IFRS 17 and the Data, Systems & Process (DSP) Agenda

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Building a better
working world

With you today

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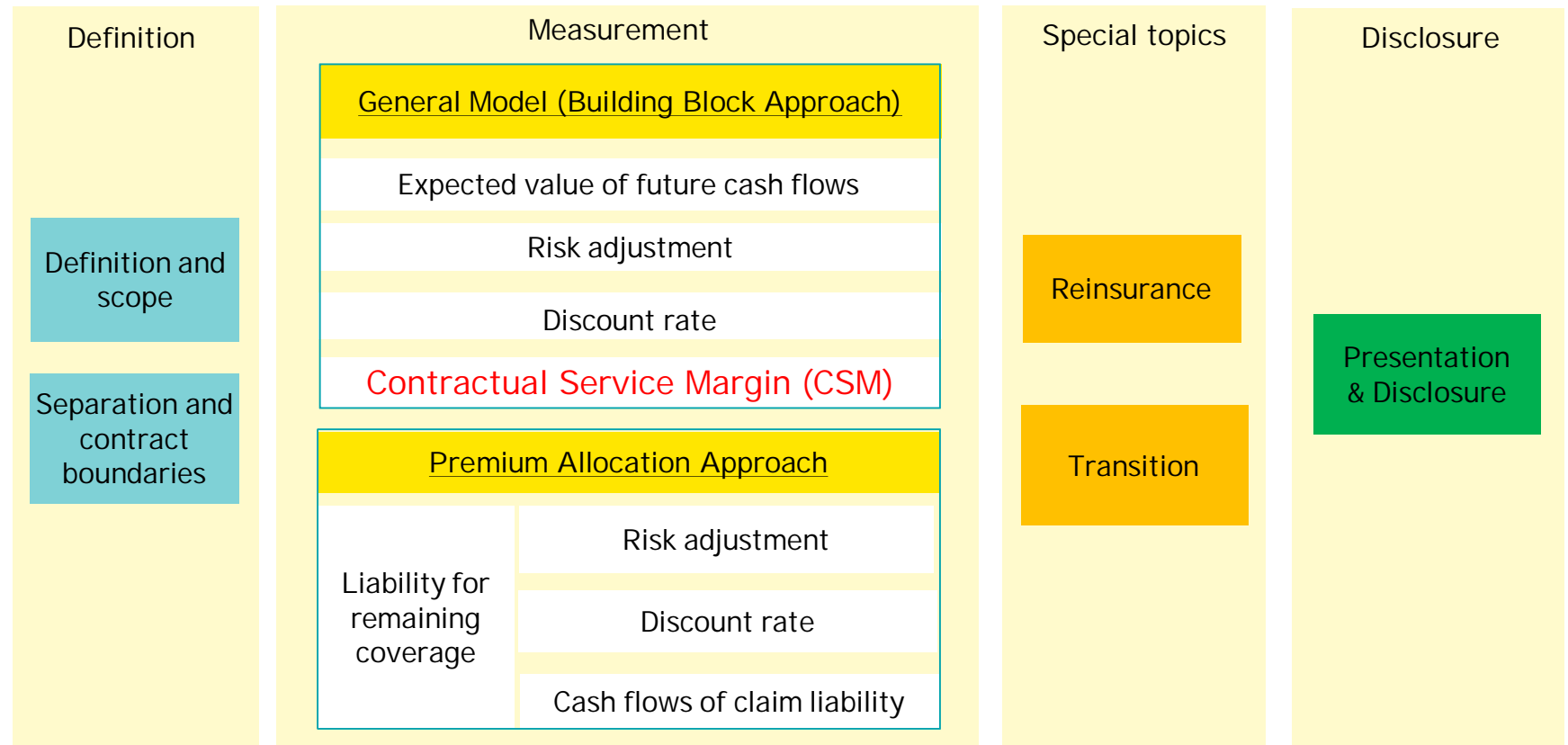IFRS 17 and the Data, Systems & Process Agenda

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So why do we need a new accounting standard for insurance contracts?

Main benefits of IFRS 17 (new standard) compared to IFRS 4 (the current standard) for insurance contracts

Underwriting revenue and expenses are recognised over time in comparable way to other non insurance business

Provides up-to-date market consistent information of obligations including value of options and guarantees

Provides separate information about the investment and underwriting performance

Reflects time value of money (through discounting)

Single accounting approach

5

1

4

2

3

Assumptions used in the valuation of insurance contract liabilities reflect the characteristics of the insurance contract rather than the risk related to asset / investment activity
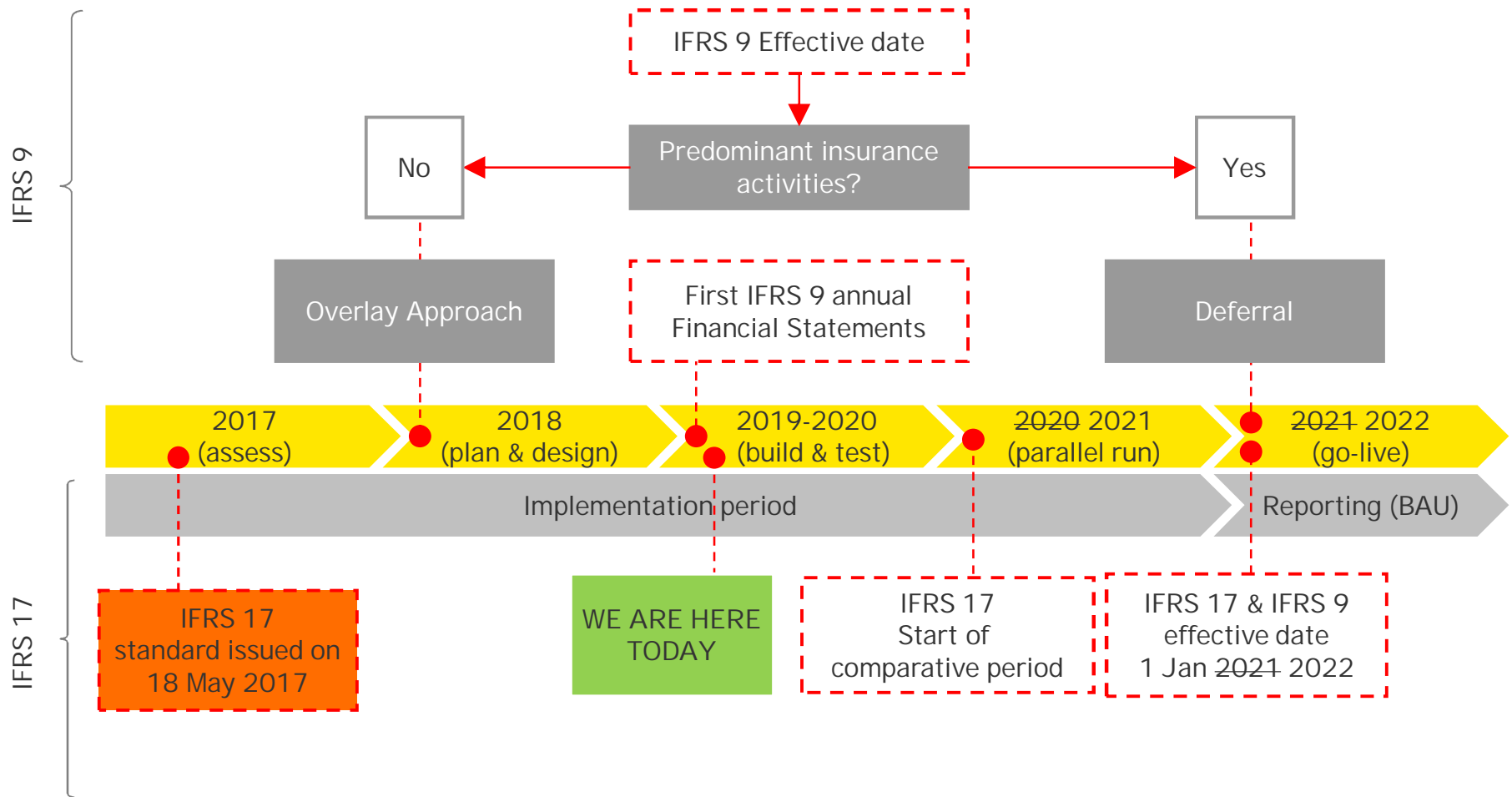
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The principle concept behind IFRS 17 is the requirement to calculate and release the Contractual Service Margin (CSM) over the remainder of the contract period

