Agenda

- Introduction: Regulatory context
- The journey ahead
- Workshop 1 - The current state: Questions for the Board and senior management (discussion and presentation back to the group)
- Workshop 2 - Milestones and building blocks (case study, discussion and presentation back to the group)
- Conclusion and wrap-up
**Individual capital assessment: Current state**

- Risk identification
- Risk modelling and capital estimation
- Insurance risk identification
- Insurance risk modelling
- Insurance risk capital estimation
- Credit risk identification
- Credit risk modelling
- Credit risk capital estimation
- Market risk identification
- Market risk modelling
- Market risk capital estimation
- Operational risk identification
- Operational risk modelling
- Operational risk capital estimation
- Individual and group risk considerations

**ICAS experience to date**

- Most firms have responded well
- Ongoing work required due to a lack of data for some aspects:
  - Operational risk
  - Aggregation / correlation
  - Stressed conditions
- Risk and capital linkages not yet fully integrated
- Evolution: FSA processes developing as they gain experience

**Policy intent of ICAS**

- For firms to hold capital more appropriate to their business and control risks (99.5% confidence level or equivalent)
- Emphasis on provision of better risk management rather than perfection in mathematical modelling
- To emphasise senior management responsibility
- To enhance consumer protection and market confidence by reducing the risk of financial failure
The world post ICA

What is the journey ahead?
Jacqui Fenech

The vision?

Questions for Boards and senior management prior to the journey ahead
### Questions for Boards and senior management prior to the journey ahead

<table>
<thead>
<tr>
<th>Strategic plan</th>
<th>Do the resources available have the necessary skills and experience?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational behaviour and governance</td>
<td>Is there visible management buy-in? Are the Board fully aware of the business impacts?</td>
</tr>
<tr>
<td>Risk assessment and management</td>
<td>How are the categories and their potential impacts to be identified and fairly evaluated?</td>
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<tr>
<td>Risk-based capital management</td>
<td>What are the priorities for risk-based capital management development?</td>
</tr>
<tr>
<td>Systems and processes</td>
<td>Are management reports based on risk-based capital modelling or on historical financial data?</td>
</tr>
<tr>
<td>Training and competence</td>
<td>Are there visible management buy-in? Are the Board fully aware of the business impacts?</td>
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</tbody>
</table>

**The journey ahead**

**Milestones along the way to the new state**

- Paul Frydas

**Steps to take regulatory capital model forward**

- Review
- Independent post implementation review
- Participation in and observation of a live model run
- Peer review comparison

- Enhance
- Better links to business processes (e.g., underwriting)
- Portfolio optimisation and discontinuance options
- Underwriting and pricing
- Investment strategy
- Reserving strategy

- Optimise
- ICA 2

- Communicate to wider business
- Building into BAU
- Governance
  - Risk management
  - Market understanding
  - System management and reporting
  - Operational risk

- Embed
- Relations with other projects: SOX, regulatory capital, rating agencies
Workshop 2 - Milestones and building blocks along the journey ahead
Case study, discussion and presentation back to the group

The vision

Old world
Risk based regulatory capital
Maximum immediate benefit
Integrated economic capital framework

Case study - TRX Insurance plc
Read and discuss
### Steps to take regulatory capital model forward (UK example)

<table>
<thead>
<tr>
<th>Review</th>
<th>Enhance</th>
<th>Embed</th>
<th>Optimise</th>
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<tbody>
<tr>
<td>Model validation</td>
<td>• Model weaknesses</td>
<td>• Risk culture</td>
<td>• Risk-adjusted return on capital</td>
</tr>
<tr>
<td>Action plan for improvement</td>
<td>• Data collection and analysis</td>
<td>• Governance</td>
<td>• Pricing</td>
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### Milestones along the journey to the new state

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<td>• Peer review</td>
<td>• Governance</td>
<td>• Investment strategy and portfolio</td>
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<tr>
<td>Post review completion</td>
<td>• Use of external data</td>
<td>• Portfolio management</td>
<td>• Disclosures</td>
</tr>
<tr>
<td>Model validation</td>
<td>• Efficiency of process</td>
<td>• Reinsurance strategy</td>
<td>• Hedging and mitigation options, including reinsurance strategy</td>
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<tr>
<td>Peer review comparison</td>
<td>• Better links to business processes (e.g. underwriting)</td>
<td>• IT processes</td>
<td>• Systems and controls</td>
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<tr>
<td>• Un-modelled risks</td>
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The vision?

<table>
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<tr>
<th>Old world</th>
<th>Modern technical methodology</th>
<th>Integrated technical methodology</th>
<th>Banking based regulatory capital</th>
<th>Market based regulatory capital</th>
<th>Integrated economic capital framework</th>
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<td>Capital based on high-level parameters</td>
<td>Decision to implement internal technical models for capital</td>
<td>Implementation of internal technical models (not limited to all risk groups)</td>
<td>Models to quantify risk as a basis for regulatory capital</td>
<td>One risk contribution to business: Capital</td>
<td>Fully integrated economic capital: Business managed through risk and capital risk drivers for key processes</td>
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</table>

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