



25 - Multi-GAAP Implementation (IFRS 17 & FASB TI) - Synergy in Achieving Smart Compliance

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Multi-GAAP Implementation (IFRS 17 & LDTI)

- Synergy in Achieving Smart Compliance

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Moderator and Presenters

Moderator / Presenters	Background
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 <p>Darryl Wagner FSA, MAAA</p> <p>Principal Deloitte Consulting Hartford, CT 06103 860 725 3606 dawagner@deloitte.com</p>	<ul style="list-style-type: none">■ Darryl is a principal at Deloitte Consulting who leads Deloitte's Global Actuarial & Insurance Solutions practice. He is the IFRS 17 leader for US Consulting and the Americas.■ With his 25-year consulting career, Darryl's areas of specialty include life insurer financial reporting and performance and value measurement and management. He has worked on numerous accounting and valuation frameworks for clients around the world, helping with technical, process-oriented, and organizational aspects of implementation, execution, and evaluation, including US GAAP and statutory reporting, Solvency II, and Embedded Value. Darryl is one of Deloitte's leading IFRS 17 specialists and has led IFRS engagements for global insurers. He has presented and written extensively on the subject of IFRS 17, including as a co-author of the recently published (May, 2018) IAA monograph on risk adjustment and the Society of Actuaries' upcoming textbook on IFRS for insurers.
 <p>Alexandre Lemieux FSA, MAAA</p> <p>Director PwC 303.358.0061 alexandre.lemieux@pwc.com</p>	<ul style="list-style-type: none">■ Alex is a member of the Actuarial Service group at PricewaterhouseCoopers LLP.■ During his time with PwC Alex has led the implementation of AXIS for multiple product types including Indexed products, Life products, and capital modeling. He was also the Actuarial lead for a team helping a large life insurance company complete an M&A from a Chinese purchaser leading the actuarial implementation of PRCGAAP (an IFRS17 reserving methodology) including modifying their AXIS models to support future reporting requirements. Recently, Alex has been helping Asian companies with IFRS17 implementation, helping to lead the LDTI and IFRS17 adoptions for both direct writers and reinsurers, as well as continued support of PBR and tax reform initiatives. These conversions cover both the modelling conversions as well as the financial impact analysis.

Summary of the New Standards



LDTI vs. IFRS 17

Comparison of Objective and Scope

US GAAP (ASU 2018-12)

Overall Objective



- To improve, simplify and enhance the financial reporting of **long-duration contracts**, providing users with more useful information about the amount, timing and uncertainty of cash flows.

Scope



- No change to the types of entities that are subject to the **long duration insurance contract** accounting and disclosure guidance under **ASC 944**
- The scope is applicable to long duration contracts that are non-cancellable or guaranteed renewable by the insurer. For example, **most term and whole life insurance and annuity contracts**

IFRS 17

Overall Objective



- Introduce for the first time a single IFRS accounting model for **all types of insurance contracts**;
- Make the new accounting model highly transparent
- Align insurance accounting with IFRS accounting of other industries to improve comparability

Scope



- Insurance and reinsurance contracts** issued by the company
- Reinsurance contracts that the company holds** (“ceded reinsurance”)
- Investment contracts with discretionary participation features (“DPF”)** that it issues, provided that the entity also issues insurance contracts

Both standards are effective starting January 2022. Even though IFRS 17 is not adopted by the SEC, it applies to international subsidiaries of U.S. insurers, and U.S. insurers that have foreign parents.

ASU 2018-12: Summary of US GAAP Targeted Improvements

“Targeted improvements” create significant impact to data sourcing, processes and models.



Cash flow assumptions

Cash flow assumptions used to measure the liability for future policy benefits **should be updated to current best estimates and recognized in net income.**

Assumptions need to be reviewed and updated if appropriate on an annual basis, at the same time every year, or more frequently if evidence suggests that previous assumptions should be revised.

The ability to produce cash flows leveraging **data that is well-controlled is important.** Leveraging other processes (e.g., IFRS) reviewed via a gap assessment will identify whether enhancements are needed.