Finance-based accounting and reporting framework (IFRS 17)

Definition	Measurement	Special topics	Disclosure

Definition

Definition and scope

Separation and contract boundaries

Measurement

General Model (Building Block Approach)

Expected value of future cash flows

Risk adjustment

Discount rate

Contractual Service Margin (CSM)

Premium Allocation Approach

Liability for remaining coverage
- Risk adjustment
- Discount rate
- Cash flows of claim liability

Special topics

Reinsurance

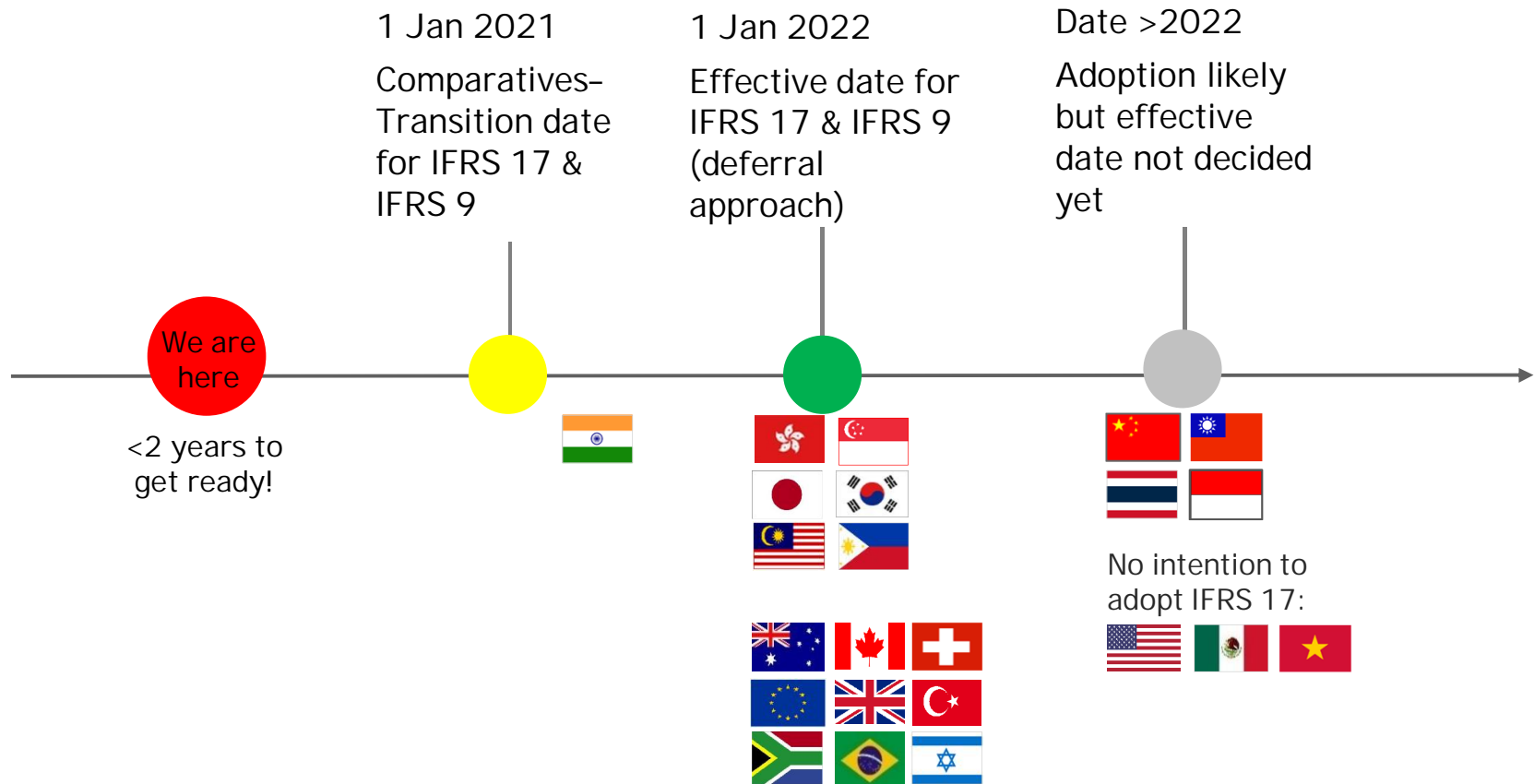Transition

Disclosure

Presentation & Disclosure

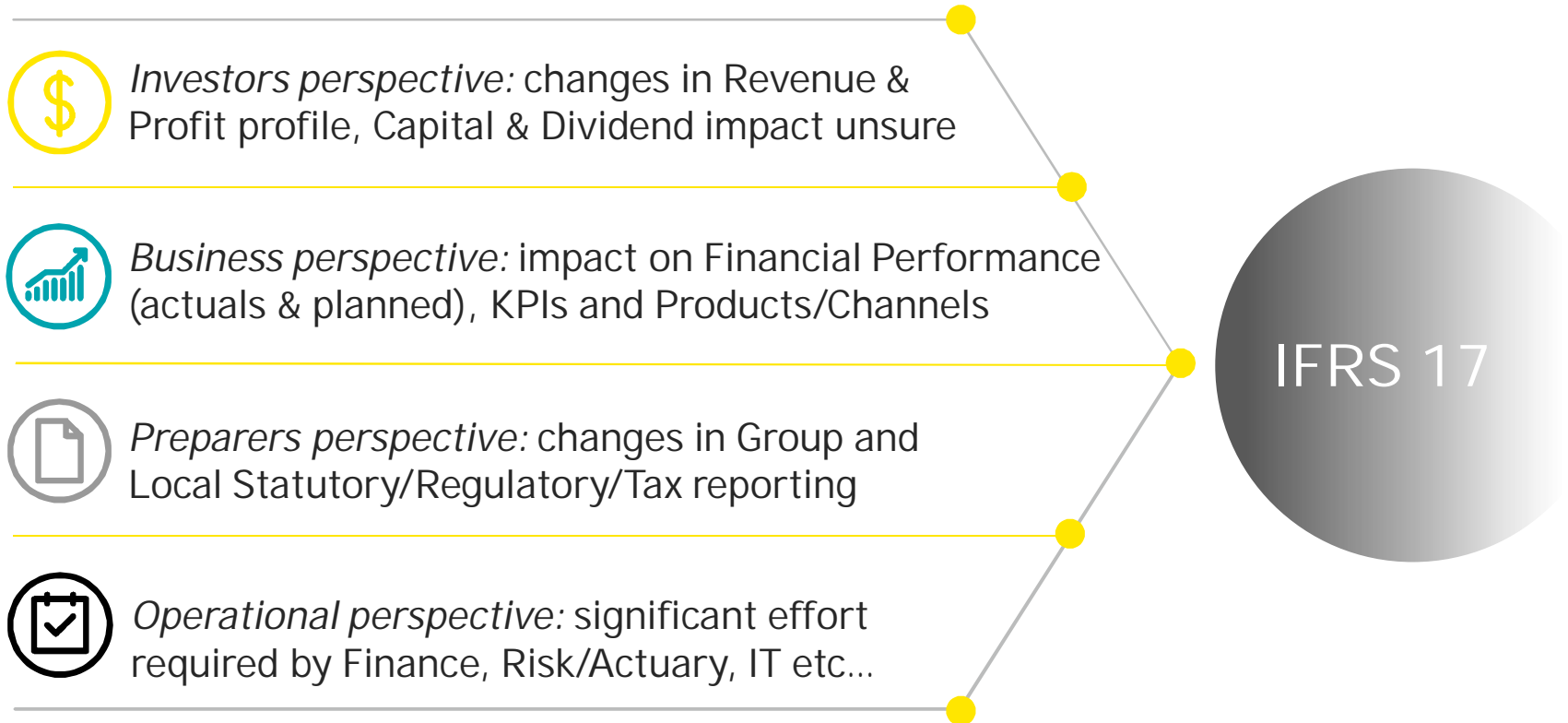## Risk-based capital management framework (eg. Solvency, RBC, ICS etc)

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IFRS 17 (insurance contracts) and IFRS 9 (fin. instruments) must be implemented by all insurers by ~~2021~~ 2022

IFRS 9

IFRS 9 Effective date

Predominant insurance activities?

No → Overlay Approach

Yes → Deferral

First IFRS 9 annual Financial Statements

2017 (assess) | 2018 (plan & design) | 2019-2020 (build & test) | ~~2020~~ 2021 (parallel run) | ~~2021~~ 2022 (go-live)

Implementation period | Reporting (BAU)

IFRS 17

IFRS 17 standard issued on 18 May 2017

WE ARE HERE TODAY

IFRS 17 Start of comparative period

IFRS 17 & IFRS 9 effective date 1 Jan ~~2021~~ 2022

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Most countries in Asia will for sure adopt IFRS 17 albeit with some first time adoption timing differences

1 Jan 2021

Comparatives–
Transition date
for IFRS 17 &
IFRS 9

1 Jan 2022

Effective date for
IFRS 17 & IFRS 9
(deferral
approach)

Date >2022

Adoption likely
but effective
date not decided
yet

We are
here

<2 years to
get ready!

