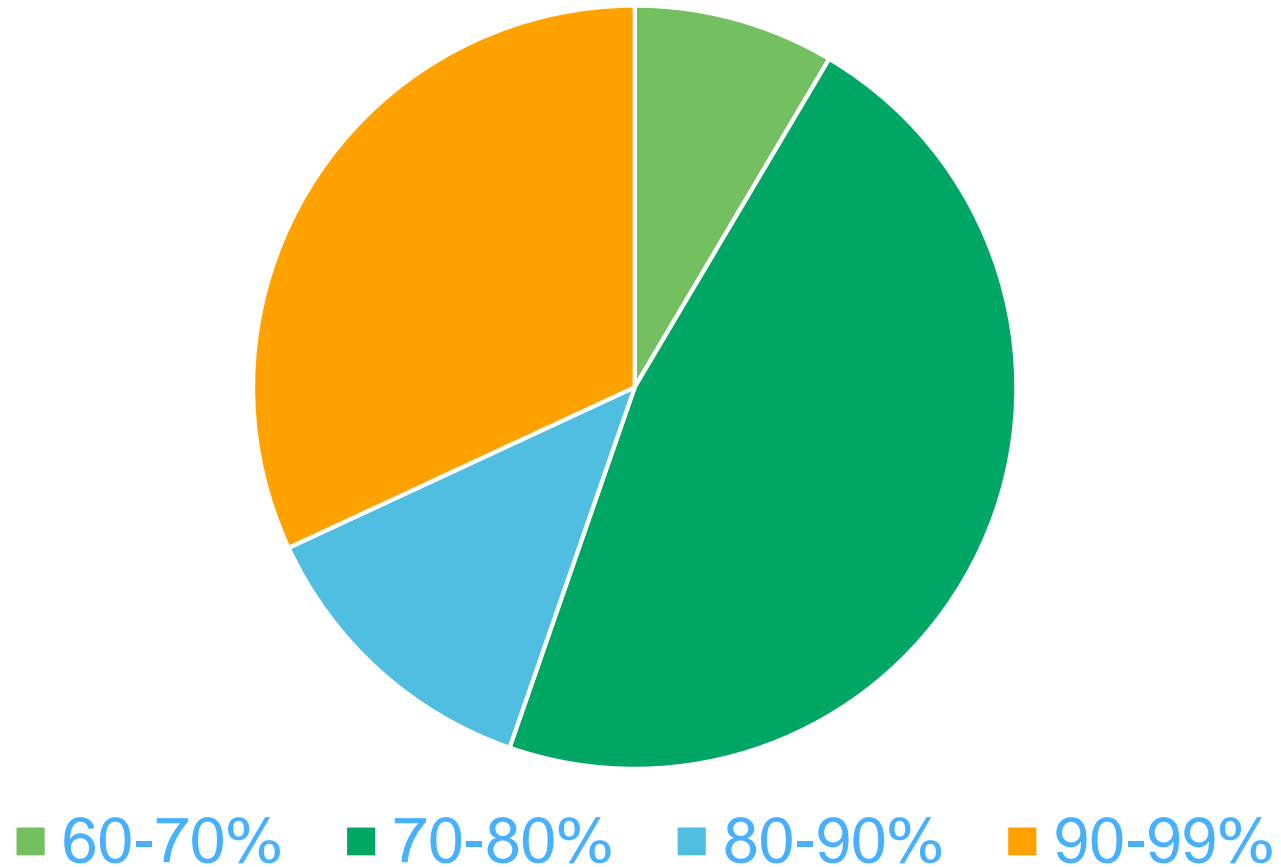
Confidence level



Risk Adjustment

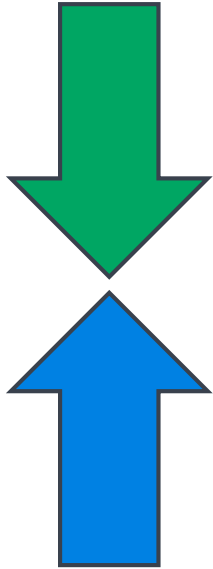
Confidence level – Preliminary survey results

Risk adjustment confidence level



Discount rates

Which approach?



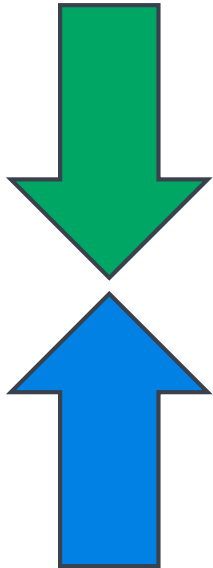
Top-down

Bottom-up

- Bottom-up arguably simpler: Easier to come up with term structure, avoid need to build portfolio, avoid need for credit risk assessment, similarity to Solvency II

Discount rates

Which approach? Preliminary survey results



29% globally

71% globally

- Broadly similar for Irish companies
- European responses close to 50/50

Discount rates

Liquidity premium

- Some business can justify the addition of a liquidity premium to discount rates
 - Classic example is annuities
 - UL contract with no surrender penalty might be considered fully liquid
 - Many products fall somewhere in between these two
-
- No particularly satisfactory way to decide exactly how “liquid” an insurance contract is - rarely an equivalent market instrument to benchmark against

Discount rates

Can we use Solvency II rates?

- For relatively short tailed and relatively liquid business, possibly reasonable
- Others more difficult:
 - Liquidity premium
 - Last liquid point
 - Ultimate forward rate
 - Can Solvency II rates be justified for IFRS 17 given we know the UFR is artificially high at present due to the mechanism to limit changes?

Coffee Break

IFRS 17 data and technology considerations

Amritpal Khangura
Life Technology
Solutions (London)



Contents

Challenges

- Business environment
- Technology
- Operations/processes

Potential Solutions

- Overview
- Architecture
- Technology
- Actuarial functionality

Contents

Challenges

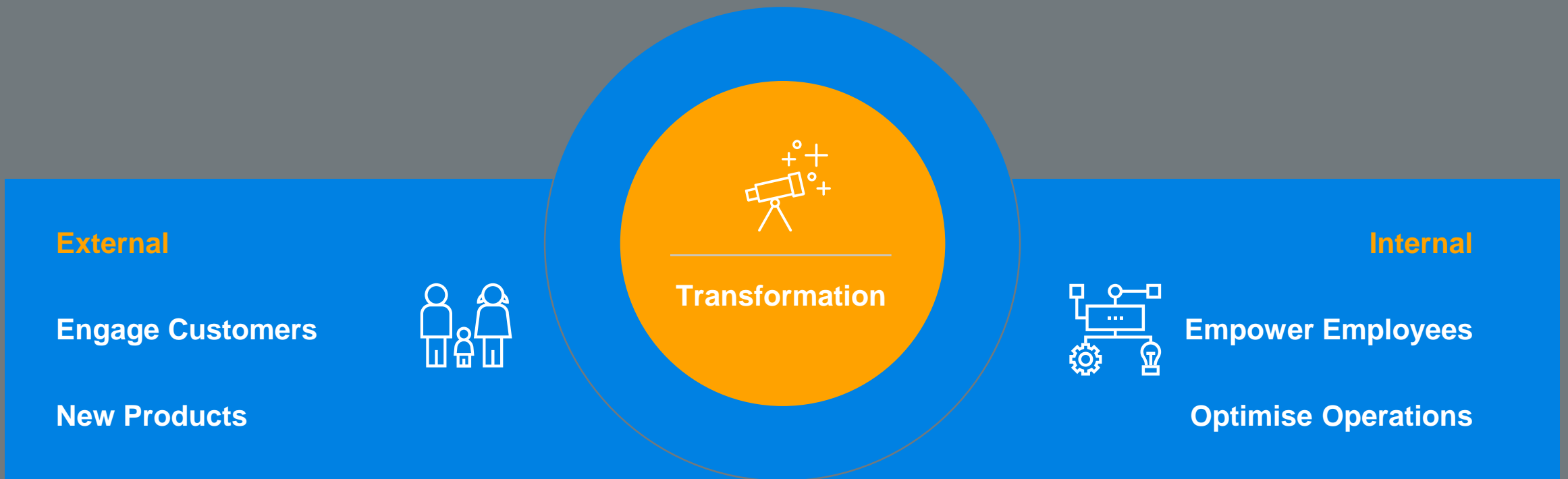
- **Business environment**
- **Technology**
- **Operations/processes**

Potential Solutions

- Overview
- Architecture
- Technology
- Actuarial functionality

“The world is changing very fast. Big will not beat small anymore. It will be the fast beating the slow.”

