

IFRS 17: Closer than it appears

Richard Johnson
Actuarial Solutions Manager
FIS Prophet

for the Polish Actuarial Society
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Empowering
the Financial World



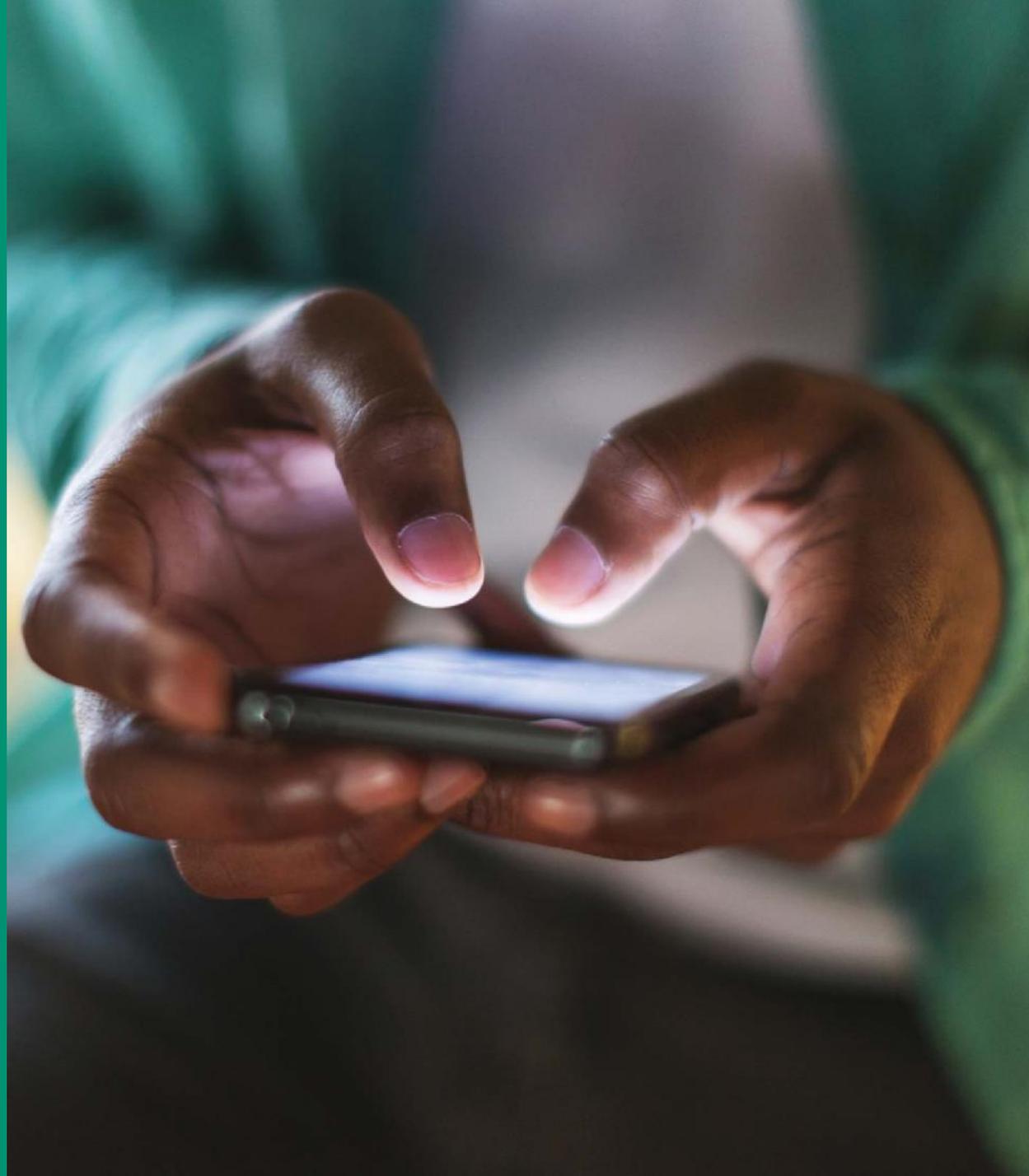
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Agenda

- **Who am I?**
- **State of play**
- **The Approaches**
- **The Calculations**
- **Aggregation**
- **Transition**
- **Governance and Connectivity**
- **Conclusion**

Who am I?