No intention to
adopt IFRS 17:

9

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IFRS 17 is impacting the internal and external stakeholders of Asian insurers in multiple ways

Investors perspective: changes in Revenue & Profit profile, Capital & Dividend impact unsure

Business perspective: impact on Financial Performance (actuals & planned), KPIs and Products/Channels

Preparers perspective: changes in Group and Local Statutory/Regulatory/Tax reporting

Operational perspective: significant effort required by Finance, Risk/Actuary, IT etc...

IFRS 17

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The operational implications of IFRS 17 can be significant

1. Policy
- ► New accounting policies/procedures and control documentation
- ► IFRS 17 methodology guidance and reporting instructions
- ► GL Chart of Accounts changes and account mappings
- ► Assumptions setting (for modelling)
- ► Investment policy changes (IFRS 9)

5. Data
- ► Refinement, upgrading, conversion and migration of (complex) actuarial valuation models
- ► New financial reporting data requirements (input/output)
- ► Data reconciliations at different levels
- ► Data gathering, storage and archiving
- ► Data quality, security & controls
- ► Data governance and master data management

2. Performance Management
- ► Changes in MI reports and KPI's
- ► Planning, budgeting and forecasting processes need to be adjusted
- ► VBM, scorecards and incentive schemes

6. Processes
- ► Materiality concepts/guidelines
- ► Updating closing and reporting procedures, planning processes, actuarial processes, risk management etc.
- ► Internal and external reporting templates including group reporting packages
- ► Internal controls and audit trail