Rupert Murdoch



Challenges and complexities

Broad themes



Data: Sources, Volume, Quality, Storage and Integration

- Multiple sources, quality variable, data tagging inconsistent, etc.
- Storage of prior period results and at-inception based parameters
- Significant current period cash flow data at a very granular level
- Integration with projection models, general ledger, data warehouses



IFRS 17 Calculations

- Calculate key IFRS 17 balance sheet and revenue account items
- Lots of complex items: accrual's type calculation of CSM, multiple discount rates, onerousness, loss-component, reinsurance, risk adjustment etc
- Reconciliation and movements analysis between prior and current period
- Sensitivity / what-if analysis

Challenges and complexities

Broad themes (Cont'd)



Accounting and Actuarial Analysis and Sign-off

- Short reporting time frames, with lots of volume being generated
- Analysis needed at different levels of granularity, and roll-ups, cohort-level through to entity and group levels
- Handling of “manuals” – where and how. FCM vs top-side adjustments



Resourcing Challenges

- Greater importance of cross-department collaborations
- Learning new standards, new reporting presentations, and terminology
- Existing projects and development initiatives with finite resources

IFRS 17: Modelling Hot Topics

Summary



1. PAA and LIC

Modelling complexity of PAA and other items such as liability for incurred claims.



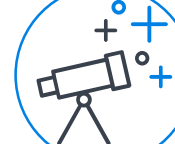
2. Currency

How to capture multiple currencies, and movements over time. Reporting entity and group results in local and group currencies.



3. Onerousness Testing

In-cycle onerousness testing, including labelling of new business into right cohort.



4. Sensitivity Testing

Proxy sensitivity testing, without requiring heavy model re-runs. Other what-if and future projection capabilities.



5. Risk Adjustment

Enhance risk adjustment calculation to perform stress and correlation of appropriate risk drivers. Other methodologies?



6. Reinsurance

Concept of “shadow” runs to capture movements in gross business for use in ceded layer CSM movements.



7. IFRS 17 Analytics

Time to analyse is minimal. Analysis and reporting needs to be the focus, not executing operational processes.



8. Collaboration

Ability for users to analyse, converse with others, define actions and complete sign-off of financial results.

Contents

Challenges

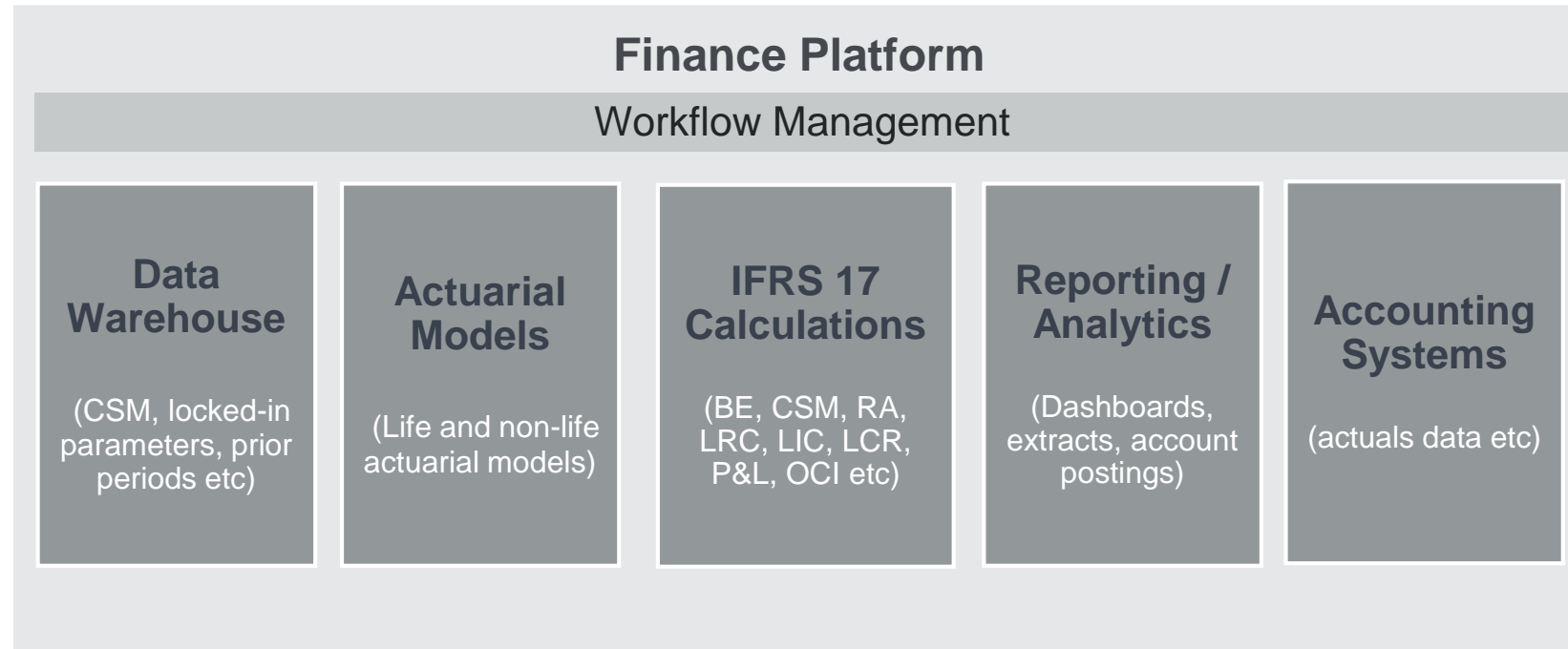
- Business environment
- Technology
- Operations/processes

Potential Solutions

- **Overview**
- **Architecture**
- **Technology**
- **Actuarial functionality**

Financial Platform

Key Components



Potential Considerations

Cloud vs On-premises

Use of cloud provides greater scalability. Versus on-premises control and customisation ease.

Actuarial vs Accounting

Both accounting and actuarial data needed. Are RA and CSM an actuarial or accounting calculation?

... and lots more.

Components

Data Warehouse

Ability to store prior period results, including locked-in parameters and other assumptions.

Actuarial Models

Best estimate cashflows, TVOG, econ vs non-econ assumptions, discount rates, data tags etc.

Analytics

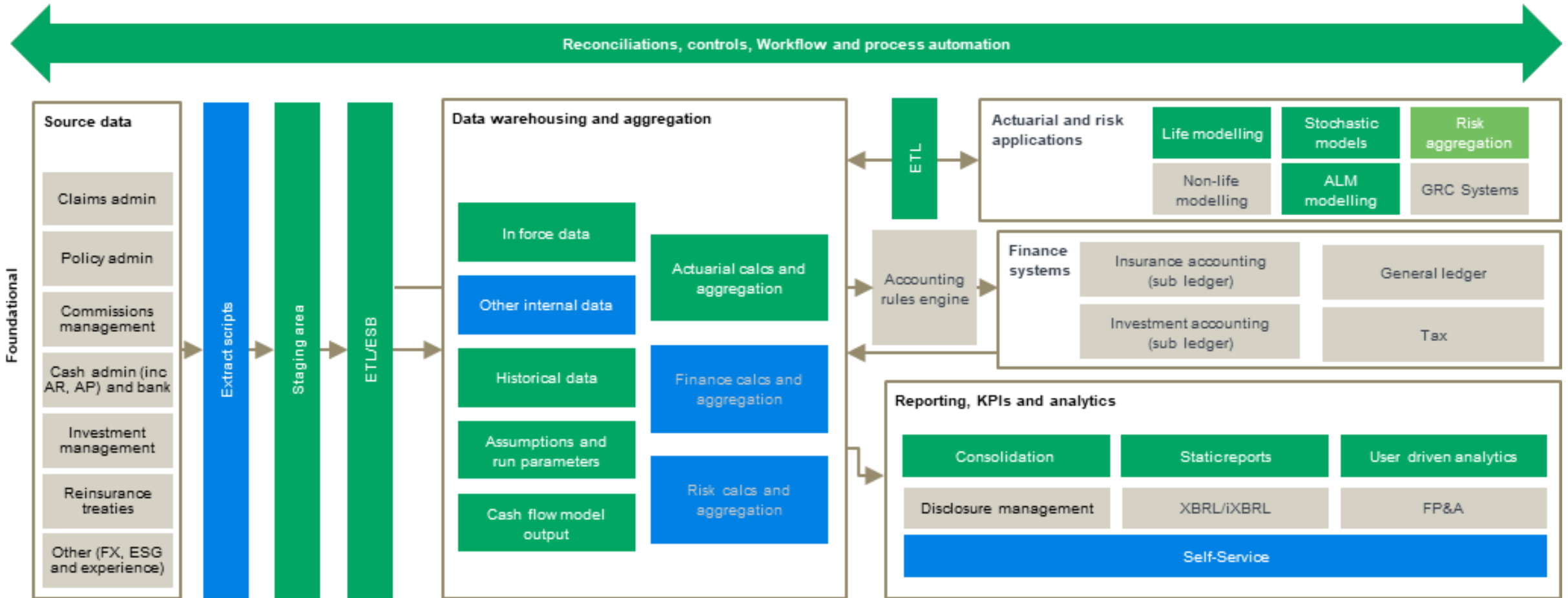
Reporting layer to support analysis, KPI, aggregations, review and sign-off.

