Milliman

IFRS 17 – Overview, Challenges and Opportunities

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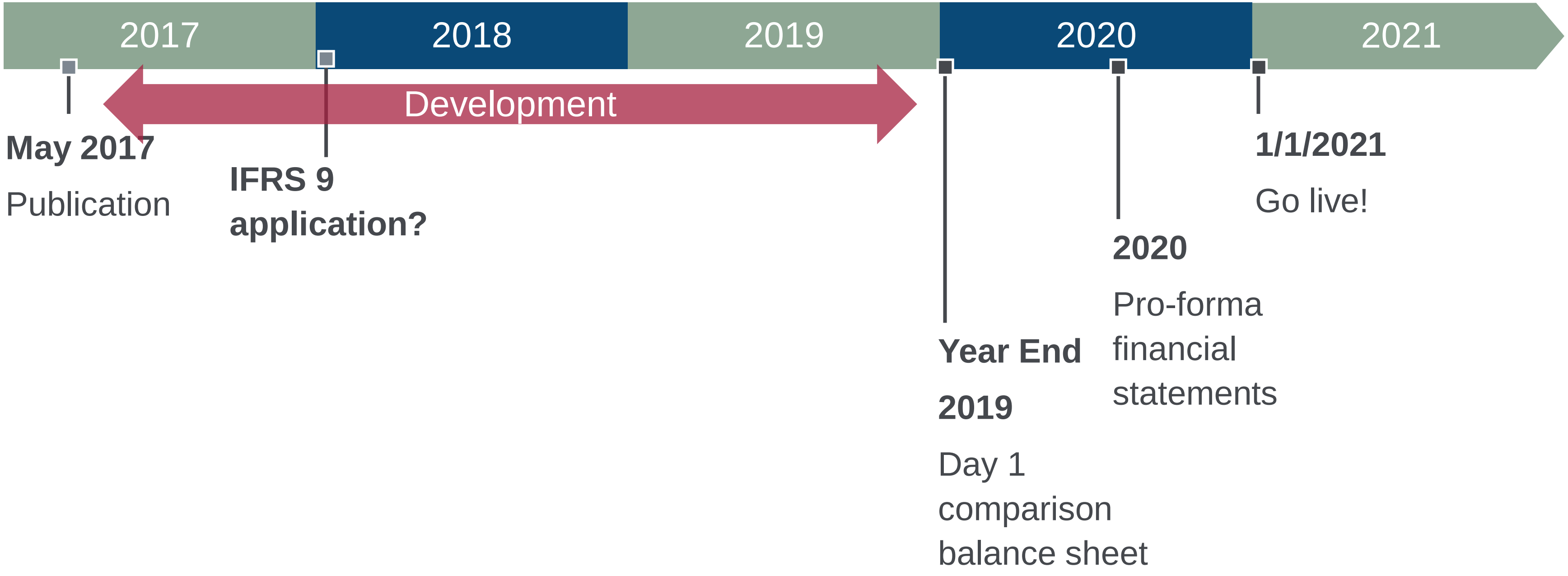
Agenda

- Overview
- What will change?
- Challenges & opportunities
- Next steps

IFRS 17 – "cheat sheet"

- **What is it?:** New accounting standard for insurance contracts – with significant actuarial involvement.
- **What does it apply to?:** insurance and reinsurance contracts; investment contracts with Discretionary Participation Features (DPF)
- **What will change in your financial statements?:**
  - Value of insurance liabilities: new calculations
  - Profit: no "Day 1" profit – profit released to P&L over the life of the contract
  - Presentation of P&L and balance sheet: they will look very different
  - Grouping of results (aggregation): big impact on systems and processes
  - New disclosures: lots of additional information
  - Lots of judgements to be made

IFRS 17 Timeline



Dedicated Training – Implementation Plan – Gap Analysis – Impact Assessment - Data & IT systems

Measurement approaches

There are three valuation approaches with respect to IFRS 17, depending on the type of insurance contract:

