# Agenda

<table>
<thead>
<tr>
<th>Pages</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Introduction</td>
</tr>
<tr>
<td></td>
<td><strong>IFRS 17</strong></td>
</tr>
<tr>
<td>4 - 9</td>
<td>Recap of Building Blocks Approach</td>
</tr>
<tr>
<td>10 - 12</td>
<td>Onerous Contracts</td>
</tr>
<tr>
<td>13 - 16</td>
<td>Transition and Presentation</td>
</tr>
<tr>
<td></td>
<td><strong>Reinsurance</strong></td>
</tr>
<tr>
<td>17 - 19</td>
<td>Recap of Reinsurance under IFRS 17</td>
</tr>
<tr>
<td>22 - 26</td>
<td>Examples</td>
</tr>
<tr>
<td>27 - 29</td>
<td>Presentation and Disclosure</td>
</tr>
<tr>
<td>30 - 33</td>
<td>Capital Management and Further Issues</td>
</tr>
</tbody>
</table>
Introduction

**WHAT**
- IFRS 17 is the new international accounting standard for insurance contracts, issued in May 2017
- This will replace the current IFRS 4 *Insurance Contracts*
- It will be implemented in an estimated 116 countries, including Hong Kong, Korea, Taiwan

**WHY**
- IFRS 4 was introduced in 2004 as a temporary measure, and permits a wide variety of treatments
- The new standard will replace these with a single consistent approach to measuring profitability
- Increased disclosure requirements will also allow investors to look into the drivers of risk and return

**WHEN**
- Apply for annual accounting periods beginning on or after **1 January 2021**
- Later implementation in certain countries
Options for accounting for insurance contracts

<table>
<thead>
<tr>
<th>Option</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Building Blocks Approach (BBA)</strong></td>
<td>- Multi-year contracts</td>
</tr>
<tr>
<td></td>
<td>- With profits life policies</td>
</tr>
<tr>
<td></td>
<td>- Whole Life, Term Life policies</td>
</tr>
<tr>
<td></td>
<td>- Long Term Care or health policies</td>
</tr>
<tr>
<td></td>
<td>- Unit Linked policies</td>
</tr>
<tr>
<td></td>
<td>- Variable Annuities</td>
</tr>
<tr>
<td></td>
<td>- UK with profits contracts</td>
</tr>
<tr>
<td></td>
<td>- Not applicable to reinsurance contracts</td>
</tr>
<tr>
<td></td>
<td>- Short term general insurance</td>
</tr>
<tr>
<td></td>
<td>- Short term life</td>
</tr>
<tr>
<td><strong>Variable Fee Approach</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- For insurance contracts linked to the returns of identified underlying assets</td>
</tr>
<tr>
<td><strong>Premium Allocation Approach</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Simplified model for short term (&lt;1 year) contracts</td>
</tr>
<tr>
<td></td>
<td>- No “day 1” profits</td>
</tr>
</tbody>
</table>

- Default approach for valuing insurance contracts
- No “day 1” profits
Building Blocks Approach (BBA)

- **Fulfilment cash flows**
- **Time value of money**
- **Risk adjustment**
- **Contractual service margin**

- Future cash flows within the boundary of an insurance contract
- Discounting to present value
- The risk adjustment is to reflect the uncertainty of future cash flows
- The expected profit over the life of the transaction

- Best Estimate Liability
Choices in applying Building Blocks Approach

• Discount rates
  - Discounting should be done using an interest rate curve, which should be disclosed in the accounts
  - *Top-down* – taking the investment yield of the asset portfolio backing the liabilities, and adjusting this
  - *Bottom-up* – taking the risk free rate of return from market sources and adjusting this

• Contract boundaries
  - Future cash flows are measured “within the boundary of an insurance contract” which is the maturity of providing services or coverage or receiving premiums
  - The boundary is limited to the period until the insurer can increase the price or reduce the coverage to fully reflect the risk e.g. reprice at market rates
Risk Adjustment

- The risk adjustment is to reflect the “uncertainty in the cash flows that arise from the insurance contract”.