Accounting Integration

Accounting specific output to support integration into general ledger systems and other accounting systems.

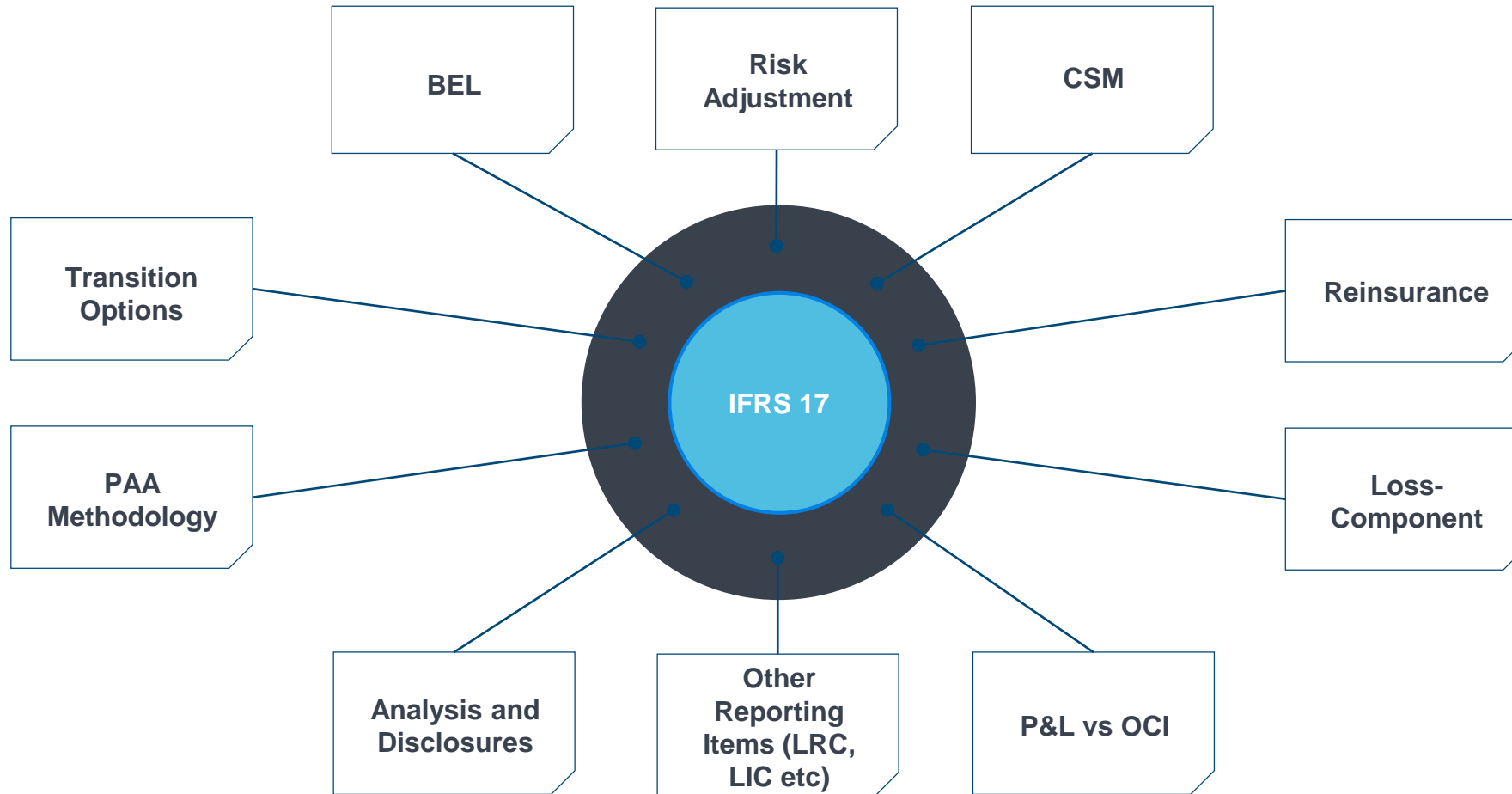
Typical Workflow

Detailed



Actuarial Functionality

Summary



Best-Estimate Liability (BEL)

Key Requirements

- Cashflows split by insurance and deposit are provided for each cohort as:
 - BEL discount rates are model inputs
 - At inception, valuation date, and projected calculations

Suggestion: Reconciliation of BEL between IFRS and Actuarial models

Suggestion: Ability to handle detailed cashflows (premiums, expenses, claims, others) to support Actual vs Expected analysis

Discount Rates

Key Requirements

- Separately definable discount rates:

By cohort

BEL vs RA
vs CSM

Insurance vs
Investment

Locked,
prior, current

- Time-weighted cash flows for BEL discounting

Suggestion: Ability to do weighted average discount curves for analysis, reporting and disclosures.

Suggestion: Storage of locked-in discount rates

Contractual Service Margin (CSM)

Key Requirements

- Use of discounted or undiscounted coverage units
- Locked (GM) or current (VFA) discount rates
- At inception, valuation date, and projected calculations
- Ability to handle non-economic and economic impacts as per measurement model rules

Suggestion: Flexibility in defining coverage unit at cohort level

Suggestion: Flexible unlocking steps, allowing for greater insight of movements in CSM

Calculation – Other calculated items

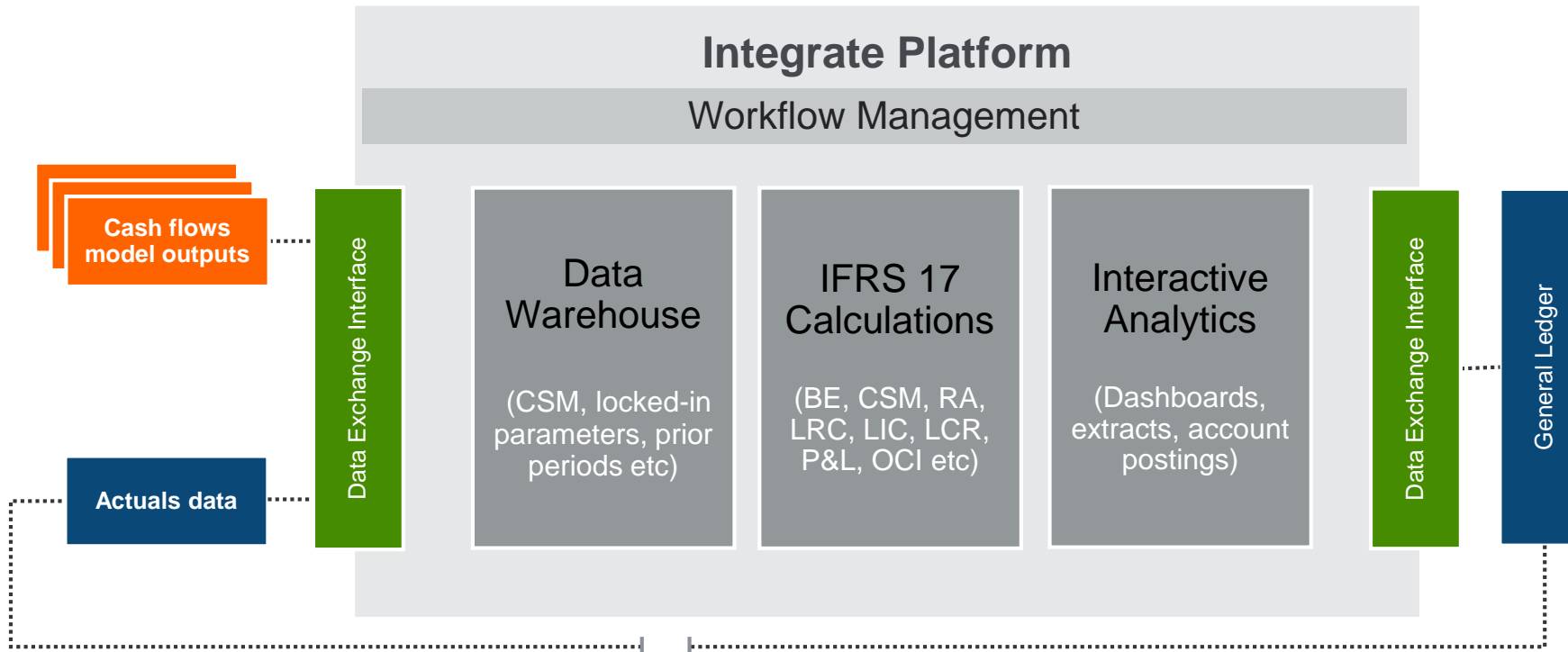
- Liability for remaining coverage (“LRC”)
- Loss Component of LRC (“LCR”):
 - calculated at inception, valuation date and projected
 - all scenarios covered:
 - Onerous at inception
 - Profitable → Onerous
 - Onerous → Onerous
 - Onerous → Profitable
- P&L or OCI (cohort level choice) impact of GM economic assumption changes
- Reinsurance:
 - Negative CSM permitted for Reinsurance ceded

Analytics

- Input data analysis and validations
- Output data analysis at cohort-level up to group-level
- Disclosure needs:
 - Comprehensive Income Statement
 - Movement analyses and reconciliations from the prior period for:
 - LRC, LCR and LRC
 - BEL, RA and CSM
- Actual vs expected cash flow analysis
- Discount rate analysis
- General ledger postings

Integrate IFRS 17 Solution

Key Components



Managed service

End-to-end process provided as a managed service with full customer and operational support.

