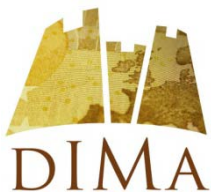


PwC & DIMA Briefing

Own risk and solvency assessment

19 October 2011



PwC & DIMA briefing **Own Risk and Solvency Assessment**

Annet Evara

Prudential Policy Division, Solvency II Team

Central Bank of Ireland

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Banc Ceannais na hÉireann
Central Bank of Ireland

Eurosystem

PwC & DIMA Briefing

Own Risk and Solvency Assessment

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21 October 2011



Agenda

1. Update from EIOPA
 2. ORSA requirements and expectations
 3. Myths /common questions on ORSA
 4. Key messages
 5. Questions
-



Key messages

- Maintain the momentum of preparing for solvency II implementation
 - Firms have some of the components of ORSA already in place
 - Documentation of the processes
 - Respond to EIOPA consultation documents
-



1. Update from EIOPA

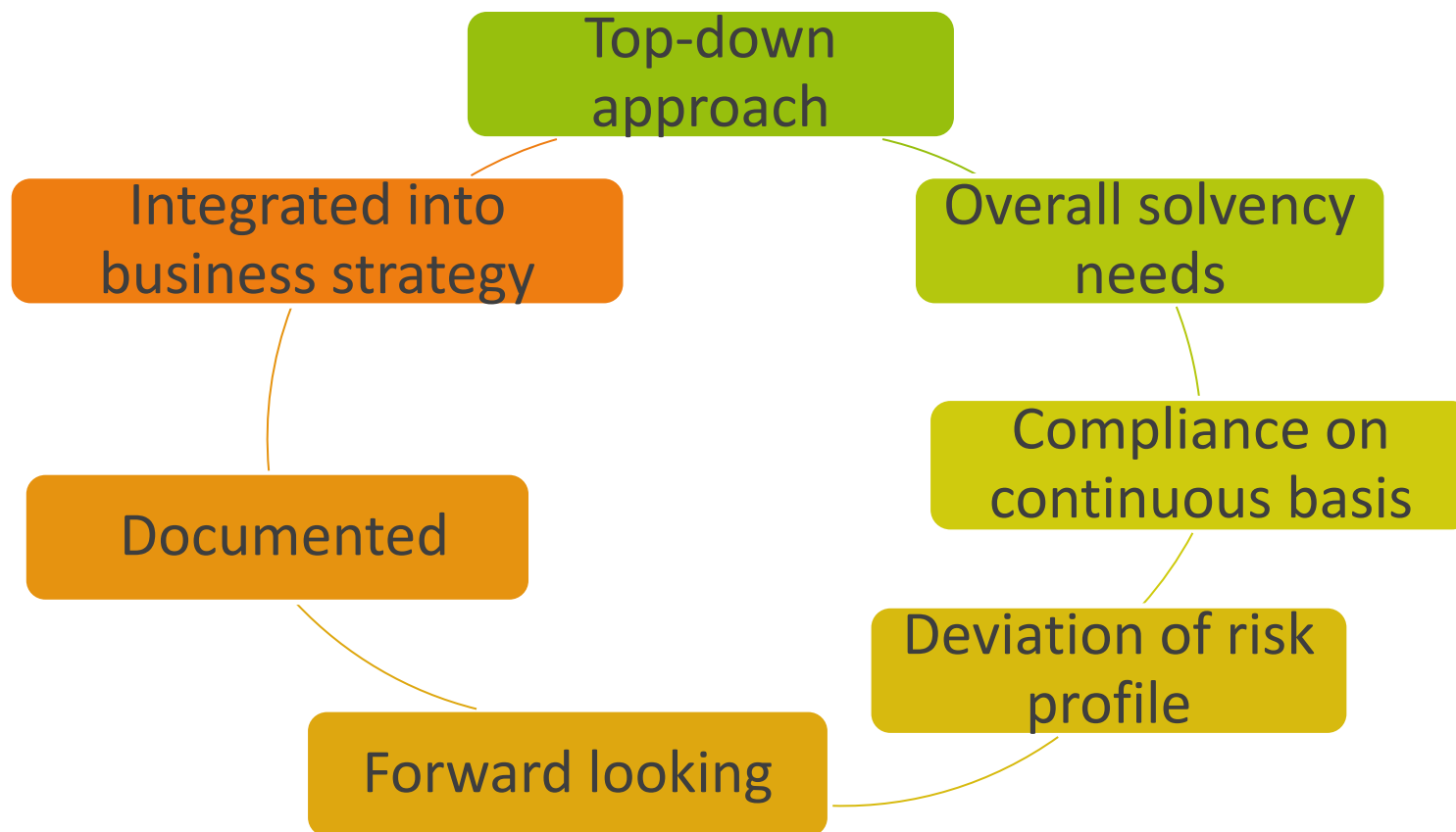
Level 3 Public consultation after publication of Level 2

Except for the following public consultation in November 2011

- **Consultation paper on ORSA**
- **Consultation paper on narrative public disclosure and supervisory reporting, predefined events and processes for reporting and disclosure**
- **Consultation paper on quantitative reporting templates**
- **Quantitative reporting templates (templates)**



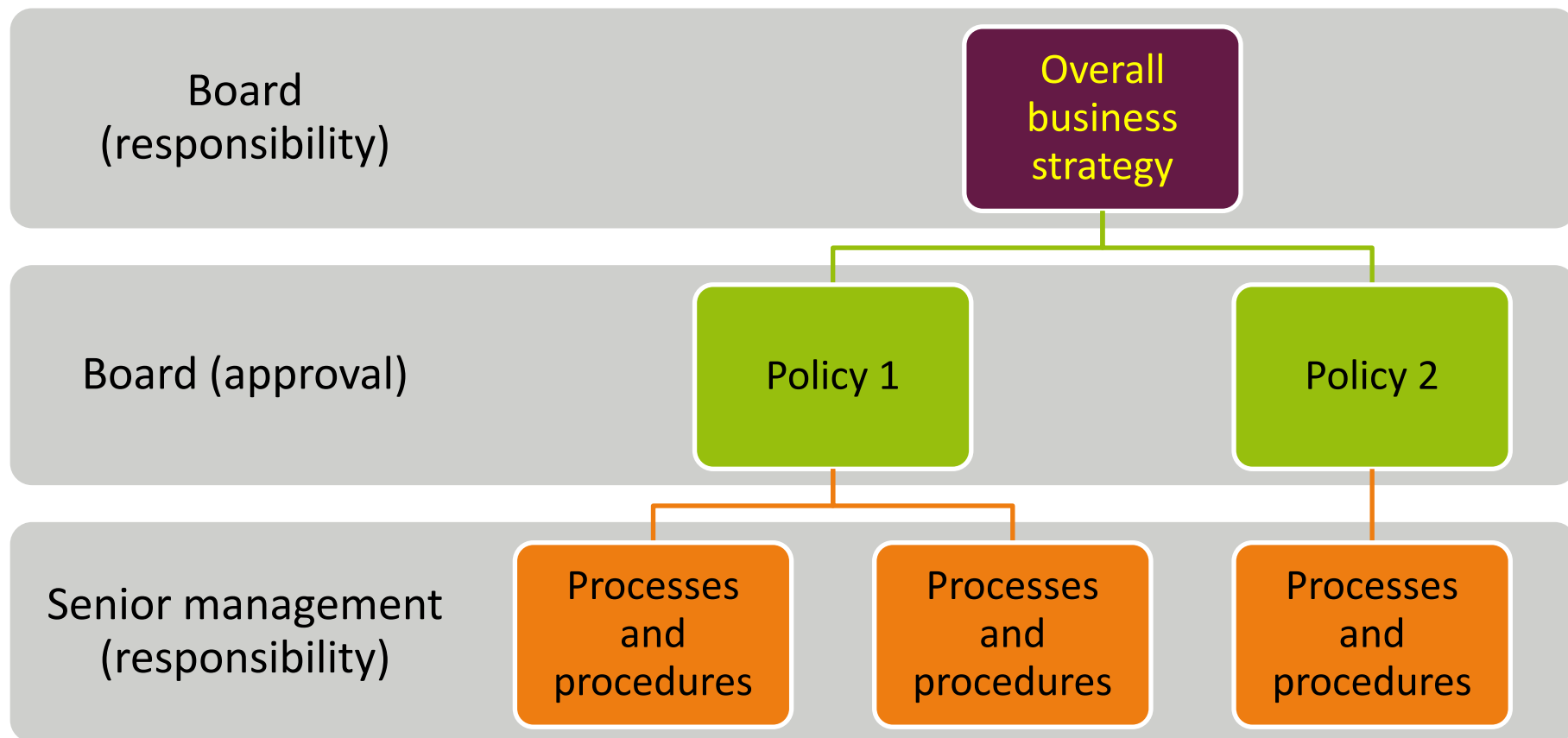
2. Overview of ORSA requirements and expectations





2. ORSA requirements and expectations

Top-down approach





2. ORSA requirements and expectations

Integrated into business strategy

ORSA integral to business
strategy

Consider the strategic decisions
influencing ORSA

Outputs and insights used in strategic
decision making

E.g. long term capital management,
business planning, etc.