Who am I?

- I'm a UK actuary
- I work for FIS – we make the Prophet actuarial software
- I've worked for insurers, actuarial consultancies, and now a software company
- My job is to make our software better ...
- ... to do this, I go all over the world asking people what they need it to do
- I'm not a thought leader ...
- ... but I am a thought gatherer

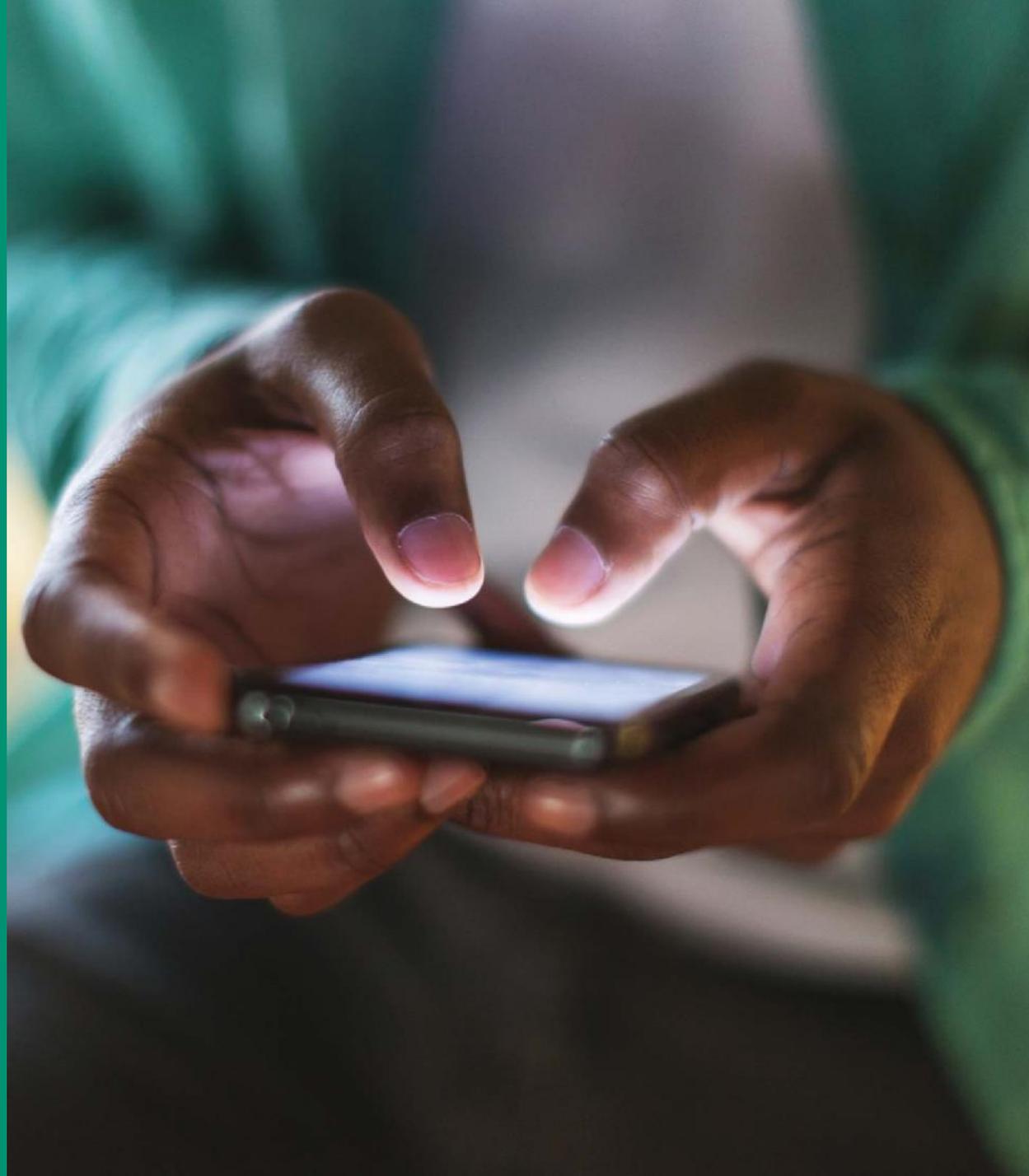
The State of Play



State of play on IFRS ~~Insurance Contracts Phase II~~ 17

- New global insurance accounting standard ...