Automated Workflow

Automate execution of end-to-end process. Full audit and governance.

Cloud-based review

Interactive reporting layer to support analysis, review and sign-off across multiple reporting bases.

Accounting Integration

Accounting specific output to support integration into client general ledger systems and other accounting systems.

Key



External Input Data



Data Exchange Interface



External Valuation System(s)



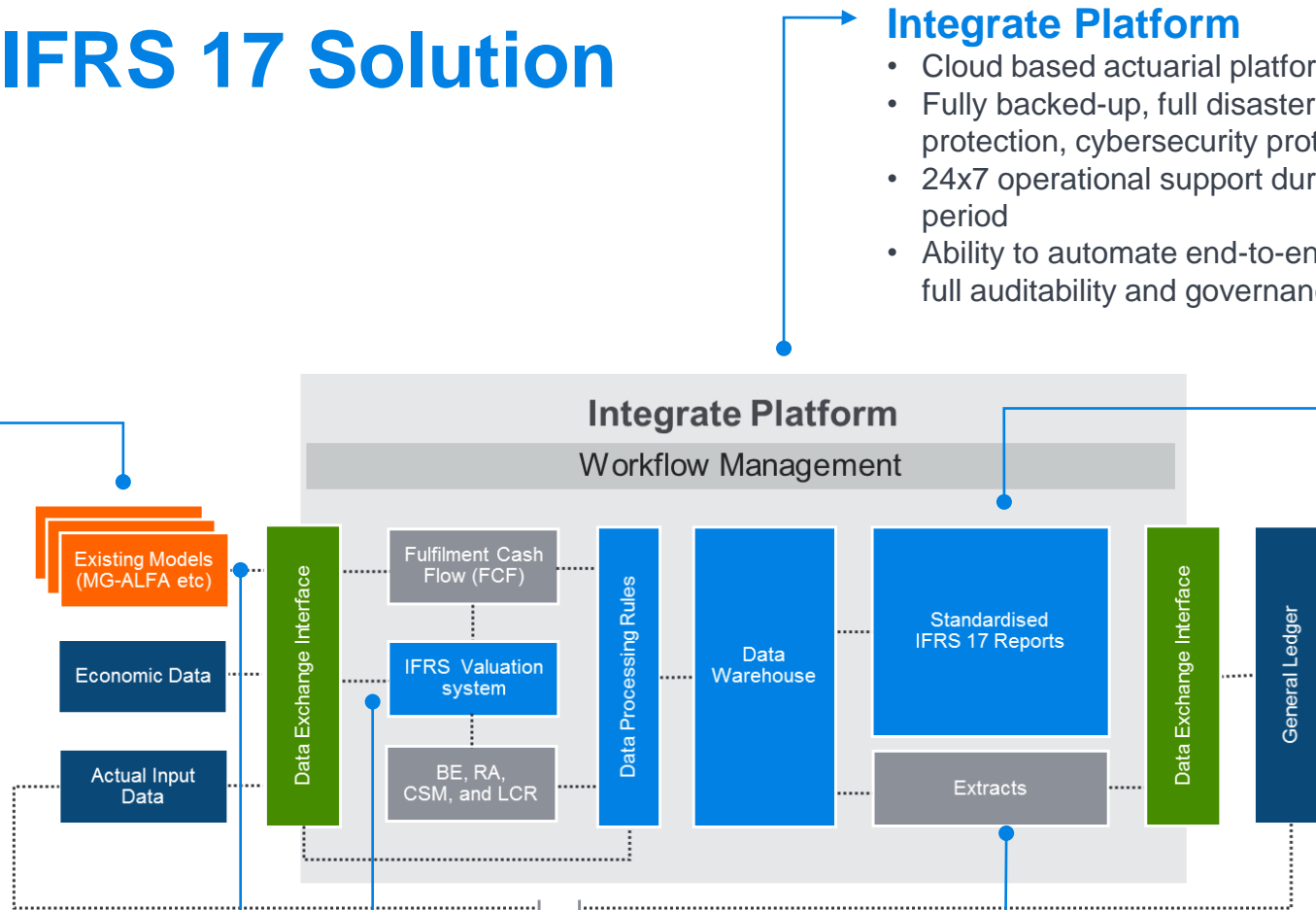
Integrate Component

Integrate IFRS 17 Solution

Architecture

Projection Model(s)

- Continue to run on existing platform(s)
- Changes need to support IFRS 17 cash flow requirements
- Labelling for cohort grouping



Integrate Platform

- Cloud based actuarial platform
- Fully backed-up, full disaster recovery protection, cybersecurity protection
- 24x7 operational support during valuation period
- Ability to automate end-to-end workflow, with full auditability and governance

Analysis Layer

- Cloud based approach to analysis and review of IFRS 17 calculations
- Results can be sourced from multiple sources to provide complete picture to support analysis
- Ability to provide reports for multiple reporting bases, and allow for reconciliation across these bases
- Ability to interact and drill-down into results

Cash flow data

- Combine results from multiple runs and systems
- Either in the cloud or on-premises

IFRS 17 Model

- MG-ALFA model that:
- Consumes data from multiple sources (cash flow model and data warehouse)
 - Calculates BE, CSM, RA and LCR.
 - Includes on-going re-measurement of CSM covering interest accretion, change for assumptions, experience impact etc.

Extracts

- Targeted extracts containing all required data for down-stream processing
- Includes postings (deltas and balances)
- Provided via fully governed and automated data exchange interface