2. ORSA requirements and expectations

Documentation

ORSA documentation should include at least:

- a. ORSA policy**
 - b. Record of each ORSA process**
 - c. Internal report on ORSA**
 - d. ORSA supervisory report**
-



2. ORSA requirements and expectations

Performance of ORSA

a) Overall solvency assessment

b) Compliance on a continuous basis

c) Deviations of assumptions underlying the SCR



2. ORSA requirements and expectations

Performance of ORSA – (a) overall solvency needs





2. ORSA requirements and expectations

Performance of ORSA –(b) Continuous compliance

Process and procedures to monitor

Compliance
regulatory
requirements

Quality and loss
absorbing capacity of
own funds

Prudent person
principle

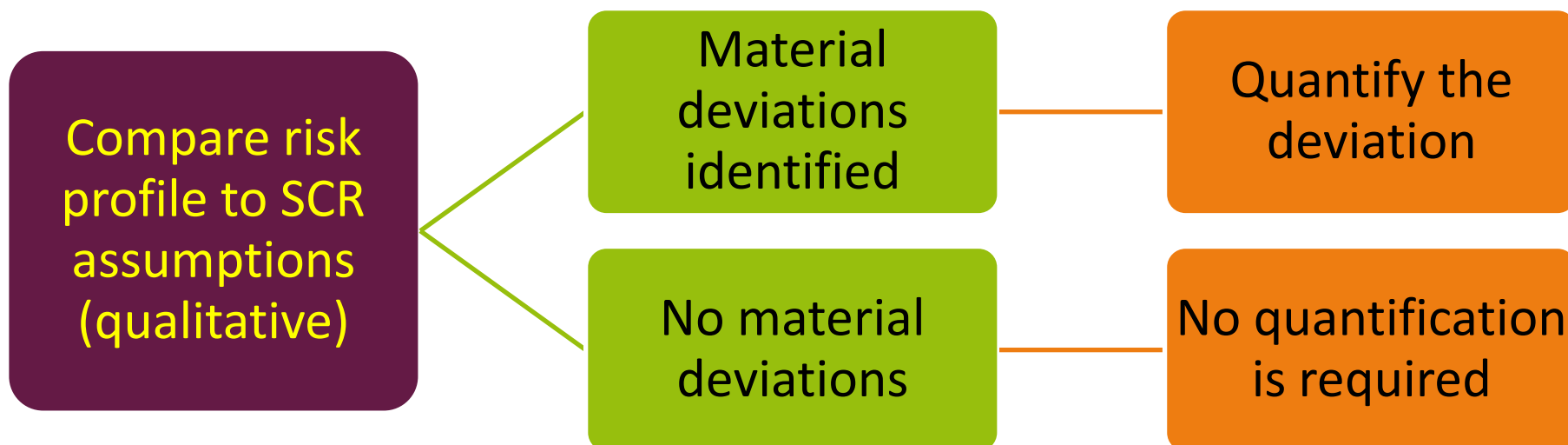
Approved Internal
model (Use test)
and compliance
with standards

Technical provisions
requirements



2. ORSA requirements and expectations

Performance of ORSA – (c) Deviation from assumptions underlying the SCR





2. ORSA requirements and expectations

- Fit for purpose
- Performed at least annually and for change in risk profile
- Process that results in a report
- Communication
- Process should be documented



2. Overview of ORSA requirements

Group ORSA

- Solo requirements shall apply mutatis mutandis
 - Possibility of a single ORSA document subject to approval of group-wide supervisor.
 - This will include ORSA at level of group and individual ORSAs of all subsidiaries into a single document
 - Single ORSA document shared with all supervisory authorities
-



3. Myths /common questions

- What will pass?
 - How detailed should the report be?
 - Who owns ORSA?
 - ORSA requires an internal model?
 - No rules from Central Bank.
-



4. Key messages

- Maintain the momentum of preparing for Solvency II implementation
 - Firms have some of the components of ORSA already in place
 - Documentation of the processes
 - Respond to EIOPA consultation documents
-



Email further questions to solvencyii@centralbank.ie



Thank you

Designing the ORSA

Garvan O'Neill

Financial Services Regulatory Practice Leader

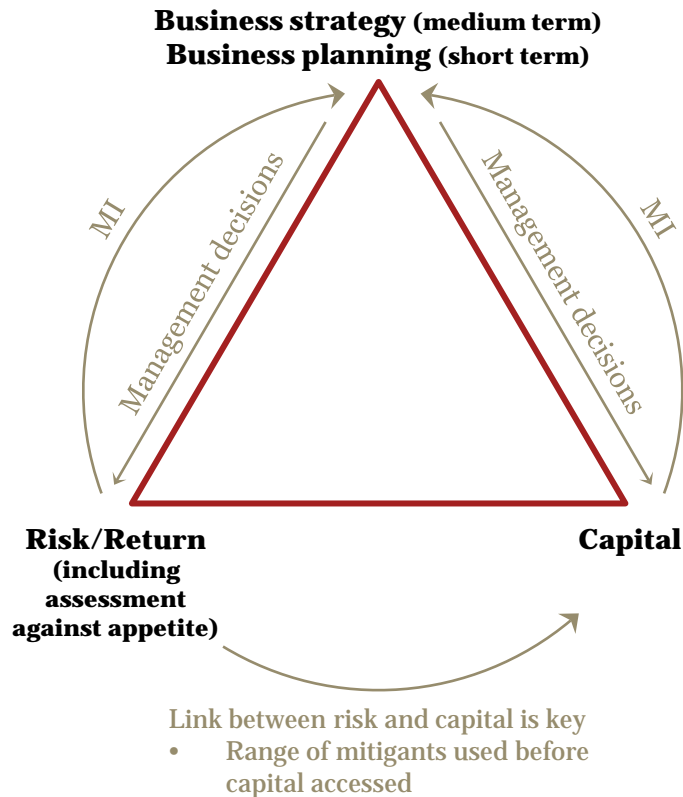
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What is the ORSA?

- A key process for embedding Solvency II into the business.
- Places Insurers' risks and their implications at the heart of decision making
- It is proving to be the most important aspect of the Solvency II project, cutting across all the key elements of risk and value management, including:
 - Risk appetite
 - Risk assessment
 - Capital management
 - Business strategy
- ORSA is a series of processes that need to come together...
 - ... a management (and supervisory) tool
 - ... with a focus not just on capital
 - ... but also on understanding risks
 - ... and managing those risks in line with your own risk appetite

Reminder: PwC's view on the ORSA



Risk management and the ORSA Process is not about producing a report

- ORSA is a bespoke *process* for management to:
 - refine business planning and strategy (forward-looking),
 - define its solvency needs,
 - taking into account risk profile, risk tolerance limits and business strategy,
 - continuously monitor regulatory solvency
- ***But developing the ORSA should not be about creating a new process on top of everything else you are developing ...***
- *...it's about bringing together existing and developing risk, capital and value management processes*

What form will the ORSA take?

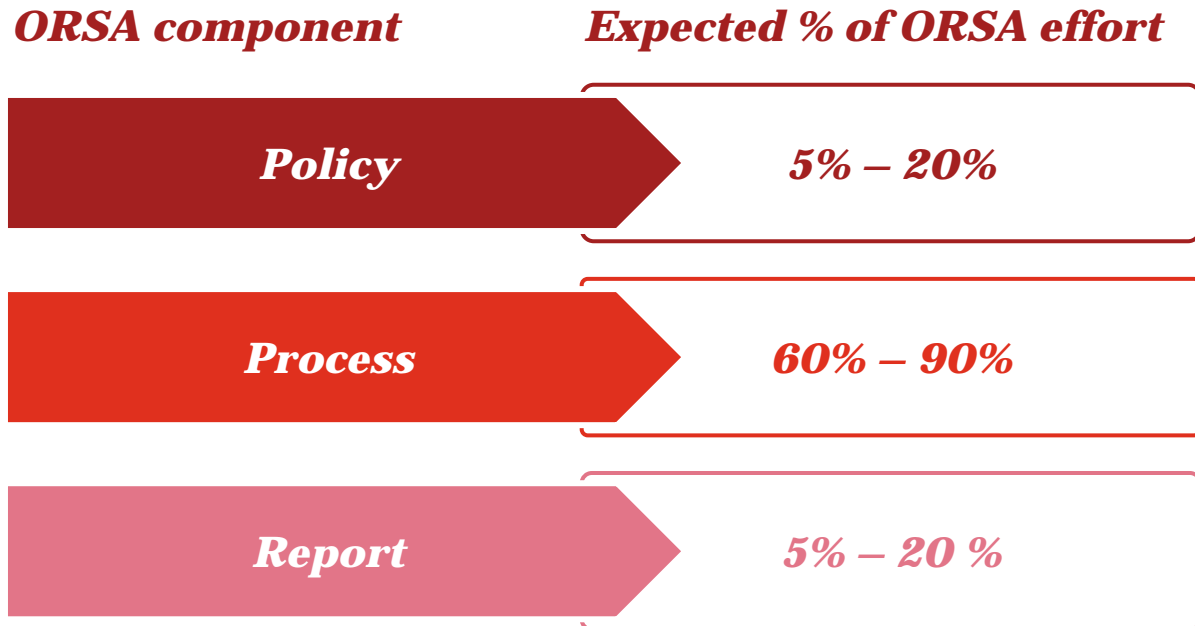
- When the SII directive was first published, it was thought that the ORSA would be in the form of a stand-alone report, akin to ICAAP of Basel II.
- Further deliberation concluded that it is a continuous process and a key risk management tool
- Solvency II is principles-based, hence the lack of guidance on ORSA
- No level 2 guidance
- Level 3 guidance focused on what is to be achieved by the ORSA
- Policymakers want to give management a high degree of discretion to create a process that is moulded to their needs.