General Model (GM)	Premium Allocation Approach (PAA)	Variable Fee Approach (VFA)

• Default model
• Type of contracts:
  • Long-term and whole life insurance, protection business
  • Certain annuities
  • US style universal life
  • Reinsurance written
  • Certain general insurance contracts
	• Simplification for short term contracts with little variability
	• Coverage period up to one year (generally)
	• Type of contracts:
	  • General insurance
	  • Short-term life and certain group contracts
		• Modification to GM for direct participating contracts
		• Type of contracts:
		  • Unit-linked contracts, variable annuities and equity index-linked contracts
		  • Continental European 90/10 contracts
		  • UK with profits contracts

General Model approach for insurance liabilities

PV of Premiums

Contractual Service Margin

Eliminates any gain at inception of the contract. Amortised over the life of the policy. CSM cannot be negative. Roll forward at discount rate @ inception.

Risk Adjustment

Explicit estimate of the effects of uncertainty.

Time Value of Money

Discount rate based on liability characteristics. Can use top-down or bottom up approach.

PV of Best Estimate Cashflows

Explicit, unbiased and probability-weighted estimate of future cash outflows less future cash inflows that will arise as the insurer **fulfills** the contract.

Fulfilment Cash Flows (FCF)

Calculate CSM & Liability at Initial Recognition

	Initial Recognition
EPV Future Cash Inflows	(900)
EPV Future Cash Outflows	635
EPV Future Cashflows	(265)
Risk Adjustment	120
Fulfilment Cashflows	(145)
CSM	**145**
Liability on Initial Recognition	0

Subsequent Measurement

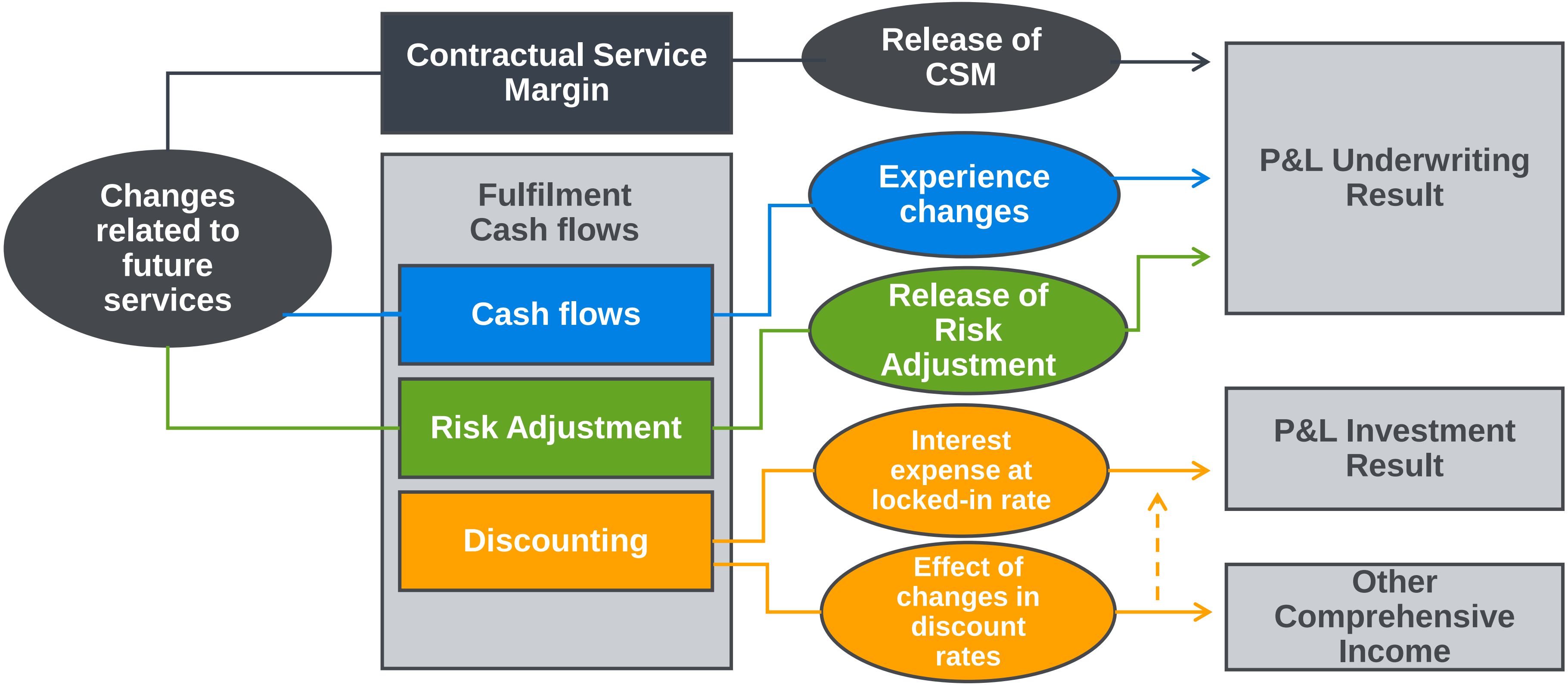
- Fulfilment Cashflows are recalculated at the valuation date based on latest best estimate assumptions.