William Hines

Eamon Comerford

Andrew Kay

Amritpal Khangura

Q&A Panel Discussion

Appendix 1

Integrate IFRS 17 Analytics

Appendices

Input Validation

GDSKey
IFRS_DEMO_05

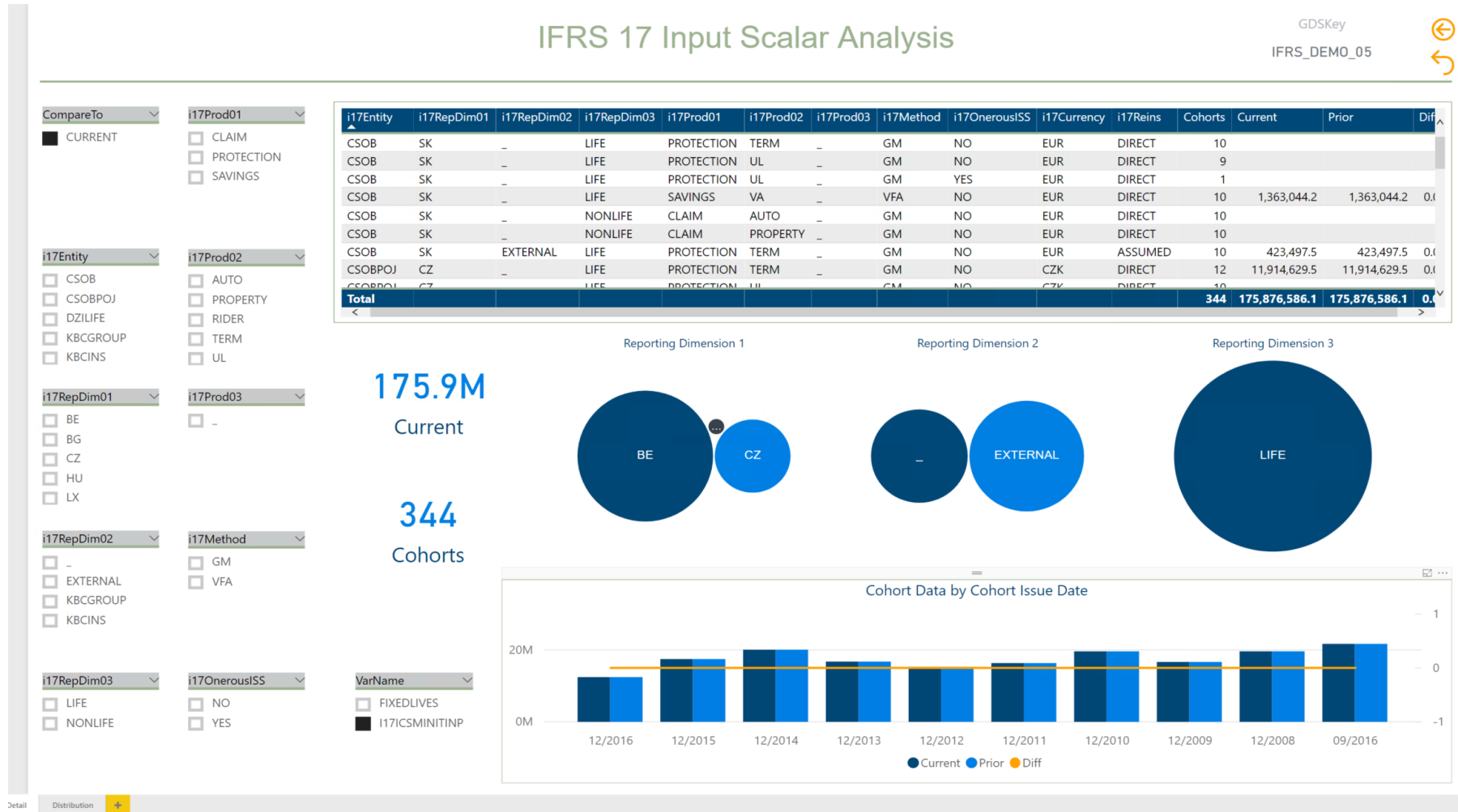
IFRS 17 Input Validation Report

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			2018-05-31 13:42:05	C005091	DZILIFE	DIRECT	INFO	I17LOISSDATE	I17LOISSDATE IS CONVERTED FROM JAN-08 TO 01/2008	CONVERTED FROM AIN	DUMM
			2018-05-31 13:42:05	C005091	DZILIFE	DIRECT	INFO	VALDATE	VALDATE IS CONVERTED FROM MAR-17 TO 03/2017	CONVERTED FROM AIN	DUMM
			2018-05-31 13:42:05	C005092	DZILIFE	DIRECT	INFO	I17HISSDATE	I17HISSDATE IS CONVERTED FROM DEC-08 TO 12/2008	CONVERTED FROM AIN	DUMM
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Appendices

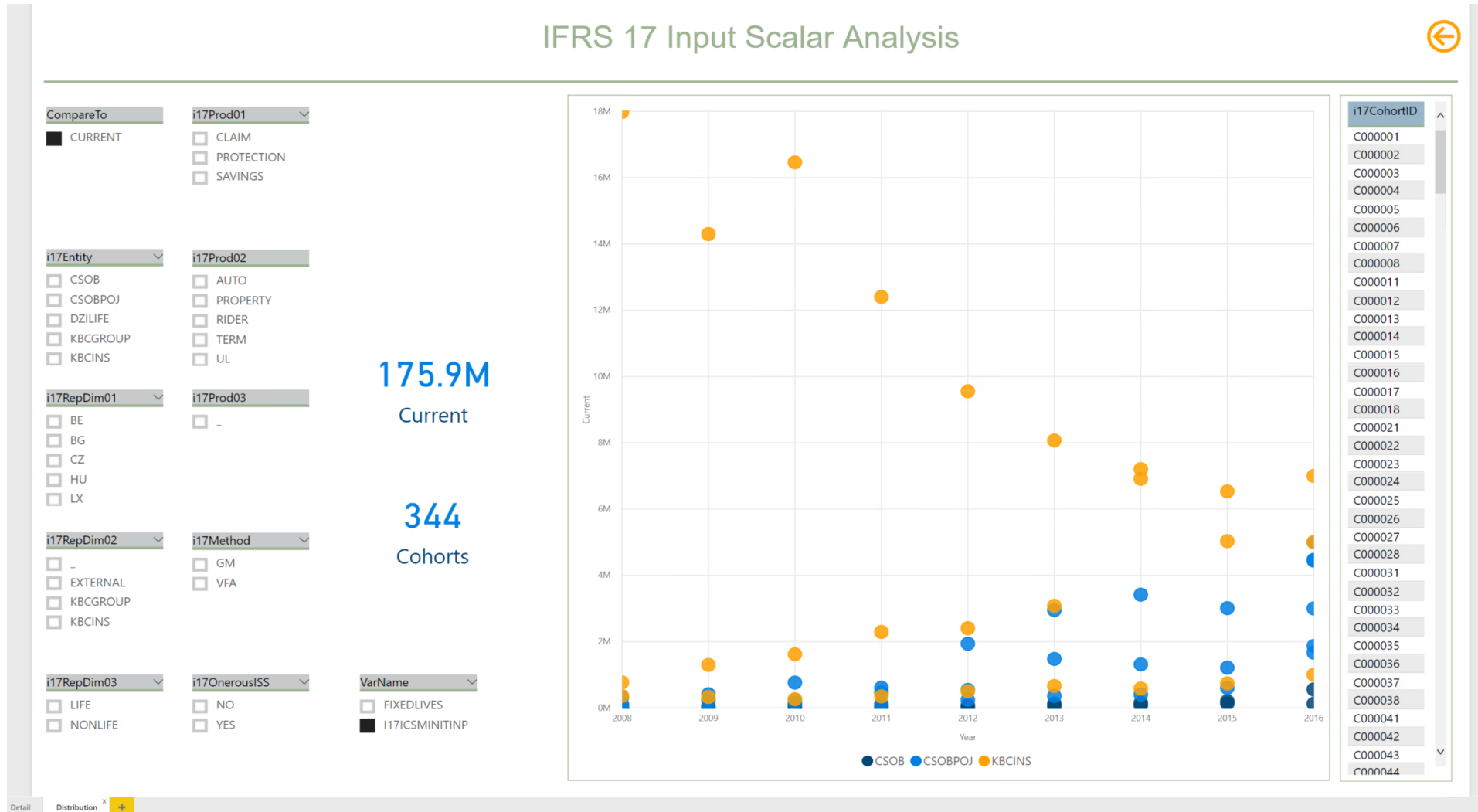
Input Scalar Data (1)



Appendices

Input Scalar Data (2)

IFRS 17 Input Scalar Analysis



Appendices

Input Vector Data

GDSKey
IFRS_DEMO_05

IFRS 17 Cash Flow Input Analysis

Scaling

 BILLION
 MILLION
 THOUSAND
 NA

i17RepDim03

 LIFE
 NONLIFE

VarName

 BEDISCDEN
 BEDISCNUM
 BENPVIF
 BENPVIFDEP
 BENPVIFINS

i17Cohor...

 C000001
 C000002
 C000003
 C000004
 C000005
 C000006
 C000007
 C000008
 C000011
 C000012
 C000013
 C000014
 C000015
 C000016
 C000017
 C000018
 C000021
 C000022
 C000023
 C000024
 C000025
 C000026
 C000027
 C000028
 C000031
 C000032