- Choices on how to calculate this:
  - Confidence interval measure (i.e. VaR)
  - Conditional tail expectation (tail loss VaR)
  - Present Value of the Cost of Capital

- In Europe, Solvency 2 requires insurers to hold a Risk Margin equal to a cost of capital of 6% on their future capital requirements.
Aggregation - 1

- IFRS 17 aims to apply to groups of contracts called **portfolios**, and defined as:
  - Contracts subject to similar risks and managed together.
  - Not issued more than one year apart

- Highlights the performance of different classes of insurance contract within an entity
- Not allow profits from some contracts to hide losses on other contracts

- This could place a significant burden on insurance companies and make IFRS accounts very long.
Aggregation - 2

• Here, policies written in 2010 were priced at a lower annual premium, which has now proved to be inadequate to cover claims. As a result it is loss making for this year.

• Policies written in 2011 were priced at a higher annual premium, and are still profitable.

• On an aggregated basis – as they are reported under IFRS 4 – the business is profitable.

• However, the reporting of separate cohorts required under IFRS 17 will show the unprofitable blocks.

<table>
<thead>
<tr>
<th>Aggregation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Here, policies written in 2010 were priced at a lower annual premium, which has now proved to be inadequate to cover claims. As a result it is loss making for this year.</td>
<td></td>
</tr>
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<td>Policies written in 2011 were priced at a higher annual premium, and are still profitable.</td>
<td></td>
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</tr>
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<td>However, the reporting of separate cohorts required under IFRS 17 will show the unprofitable blocks.</td>
<td></td>
</tr>
</tbody>
</table>

**Example**

<table>
<thead>
<tr>
<th>Originated</th>
<th>2010</th>
<th>2011</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium</td>
<td>50</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Claims</td>
<td>-70</td>
<td>-140</td>
<td>-210</td>
</tr>
<tr>
<td>Net result</td>
<td>-20</td>
<td>60</td>
<td>40</td>
</tr>
</tbody>
</table>
Onerous Contracts - 1

- IFRS 17 has a specific treatment for insurance contracts where cash outflows are expected to exceed cash inflows.

- These loss making contracts are termed onerous contracts.

- The expected future losses on onerous contracts are taken as a loss through the P&L immediately.

- This contrasts with expected future profits, which are spread out over the expected lifetime of the contracts.

- Examples of onerous contracts include those with high initial expenses (commissions, advertising) where insurers recoup costs through renewals in future years, or those long term contracts with a guaranteed premium rate and high loss ratios, such as cancer care products from previous years.
  
  - Contracts with high guaranteed investment rates may be subject to IFRS 9, where the insurance contract is split from the investment component and valued separately.
Expected future claims and expenses exceed the expected future income from premiums. The expected future loss on the contract is immediately taken as an expense through the P&L account. As there is no expected future profit, there is no Contractual Service Margin.

The small annual changes in the time value of money would pass through the P&L as an investment expense.

- Potentially a block of onerous contracts

<table>
<thead>
<tr>
<th>Originated</th>
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<th>Total</th>
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<tbody>
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<td>-20</td>
<td>60</td>
<td>40</td>
</tr>
</tbody>
</table>
The future cash flows show more cash outflows than cash inflows, due to high claims (a Loss Ratio of 140%) for this particular block of business.

The future losses are discounted and then taken as an expense through the P&L.
Transition

- IFRS 17 will be applied with **retrospective effect**.

- Opening balances and prior year amounts will need to be restated.

- However, the IASB also recognizes this may cause practical issues.

- Potential short cuts include
  - Simplified approach (that is the modified retrospective approach)
  - Fair Value approach

- What will auditors allow as short cuts?

---

**Applying the new Standard for the first time**

On first-time application, the entity can measure the fulfilment cash flows directly, but the remaining balance of the contractual service margin requires historical data.

**Retrospective application:**
- When historical data exists and hindsight is not required

**Prescribed simplified approach:**
- When not all historical information is available but information about historical cash flows is available or can be constructed

**Liability calibrated to fair value:**
- When no historical information about cash flows is available to determine the contractual service margin
Sources of income

Fulfilment cash flows

Time value of money

Risk adjustment

Contractual service margin

Realised cash flows

Profit or loss: Insurance service

Change in discount rate

Other Comprehensive Income or P&L

Passage of time

Profit or loss: Net finance

Amortisation

Profit or loss: Insurance service

Change in estimate

Profit or loss: Insurance service

Amortisation
The major change is that **no Gross Written Premium (GWP)** is reported on the front of the P&L.