- ... existing standard is IFRS 4 ...
- ... so people often call this new standard IFRS 4 Phase II
- “Current” exposure draft dates back to June 2013
- Substantial new sections of text published earlier in 2016 as part of a consultation
- Final IFRS standard currently expected March 2017 ...
- ... so all the cool kids are now calling it “IFRS 17”
- Expectations in Europe are for a 2020/2021 implementation date
- So we can just relax, then?

The Approaches



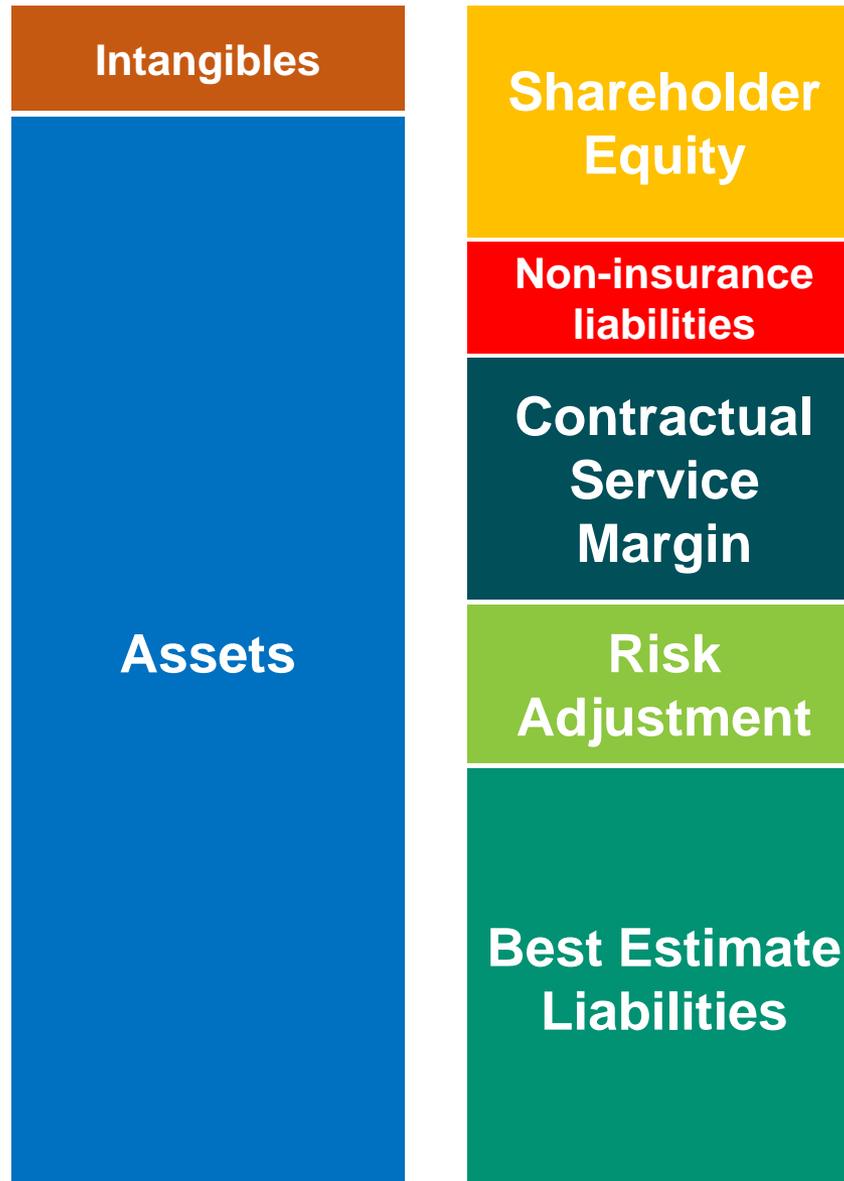
IFRS 17 Calculation “Approaches”

