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**Own Risk and Solvency Assessment**  
**THE ORSA**  
**Kathryn Morgan**

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**What is an ORSA** 

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• **The European definition**

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**European ORSA** 

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- Overall solvency needs currently and over the term of its business planning period
- Compliance with regulatory capital requirements
- Compliance with reserving requirements
- Assessment of the deviation of the regulatory capital assumptions from the risk profile
- Includes qualitative and quantitative risks
- Link between the own assessment of solvency needs and regulatory capital assessed using an internal model
- The ORSA must be used in decision making
- The ORSA process must be done when the risk profile changes significantly
- Results of the process must be reported to the supervisor
- The overall solvency need is NOT a capital requirement

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**European ORSA** 

- ORSA report
- Actuarial involvement
- Inclusion in the use test
- Prudent person investment principle
- A group ORSA has to be performed, including all entities and risks in the group.
- As well as a group ORSA, an insurer must have an ORSA for each regulated entity in the group.
- Frequency of running through the ORSA process
- Ownership of the ORSA
- Fit for purpose
- Reporting

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**How insurers are struggling with this** 

- Where are the rules?
- What will pass?
- Is it a process? Is it a report?
- What does "own" mean?
- How detailed does it have to be?
- What is a risk appetite?
- Who owns the ORSA?
- Many more.....

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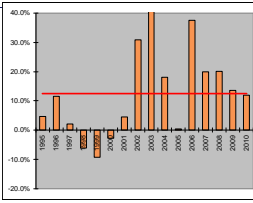
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**Introduction: Kiln's risk profile** 

- 5 syndicates: £1.2 bn of capital under management
- Short tail speciality commercial GI business:
  - no retail customers, no long-tail casualty business
  - 80% outside the UK
- Risk tolerance very much at the high end of the spectrum:
  - expect high volatility (20% chance break-even or worse)
  - target a high return (target: 8% after tax excess risk-free) (actual average 1995-2010: 12%)
- owned by Tokio Marine Group, who have S&P "strong" rating for ERM
- part of Lloyd's, but not refer to that today: "as if" stand alone




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### Designing the ORSA process: - current capital planning and risk reporting of FSA to Board / Risk Committee

Q1 2011	Q2 2011	Q3 2011	Q4 2011
	Proposed ORSA report(s)	Head Office 3-year plan 2012-2013-2014	Lloyd's 1-year capital setting 2012
Assessing latest risk profile against carried capital (full re-run of capital model)			
1/1 update	1/4 update	1/7 update	
		Risk appetite review: long term ROE, EAR, CAR	Risk limits setting: front office triggers for 2012
(Audit Committee: Year-end financials) Key risks drill down for Directors	Strategic risk review Stress & scenario testing (incl reverse stress testing)	Mid level risk review for Directors Operational risk review	

*Comment & timeline:*

- Above = high level output from Risk Management System
- Most of the above has been in place since 2009

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### Designing the ORSA process: - 3 views of capital (actually 6 flavours!) FSA

3 views	6 flavours – existing basis, pre SII	New basis – post SII
Regulatory	(1) ICA: 99.5% VaR DFB Risks to ultimate GAAP reserves	SCR: 99.5% VaR DFB 1-year emergence Tech provs: disc, RM
Rating agency	(2) ECA: 99.5% VaR DFB * 1.35 (3) 99.9% VaR DFB	No change
Economic	(4) Buffer: ECA + 80% TVaR DFM (5) HO carry: 99.93% VaR DFB (6) HO allocation: 99% TVaR DFM	No change

*Comment & timeline:*

- All of these results calculated by the same underlying model
- (1)/(2) in place since 2005, (3) in place since 2007
- (5)/(6) in place since 2008/2009 (take over by TM)
- (4) in place since 2010: capital providers expect rights issue every 5 years – consistent with risk appetite

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### Designing the ORSA process: - 3-year capital plan: trends + shocks FSA

**Step 1:**  
1-year capital calculation: fully stochastic DFA model

**Step 2:**  
Chain together 3 consecutive 1-year calculations: trends on volume, exposures, PRI, loss ratios, the insurance cycle → financing of preferred path for the business

**Step 3:**  
Apply shocks to central capital forecasts → contingency capital planning  
→ studies of plan ROE and variability of ROE

Solvency risks and opportunities

Strategy risks level 2  
Strategic risks level 1

Business strategy

Annual Capital Plans

Year 1 Year 2 Year 3

Unknown/unexpected risks throw strategy off course

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### Designing the ORSA process: - mapping from ORSA to Use Test (1/2)



**Kiln's proposed structure for Use Test implementation**

<b>Level 1:</b>	<b>Formal meetings:</b> <ul style="list-style-type: none"> <li>Boards &amp; committees</li> <li>minuted meetings</li> <li>papers in advance</li> </ul>	<b>Formal reports:</b> <ul style="list-style-type: none"> <li>ORSA / 1-year FAL</li> <li>Evaluate overall RI programme</li> <li>Confirm risk appetite</li> </ul>
<b>Level 2:</b>	<b>Research projects:</b> <ul style="list-style-type: none"> <li>3-6 weeks duration</li> <li>strategic studies</li> <li>written reports</li> </ul>	<b>Outputs / studies:</b> <ul style="list-style-type: none"> <li>methods of allocation</li> <li>target loss ratios, ROE studies</li> <li>graduation factors for KRIs</li> </ul>
<b>Level 3:</b>	<b>Individual ad hoc requests:</b> <ul style="list-style-type: none"> <li>tactical evaluations</li> <li>replies by email</li> </ul>	<b>Outputs / studies:</b> <ul style="list-style-type: none"> <li>individual RI layers quoted</li> <li>new lines of business</li> </ul>

ORSA = "just" part of Level 1 Use Test evidence: likely the biggest part!  
 • Already 3-year plans with Head Office, ORSA = expansion / "re-badging"

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### Implementing the ORSA process:



**2011 = year of shadow committees gradually becoming "live"**

2011	2012
SHADOW	
LIVE	
Dress rehearsal	Preview shows
	Live shows

<b>Live committee</b>	<b>"Me and my shadow"</b>
• Board (IMAP, ORSA)	SII Steering Group
• ARC (Systems of governance)	SII Steering Group
• Internal Model Governance Committee	Risk Management Team (minuted)
• Validation report	Risk Management Team (minuted)
• IM – Calculation Kernel	Capital Modelling Team (minuted)
• IM – 6 tests	Risk Management Team (minuted)
• Technical Provisions governance	SII Steering Group

• SII Steering Group = CEO, CFO, DUO, COO  
 i.e. all of the executive directors except CRO (being reviewed!)

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