Instead, the change in contract liabilities is reported, split between different lines.

Insurance service result continues to report most, **but not all**, of the revenue.
Selected issues

- **Regulatory capital / Solvency**
  - Retained earnings will be restated
  - Impact on capital for solvency purposes?

- **Presentation**
  - New presentation for both profit and loss and balance sheet

- **Transition**
  - Which approach to adopting new standard

- **Taxation**
  - Will tax treatment follow accounting treatment?
Reinsurance contracts held are treated in line with insurance contracts.

The cost of reinsurance is spread over the life of the reinsurance contract.

Ceding commissions are treated as a reduction in premiums to be paid.

Contingent ceding commissions (linked to the claims performance) are treated as part of the claims to be paid by the reinsurer.

Both Profit & Loss and Balance Sheet statements will disclose the financial position of reinsurance contracts separately from insurance contracts.
Reinsurance – choices in applying the BBA

• **Discount Rates**
  - Use the same discount rates as for the underlying insurance contracts:

• **Contract Boundaries**
  - May be different to the underlying insurance contracts, depending on the terms of the reinsurance treaty.

• **Risk adjustment**
  - This should reflect the degree of risk transfer:
    - If this is calculated on a Cost of Capital basis, then capital can be allocated to the risks being
    - Separately the value of reinsurance should reflect the credit quality of the reinsurer
Reinsurance - presentation

- Insurance results and balances must always be shown gross (before reinsurance).
- Reinsurance results and balances shown separately, before coming to the total of results and balances.
- No set-off between income or expense from reinsurance contracts against the expense or income from insurance contracts.
- As a result, the total cost of reinsurance will be a separate column on the statement of profit or loss.

➢ An entity may choose to provide additional disclosure of reinsurance cost relating to the disclosure of portfolio level information.
Reinsurance – example 1

- Under a **Quota Share Yearly Renewable Term (QS YRT)** treaty:
  - 50% Quota Share => Reinsurer pays 50% of any claims
  - Reinsurance premium on a specified schedule depending on the year
  - Reinsurance profit commission of 50% of profits after expense charge of 10% of premium

<table>
<thead>
<tr>
<th>Insurance</th>
<th></th>
<th>YRT reinsurance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium</td>
<td>200.0</td>
<td>Premium</td>
<td>- 70.0</td>
</tr>
<tr>
<td>Claims</td>
<td>- 90.0</td>
<td>Profit commission</td>
<td>22.5</td>
</tr>
<tr>
<td>Net result</td>
<td>110.0</td>
<td>Net Premium</td>
<td>- 47.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50% claims</td>
<td>45.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net result</td>
<td>- 2.5</td>
</tr>
</tbody>
</table>

Overall result of $110 - 2.5 = 107.5$
Under IFRS 17 the pool of insurance contracts and the reinsurance contract are valued as two items under the Building Blocks Approach – here assuming cash flows for 20 years:

### Insurance cash flows

<table>
<thead>
<tr>
<th>Year</th>
<th>Premium</th>
<th>Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>387.9</td>
<td>3,819.1</td>
</tr>
<tr>
<td>2013</td>
<td>168.4</td>
<td>3,262.8</td>
</tr>
</tbody>
</table>

### Fulfilment cash flows

- **3,819.1**
- **168.4**
- **3,262.8**

### YRT Reinsurance cash flows

- **86.8**
- **84.2**
- **6.2**

![Insurance cash flows graph]

![YRT Reinsurance cash flows graph]
Reinsurance – example 1 continued

- Under IFRS 17, the results are presented in a different manner, but over a 1 year horizon with no changes in interest rates or other assumptions, this should be in line with IFRS 4.

- The major change is the split between underwriting result and investment income.

- This level of detail would be presented in the notes to the accounts, with the totals presented in the overall statement of profit or loss.