CompareTo

 CURRENT
 PROTECTION
 SAVINGS

i17Prod01

 CLAIM
 PROTECTION
 SAVINGS

i17OnerousISS

 NO
 YES

i17Entity

 CSOB
 CSOBPOJ
 DZILIFE
 KBCGROUP
 KBCINS

i17Prod02

 AUTO
 PROPERTY
 RIDER
 TERM
 UL

UnlockStep

 01
 02
 03
 04

i17RepDim01

 BE
 BG
 CZ
 HU
 LX

i17RepDim02

 -
 EXTERNAL
 KBCGROUP
 KBCINS

i17RepDim03

 LIFE
 NONLIFE

i17Prod03

 -

UnlockType

 NONE

i17Method

 GM
 VFA

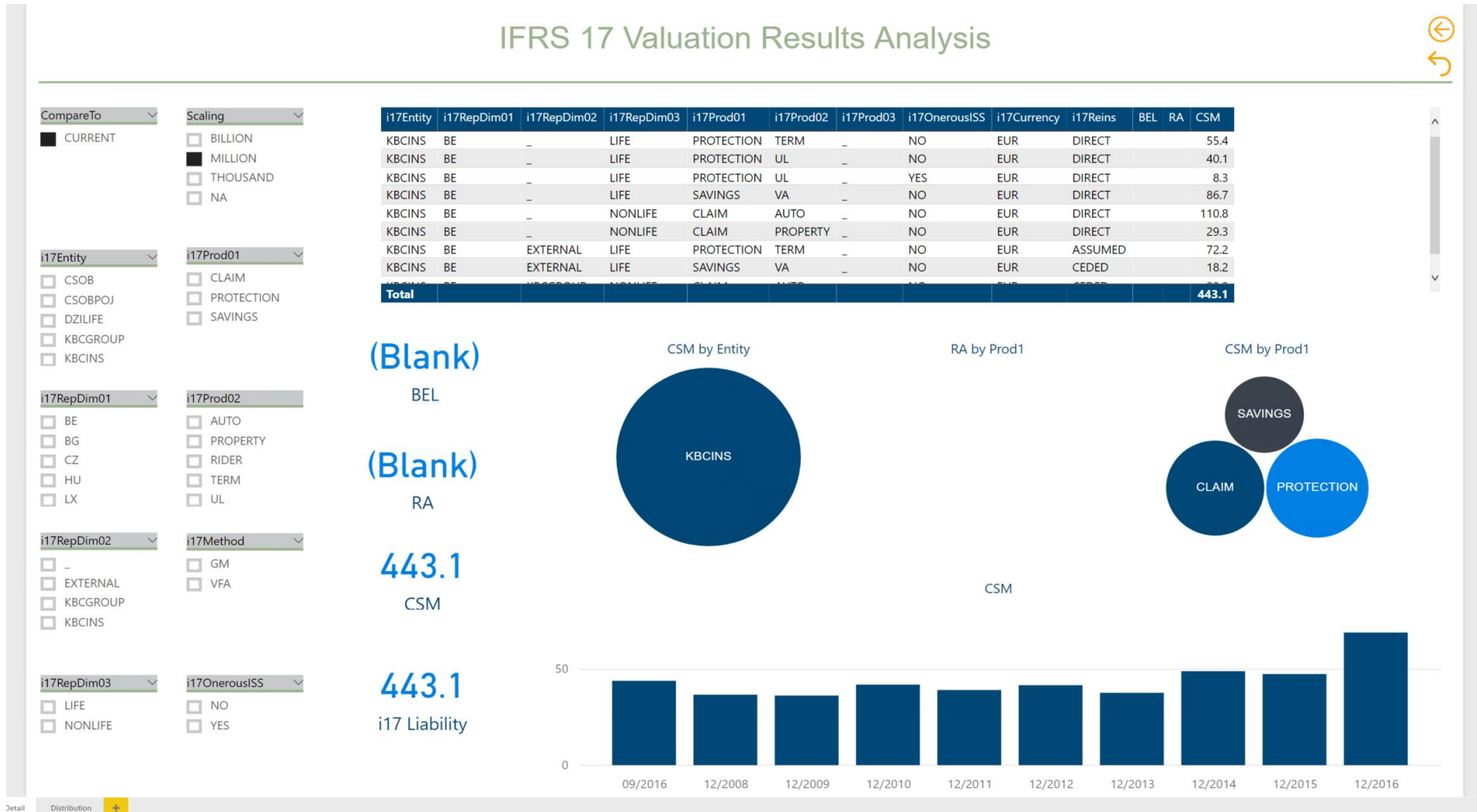
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Input Cash Flow Projection (Variable Detail)

Input Cash Flow Projection (Curr vs Prior)

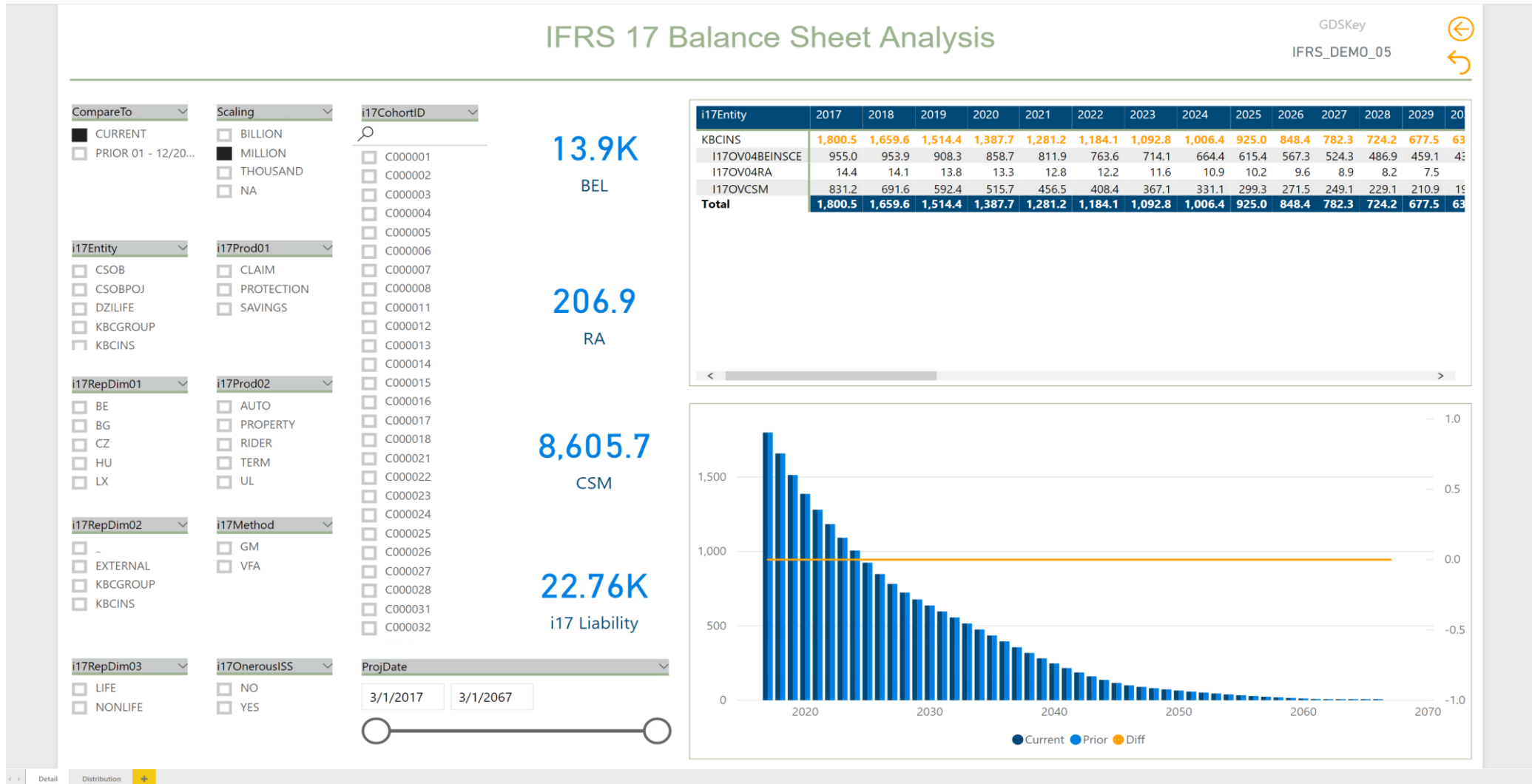
Appendices

Output Scalar Data (1)



Appendices

Balance Sheet



Appendices

Comprehensive Income

IFRS 17 Comprehensive Income

GDSKey
IFRS_DEMO_05



BILLION
 MILLION
 NA
 THOUSAND

LIFE
 NO
 C000054
 C000073

CURRENT
 PRIOR 01 - 12/20...

KBCINS
 VA

BE
 -

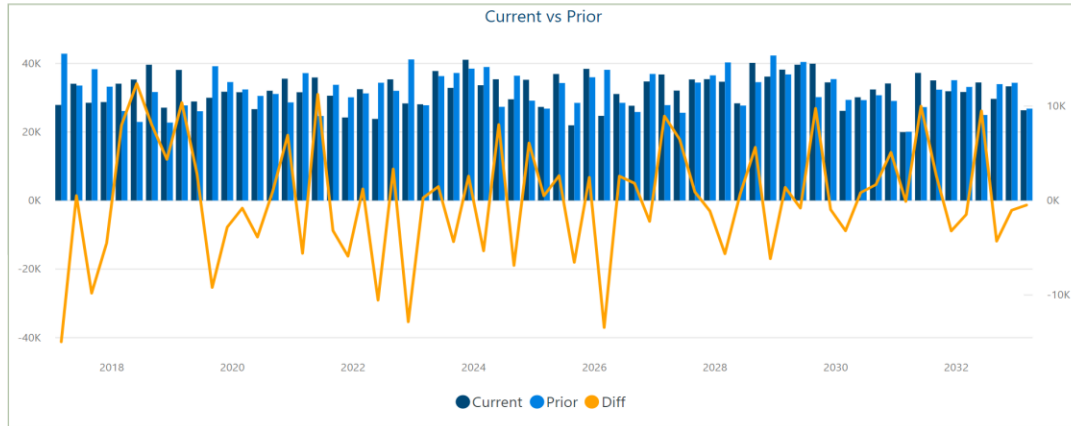
-
 VFA

01. Insurance Revenue
 02. Insurance Service Expenses
 03. Insurance Service Result
 04. Investment Income
 05. Investment Finance Expenses