- **General Model**
- **Variable Fee Approach**
- **Premium Allocation Approach**

General Model

- **Originally the Building Block Approach, it is now commonly referred to as the “General Model”, as it is effectively the default approach**
- **The building blocks are probably now familiar to most of us:**
 - Future Cashflows
 - Time Value of Money
 - Risk Adjustment
 - Contractual Service Margin

IFRS 17 Balance Sheet



Variable Fee Approach

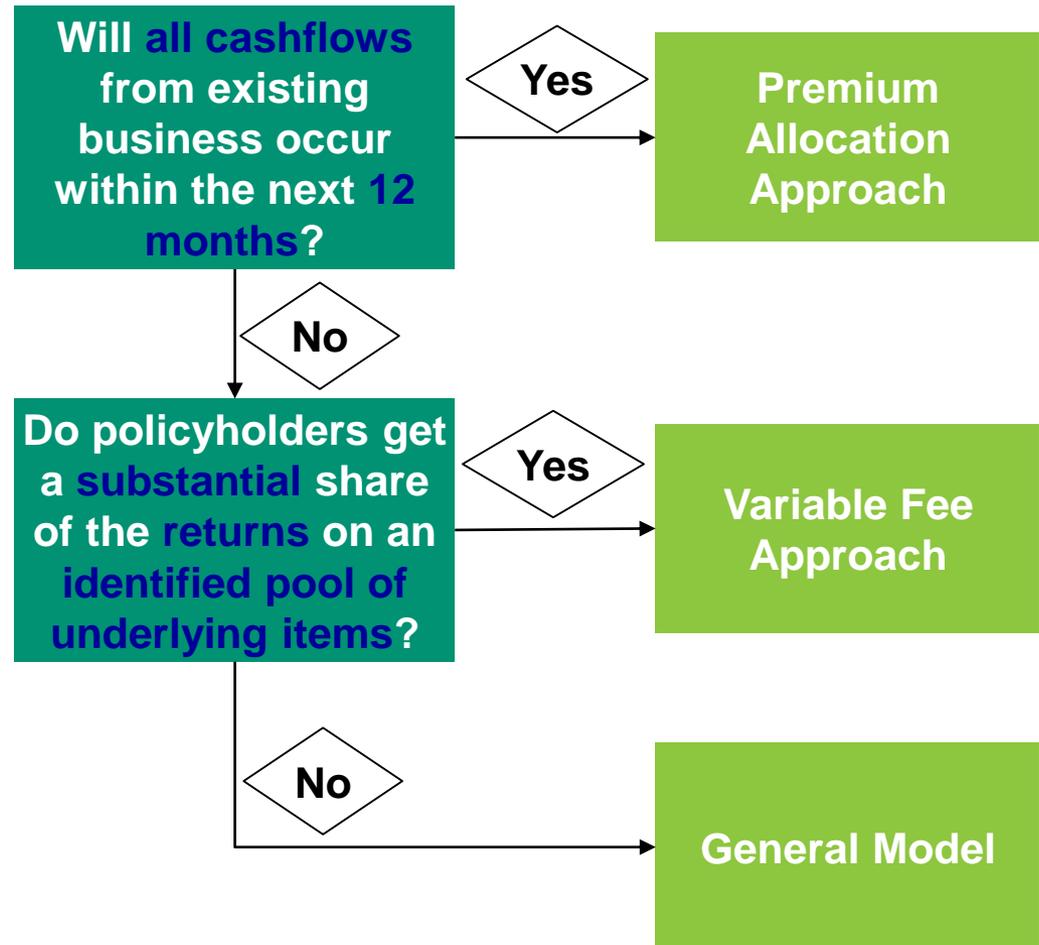
- **Components are the same as the General Model**
- **The policyholder participates in the return on a pool of underlying items**
- **General model rules are modified to account for fluctuating investment returns**
- **The concept of “direct participation” not only covers investment-linked and unit-linked ...**
- **... it is intended to cover profit participation too**