Guideline 3

- “ The undertaking should have in place at least the following documentation on the ORSA:
- a) ORSA policy;
 - b) record of each ORSA process;
 - c) internal documentation of ORSA information;
 - d) information to be disclosed and reported to the supervisor.
- ”

Draft proposal for Level 3 Guidelines on ORSA

How does the ORSA effort divide?



Focus on the risk, capital and value management processes – not just on reporting the results

Sample outline for an ORSA policy

Setting the tone for the ORSA process

Board engagement

- Ownership
- Board understanding of risk profile
- Integral part of key business decisions and strategy
- Approval by appropriate governance committees
- Link between risk appetite capital

Effective risk management

- Individual risk exposures across the entity
- Inclusion of all risks
- Stress and scenario testing

Internal model

- Continued appropriateness of internal model

Own assessment of balance sheet

- Recognition and valuation of assets and liabilities

Outputs and documentation

- Internal reporting
- Regulatory reporting (SFCR and RSR)
- Documentation
- Review Approach

Capital calculations

- SCR
- Current and future management decisions
- Own capital assessment
- Assumptions are consistent with the chosen level of risk for the assessment
- Capital level to meet risk appetite

Turning policy into practice and practice into policy

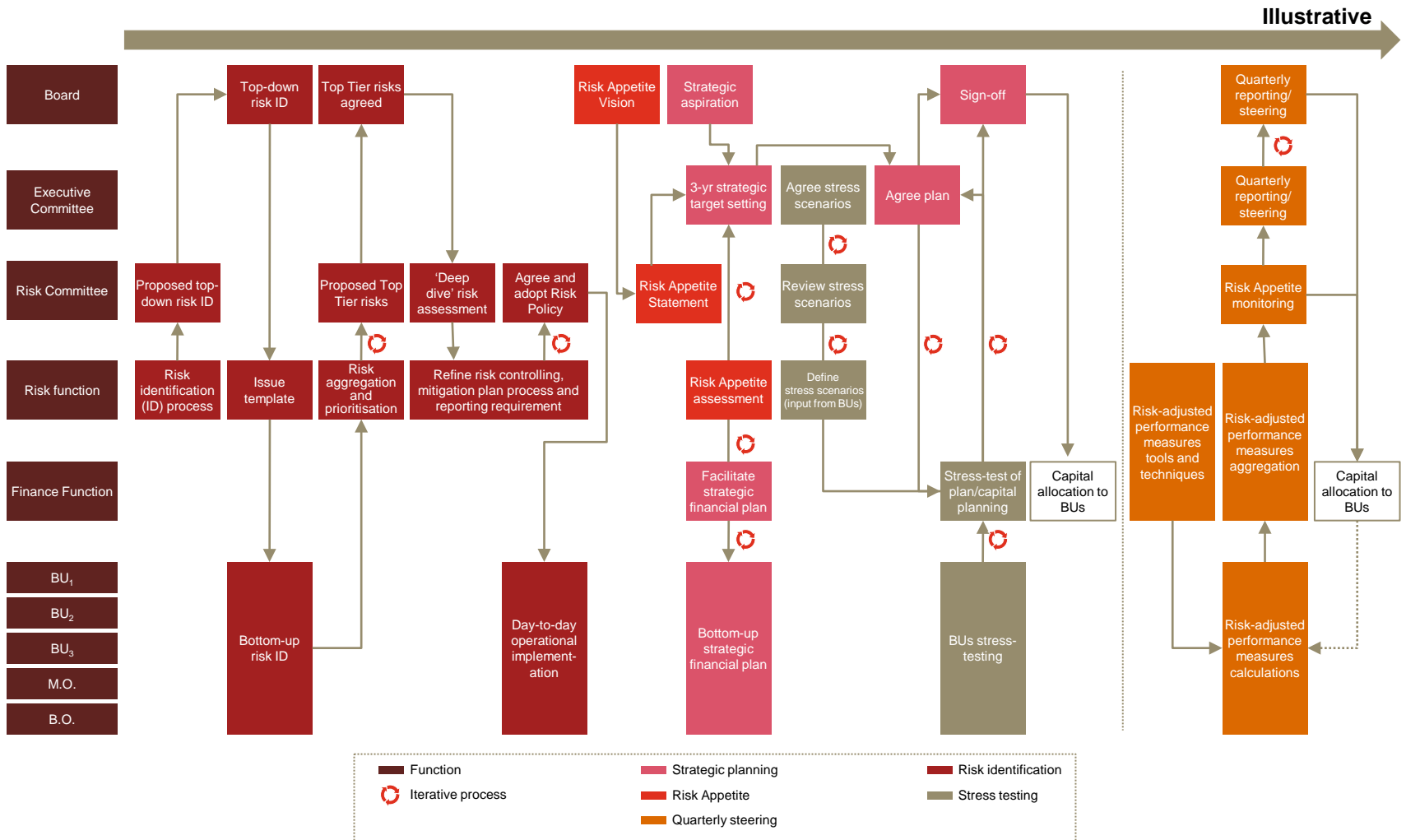
Develop and/or document existing practices and processes that support the ORSA policy, and for new processes, develop into business requirements to be delivered

- Enduring policy approach
- Reflecting existing/target operating model

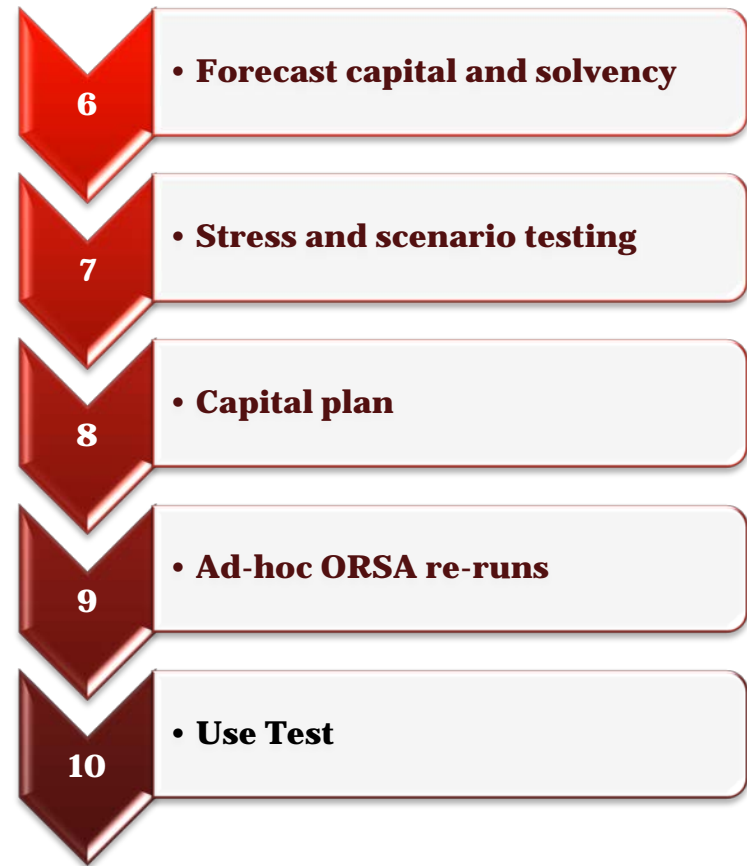
- Current implementation of target operating model
- Reflecting management's intended approach
- Process map

- Business requirements reflecting intended practice
- Allocation to work stream owners for delivery