3. People
- ► Training
- ► Cross functional collaboration (especially for Finance & Risk)
- ► Project resourcing & budget
- ► Managing change fatigue
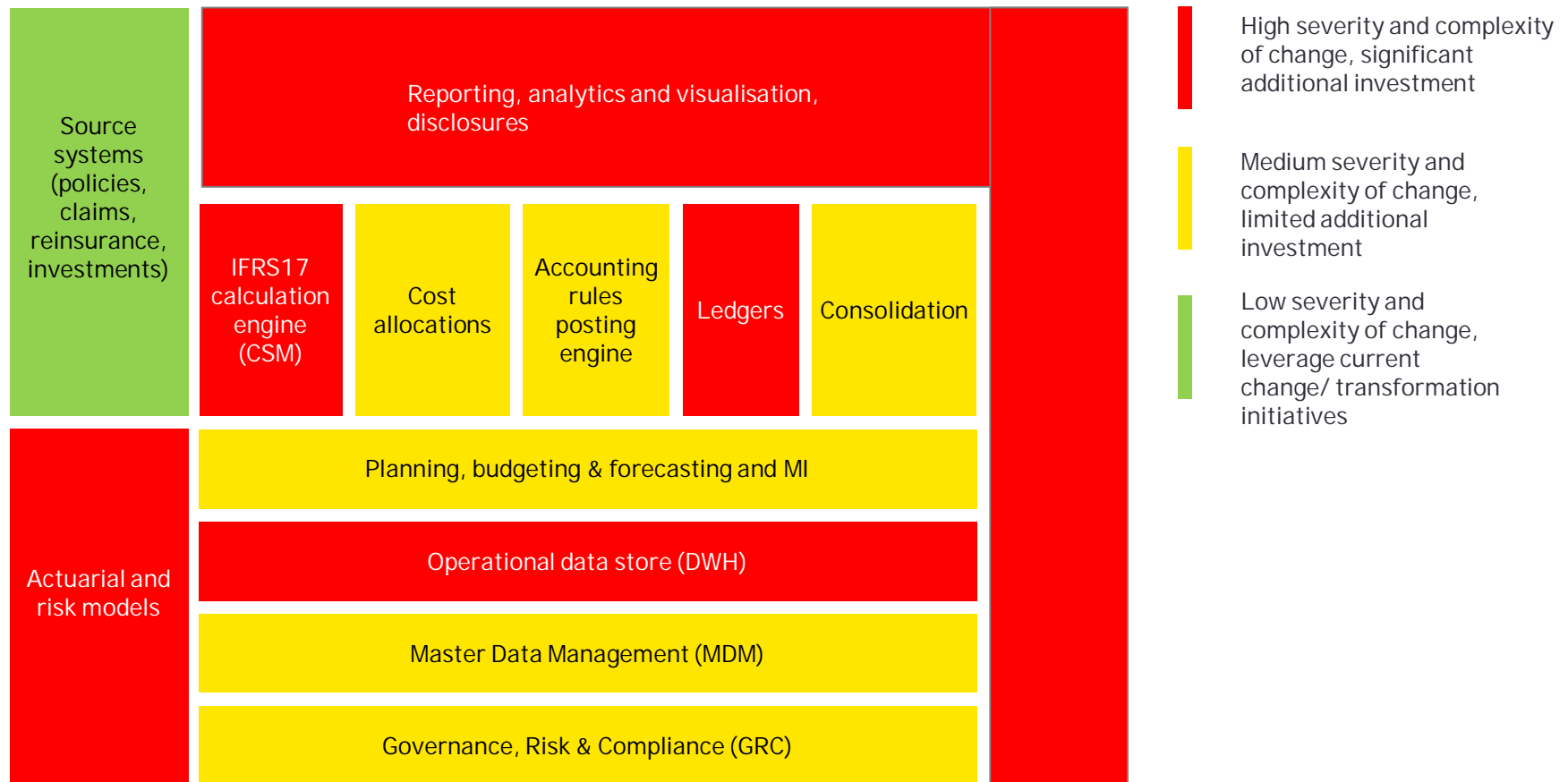
4. Organisation
- ► Clear roles & responsibilities between Actuarial and Finance departments
- ► Technical Provisions Assumptions/ Expert Judgement Committee
- ► Impact on outsourcing contracts?

7. Technology
- ► Core systems, investment system, actuarial systems, pricing systems, etc.
- ► Posting logic/engines
- ► General Ledger, consolidation package and reporting systems
- ► System interfaces
- ► Current system capacities & capabilities (agile technology)
- ► New functionalities/features

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Careful consideration of the impact of IFRS 17 across the entire system architecture is required
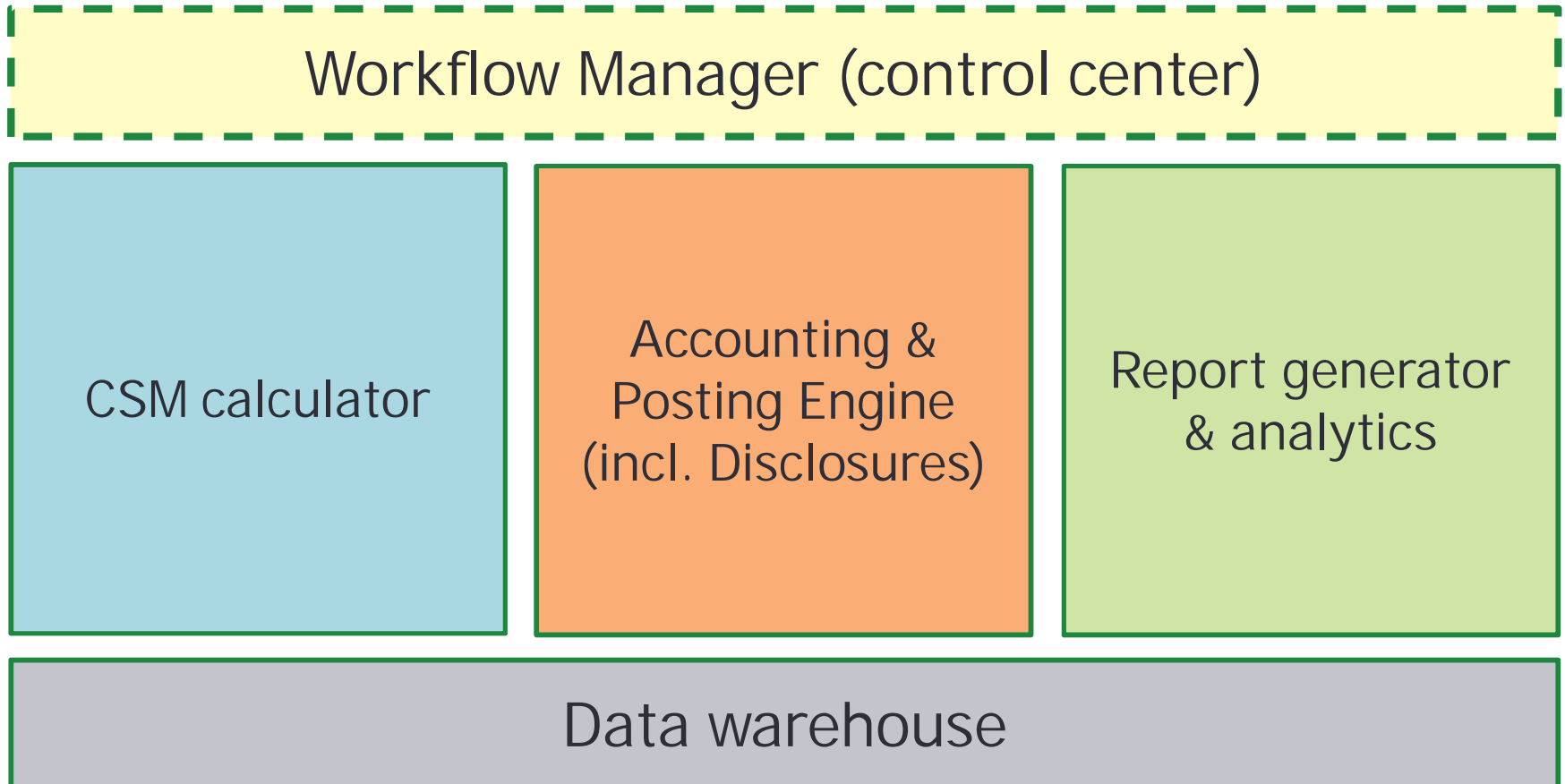
The complexity of the IFRS 17 implementation is high (red) to medium (yellow) across the entire financial & actuarial Data, Systems and Processes (DSP) infrastructure