Premium Allocation Approach

- **Similar to the Unearned Premium Reserve / Unexpired Risk Reserve concept in non-life insurance**
- **Significant simplification compared to the Building Block Approach ...**
- **... IFRS text says the PAA must be a close approximation to the BBA result ...**
- **... but how do you prove that without doing it the hard way?**
- **IASB often reiterate that this is NOT the default approach ...**
- **... even for non-life business**

IFRS 17 Calculation “Approaches”

- General Model
- Variable Fee Approach
- Premium Allocation Approach



The Calculations



Future Cashflows

Problem

- Expected value of future cashflows

Principle

- Expected value of all future cashflows required to fulfil insurance liabilities

Considerations

- It may not be the same set of cashflows for different purposes ...
- ... for example, different interpretation of boundary conditions ...
- ... and other unusual features such as “pre-policy” cashflows

Time Value of Money

Problem

- Discounting of expected future cashflows

Principle

- Discount rates must be traceable back to observable market data

Considerations

- Risk-free yield curves are acceptable ...
- ... asset-backed returns are also acceptable ...
- ... plus or minus various modifications for credit risk, liquidity premium

Best Estimate Liability

Problem

- Combine Future Cashflows and Time Value of Money

Principle

- The amount you believe you need to hold in order to meet liabilities ...
- ... essentially with a 50/50 probability

Considerations

- Best Estimate Liability \neq Liabilities on best estimate assumptions
- Any non-linearity of results with respect to the risk factors, and the Best Estimate Liability effectively becomes a stochastic calculation

Risk Adjustment

Problem

- Compensation for risk of fulfilling insurance liabilities

Principle

- Hold an amount sufficient to be indifferent between the block of insurance business and a certainty equivalent

Considerations

- Value at Risk (or variant such as tail VaR) are acceptable techniques ...
- ... cost of capital approach is also an acceptable technique
- Can you leverage what you've done for Solvency II using cost of capital approach?

Contractual Service Margin

Problem

- “Zeroise” future profits, then allow profits to emerge smoothly over time

Principle

- Recognise profits over the lifetime of the insurance policy, as the “service” is provided