Discount rate

The company should update the discount rate assumptions that it uses to measure the liability for future policy benefits at each reporting date and recognize any effects of the discount rate change immediately in other comprehensive income. The target **discount rate should be based on an “upper medium grade (low credit risk) fixed income instrument yield”.**

For instances where limited observable inputs exist, **processes will need to be developed to establish unobservable points on the yield curve**



Retrospective unlocking

When non-discount rate assumptions are updated, a **revised net premium ratio will be calculated using actual historical experience**, the updated future period cash flow assumption and the discount rate applied at inception. The revised NPR is applied from issue to determine the revised liability as of the B/S date. The difference is reflected in current period operating income.

The company will need to efficiently and effectively **assess historical experience, requiring quality governance** over experience studies, inputs, models, outputs and processes given the focus on the use of current assumptions



DAC

While the definition of expenses eligible for deferral remains unchanged, the FASB has simplified the amortization pattern. **DAC is now amortized in proportion to the remaining life of the contract (e.g. policies in force).**

Additionally, DAC no longer accrues interest.

Key decisions will need to be made to determine **where the DAC calculation will take place and at which level it will occur (seriatim vs. cohort).**



Market risk benefits

FASB believes that features that meet the definition of **“market risk benefits” should be separately measured at fair value.**

A market risk benefit would be defined as *“A contract or contract feature that both provides protection to the contract holder from capital market risk and exposes the insurance entity to other-than-nominal capital market risk.”*

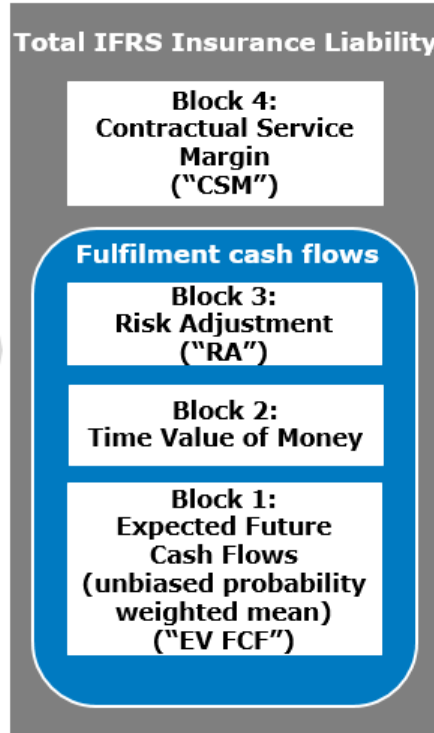
Processes **will need to be developed to identify relevant observable information** to inform the fair value measurement of market risk benefits.

The end result of these technical impacts is a significant increase in financial statement disclosures. New disclosures covering significant detail on reserve rollforwards, separate account, market risk benefit attribution, and DAC rollforwards will be required under the ASU.

IFRS 17 – Summary of General Measurement Model

Often referred to as the Building Block Approach (“BBA”)

- Principles**
- Measurement uses **current estimate** assumptions
 - Contracts are grouped by **portfolio, year of sale** and **possible profitability levels**
 - Profit measured and reported based on the delivery of the **“insurance coverage service”**
 - CSM absorbs assumption changes for future coverage (**“Unlocking”**)
 - Discount rates based on **market interest rates** (currency, duration, liquidity)
 - **CSM from participating contracts revalued** based on assets



Measured at inception as the expected contract profit to be earned as services are fulfilled. It is **adjusted for changes in non-financial variables** affecting future coverage cash flows. It **accretes interest based on day 1 discount rate** (locked-in rate)

An entity-specific assessment of the uncertainty about the amount and timing of future cash flows

An adjustment that converts future cash flows into current amounts

Expected (probability-weighted) cash flows from premiums, claims, benefits, expenses and acquisition costs

How are profits earned under IFRS 17?

Profit =

Release of CSM

+

Change in Risk Adjustment

+

Interest / unwind of cash flows

IFRS 17 – Variations of General Measurement Model

Variations of the general model to better reflect certain product characteristics

The general model:

Building blocks approach (BBA)

- Measurement objective is to quantify the notion of the insurer's "fulfilment of obligations under the contract"
- Total IFRS insurance liability includes the following components:
 - Best estimate cash flows: Probability-weighted estimate of cash inflows and outflows that will arise as the entity fulfils the contract
 - Discounting: Use a discount rate to adjust the cash flows for the time value of money
 - Risk adjustment: Quantifies the amount to compensate for uncertain vs. certain liability cash flows (similar to a Solvency II risk margin)
 - Contractual service margin: Obligation to provide service, measured at inception as the expected contract profit