Source systems (policies, claims, reinsurance, investments)	Reporting, analytics and visualisation, disclosures
	IFRS17 calculation engine (CSM) / Cost allocations / Accounting rules posting engine / Ledgers / Consolidation
Actuarial and risk models	Planning, budgeting & forecasting and MI
	Operational data store (DWH)
	Master Data Management (MDM)
	Governance, Risk & Compliance (GRC)

Legend:

- **High severity and complexity of change, significant additional investment**
- **Medium severity and complexity of change, limited additional investment**
- **Low severity and complexity of change, leverage current change/ transformation initiatives**

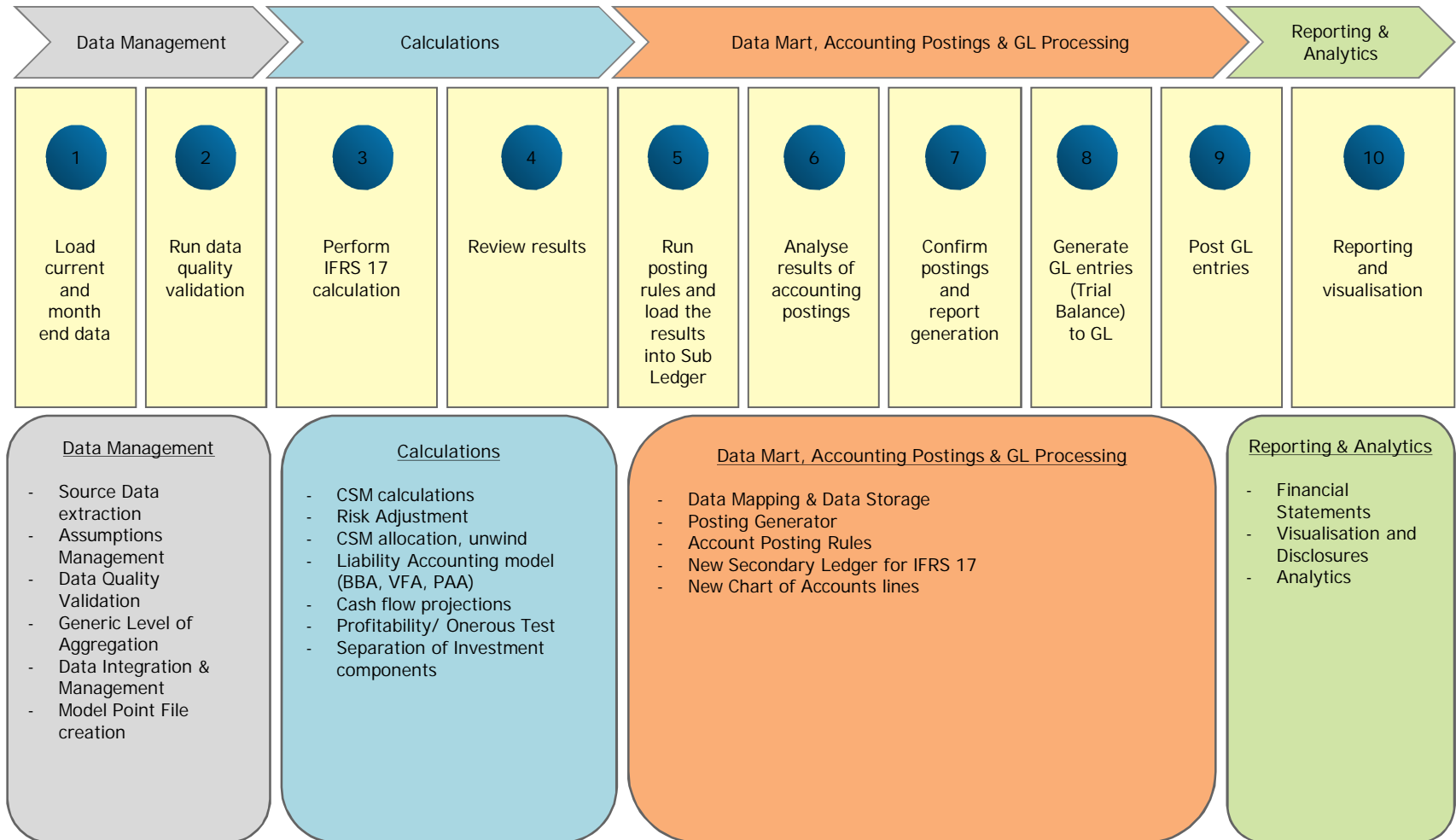IFRS 17 and the Data, Systems & Process Agenda

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There are basically 3 system solution options available to address your IFRS 17 needs

	1. Actuarial-driven system solution *"Leverage existing data, processes and systems for IFRS 17 and do the CSM calculations and data storage in the Actuarial system(s)"*	2. Integrated sub-ledger solution *"Build IFRS 17 capabilities through the introduction of a separate sub-ledger system solution that receives cashflows from actuarial systems and feeds the GL"*	3. Global GL embedded solution *"Integrated Finance system to provide multi-GAAP reporting platform embedded in core GL system"*
How to do it	▶ Enhance current actuarial system to produce CSM calculations ▶ Build on existing MCEV/Solvency II tools ▶ Enhance existing Finance systems and IT solutions to cover IFRS 17 specific accounting and reporting requirements	▶ Buy or build IFRS 17 capabilities through the introduction of new integrated sub-ledger solution (owned by Finance & Risk) ▶ Includes an integrated, pre-configured insurance data model for source data and results data onto one platform that eliminates redundancy ▶ A powerful enterprise data warehouse	▶ Central Finance system with enhanced multi-dimensional IT capabilities to provide a new Multi-Ledger, Multi-Client, Multi-Product, Multi-Currency, Multi-Time IFRS 17 Platform ▶ Use of in-memory calculation features with integrated database
Pros	▶ Easiest and fastest solution to implement ▶ Built primarily on existing reserving (EVM, EV, Solvency II) tools and processes ▶ Lower investment required	▶ Opportunity to implement a new, more efficient system setup for IFRS17 while leaving old IFRS4 systems intact ▶ Shorter time to benefits realization ▶ Ancillary benefits in areas outside IFRS	▶ Higher "future-proof" flexibility of the implemented solution ▶ Enables addition of other requirements (e.g. USGAAP, IFRS 9 and Solvency/RBC) ▶ Consistent global systems solution
Cons	▶ Less efficient system setup ("add-ons") ▶ May not fit the future IFRS 17 reporting timelines (faster) and new requirements (e.g. controls) ▶ Considerable manual work = higher operating costs	▶ Multiple data sources and complexity/diversity of the underlying processes means higher implementation risks ▶ Significant upfront investment required for new solution with potentially limited lifespan?	▶ Takes longer to build and realize benefits from migration to new platform ▶ Likely to have some manual steps and local solutions resulting in higher cost ▶ Potentially very expensive to implement and technology still unproven ▶ Critical path delay risk (need a "Plan B")