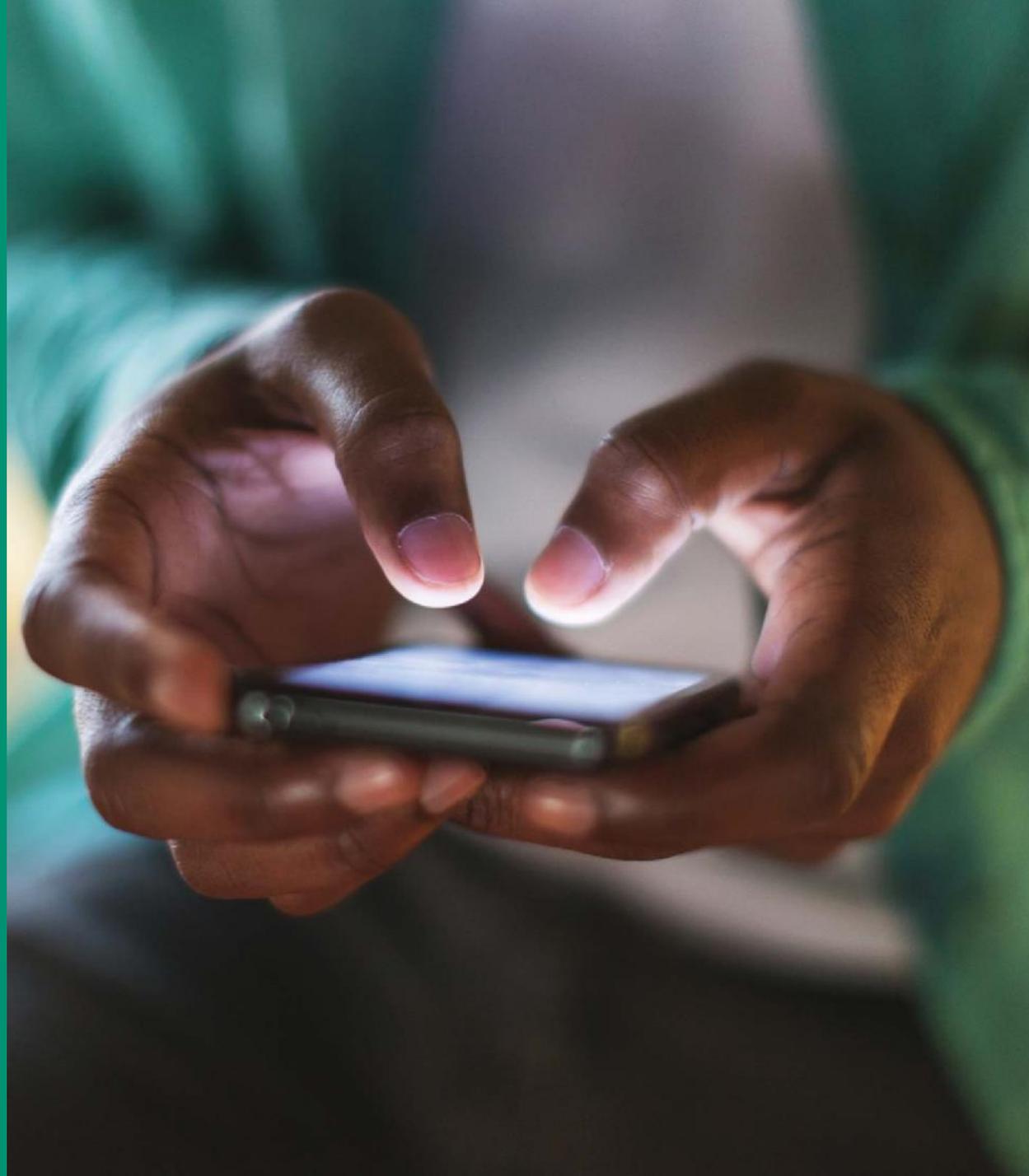
Considerations

- CSM calculation is just a formula, albeit with a lot of complexities ...
- ... BEL on original economic assumption, “shadow” negative CSMs
- Practical pain point is passing CSM data from one valuation to the next ...
- ... storage and retrieval of BEL and CSM - potentially by policy – has no parallels today

The Fundamental Interconnectedness of All Things

- **An IFRS 17 balance sheet in a Solvency II world**
- **Best Estimate Liability wrap around the cashflows on an IFRS basis ...**
- **... discount using a yield curve or asset-backed returns**
- **IFRS Risk Adjustment based on Solvency II Solvency Capital Requirement ...**
- **... revalue Solvency II BEL under a series of stresses, calculate risk capital for each stress, aggregate stress capital requirements ...**
- **... project business forward in annual time steps on IFRS assumptions ...**
- **... evaluate projected SCR on Solvency II assumptions ...**
- **... using IFRS cost of capital basis on projected Solvency II SCR**
- **Contractual Service Margin ...**
- **... incorporating “properly-calculated” Risk Adjustment into the zeroisation**