ORSA process map – example



Reporting: Telling the story of the ORSA



Embedding the ORSA

Paul Duffy, Non-Life Actuarial Practice Leader

Conor Gaffney, Senior Non-Life Consultant

PwC

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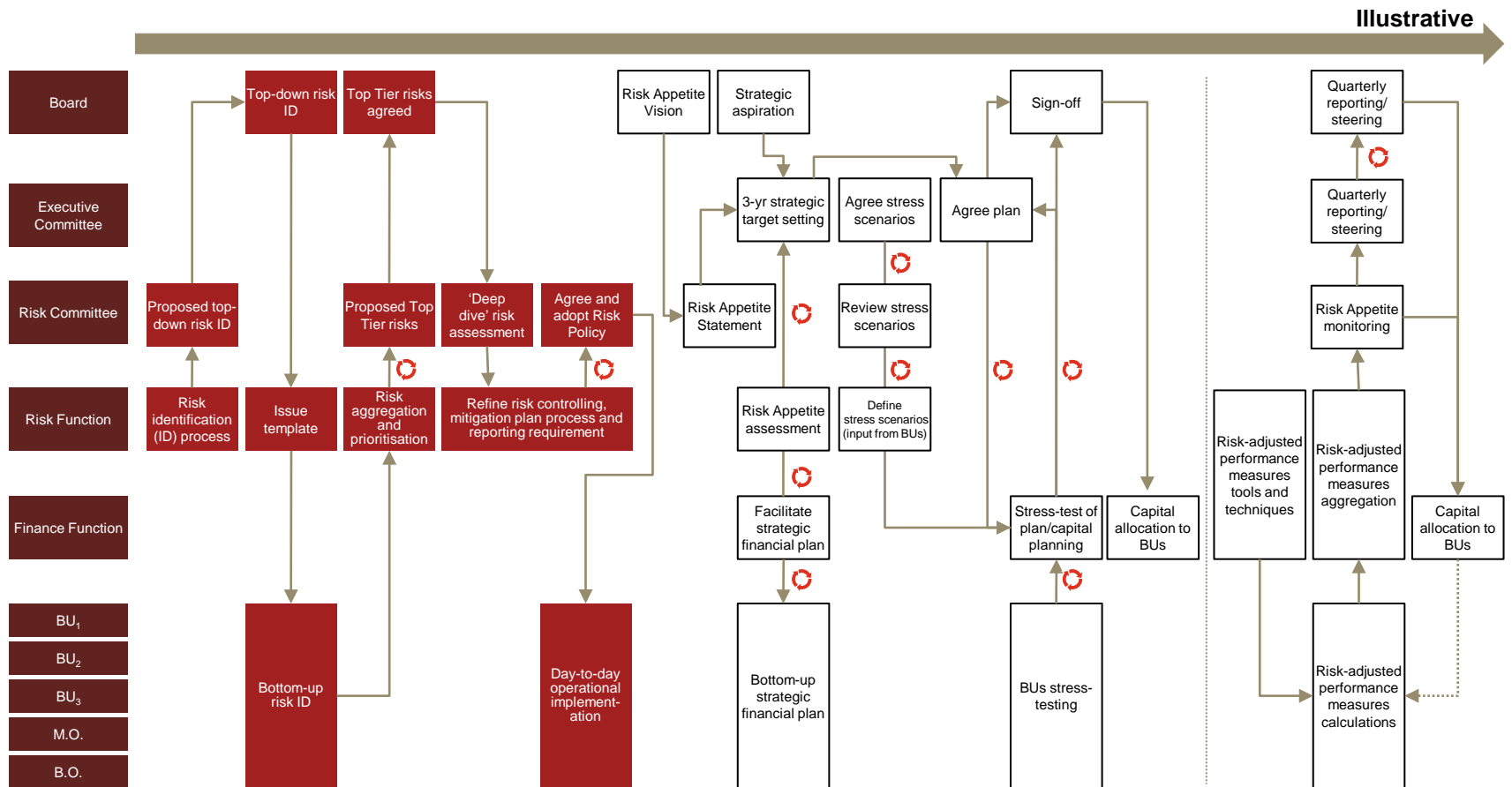
Reporting: Telling the story of the ORSA



Embedding the ORSA



Risk Identification



1. Risk Management Philosophy

An outline of the firm's risk management philosophy (i.e. how the risk dimension is used in the business)

Actions:

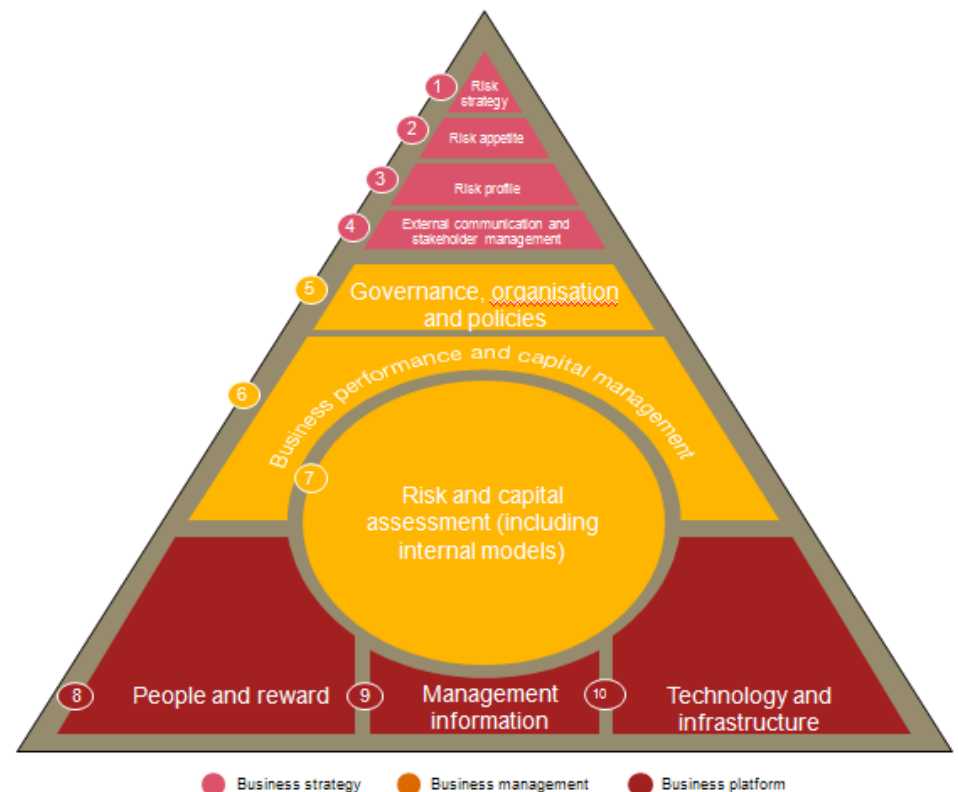
- Strategic
 - Risk based metrics that can be used by Management alongside other “secondary” measures such as IFRS profits and shareholder funds in the running of the business
 - Risk-adjusted profitability (“RAP”) for all product lines used for strategic decision taking
 - Risk appetite (the level of risk deemed acceptable by the Board; this could be in the form of exposure, VaR, TailVar etc)
- Operational
 - Underwriting/Pricing strategy and processes
 - Asset allocation and level of risk within each class of asset
 - Risk exposures control and management on a company and group basis (if appropriate)
 - Compensation and benefits and their alignment with risk based performance targets

1. Risk Management Philosophy

An outline of the firm's risk management philosophy (i.e. how the risk dimension is used in the business)

Outputs:

- Clearly defined risk management framework
- Quantification of the degree of prudence within core risk areas
- A risk strategy that ensures business units operate within defined risk parameters. The firm's risk strategy and its risk appetite should be communicated at all levels within the organisation
 - Investment policy
 - Underwriting Policy

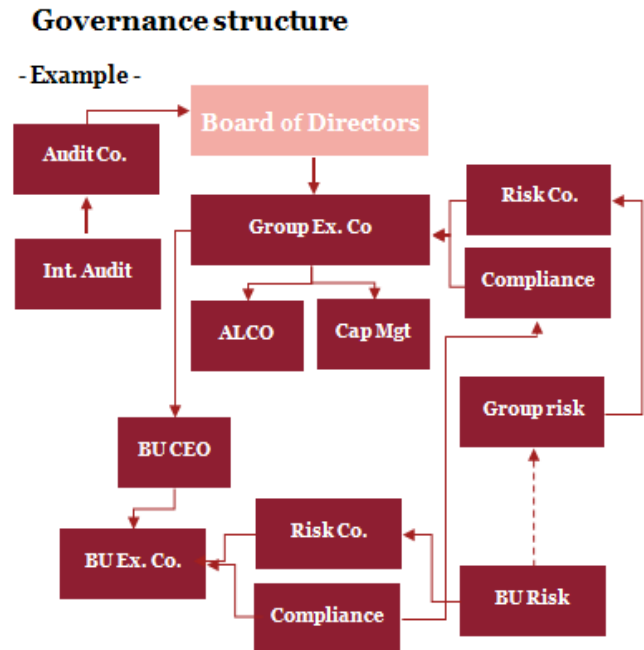


2. Risk Governance

An outline of the firm's risk governance and risk control processes, procedures and policies

Actions:

- Outline of the risk governance structure
- Remits/mandates setting out roles and responsibilities of all key committees
- Differentiation between “advisors” and “decision takers” in the firm
- Demonstration of effectiveness of risk mitigation and/or management plans
- Clear definition of accountability and ownership of the firm's top tier risks