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An IFRS 17 sub-ledger solution has 5 main system components

Workflow Manager (control center)

| CSM calculator | Accounting & Posting Engine (incl. Disclosures) | Report generator & analytics |

Data warehouse

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Example of the end-to-end workflow for a financial close process using an IFRS 17 sub-ledger system (like SAS)

Data Management	Calculations	Data Mart, Accounting Postings & GL Processing	Reporting & Analytics

1	2	3	4	5	6	7	8	9	10
Load current and month end data	Run data quality validation	Perform IFRS 17 calculation	Review results	Run posting rules and load the results into Sub Ledger	Analyse results of accounting postings	Confirm postings and report generation	Generate GL entries (Trial Balance) to GL	Post GL entries	Reporting and visualisation

Data Management

- Source Data extraction
- Assumptions Management
- Data Quality Validation
- Generic Level of Aggregation
- Data Integration & Management
- Model Point File creation

Calculations

- CSM calculations
- Risk Adjustment
- CSM allocation, unwind
- Liability Accounting model (BBA, VFA, PAA)
- Cash flow projections
- Profitability/ Onerous Test
- Separation of Investment components

Data Mart, Accounting Postings & GL Processing

- Data Mapping & Data Storage
- Posting Generator
- Account Posting Rules
- New Secondary Ledger for IFRS 17
- New Chart of Accounts lines

Reporting & Analytics

- Financial Statements
- Visualisation and Disclosures
- Analytics

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Getting all the required people involved and engaged at the right time is key to a successful IFRS 17 project delivery

What are the key accounting & disclosure differences?

What are the required model changes and financial/product implications?

What is the best implementation plan and how do I manage all key stakeholders?

Finance

Actuarial

Project & Change Management

Business / Operations

Technology

What are the business and operational implications?

What are the required data and system changes?

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Accountants first need to understand the different options under IFRS 17 and provide the required accounting guidance

Level of aggregation

Expenses allocation

CSM postings

Discounting

Reinsurance

Risk adjustment

Transition

Contract boundaries

Presentation & disclosures

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Actuaries are required to understand, calculate and explain product impact assessments

Product A
XYZ Product A

Key Observations

- ▶ Significant **revenue and profit deferral** under MFRS 17 compared to current MFRS 4
  - ▶ Cannot capture upfront profits earned
  - ▶ Revenue deferred as it is driven by expected benefit payments
- ▶ Critical areas of judgement – discount rates, risk adjustment, coverage units, attributable expenses.
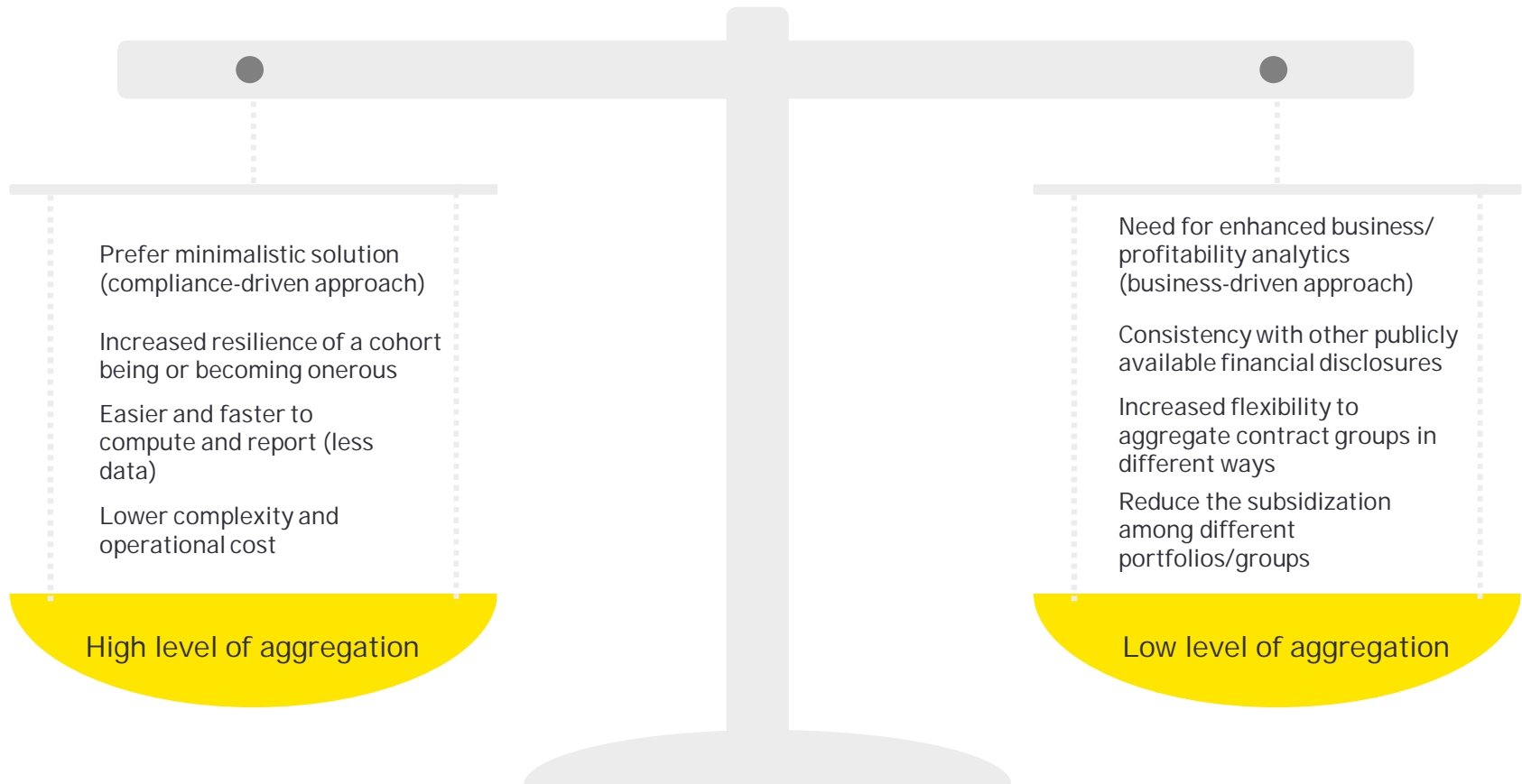- ▶ Product A features are...