- Changes will either:
  - Flow to P&L
  - Be absorbed in CSM (balance sheet)
  - Flow to Other Comprehensive Income (OCI) (balance sheet)

- The CSM is updated based on locked-in discount rates.

- CSM is released to P&L based on coverage provided.

Subsequent Measurement & Impact on P&L



Comparison of Balance Sheet

Current Gaap

	Year 1
Cash	645
DAC	60
Assets	705
Technical Provisions	455
Liabilities	455
Equity	**250**

IFRS 17

	Year 1
Cash	645
Assets	645
Best Estimate	372
Risk Adjustment	80
CSM	102
Liabilities	554
Equity	**91**

Comparison of P&L

Current Gaap

	Year 1
Premium Income	900
Investment Income	35
Total Revenue	**935**
Claims Paid	(200)
Expenses	(90)
Change in Liabilities	(372)
Change in DAC	(30)
Total Expenses	**(692)**
Profit	**243**

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	Year 1
Allocation of CSM to P&L	51
Change in Risk Adjustment	40
Expected Insurance Service Expenses	200
Amort. of Attributable Acq. Cashflows	30
Insurance Revenue	**321**
Claims paid	(200)
Amort. of Attributable Acq. Cashflows	(30)
Insurance Services Expenses	**(230)**
Insurance Service Result	**91**
Investment Income	35
Insurance Finance Expense	(35)
Finance Result	**0**
Profit	**91**

Practical considerations - Three Pillars

Valuation

- Classification
- Unbundling
- Aggregation
- Contract boundaries
- Discount rate
- Assumptions
- Cash flows
- Risk Adjustment