2. Risk Governance

An outline of the firm's risk governance and risk control processes, procedures and policies

Outputs:

- Documented risk policies, aligned with the firm's appetite for top tier risks
- Risk control, monitoring and management framework for each of the key risks
- Escalation triggers and mitigation plans aligned with delegated authorities
- Robust management information (KRI's, early warning systems etc)
- Regular reviews of risk control processes, procedures and policies

3. Risk Identification and Assessment

An overview of the firm's processes and procedures for identifying, assessing and prioritising its key risks

Actions:

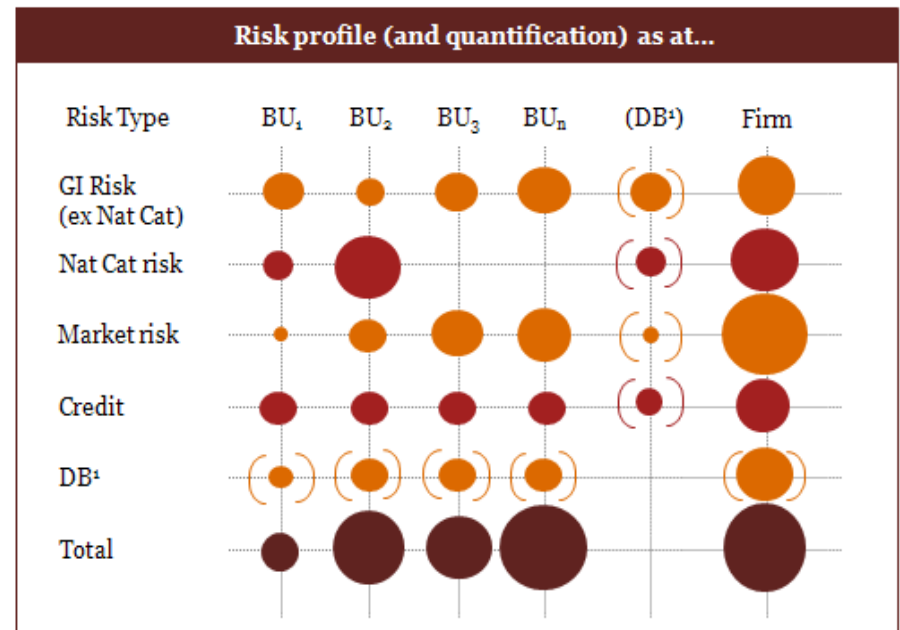
- Key risks that the business might face in the strategic planning period (3 to 5 years)
 - o Insurance risks, market risks, counterparty and other risks
- Internal capital, regulatory solvency requirements, profits and returns on capital
- Outline of risk transfer mechanisms (reinsurance, hedging, securitisation, etc)
- An understanding of capital based metrics and potential limitations of modelled amounts
- Roles and responsibilities of key functions (BoD, Risk Committee, Risk Management, Executive, Business Units, Support Functions)
- Processes and procedures for capturing emerging and evolving risks
- Details of risk quantification, correlations and diversification (gross and net of reinsurance and financial hedges)

3. Risk Identification and Assessment

An overview of the firm's processes and procedures for identifying, assessing and prioritising its key risks

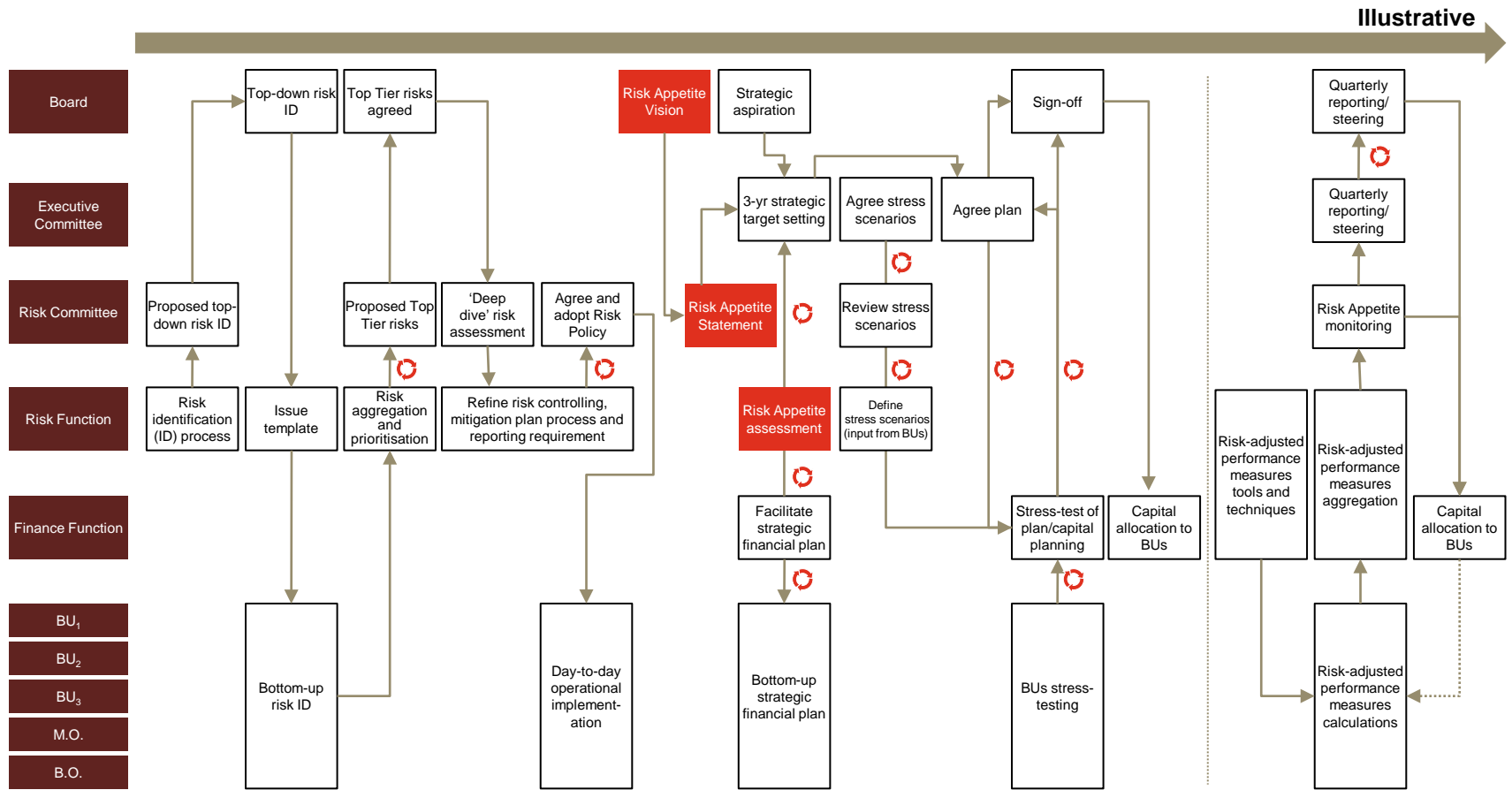
Outputs:

- Risk Profile
- Hierarchy of risks with an indication of likely frequency/severity
- Range of possible adverse scenarios
- Articulation of procedures in adverse risk events
- Range of possible mitigation options
- Confirmation that the Board of Directors is comfortable with the risk profile of the business for the next strategic planning period



[†]Diversification benefit

Risk Appetite



4. Risk appetite

The firm's risk appetite statement, process for managing within desired parameters and the firm's current profile

Actions:

- Details of Group and BU level risk appetite
 - Process for cascading Group Risk Appetite down to BU level
 - Treatment of diversification benefit (and rationale if allocated down)
- Risk limits / thresholds framework
 - Limits and thresholds set
 - Strategy and process for monitoring and managing risk to remain within desired parameters
 - Early warning process
 - KPIs / KRIs
 - Escalation process
 - Pre-planned mitigation / management actions
 - Evidence of execution and effectiveness

Example Group Risk Appetite Statement

Dimension	Risk Appetite Statement
Capital	• Maintain a minimum S&P rating of A+ within a 1/25 confidence interval
Earnings	• Achieve a minimum of 75% of plan IFRS profit nine years out of ten
Liquidity	• Maintain a minimum claims and planned dividend paying ability of ...
Reputation	• Zero tolerance to FSA compliance breaches....