MFRS 17 Details

Measurement Model	General Model
Coverage Units (CSM amortization driver)	Reducing sum assured in-force
Contract Boundary	Similar under MFRS 4

*Projection based on sample policy profile

Revenue Recognition

Sample Financial Impact Model

Revenue Comparison ... 17 vs Gross Premiums MFRS 4

MYR '000

MFRS 4 – Single Premium on day 1

— MFRS4   — MFRS17 - EY

Profit Comparison

Profit Comparison MFRS 17 vs MFRS 4

MYR '000
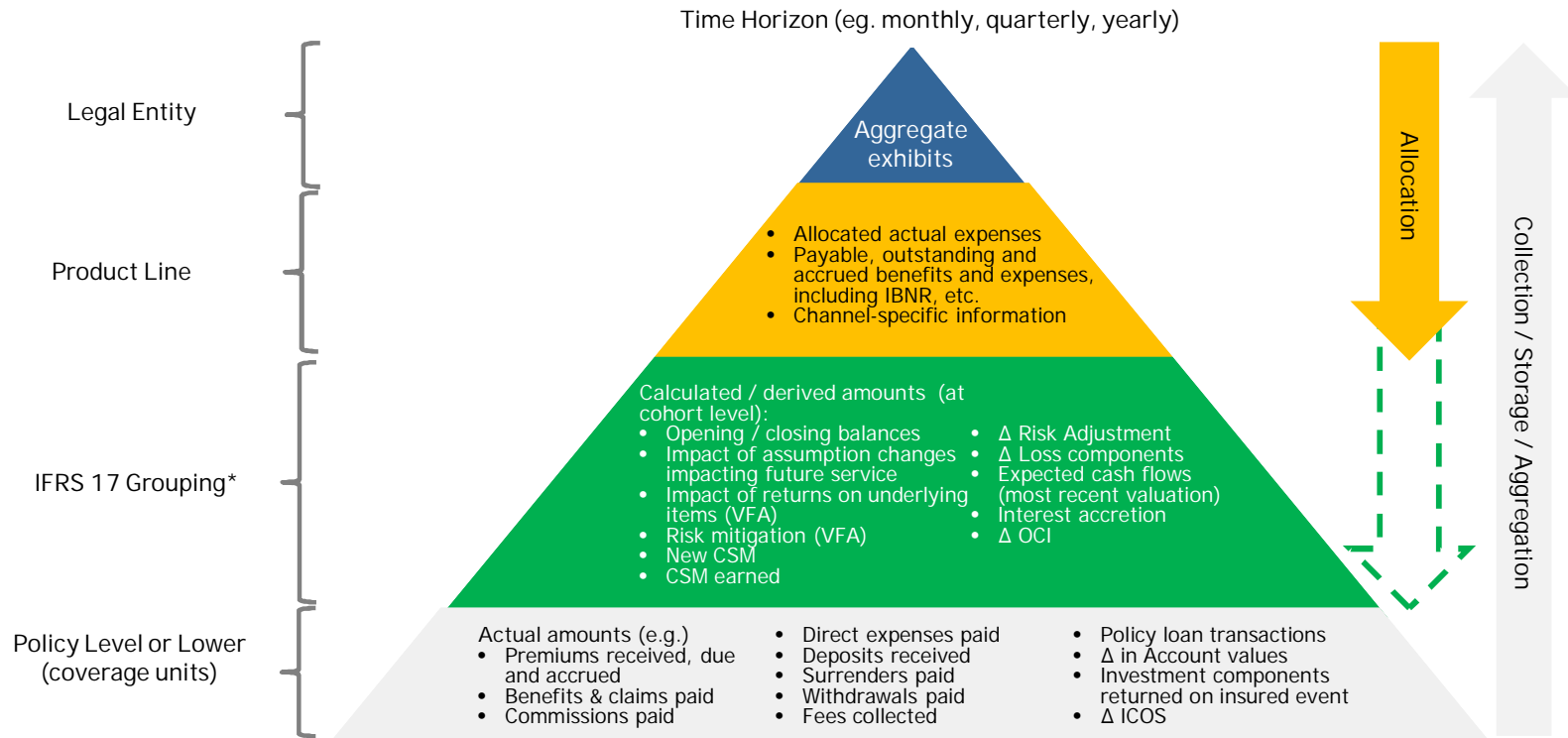
MFRS 4 – Recognition of upfront profit in Day 1

— MFRS4   — MFRS17 - EY

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The definitions on the level of aggregation (unit of account) will also drive the level of data granularity needed

Prefer minimalistic solution (compliance-driven approach)

Increased resilience of a cohort being or becoming onerous

Easier and faster to compute and report (less data)

Lower complexity and operational cost

High level of aggregation

Need for enhanced business/ profitability analytics (business-driven approach)

Consistency with other publicly available financial disclosures

Increased flexibility to aggregate contract groups in different ways

Reduce the subsidization among different portfolios/groups

Low level of aggregation

We recommend a balanced approach that takes all pros and cons into account

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Example of an IFRS 17 Data Model

Time Horizon (eg. monthly, quarterly, yearly)

Legal Entity

Product Line

IFRS 17 Grouping*

Policy Level or Lower (coverage units)

Allocation

Collection / Storage / Aggregation

Aggregate exhibits

- Allocated actual expenses
- Payable, outstanding and accrued benefits and expenses, including IBNR, etc.
- Channel-specific information

Calculated / derived amounts (at cohort level):
- Opening / closing balances
- Impact of assumption changes impacting future service
- Impact of returns on underlying items (VFA)
- Risk mitigation (VFA)
- New CSM
- CSM earned
- Δ Risk Adjustment
- Δ Loss components
- Expected cash flows (most recent valuation)
- Interest accretion
- Δ OCI