Aggregation



Aggregation / Unit of Account

BEL

- Best Estimate Liability should be much the same at any level – it's the mean

RA

- Risk Adjustment should optimally be calculated at entity level ...
- ... it's a solvency calculation, thus incorporates diversification benefit

CSM

- So you have an entity-level Risk Adjustment ...
- ... now need to allocate it back down to – potentially – policy level ...
- ... to obtain the CSM at policy level

Aggregation for assessment of CSM

- CSM has been the focal point of much of the discussion around aggregation

• Example:

Policy	CSM	Ungrouped CSM Assessment	Grouped CSM Assessment
A	1,000	1,000	1,000
B	-900	0	-900
“Entity” CSM:		1,000	100

- Clearly grouping is advantageous in this simplified example, but ...
- ... IFRS 17 says only policies with “similar” profit signatures should be grouped ...
- ... so clear-cut situations like this example are unlikely to happen

A software vendor's perspective

- There may be advantages to aggregating data in order to reduce the CSM ...
- ... though even that statement is questionable ...
- ... you're not supposed to use it as an opportunity to reduce CSM

- The IFRS 17 wording is trying to be pragmatic ...
- ... allowing you to group if it helps ...
- ... and, within reason, to disregard the “unintended” positive consequences

- But grouping does lead to an increase in operational complexity

- Addressing the operational complexity costs real money ...
- ... is it worth spending real money to adjust a notional balance?

Transition



Transition

- 
- If possible, need to fully recreate the predicted profitability at inception ...
 - ... this means recreating everything – assumptions, policy data, pricing models

- 
- If that's impracticable, proposed “simplification” is to estimate future cashflows from today ...
 - ... then use actual historic experience to step back to inception

- 
- Only if that's impracticable can you assess a fair value on current assumptions

Practical considerations

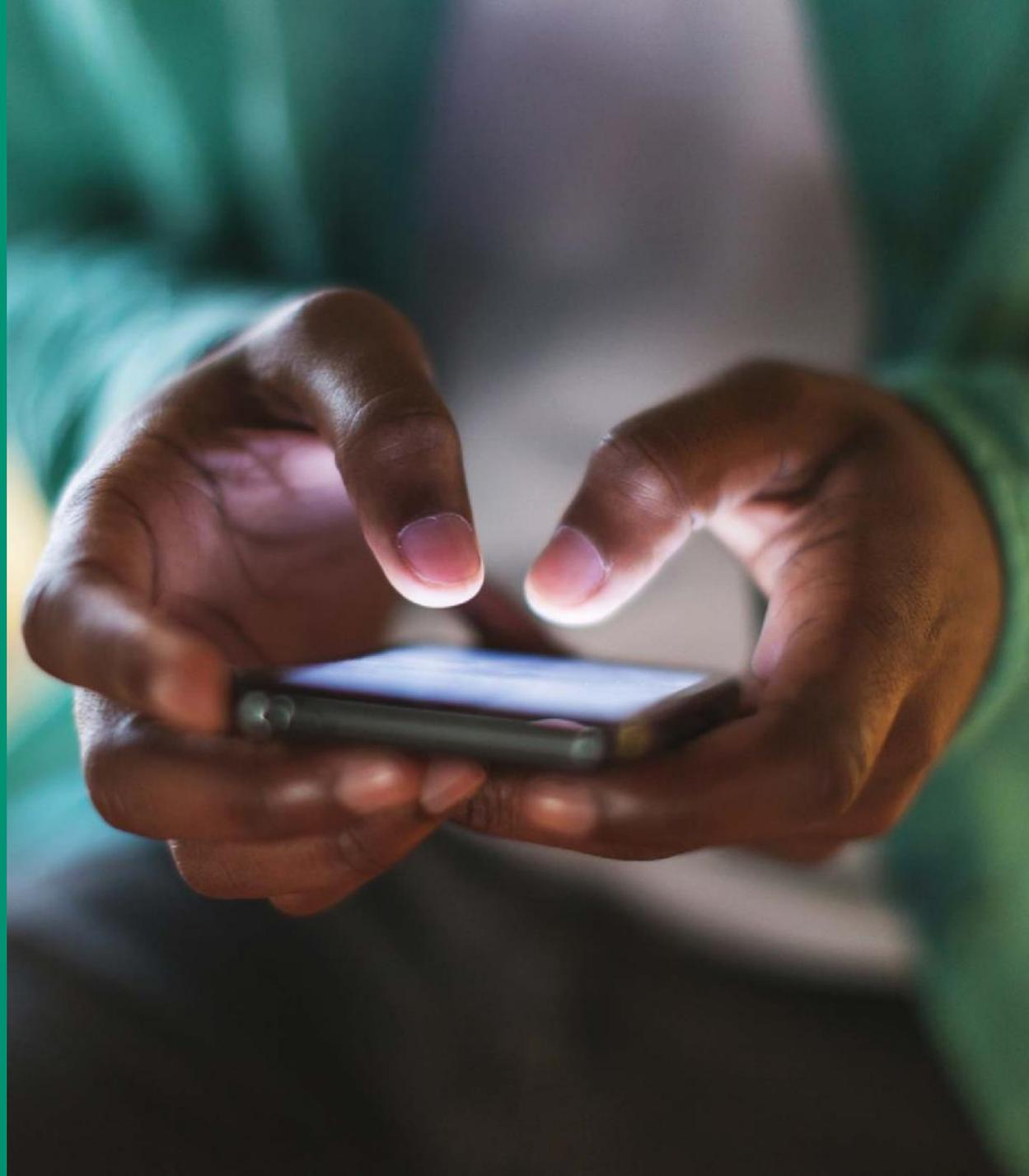
- **This isn't just about locating old assumptions ...**
- **... you need the policy data that would have been in effect at the time ...**
- **... and possibly most difficult of all – the models**