Example BU level risk limits and thresholds

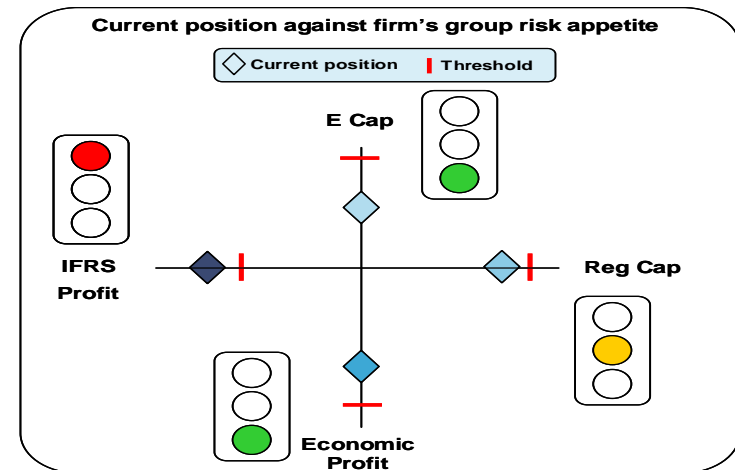
“Hard”	“Soft”
New business volume of €Bn	• New Business volume of €Bn
Aggregate California quake exposure of €Bn	• Aggregate California quake exposure of €Bn
UK Bond market exposure of €Bn	• UK Bond market exposure of €Bn

4. Risk appetite

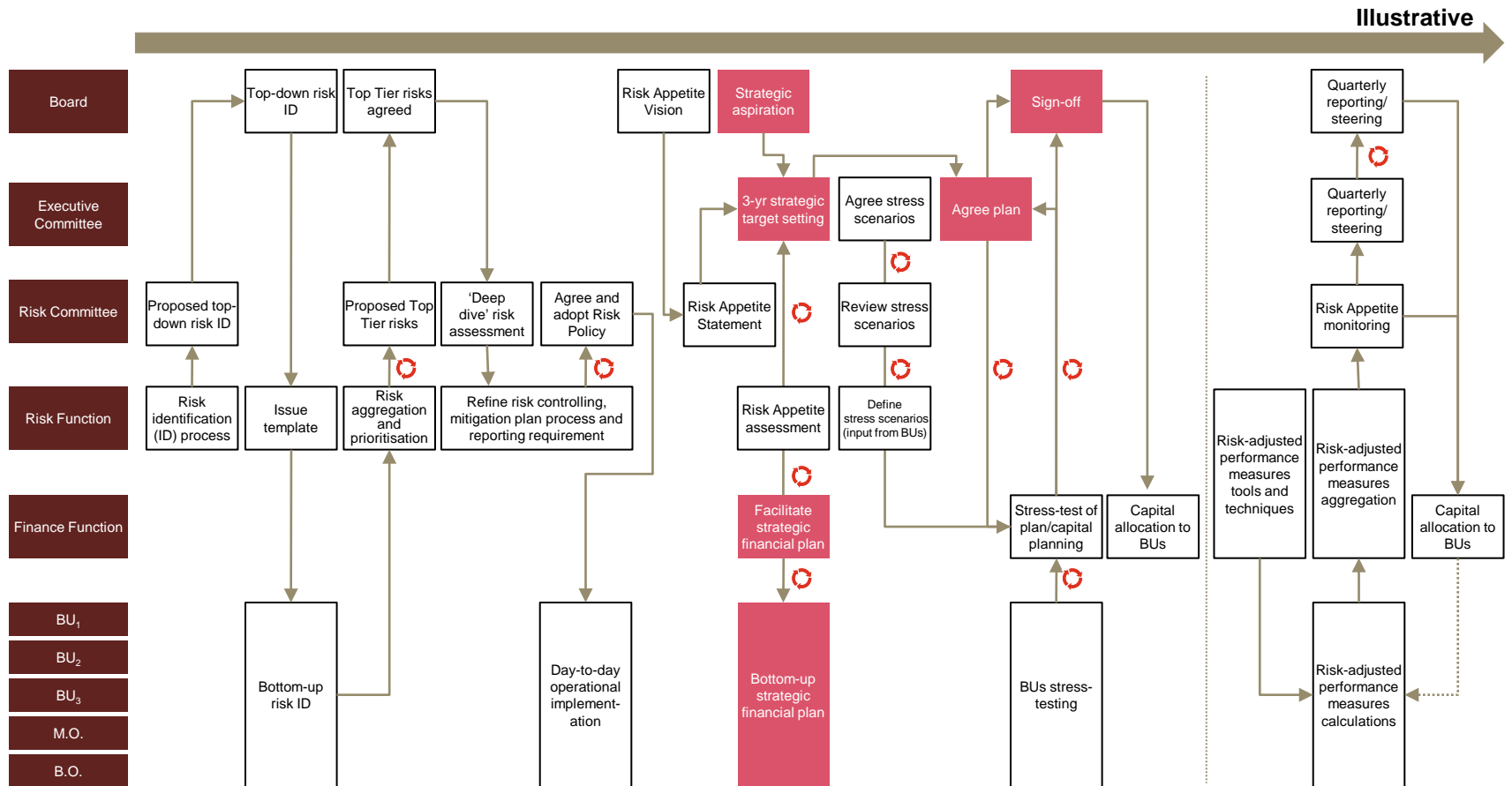
The firm's risk appetite statement, process for managing within desired parameters and the firm's current profile

Outputs:

- Current risk profile compared against articulated risk appetite
- Outstanding actions (timetable, anticipated impact, contingency plan etc)



Strategic Planning



5. Point in Time Capital and Solvency Position

The firm's point-in-time capital & solvency position along regulatory and economic dimensions

Inputs:

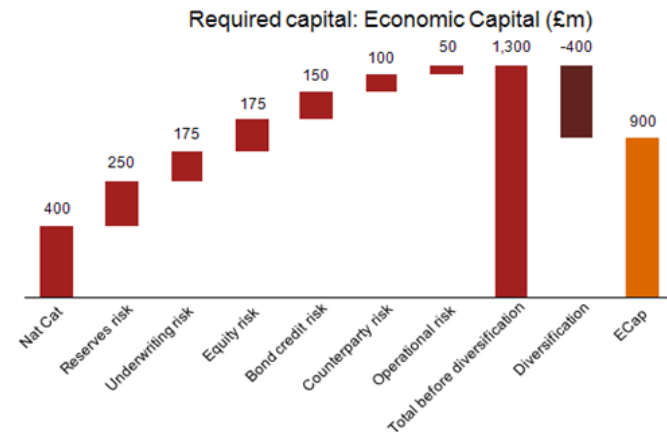
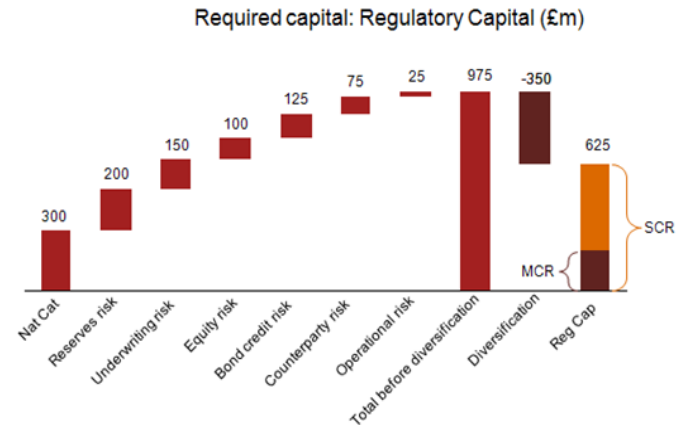
- Life /Non Life Underwriting Risk charge (Premium and Reserve Risk)
- Market Risk charge
- Counterparty Default Risk charge
- Operational Risk charge
- Diversification benefits

5. Point-in-Time Capital and Solvency Position

The firm's point-in-time capital & solvency position along regulatory and economic dimensions

Outputs:

- Point in time Regulatory Capital Requirement
- Point in time Economic Capital Requirement
- Comparison of Solvency Margin (Regulatory => Economic Capital)



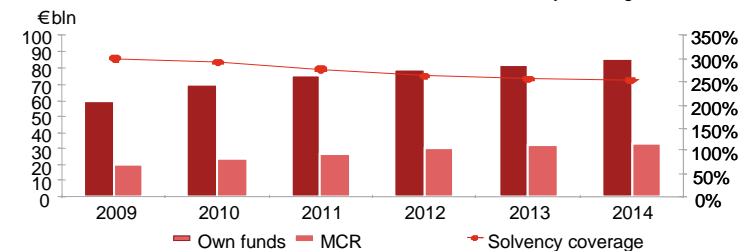
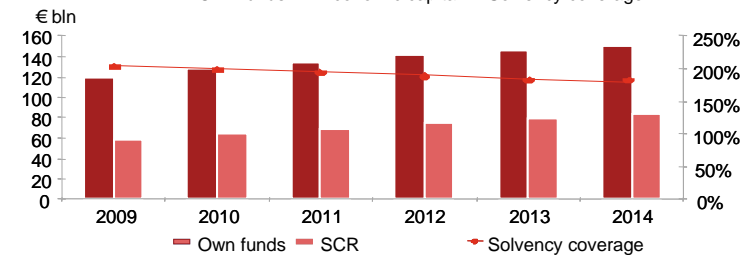
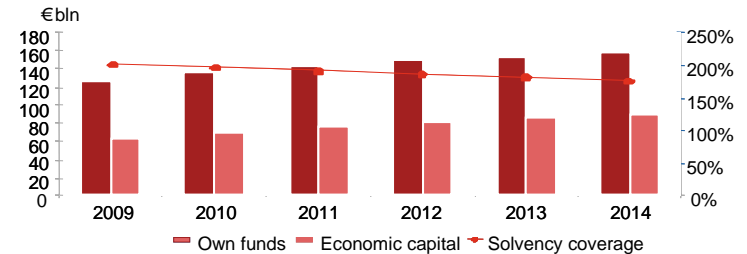
6. Forecast Capital and Solvency Position