Actual amounts (e.g.)
- Premiums received, due and accrued
- Benefits & claims paid
- Commissions paid
- Direct expenses paid
- Deposits received
- Surrenders paid
- Withdrawals paid
- Fees collected
- Policy loan transactions
- Δ in Account values
- Investment components returned on insured event
- Δ ICOS
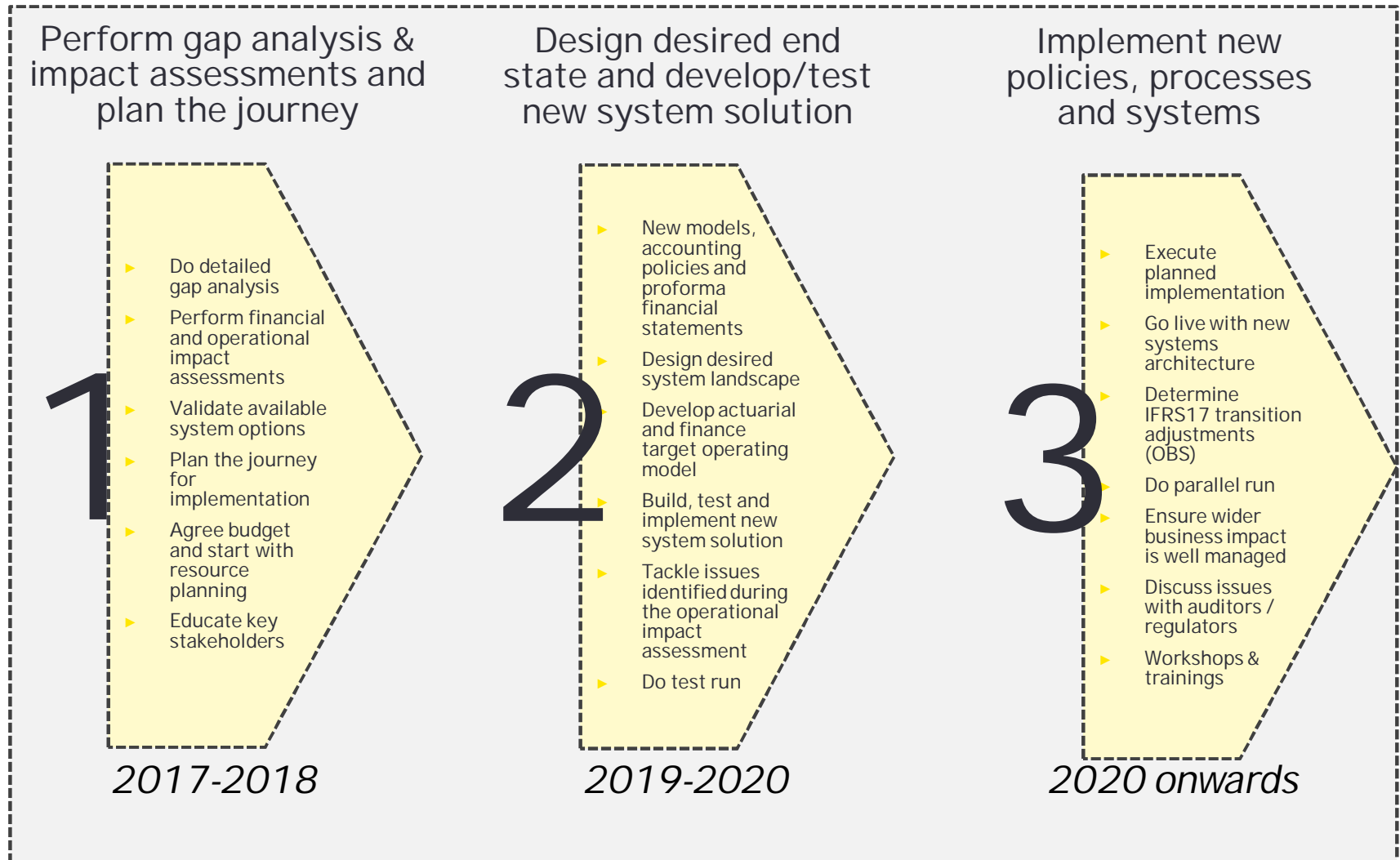
*Grouping as defined including cohorts based on issue date   **Payable amounts related to unexpected premium may need to be separated*

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We recommend a phased approach to manage the timely implementation of IFRS 17

Perform gap analysis & impact assessments and plan the journey

1

- ▸ Do detailed gap analysis
- ▸ Perform financial and operational impact assessments
- ▸ Validate available system options
- ▸ Plan the journey for implementation
- ▸ Agree budget and start with resource planning
- ▸ Educate key stakeholders

2017-2018

Design desired end state and develop/test new system solution

2

- ▸ New models, accounting policies and proforma financial statements
- ▸ Design desired system landscape
- ▸ Develop actuarial and finance target operating model
- ▸ Build, test and implement new system solution
- ▸ Tackle issues identified during the operational impact assessment
- ▸ Do test run

2019-2020

Implement new policies, processes and systems

3

- ▸ Execute planned implementation
- ▸ Go live with new systems architecture
- ▸ Determine IFRS17 transition adjustments (OBS)
- ▸ Do parallel run
- ▸ Ensure wider business impact is well managed
- ▸ Discuss issues with auditors / regulators
- ▸ Workshops & trainings

2020 onwards

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Remember that IFRS 17 can have a profound impact on your entire business operations

Front Office	**Marketing & customer**		**Sales & distribution**		
	Strategic marketing management	Customer marketing & analysis	Customer lead generation	Marketing correspondence	Distribution hierarchy and compensation management
	Sales programme	Brand management	Insurance sales process	Channel management	Campaigns management

Middle / Back Office

Product management

Product portfolio strategy	Pricing / reserving analysis	Product planning	Product tracking and illustration	Product development & maintenance	Reinsurance strategy and execution

Underwriting	**Policy servicing**		**Claims management**		
Underwriting guidelines	Operation control	Collection control	Loss reserve Management	Claims processing, evaluation and investigation	Recoveries and settlements
Product risk rating	Operation planning	Billing, collections and return	Fraud detection and management	Catastrophe planning	
Underwriting decisioning & control	Policy processing		Claim filing and management	Litigation management	

Enterprise	**Corp. perf. mgmt.**	**Human resources**		**Risk & compliance**		
	Performance management	Training and education	Remuneration	Legal & compliance	Internal control	Risk management

Degree of impacts to key functional areas | **Low or no impact** | **Medium – indirect impact** | **High – direct impact**

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Key IFRS 17 implementation lessons learnt in Asia

Implementation project MUST be content-led (by Accountants & Actuaries) not process-led (by PMO)

Must determine Level of Aggregation first – use data matrix to decide and ensure required data is readily available
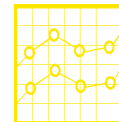
Need to decide where and how to calculate the CSM balances (3 options)

Unclear business requirements and data quality issues can really slow down the project
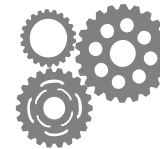
Don't forget the Day 1 Transition Opening Balance Sheet (OBS) which requires detailed historic data

There is no "one size fits all" system solution – needs substantial tailoring!

Devil in in the detail – requires experienced Business Analysts to support the DSP workstream

All solutions (FIS, SAS, SAP, Aptitude, Moody's) are still under development and not fully tested yet

Need the combine the D(ata) with the S(ystem) and P(rocess) workstreams

Must find right balance between internal & external resources (backfilling!)

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A useful IFRS17 system implementation readiness checklist (all items must be ticked BEFORE you start any system work)

☐ 1. Have you completed a detailed IFRS 17 gap analysis?

☐ 2. Have you done a proper system impact assessment based on the gap analysis results?

☐ 3. Have you determined all the available system options and decided which one is best suitable for you?

☐ 4. Have you decided which system vendors have the best solution for you (based on PoC)?

☐ 5. Have you decided if you want a single system solution or let the users decide on their own?

☐ 6. Have you defined your application guidance & user requirements in enough detail?

☐ 7. Have you decided whether you want a cloud-based or on premise solution?

☐ 8. Have you properly sized the system solution and data storage requirements?

☐ 9. Have you prepared clear implementation roadmap & set aside a realistic budget?

☐ 10. Have you shared your findings with all key stakeholders to make sure they support the proposed system solution?

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"Working on an IFRS 17 project feels a lot like crossing a bridge while building it at the same time!"

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