- The contract boundary of the reinsurance treaty is based on the expected lifetime
Reinsurance – example 2

- Under an **Excess Of Loss** (XOL) catastrophe cover treaty:
  - The treaty lasts for only 1 year
  - No ceding commission
  - Reinsurance pays for claims for a single event with a loss over 30 million

<table>
<thead>
<tr>
<th>No claims</th>
<th>A claim of 40 mio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Premium</strong></td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Claims</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>Net result</strong></td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Probability</strong></td>
<td>99%</td>
</tr>
</tbody>
</table>

**Diagram:**
- **Cedent**
  - Insurance premium
  - Claims
- **Reinsurer**
  - Reinsurance premium
  - Claim if XOL threshold reached

**Flow:**
- Insurance premium flows from **Cedent** to **Reinsurer**.
- Claims flow from **Cedent** to **Reinsurer**.
- Reinsurance premium flows from **Reinsurer** to **Cedent** with a dotted line indicating a conditional flow based on the threshold reach.
Reinsurance – example 2 continued

- Under an Excess Of Loss (XOL) treaty, we look at the probability weighted cash flows of the contract:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium</td>
<td>0.5</td>
</tr>
<tr>
<td>Claims</td>
<td>-0.1</td>
</tr>
<tr>
<td>Net cost</td>
<td>0.4</td>
</tr>
</tbody>
</table>

- As the treaty is only for 1 year, there is no issue of contract boundaries.

- As the premium is so low, any Risk Adjustment and Contractual Service Margin will be very low.
Reinsurance – example 3

- A cedent writes annual medical insurance, and the policies have a high upfront sales commission. However, the policies also have a high annual renewal rate so the cedent expects to make profits in future years.

- To reduce the cash strain, it enters into a **multi-year quota share** treaty with a reinsurer, and receives an **initial ceding commission**.

### Forecast

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Claims</td>
<td>-70</td>
<td>-70</td>
<td>-70</td>
</tr>
<tr>
<td>Expenses</td>
<td>-40</td>
<td>-10</td>
<td>-5</td>
</tr>
<tr>
<td>Net result</td>
<td>-10</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>

### Reinsurance

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium</td>
<td>-85</td>
<td>-85</td>
<td>-85</td>
</tr>
<tr>
<td>Claims</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Commission</td>
<td>25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Net result</td>
<td>10</td>
<td>-15</td>
<td>-15</td>
</tr>
</tbody>
</table>
Reinsurance – example 3 continued

- There is a difference in contract boundaries between the underlying insurance policies (1 year) and the reinsurance contract (3 years).
- Furthermore, in 2021 the underlying insurance policies will be onerous policies.

The cost of reinsurance is spread over the 3 year term of the contract, including the cash flow from the initial commission payment. There is no upfront profit recognised under IFRS 17.
Reinsurance of onerous contracts

- The reinsurance of onerous contracts may be subject to different presentation on transition to IFRS 17, depending on whether the contracts were onerous at inception.

If the contracts were not onerous when written, but later become onerous due to poor performance, then reinsurance gains should offset insurance losses on transition to the new accounting standard.

If the contracts were onerous, then the treatment is not clear – need clarification from audit firms on this topic.
## Reinsurance and Presentation - Income