Governance & Processes

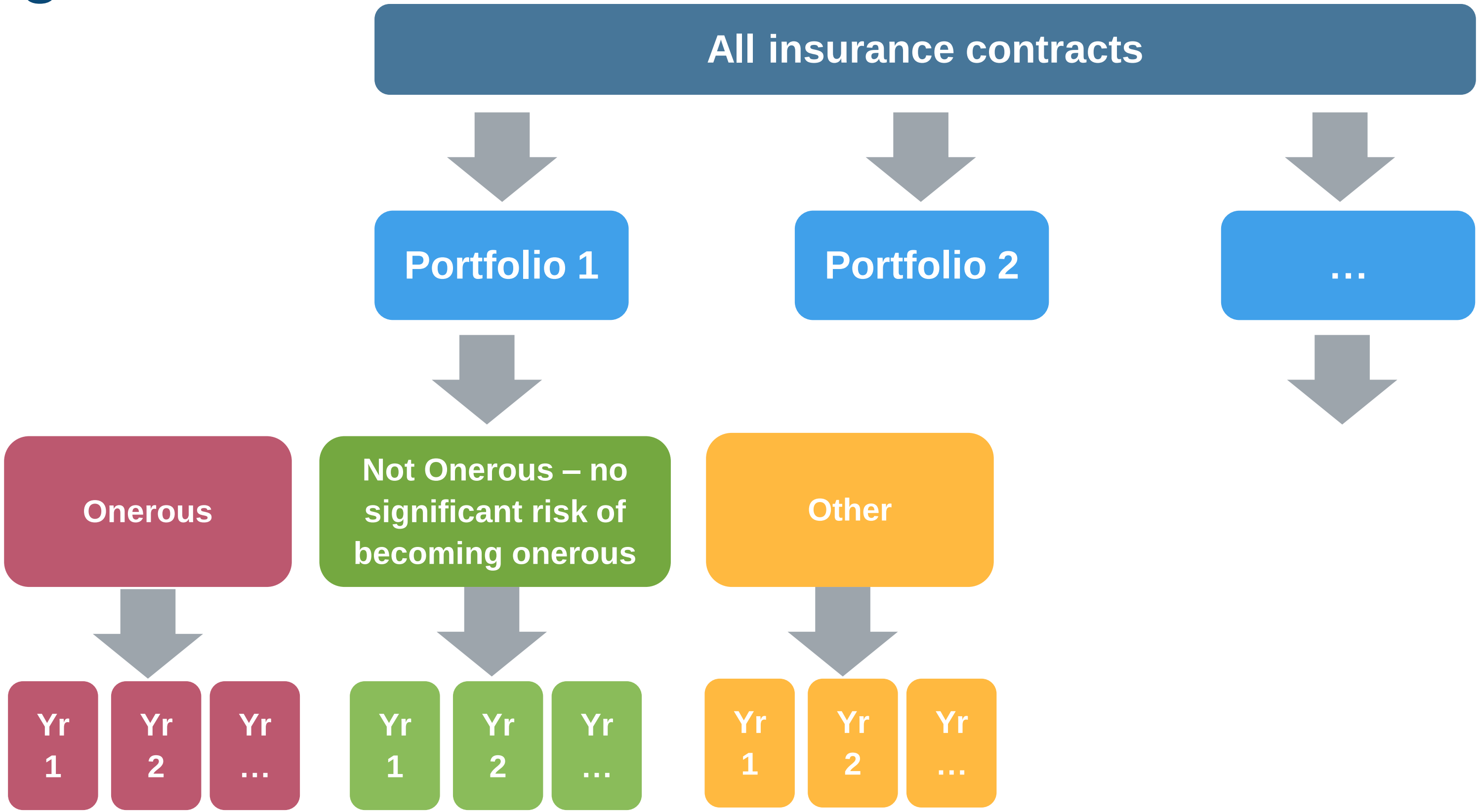
- Data quality
- Model validation and governance
- Assumptions, methodology
- Forecasting / Business Planning
- Use of simplifications and approximations
- Training and education

Reporting & Analysis

- Fundamentally different Income Statement
- Significant changes to the Balance Sheet
- Significant additional disclosures and analysis of change
- Challenging reporting deadlines
- Transition