Variable fee approach (VFA)

- Variation that applies to direct participating contracts based on relevant criteria
- Example: Unit linked products, where
 - Choice of funds are transparent and clearly identified to policyholders
 - Substantial share of fund return (e.g. 100%) is expected to be paid to the policyholder
 - Variability of payment: Death benefit = max (fund value, sums assured)
- Similar methodology as building block approach except for subsequent measurement of the contractual services margin

Simplified approach:

Premium allocation approach (PAA)

- Simplified approach to measuring the value of insurance contracts if eligibility criteria is met. Targeted toward short duration contracts.
- Total IFRS insurance liability includes pre-claims and post-claims (liability for remaining coverage, and liability for incurred claims):
 - Pre-claims: Comparable to unearned premium approach
 - Post-claims: Building blocks approach (BBA) still applies for post-claims reserves, where fulfillment cash flows are calculated composed of best estimate cash flows, discounting, and risk adjustment

Indirect participating contracts

- Defined as participating contracts whose effect of discretion does not meet the definition of direct participating contracts
- Example: Certain universal life products, where
 - Companies have the discretion of changing the crediting rate, arising from the returns from the underlying investment
- Measurement approach is more closely aligned to the variable fee approach, along with specific variations

Comparison and Implementation Synergy



Fundamental differences between IFRS 17 and LDTI

While US GAAP is moving closer to a current value framework, for long-duration contracts, there are still fundamental differences in the conceptual framework between IFRS 17 and ASU 2018-12

01

Reserving Approach

- The IFRS17 fulfilment cash flows essentially follow a **gross premium valuation** approach which captures all future P&Ls at valuation. CSM is then set up to defer the profit, which is a unique concept under IFRS 17.
- US GAAP is a **net premium valuation** approach which effectively defers the profit loadings in premiums to later periods. Deferred profit liability is only set up for limited-pay contracts, or contracts with excessive charges.

02

Computation Requirement

- IFRS 17 requires a **current value**, as the unbiased “*probability-weighted mean of the full range of possible outcomes*”. TVOG is necessary for the cost of options/guarantees.
- Under current US GAAP, **deterministic** approach is prevalent for benefit reserves, and SOP 03-1 for certain guarantees due to their “**book value**” nature. Under new US GAAP, market risk benefit guarantees are measured at **fair value** which would involve **stochastic runs**.

03

Unit of Account

- IFRS 17 requires **at least three groups of contracts for any given issue year** for a portfolio in the CSM roll-forward to determine P&L. Grouping of onerous contracts is based on **individual contract level** calc. unless there is reasonable and supportable info.
- New US GAAP **allows seriatim to an issue year** or more granular cohort. No impairment testing on DAC.

04

Assumption Unlocking

- **Prospective unlocking** under IFRS 17, where changes in future assumptions do not result in any current period I/S impact, to the extent the impact can be absorbed by the CSM.
- **Retrospective unlocking** for US GAAP benefit reserves for long-duration contracts, where future assumption changes impact the current period income.

05

Revenue Recognition

- IFRS 17 income is based on **derived figures** involving actuarial calculation.
- Under US GAAP, **premium** is recognized as revenue for traditional long-duration products, and **margins** are for non-traditional products (such as universal life)

Focused Synergy Areas in a Concurrent Implementation

With effective dates tentatively pushed to 1/1/2022 for both standards, it would be worthwhile to consider an aligned strategy for the adoption of both ASU 2018-12 and IFRS 17. There are numerous areas to leverage that can drive enhanced efficiencies and cost savings, while reducing resource requirements.

Actuarial Systems and Modeling



Modeling changes and specific applications may be needed to support updated estimations, risk adjustments and discount rates.

Data Storage and Accessibility



IT resources may be needed to support additional data granularity and volume.

Processes and System Design



System logic and account mapping changes may be updated to support technical reporting requirements.

Financial Reporting and Disclosures



Reporting and governance framework may need to be redefined to meet new disclosure requirements and external reporting considerations.

Policy Development



Accounting/Actuarial policies will need to be established/modified for adoption of updates.

Leverageable Activities

Vendor decisions and software integration, while likely to require separate modeling modules, should be contemplated in tandem such that multiple reserving platforms aren't required to support the two standards.