01/03/2017
 01/03/2033

Breakdown

VarDesc	2017	2018	2019	2020	2021	2022	2023	2024	2025
01. Insurance Revenue	34,980.00	23,322.00	32,118.00	25,485.00	28,144.00	31,669.00	32,282.00	34,852.00	29,282.00
02. Insurance Service Expenses	43,681.00	24,556.00	33,812.00	29,757.00	34,077.00	34,230.00	29,391.00	30,476.00	28,365.00
03. Insurance Service Result	78,661.00	47,878.00	65,930.00	55,242.00	62,221.00	65,899.00	61,673.00	65,328.00	57,647.00
04. Investment Income	33,246.00	36,225.00	28,898.00	30,012.00	39,273.00	33,857.00	41,483.00	34,310.00	31,903.00
05. Investment Finance Expenses	36,023.00	19,337.00	32,722.00	37,404.00	24,240.00	39,051.00	36,654.00	32,228.00	36,015.00
06. Net Financial Result	69,269.00	55,562.00	61,620.00	67,416.00	63,513.00	72,908.00	78,137.00	66,538.00	67,918.00
07. Profit and Loss	147,930.00	103,440.00	127,550.00	122,658.00	125,734.00	138,807.00	139,810.00	131,866.00	125,565.00
08. Insurance Finance Expenses (P&L)	28,865.00	31,472.00	21,164.00	30,498.00	32,044.00	35,809.00	22,920.00	30,078.00	31,154.00
09. Insurance Finance Expenses (OCI)	28,720.00	28,835.00	22,719.00	28,573.00	35,970.00	36,467.00	32,470.00	34,154.00	31,231.00
10. Total Other Comprehensive Income	28,720.00	28,835.00	22,719.00	28,573.00	35,970.00	36,467.00	32,470.00	34,154.00	31,231.00
11. Comprehensive Income	176,650.00	132,275.00	150,269.00	151,231.00	161,704.00	175,274.00	172,280.00	166,020.00	156,796.00



Appendices

Movement Analysis (1)

IFRS 17 Movement Analysis (1)

GDSKey
IFRS_DEMO_05



Unit

BILLION
 MILLION
 NA
 THOUSAND

CompareTo

CURRENT
 PRIOR 01 - 03/20...

i17Entity

KBCINS

i17RepDim01

BE

i17RepDim02

-

i17RepDim03

LIFE

i17Prod01

SAVINGS

i17Prod02

VA

i17Prod03

-

i17OnerousISS

NO

ItemDesc01

01. JAN
 02. FEB
 03. MAR
 YTD

i17CohortID

C000043
 C000051
 C000054
 C000073

ItemDesc01 ItemDesc02 VarDesc	01. JAN			02. FEB			03. MAR		
	01. LRC NON-ONEROUS	ONEROUS	02. LIC NA	Total	01. LRC NON-ONEROUS	ONEROUS	02. LIC NA	Total	01. LRC NON-ONEROUS
01. Insurance contract liabilities (opening)	10,002.0	8,426.0	9,354.0	27,782.0	24,998.0	25,652.0	22,937.0	73,587.0	39,498.0
02. Incurred claims and other expenses	834.0	974.0	835.0	2,643.0	1,005.0	1,330.0	1,172.0	3,507.0	1,125.0
03. CSM for service provided	1,018.0	774.0	690.0	2,482.0	810.0	779.0	726.0	2,315.0	1,341.0
04. RA release for expired risks	788.0	745.0	1,041.0	2,574.0	1,096.0	716.0	766.0	2,578.0	473.0
05. Amounts related to LRC (2 + 3 + 4)	2,640.0	2,493.0	2,566.0	7,699.0	2,911.0	2,825.0	2,664.0	8,400.0	2,939.0
06. Recovery of acquisition cash flows	684.0	929.0	870.0	2,483.0	417.0	673.0	744.0	1,834.0	1,101.0
07. Insurance revenue (5 + 6)	3,324.0	3,422.0	3,436.0	10,182.0	3,328.0	3,498.0	3,408.0	10,234.0	4,040.0
08. Insured claims and other expenses	524.0	618.0	638.0	1,780.0	890.0	451.0	446.0	1,787.0	711.0
09. Acquisition expenses	992.0	486.0	874.0	2,352.0	872.0	739.0	501.0	2,112.0	789.0
10. Changes related to future service	1,179.0	1,116.0	1,229.0	3,524.0	620.0	978.0	972.0	2,570.0	882.0
11. Changes related to past service	1,012.0	690.0	793.0	2,495.0	508.0	693.0	1,058.0	2,259.0	526.0
12. Insurance service expenses (8 + 9 + 10 + 11)	3,707.0	2,910.0	3,534.0	10,151.0	2,890.0	2,861.0	2,977.0	8,728.0	2,908.0
13. Investment components	6,798.0	10,085.0	4,789.0	21,672.0	6,806.0	7,907.0	4,606.0	19,319.0	4,837.0
14. Insurance service result (7 + 12 + 13)	13,829.0	16,417.0	11,759.0	42,005.0	13,024.0	14,266.0	10,991.0	38,281.0	11,785.0
15. Insurance finance expenses	537.0	422.0	952.0	1,911.0	618.0	1,259.0	618.0	2,495.0	898.0
16. Total change in comprehensive inc (14 + 15)	14,366.0	16,839.0	12,711.0	43,916.0	13,642.0	15,525.0	11,609.0	40,776.0	12,683.0
17. Premiums received	-849.0	-1,112.0	-657.0	-2,618.0	-667.0	-488.0	-722.0	-1,877.0	-993.0
18. Claims and expenses paid	837.0	865.0	780.0	2,482.0	926.0	647.0	641.0	2,214.0	1,134.0
19. Acquisition costs paid	642.0	634.0	749.0	2,025.0	599.0	874.0	843.0	2,316.0	998.0
20. Total cash flows (17 + 18 + 19)	630.0	387.0	872.0	1,889.0	858.0	1,033.0	762.0	2,653.0	1,139.0
21. Insurance contract liabilities (closing) (1 + 16 + 20)	24,998.0	25,652.0	22,937.0	73,587.0	39,498.0	42,210.0	35,308.0	117,016.0	53,320.0

● Increase ● Decrease ● Total

Appendices

Movement Analysis (2)

GDSKey
IFRS_DEMO_05

←
↶

Unit

 BILLION
 MILLION
 NA
 THOUSAND

i17RepDim03

 LIFE

i17OnerousISS

 NO

CompareTo

 CURRENT

i17Prod01

 SAVINGS

ItemDesc01

 01. JAN
 02. FEB
 03. MAR
 YTD

i17Entity

 KBCINS

i17Prod02

 VA

i17CohortID

 C000043
 C000051
 C000054
 C000073

i17RepDim01

 BE

i17Prod03

 -

i17RepDim02

 -

i17Method

 VFA

ItemDesc01 VarDesc	01. JAN				02. FEB				03. MAR			
	01. BE	02. RA	03. CSM	Total	01. BE	02. RA	03. CSM	Total	01. BE	02. RA	03. CSM	Total
01. Insurance contract liabilities (opening)	19,948.0	11,984.0	11,245.0	43,177.0	33,258.0	26,830.0	24,579.0	84,667.0	47,524.0	40,700.0	38,585.0	126,809.0
02. CSM for service provided	1,389.0	1,513.0	1,491.0	4,393.0	1,803.0	2,193.0	1,248.0	5,244.0	1,986.0	1,310.0	998.0	4,294.0
03. RA release for expired risks	1,674.0	1,585.0	1,589.0	4,848.0	1,659.0	1,019.0	1,648.0	4,326.0	1,629.0	1,304.0	1,847.0	4,780.0
04. Experience adjustments	1,370.0	2,007.0	1,391.0	4,768.0	1,790.0	1,778.0	1,479.0	5,047.0	2,236.0	1,701.0	1,515.0	5,452.0
05. Changes related to current service (2 + 3 + 4)	4,433.0	5,105.0	4,471.0	14,009.0	5,252.0	4,990.0	4,375.0	14,617.0	5,851.0	4,315.0	4,360.0	14,526.0
06. New contracts recognised	1,599.0	1,713.0	1,250.0	4,562.0	2,458.0	1,719.0	1,718.0	5,895.0	1,432.0	1,788.0	1,435.0	4,655.0
07. Changes in assumptions reflected in CSM	1,776.0	1,657.0	1,556.0	4,989.0	1,656.0	1,680.0	1,015.0	4,351.0	2,243.0	1,800.0	1,555.0	5,598.0
08. Changes in assumptions resulting in contract losses	1,514.0	1,746.0	1,799.0	5,059.0	1,169.0	2,086.0	2,024.0	5,279.0	1,651.0	1,441.0	1,875.0	4,967.0
09. Changes related to future service (6 + 7 + 8)	4,889.0	5,116.0	4,605.0	14,610.0	5,283.0	5,485.0	4,757.0	15,525.0	5,326.0	5,029.0	4,865.0	15,220.0
10. Adjustments to liabilities for incurred claims	1,831.0	1,478.0	1,627.0	4,936.0	1,091.0	1,640.0	1,651.0	4,382.0	1,970.0	1,983.0	1,623.0	5,576.0
11. Changes related to past service (10)	1,831.0	1,478.0	1,627.0	4,936.0	1,091.0	1,640.0	1,651.0	4,382.0	1,970.0	1,983.0	1,623.0	5,576.0
12. Insurance service result (5 + 9 + 11)	11,153.0	11,699.0	10,703.0	33,555.0	11,626.0	12,115.0	10,783.0	34,524.0	13,147.0	11,327.0	10,848.0	35,322.0
13. Insurance finance expenses	1,206.0	1,790.0	1,282.0	4,278.0	1,333.0	1,251.0	1,957.0	4,541.0	1,512.0	1,469.0	1,930.0	4,911.0
14. Total change in comprehensive inc (12 + 13)	12,359.0	13,489.0	11,985.0	37,833.0	12,959.0	13,366.0	12,740.0	39,065.0	14,659.0	12,796.0	12,778.0	44,239.0
15. Premiums received	-2,008.0	-1,654.0	-1,715.0	-5,377.0	-1,332.0	-2,103.0	-1,981.0	-5,416.0	-1,263.0	-1,392.0	-2,069.0	-4,714.0
16. Claims and expenses paid	1,226.0	1,788.0	1,940.0	4,954.0	1,365.0	1,578.0	2,010.0	4,953.0	1,430.0	1,827.0	1,557.0	4,814.0
17. Acquisition costs paid	1,733.0	1,223.0	1,124.0	4,080.0	1,274.0	1,029.0	1,237.0	3,540.0	1,838.0	1,495.0	998.0	4,331.0
18. Total cash flows (15 + 16 + 17)	951.0	1,357.0	1,349.0	3,657.0	1,307.0	504.0	1,266.0	3,077.0	2,005.0	1,930.0	486.0	4,421.0
19. Insurance contract liabilities (closing) (1 + 14 + 18)	33,258.0	26,830.0	24,579.0	84,667.0	47,524.0	40,700.0	38,585.0	126,809.0	64,188.0	55,426.0	51,849.0	171,463.0