Actuarial and accounting systems build, modelling speed, data storage

Aggregation



Transition – three approaches

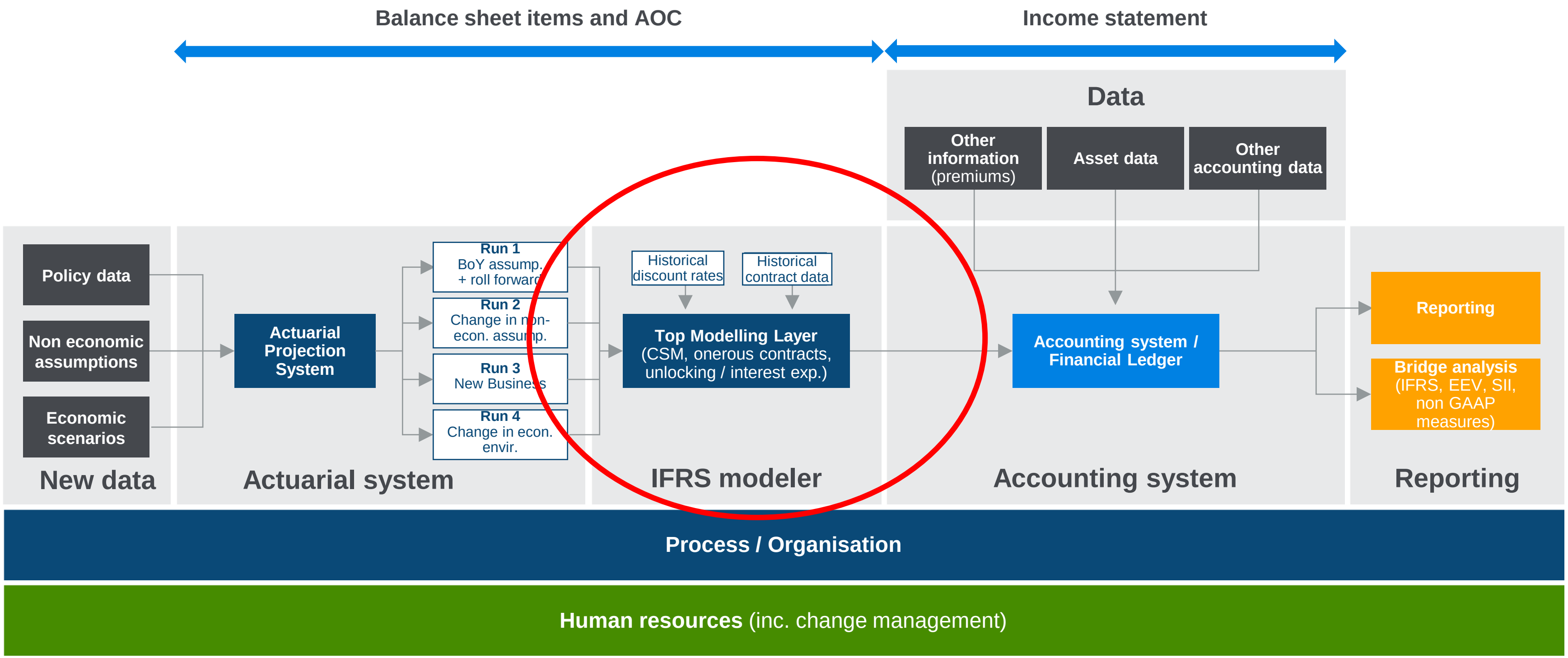
Full retrospective approach	Modified retrospective approach	Fair value approach

▪ Required where not 'impracticable'
 	
▪ Calculate CSM at contract inception and roll forward
 	
▪ Requires day 1 data and assumptions and full history to date of transition
 	
▪ If impracticable, choose between modified retrospective and fair value approach
	▪ Retrospective with simplifications to address data gaps
	
	▪ Simplifications can be applied on a piecemeal basis
	  ▪ Grouping
	  ▪ Discount rates
	  ▪ Risk Adjustment
	  ▪ CSM
	  ▪ …
		▪ 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

Other considerations

- Asset-Liability mismatches
- Product Design
- Remuneration
- Impact on stochastic modelling
- Risk Management
- Impact on profit and equity
- Tax
- Business planning

Overview of a target IFRS 17 operating model



Questions?

- What will the impact be on:
  - Balance Sheet
  - Profit
- How do we interpret the results?
- Will we be able to report accurate results on time?
- How much will it cost to implement?
- Do we have project plan?