New data extracts, processes, reconciliations, and controls will be required as an input to future state reserving processes. Back-end data storage and reporting to the ledger will need to be updated, scaled, and ideally automated.

The target operating model updates to reflect the changes to the reserving, finance and reporting processes can be designed to reflect the requirements for both standards.

Both standards pose additional requirements on presentation and disclosures. There is opportunity to leverage the reporting and governance framework for both standards.

Under both standards, assumptions are required to stay current. Data sourcing for discount rates, technique to develop a yield curve and unit of account are common topics for which accounting policies can be designed concurrently.

LDTI and IFRS 17 Synergies

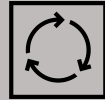
August 26th, 2019



LDTI and IFRS 17 Synergies

Because both FASB and the IASB approaches address similar considerations, companies that need to dual-adopt are finding opportunities for synergies as they refine their approach to implementation. They'll be able to align policy decisions while simultaneously adopting both standards without needing to worry about two full implementation plans.

Why Synergies?



The key goal is to implement these new standards in a **cost-effective** fashion, **limiting the amount of reworks and time** needed to **reconcile the results** of the two standards.

Best Estimate Cash Flows

Identify the extent to which cash flows can be leveraged for dual purpose.



Reporting & Roll-forward Disclosures

Increase demand for additional insights and required disclosures.



Best Estimate Assumptions

Symmetrical distribution and as the mean of the experience.



Model Runs & Order of Operations

Ensure a consistent order of operations to minimize the number of model runs.



Granularity & Level of Aggregation

Serial cash flows allows analysis flexibility like cohort (LDTI is less granular)