- **I always use the term “reimagining” ...**
- **... you can't just pick up and use old information ...**
- **... you have to put yourself into the mindset applied at that time**

- **Start collecting data and storing models today ...**
- **... it will take away some of the pain come 2020/2021**

- **What if you have already distributed profits that you now have to hold back?**

Governance and Connectivity

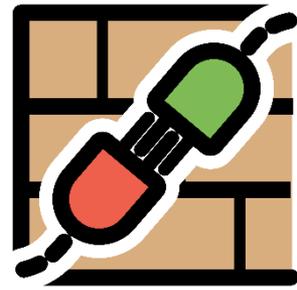


Why governance?



- Solvency II, ComFrame ...
- ... the risk-based regimes have explicit governance framework requirements
- On paper, IFRS 17 is a calculation regime ...
- ... governance matters because the actuaries have to work with the accountants on this ...
- ... and the accountants say it matters
- Accountants want to see process and governance around their numbers ...
- ... actuarial mathematics is of little interest to them
- But this is actually great news for many actuaries ...
- ... everything we did for these risk-based regimes works for IFRS 17 too

Why connectivity?



- **Again, it's all about co-operation between actuaries and accountants**
- **Actuarial calculation results will need to be consumed by accounting systems ...**
- **... on a greater scale than under previous regimes**
- **Accountants have the concept of “Priority 1 systems” ...**
- **... if it feeds into the Accounts, it's a Priority 1 system ...**
- **... if it feeds data into a Priority 1 system, then it must meet standards of a Priority 1 system**
- **It's not just that data flow between systems must be facilitated ...**
- **... data flow will also need to be automated and controlled**

Conclusion



Conclusion

- **We have time ...**
- **... about four years from final text to official implementation date**
- **There is a lot of work to do ...**
- **... experience so far is that everything takes longer than expected**
- **Make sure you leverage everything you've got ...**
- **... systems, models, assumption setting, governance, process management**

• **Own it!**

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