IFRS 17 Project Plan

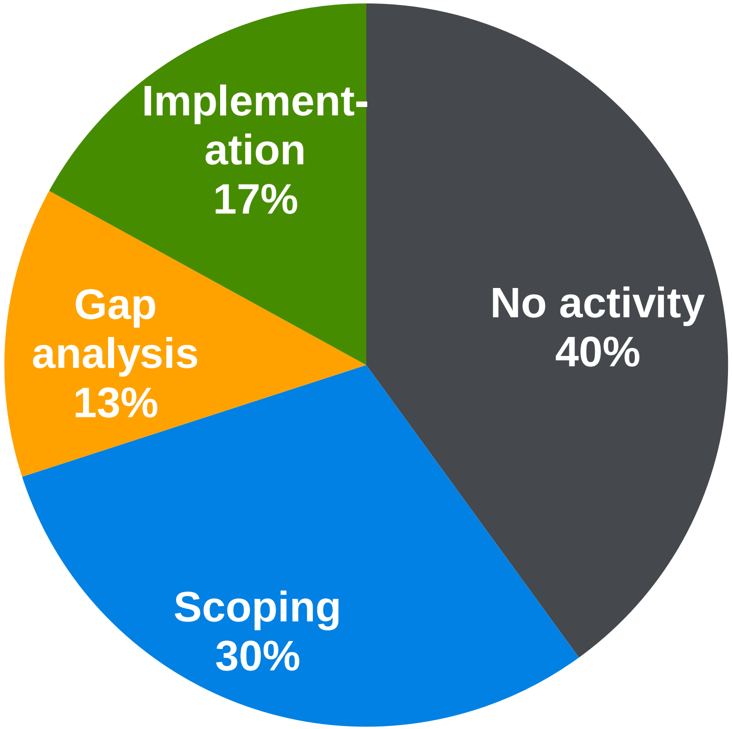
2017	2018	2019	2020	2021
• Training • GAP analysis • Field testing and planning • Initial impact assessment	• Development of methodology • Chart of accounts • Data definitions and storage • Reporting engines • Start with the modelling of high priority products	• Testing and implementation of tools and development of models for low priority products • Development of governance structure • Risk management on IFRS • Forecasting models	• Further testing and implementation of tools • Testing of entire valuation and reporting chain • Development of disclosures • Shadow runs • Collecting information for comparatives	• **GO LIVE!**

Milliman Survey (1/2)

Recent IFRS 17 readiness survey with 93 responses from around the world.

- Budget estimates vary a lot – between $1 million and $25 million
- A significant part (50-70%) of the work expected to be performed by actuaries
- Systems for SII, EV or IFRS (LAT) reporting may be used as a starting point for IFRS 17

Industry Readiness



Milliman Survey (2/2)

Main concerns of the respondents

- Determination of the discount rate (top down, bottom up, application UFR, RP requirement)
- Hedging and the possible accounting mismatch
- Granularity of the calculations/unit of account for new business/aggregation of in force business
- Determination and validation of the CSM (at transition and after implementation)
- Complexity of the income statement and disclosures
- Systems and models – robustness, auditability, integration in reporting chain, run-times and process time
- Availability of resources and timescales during the project

IFRS 17 – will you be ready?

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Project Planning

Instructions

Print

IFRS 17 Readiness Assessment for XYZ

Summary		% of questions completed	Weighted Full IFRS 17 Score
Background	B - Background	60%	Not applicable
	B - Project management	69%	Not applicable
Pillar 1	P1 - Methodology	44%	2.4
	P1 - Unit of account, Product classification, Recognition	71%	4.3
	P1 - Technical provisions, BE, RA, CSM	0%	1.0
	P1 - Assumptions	53%	4.5
	P1 - Discount rates	0%	1.0
	P1 - Income statement, Analysis of change and Indicators	0%	1.0
	P1 - Actuarial Models	0%	1.0
Pillar 2	P2 - Governance	23%	2.4
	P2 - Risk Management System (RMS)	41%	2.9
	P2 - Calculation and reporting processes	0%	1.0
Pillar 3	P3 - Reporting model design	50%	3.9
	P3 - Reporting and disclosures	0%	1.0
	P3 - Accounting systems	17%	1.7
	P3 - Reconcilition with other measures	33%	2.4
Other	O - IT and Systems	100%	2.4

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**

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IT TAKES VISION

Thank you

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22 June 2017

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