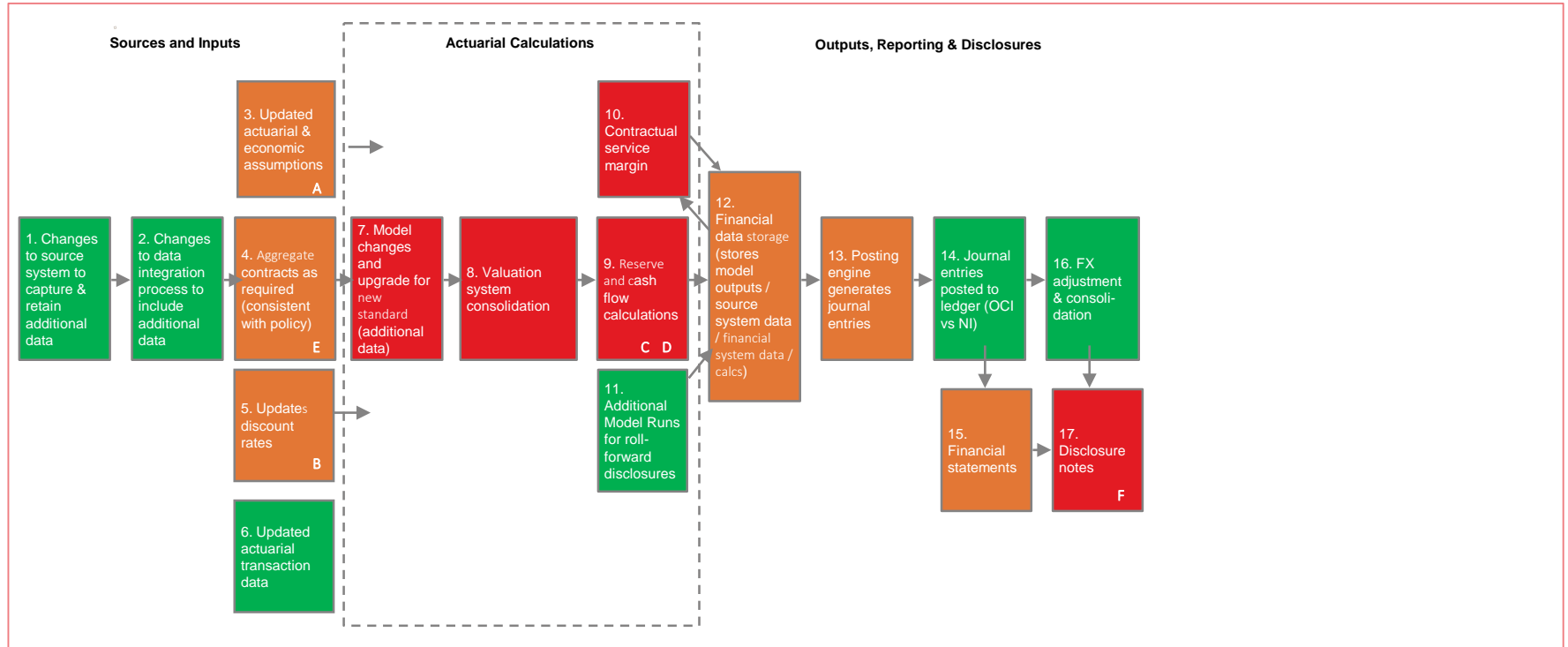
Limited Synergies with Modifiers

Modify LDTI cash flows to become IFRS 17 cash flows (e.g., contract boundaries).



Business Impacts Framework

■ = consistent themes between LDTI and IFRS 17
■ = similar ideas but technically different between LDTI and IFRS 17
■ = distinct deviation between LDTI and IFRS 17



LDTI – Technical comparison to IFRS 17

There are many differences in the current measurement models between US GAAP and IFRS 17. Although new LDTI standard somewhat aligns these differences, remaining differences are highlighted below. These “tags” are cross-referenced on the business impact diagram.

Area	Tags	US GAAP LDTI changes	IFRS 17 Treatment
Assumptions	A	Assumptions are no longer be locked-in but instead reviewed at least annually and updated (as necessary) to reflect current experience, as applicable. Management actions to be considered. Provisions for adverse deviation (PADs) to be removed.	Estimates of future cash flows based on current best estimate assumptions.
Discount Rates	B	For non-participating traditional and limited payment contracts, the use of a current upper-medium grade fixed-income instrument yield is required. The effect of updating the discount rate to be recognised immediately in other comprehensive income.	Requires discount rates used to reflect the characteristics of the cash flows arising from the insurance contracts. Potential use of locked in discount rates for net income and current discount rates for balance sheet (and OCI).
Options and Guarantees	C	To be included as part of the market risk benefits under the updates which should be measured at fair value.	Market consistent valuation of options and guarantees within the measurement of fulfilment cash flows
Risk Adjustment	D	The provision for adverse deviation for non-participating traditional and universal life contracts is to be eliminated. Risk margins for MRBs and fair value balances.	Explicit risk adjustment to reflect uncertainty in fulfilment cash flows relating to non-financial risk.
Level of aggregation	E	Contracts from different issue years should not be grouped together	Groups are based on assessment of similar risks, profitability, as well as ensuring contracts from different issue years are not grouped together
Disclosures	F	The amendments require that an insurance entity provide disaggregated roll-forwards of beginning to ending balances of the liability for future policy benefits, policyholder account balances, market risk benefits, separate account liabilities, and deferred acquisition costs. The amendments also require that an insurance entity disclose information about significant inputs, judgments, assumptions, and methods used in measurement, including changes in those inputs, judgments, and assumptions, and the effect of those changes on measurement.	IFRS 17 requires a number of additional quantitative disclosures that have not been required under IFRS 4. In practice, providing these numbers and collecting all of the necessary information might be an operational challenge and should be considered when designing the system architecture.

Synergy Areas - Policy

- IFRS17 and LDTI offer a number of points that are similar (or potentially could be defined similarly):
 - Inforce policy information
 - Unit of account
 - Cash flow assumptions
 - Discount Rate (bottom-up) definitions
- Other items are not nearly as aligned though there remains potential leverage
 - Contract Boundary
 - Portfolio vs. Cohort definitions

Synergy Areas - Data

Inforce and transaction data - more data required under both standards

- Inforce file will likely require more information for up to date modelling of assumptions
- Transaction data, including claim paid, premiums received at the appropriate level of granularity
- Ledger information, including change in claim reserves and Due Premium/Advanced Premium at the correct cohort
- DAC and DAC-like balances amortization basis as compared to the CSM profit carrier

Retention period

- Transactions (cash settlements) - since inception going forward
- Inception and current discount rates

Synergy Areas – Cash Flows

- Highlighted by the potential policy synergies is technology enablement
 - Database solutions that can store a “single source of truth” for seriatim cash flows
 - ITGC process that can modify best estimate cash flows to make them fit for purposes
 - Systemic process that can group seriatim cash flows into appropriate cohort/portfolio
- Alignment of policies, potentially globally, is needed to support the potential rationalization of the process
 - Regions can not independently define risks differently for IFRS and LDTI
 - IFRS unit of accounts should aim to be subgroups of LDTI unit of accounts to make consolidation of cash flows easiest (no Many-to-Many to mappings)