The firm's projected capital & solvency position over the plan period (3 to 5 year outlook)

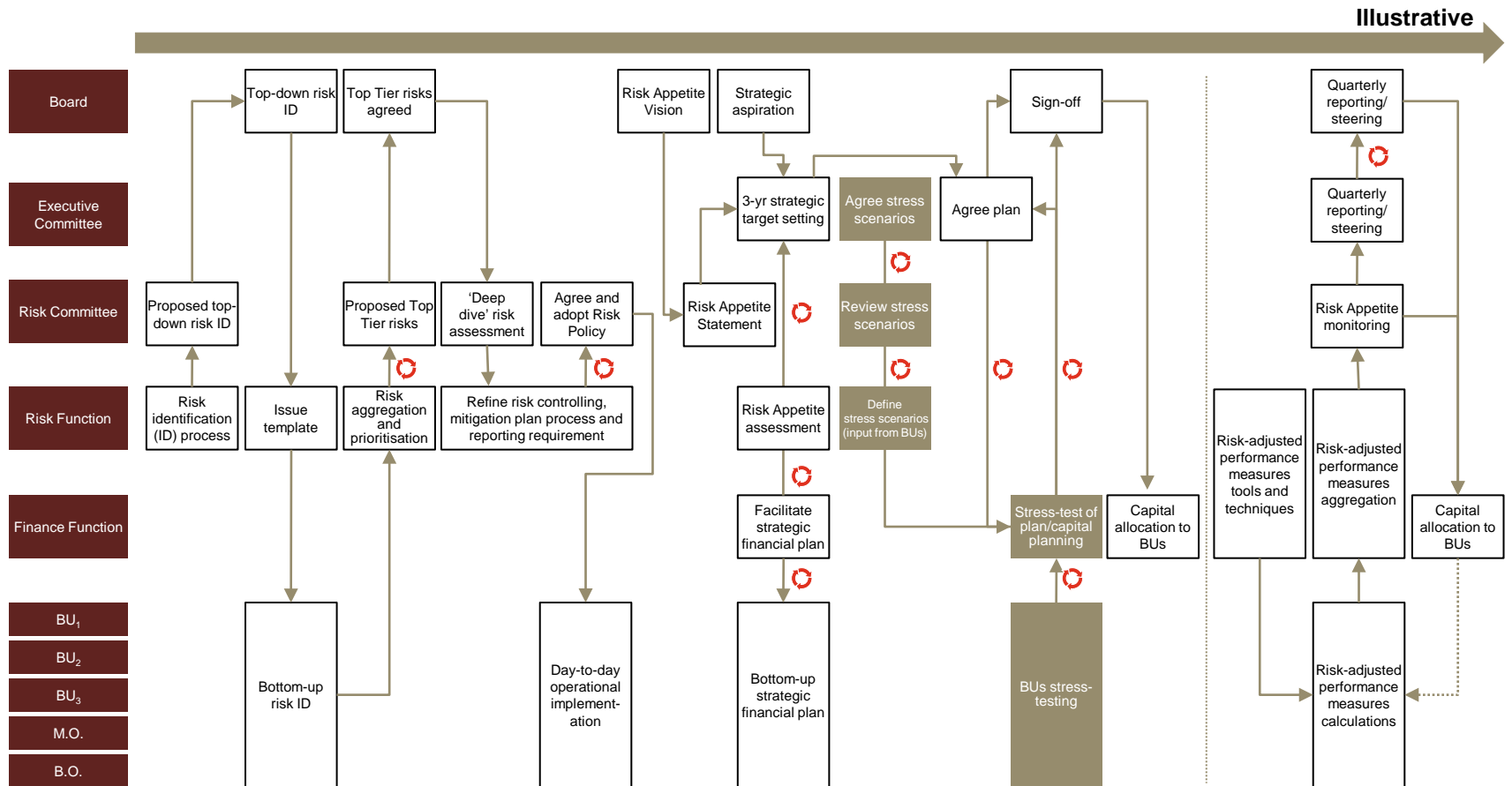
Inputs:

- Planned business volumes
- Forecasted changes in:
 - Underwriting strategy
 - Business model
 - Wider external environment
 - Capital management strategy

Outputs:



Stress Testing



7. Stress and Scenario Testing

The firm's future capital/solvency position under a number of reasonably plausible (downside) stress tests and scenarios

Inputs:

- Define Stress Type(s)
 - Market risk (Fall in bond valuations/equity prices)
 - Underwriting Risk (Catastrophe/Claims Inflation/PPOs)
 - Counterparty Default (Reinsurer Default/Downgrading)
 - Operational Risk (Fraud/Business Interruption)
- Can be single factor stress tests or more comprehensive scenario analysis
- Need to allow for management mitigation actions

7. Stress and Scenario Testing - Outputs

Stress / Scenario-test before mitigation action		Quantitative Impact (£ m)					
Test no. / Description	Qualitative impact	Regulatory Capital			Economic Capital		
		OF ⁽¹⁾	RC ⁽²⁾	SC ⁽³⁾	OF	RC	SC
1. Bond shock	Mark-to-market loss on bonds leads to less available capital	-190	-60	-18%	-200	-30	-22%
2. European windstorm	Loss caused by nat cat diminishes available capital	-70	+50	-23%	-120	+55	-24%
3. Major reinsurance failure	Higher required capital due to revaluation of risks	-70	+200	-48%	-60	+300	-44%
4. Lower long-term discount rate (2%)	Higher required capital because of higher discounted cash-flows	+5	+80	-18%	+6	+90	-14%
5. Liquidity crisis	Capital not available in capital markets	-150	+40	-33%	-140	+50	-26%

Stress / Scenario-test after mitigation action		Quantitative Impact (£ m)					
Test no. / Possible mitigation action		Regulatory Capital			Economic Capital		
		OF	RC	SC	OF	RC	SC
1. A. Unwind bond portfolio ('stop-loss')	B. Capital injection	-190	-120	0%	-200	-130	-4%
2. A. Exposure capped through reinsurance		-25	+50	-16%	-40	+55	-14%
3. A. Buy CDS protection	B. Issue catastrophe bond (as an alternative to reinsurance)	-70	+30	-19%	-60	+50	-16%
4. A. Change product mix to focus on quality	B. Tighten limits, cut-offs and underwriting policies	+5	+15	-3%	+6	+20	-3%
5. A. Reduce dividends and defer coupon payments	B. Reduce policyholders bonuses	-35	+40	-15%	-30	+50	-12%
	C. Cancel planned acquisitions						

8. Capital plan

The firm's capital plan under the base case and under downside stress tests and scenarios

Capital position & headroom

- Outline of firm's current capital position (including headroom(1))
- Demonstrate capital flexibility