● Increase ● Decrease ● Total

Detail Distribution Need to add checks +

Appendix 2

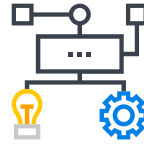
About Milliman

How Milliman can help...



CONSULTING

- Development of methodology and internal standard
- Financial impact analysis
- Gap analysis/Readiness monitoring
- Accounting manual
- Assumption setting
- Design of the income statement and chart of accounts
- Development performance measures
- Analysis of interaction between IFRS 9 and IFRS 17
- Model validation
- Forecasting/Multi-term planning bases on IFRS 17



MODEL DEVELOPMENT

- Prototyping supporting the development of the methodology
- Development of model projection/valuation tools
- Development of data interface into the projection software
- Data validations
- Development of run schedules to generate the information of the income statement, balance sheet and disclosures
- Model testing and documentation



REPORTING SOLUTIONS

- Workflow management
- Data warehouse solutions between the projection software and the general ledger
- Data interfaces into the data warehouse of general ledger
- Checks and balances/validation of outputs
- Reporting engines
- Reconciliation of SII, MCEV, or other GAAP to IFRS 17

IFRS 17 Thought Leadership

- Milliman's internal IFRS 17 working group have been actively following developments for the past 5 years including participating in the Accounting Committee of the International Actuarial Association (IAA).
- We have published a number of IFRS 17 briefing notes, white papers, blogs, and articles and have a dedicated website on IFRS 17 (<http://www.milliman.com/IFRS/>)
- We have presented on IFRS 17 at many industry events and deliver IFRS 17 training to finance professionals.

MILLIMAN RESEARCH REPORT
Transition to IFRS 17
June 2017

Sjoerd Brethouwer, MSc, AAG
Andrew Kay, FSAI, FIA
Andrew Gächist, BSc, PhD, FIA

Aldo Balestrieri, OIA, IIA
William Hines, FSA, MAAA

Milliman

MILLIMAN BRIEFING NOTE
Milliman IFRS 17 Preparedness Survey
How ready is the insurance industry?

Alding Daniels, FSAI
Andrew Kay, FSAI
Gillian Tucker, FSAI
Roman Judge, FSAI

Milliman

This briefing note summarises key findings from our recent IFRS 17 preparedness survey completed by both local Irish insurers and international insurers.

Milliman carried out this survey to measure the level of preparedness for IFRS 17 among insurers. Responses were received from over 50 insurers worldwide, with responses from 9 insurers in Ireland. We have summarised below the responses received to some of the key questions along with our comments and observations.

The International Accounting Standards Board ("IASB") published the final IFRS 17 Standard on 18 May 2017 with an effective date of 1 January 2021. Most Irish and international participants are aiming to carry out a dry run of IFRS 17 calculations in 2019. If you have not yet started, an ideal timeline is:

- In 2017, establish a project team, start internal discussions and training around desired objectives for the project, conduct a gap analysis and allocate responsibilities;
- In 2018, begin designing and implementing system changes and conduct an impact assessment;
- In 2019, perform parallel dry runs and iron-out issues identified (especially with regard to the retrospective application); and
- In 2020, prepare full IFRS 17 results and familiarise investors and analysts with the new disclosures, such that you and your stakeholders are ready for full implementation of the Standard in 2021.

Our immediate recommendations include:

- Automate Solvency II calculations and reporting processes now, so as to free up resources for IFRS 17 implementation programmes;
- Establish a project team in the coming months who will determine IFRS 17 data, system and resourcing requirements (through a gap analysis), followed by development and testing of methodologies (e.g. discount rate, risk adjustment and transition approach); and
- Focus on business aspects early on to gain the support of management – changes to earnings patterns, new business strain and Asset and Liability Modelling (ALM) will have fundamental implications for business decision makers and product owners.

FIGURE 1: WHAT IS YOUR STATUS OF PREPAREDNESS FOR IMPLEMENTATION OF IFRS 17?

Preparedness Status	International (%)	Ireland (%)
Implementing project underway	~15	~10
Scoping activities underway	~35	~25
Gap analysis underway	~45	~35
Just following at a distance	~15	~15
No activity	~10	~10

FIGURE 2: WHAT YEAR DOES YOUR COMPANY PLAN TO BE READY FOR SHADOW / DRY RUNS?

Year	International (%)	Ireland (%)
2018	~10	~10
2019	~45	~45
2020	~35	~35
2021	~10	~10

Milliman IFRS 17 Preparedness Survey | 1 | July 2017

MILLIMAN BRIEFING NOTE
Overview and Practical Considerations of the new Insurance Contract Standard: IFRS 17

Gillian Tucker, FSAI
Andrew Kay, FSAI

Milliman

The new accounting standard for insurance contracts, expected to be called IFRS 17 (previously known as IFRS 4 Phase 2) is currently expected to be issued in the first half of 2017. In this briefing note we discuss some of the key challenges companies will face in adopting and applying this new standard for insurance contracts.

Project Management Timeline

The timeline in Figure 1 illustrates the work which will need to be undertaken by companies between now and the expected implementation date:

FIGURE 1: EXPECTED TIMELINE

Introduction

The International Accounting Standards Board (IASB) continues to work on the Insurance Contracts project. The aim of the project is to provide a single principle-based standard to account for all types of insurance contracts that an insurer holds¹. The project also aims to enhance comparability of financial reporting between companies, jurisdictions, and capital markets.

Phase I of this project was completed in 2004 with the introduction of International Financial Reporting Standard (IFRS) 4: Insurance Contracts. However this was intended only as an interim standard.

Phase II is still underway. In July 2010, the IASB issued an exposure draft of IFRS 4 Phase II. In June 2013, a second exposure draft was issued outlining the draft standard and focusing on key areas for consultation. Currently it is expected that the final standard will be published in the first half of 2017 and it is expected to be called IFRS 17.

The new standard is expected to raise a number of practical challenges for insurance companies. While it is an accounting standard, implementation will require a multi-disciplinary program requiring involvement from accounting teams, risk management teams as well as a heavy actuarial involvement. In this briefing note we identify and discuss some of the most significant practical challenges companies will need to consider.

Valuation of Liabilities

GENERAL MODEL

Under IFRS 17 long-term insurance liabilities without direct participation features² will be calculated using the building block approach:

² Direct participation contracts are contracts where:

- The contractual terms specify that the policyholder participates in a defined share of a readily identified pool of underlying items;
- A substantial share of the return from the underlying items is paid to the policyholder;
- A substantial proportion of the expected cashflows paid to the policyholder vary with the cashflows of the underlying items.

¹ An insurance contract is defined as a contract under which one party accepts significant insurance risk from another party by agreeing to compensate them if a specified uncertain future event adversely affects them.

IFRS 17 | 1 | December 2016

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IFRS 17 – Overview, Challenges and Opportunities

Andrew Kay
22 June 2017

Milliman Financial training

Overview and Practical Considerations of the new Insurance Contract Standard: IFRS 17

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OVERVIEW

This training course provides a detailed view of the requirements/methodology and practical challenges involved in implementing the new insurance contract standard, IFRS 17.

The course will begin with a brief introduction to IFRS 17 including expected timelines for the new standard. The course will then go into detail on the requirements/methodology and main challenges companies will face in implementing the new standard. We will go through a worked example showing how IFRS17 will be applied in practice for a sample product. The worked example will demonstrate the impact this new standard will have on companies' profit and loss account and balance sheet and highlight associated implementation challenges.

This course is suitable for insurance professionals, practitioners and senior management involved in IFRS reporting and implementation.

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