Synergy Areas - Reporting

- New required roll-forward disclosures will increase the amount of analysis and the number of model runs
- Analyzing these disclosures and determining a management reporting framework will allow actuaries to design, automate, and minimize the number of runs needed to perform these roll-forwards and analysis.
 - LDTI prescribes that the assumption unlocking should occur at the beginning of the quarter
 - Under IFRS17, the order of operations for roll-forward are not prescribed outside of CSM amortization.
 - Companies should consider whether assumption unlocking for IFRS17 also should occur as of the beginning of the quarter in order to minimize the number of runs required.
- Similar synergies would exist for updates for actual experience, and ensuring a consistent order of operations will be vital to minimizing the number of required runs.

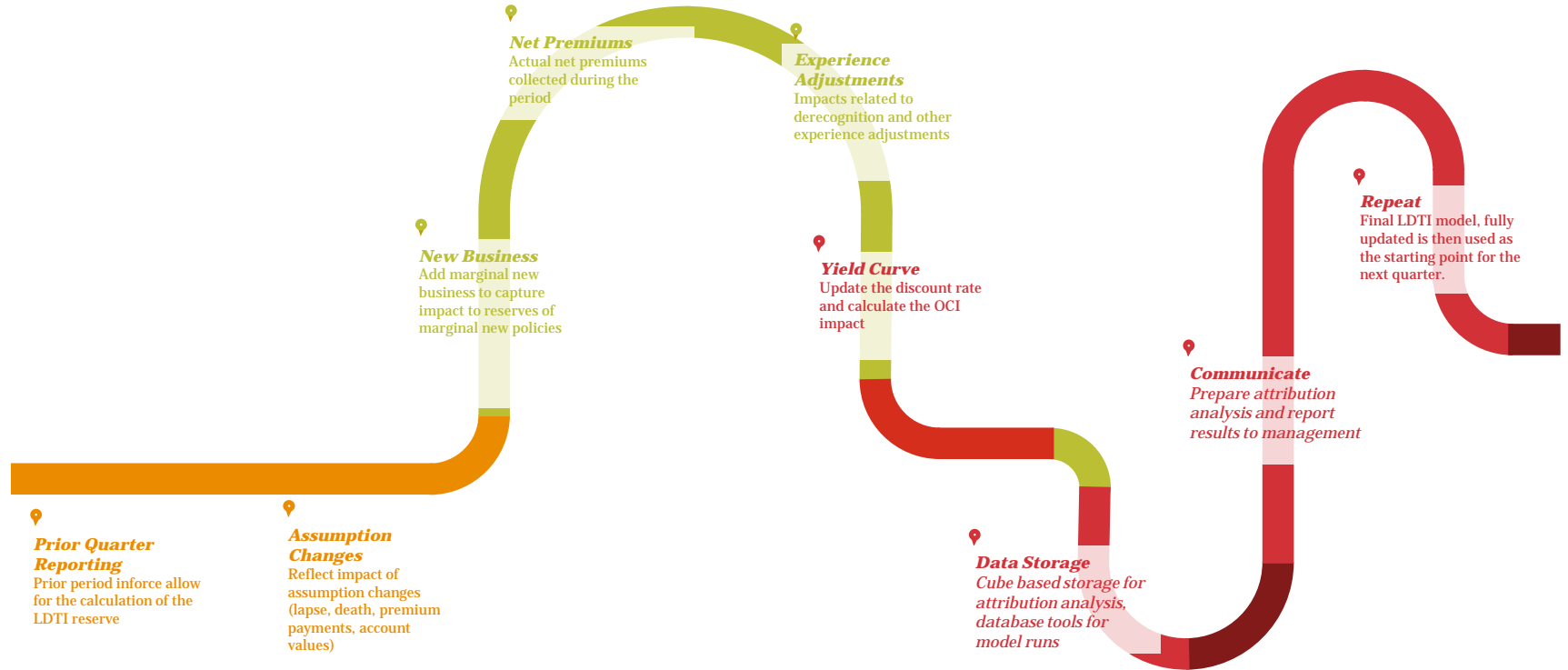
Operational Decision

Order of operations – Ignoring the impact of new business

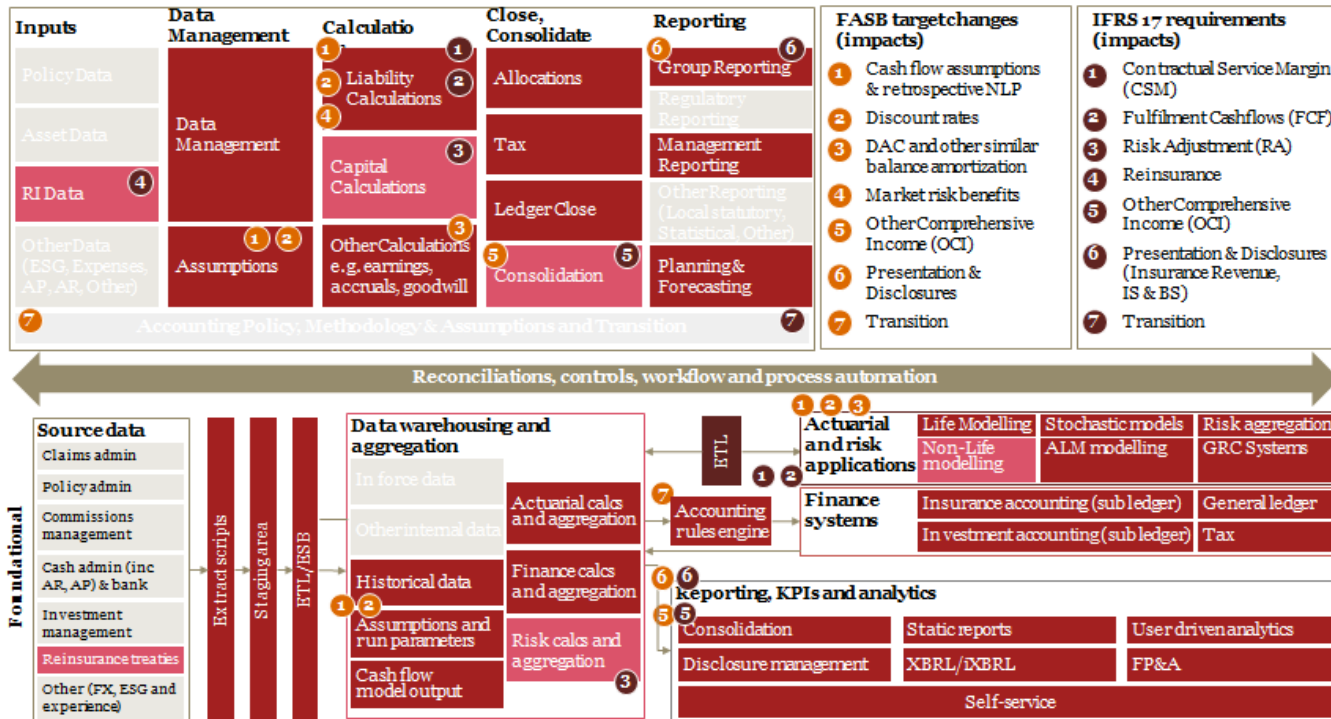
- IFRS17 does not specify the order of operations for analysis of the movement of CSM other than a requirement for amortization of CSM to be the final step of the process
- A policy decision will need to be made to determine the appropriate order of operations
- A potential order could be:
 1. Impact of final model design (e.g. version change, architecture change) on beginning of quarter inforce
 2. Assumption updates on inforce (beginning of quarter inforce again)
 3. This item is moved to beginning of period inforce given that the LDTI requirement is for assumption updates to be at the beginning of the period
 4. Interest accretion on CSM balance
 5. Impact of updating for actual transactions during the quarter
 6. Impact of inforce updates on CSM balance
 7. Update to end of quarter discount rate
 8. Amortization of CSM based on amortization basis

Source of Earnings Data Flow

Attribution Analysis



System Considerations



Items like input data, projection modules, and reporting elements all can be leveraged on a combined basis to maximize the impact and minimize the cost of implementation. Other items we've already mentioned, in particular data warehousing and aggregation, are particularly open to consolidation since so many data elements are common across the regimes.

Thank you

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