### Statement of profit & loss

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Insurance contracts</td>
<td>Reinsurance ceded</td>
<td>Total</td>
</tr>
<tr>
<td>Insurance contract revenue / reinsurance expense</td>
<td>14,210</td>
<td>-717</td>
<td>13,493</td>
</tr>
<tr>
<td>Claims incurred / reinsurer’s share of claims incurred</td>
<td>-11,105</td>
<td>569</td>
<td>-10,536</td>
</tr>
<tr>
<td>Fulfilment expenses incurred</td>
<td>-793</td>
<td></td>
<td>-793</td>
</tr>
<tr>
<td>Other expenses incurred</td>
<td>-303</td>
<td></td>
<td>-303</td>
</tr>
<tr>
<td>Amortisation of acquisition costs</td>
<td>-1,324</td>
<td></td>
<td>-1,324</td>
</tr>
<tr>
<td>Changes in estimates</td>
<td>-53</td>
<td>-3</td>
<td>-56</td>
</tr>
<tr>
<td>Adjustments to expected claims and expenses</td>
<td>114</td>
<td>4</td>
<td>118</td>
</tr>
<tr>
<td>Losses on initial recognition of insurance contracts</td>
<td>-7</td>
<td></td>
<td>-7</td>
</tr>
<tr>
<td>Net gains on modification and derecognition of contracts</td>
<td>481</td>
<td>-20</td>
<td>461</td>
</tr>
<tr>
<td><strong>Insurance service result</strong></td>
<td><strong>1,220</strong></td>
<td><strong>-167</strong></td>
<td><strong>1,053</strong></td>
</tr>
<tr>
<td>Investment income</td>
<td></td>
<td></td>
<td>4,759</td>
</tr>
<tr>
<td>Insurance finance expense</td>
<td>-4,540</td>
<td>182</td>
<td>-4,358</td>
</tr>
<tr>
<td>Finance costs</td>
<td></td>
<td></td>
<td>-50</td>
</tr>
<tr>
<td><strong>Profit before tax</strong></td>
<td></td>
<td></td>
<td><strong>1,404</strong></td>
</tr>
<tr>
<td>Tax expense</td>
<td></td>
<td></td>
<td>-393</td>
</tr>
<tr>
<td><strong>Profit after tax</strong></td>
<td></td>
<td></td>
<td><strong>1,011</strong></td>
</tr>
</tbody>
</table>
Additional disclosure for reinsurance

- Inbound and outbound reinsurance should be disclosed separately:

- The expense of reinsurance is spread over the term of the reinsurance contract

- The credit risk in reinsurance contracts should be disclosed:
  - For credit risk that arises from contracts within the scope of IFRS 17, an entity shall disclose:
    a) The amount that best represents its maximum exposure to credit risk at the end of the reporting period, separately for insurance contracts issued and reinsurance contracts held; and
    b) Information about the credit quality of reinsurance contracts held that are assets.
Reinsurance and Capital Management - 1

- Sell portfolios that consume capital – M&A
- Expand into emerging markets
- Change strategic asset allocation

- Decrease policyholder and shareholder dividends
- Structured Reinsurance

- Sell more capital light products e.g. UL policies
- Expand into emerging markets
- Change strategic asset allocation

- Merge or put company into run-off

- Purchase more traditional reinsurance
- Reduce costs – automation, outsourcing
- Raise capital – equity, subordinated debt

- Expand into emerging markets
- Change strategic asset allocation

- Merge or put company into run-off
Reinsurance and Capital Management - 2

• Currently insurers may need to hedge their financial risks differently, depending on whether they focus on hedging
  − The IFRS balance sheet or
  − The regulatory balance sheet

• With the change to IFRS 17, some regulators are looking to change their approach to capital to a more Solvency 2 / risk sensitive framework

• This will enable hedging strategies to closely match both accounting and regulatory treatment of insurance liabilities

• It may also encourage more co-insurance / quota share / full risk transfer reinsurance solutions, to offer better matching of assets and liabilities between insurance and reinsurance

• IFRS 9 will also encourage more active hedging of assets and liabilities with a move to fair value accounting
Reinsurance – selected issues

• Contract boundaries for reinsurance
  – Reinsurance contracts may well have different boundaries to the underlying policies

• Impact on transition to new standard
  – The retrospective application of the standard will involve a great deal of work and potentially significant changes to brought forward balances such as retained earnings.
  – Treatment of onerous contracts on transition?

• Business aims of reinsurance
  – The future volatility from changes in valuation parameters such as future claims, lapses, and even interest rate assumptions will highlight the role of reinsurance

• Differences with Solvency 2 / local regulations
  – Choices of interest rate used and risk adjustment calculation may vary from Solvency 2 or other regulatory capital frameworks
Responding to IFRS 17 – potential solutions

- **Co-Insurance**
  - Ensure cash flows under reinsurance offset cash flows of underlying policies
  - Still issues on transition and contract boundaries
  - Reinsurers have a different level of aggregation from insurers

- **Changing policy terms**
  - Extending contract boundaries allows for initial expenses to be spread over a longer period, but adds more risk to product and attracts more capital

- **Hedging financial risks** through derivatives and banking products
  - Reduce volatility of accounting results from changes in discounting rates and other financial variables

- **Selling run-off assets**
  - Will run-off players in Bermuda or elsewhere stick with US GAAP for accounting?
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