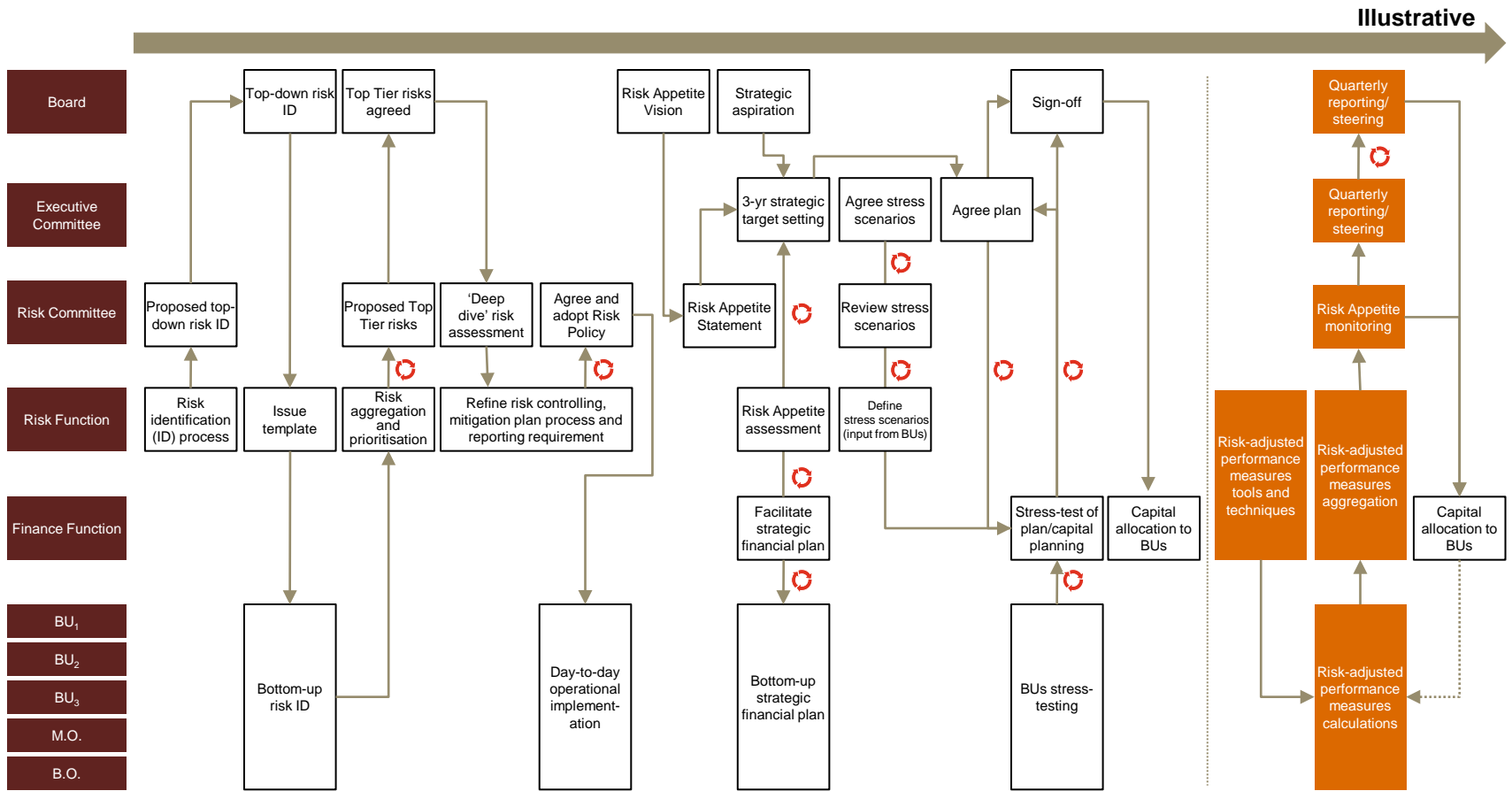
Base case capital plan

- "Declaration" of capital and solvency strategy (e.g. maintain a solvency margin of between 140 - 150% on an Economic capital basis)
- Outline of firm's capital plan under the base case plan scenario
 - Dividend policy / retained earnings
 - Planned share buy backs
 - Conversion of hybrids
 - Planned Tier 1 capital issuances
 - Maturity/ replacement/ retirement of hybrid/debt instruments
 - Securitisation programme

Capital plan under stress

- Capital raising options under stress / scenarios
- Reasonableness of capital plan in the context of stress / scenario
 - Availability of capital
 - Cost of capital
 - Investor reaction
 - Eligibility of funds under stress situation (retrenchment of Tier 1 capital)
 - Debt and banking covenants
 - Contingency plans
 - Prior history / track record of proposed actions

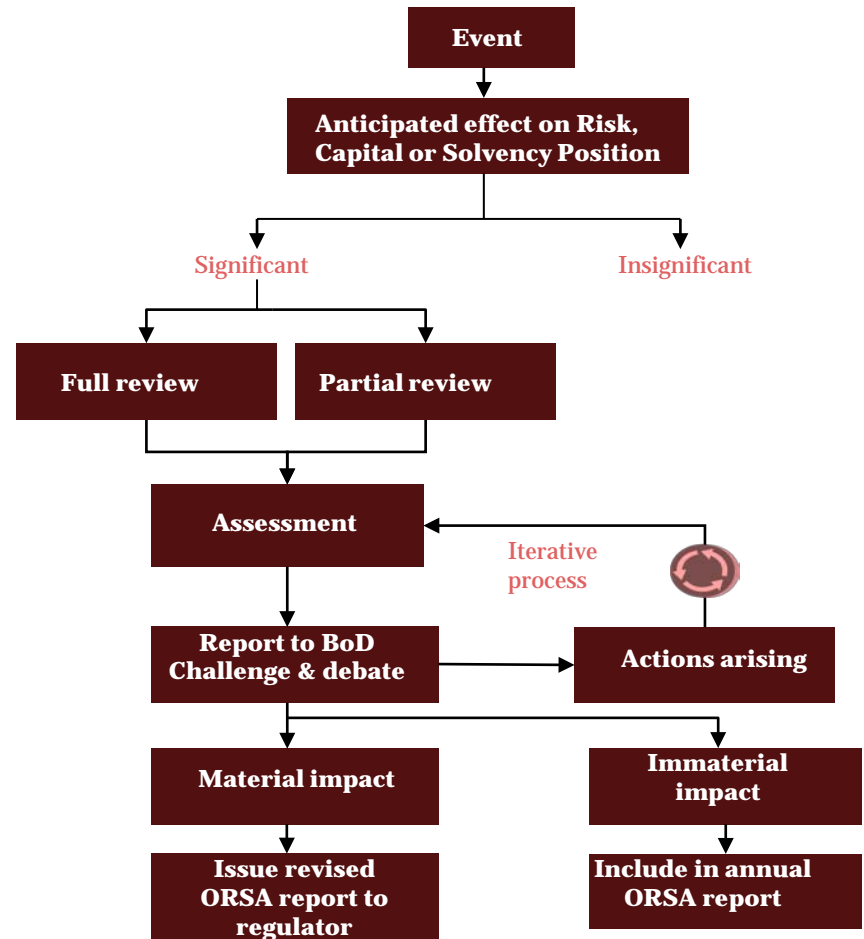
Quarterly Reporting



9. Ad-hoc ORSA re-runs

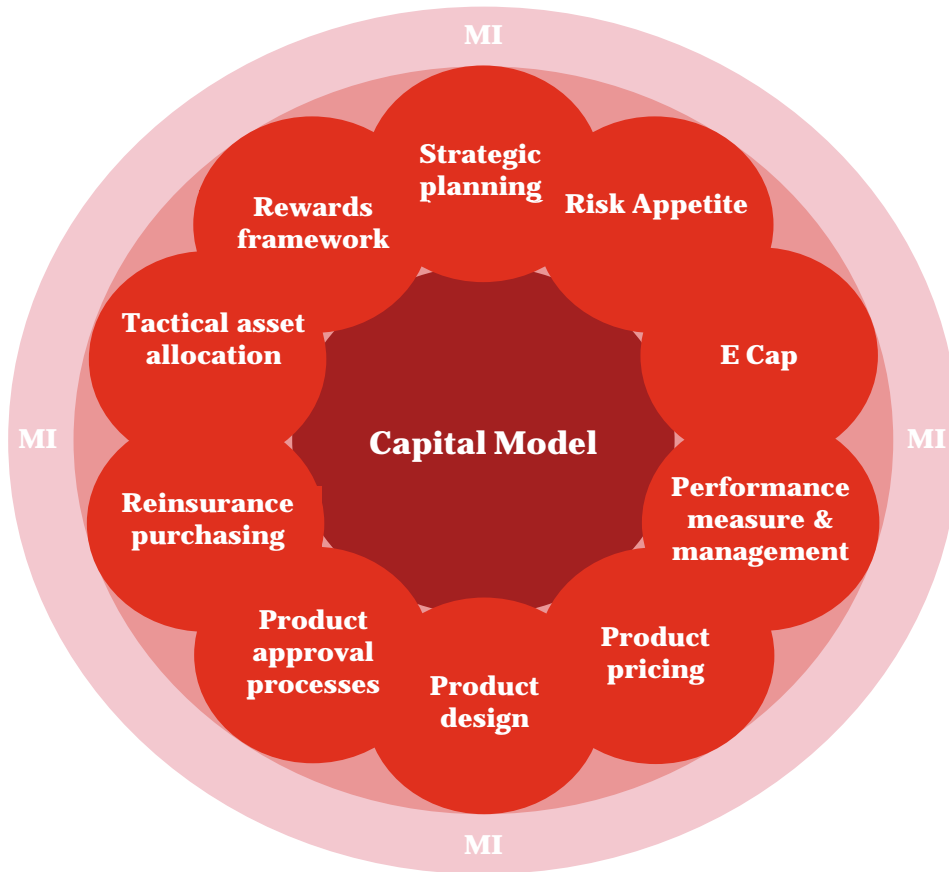
Formal presentation of as-hoc “event-driven” risk, capital and solvency assessments during the reporting period

- Frequency of monitoring between ORSA assessments should be associated with
 - the volatility of the risks
 - the frequency of business critical risk based decisions
- “Event driven” assessments of the firm’s risk, capital and solvency position need not always be ex ante:
 - M&A activity
 - New product launch
- May not result in the formal submission of a revised ORSA report to the regulator as part of the normal regulatory supervisory relationship e.g.:
 - M&A opportunity declined
 - Immaterial impact on risk, capital and solvency position
- The regular ORSA report nonetheless provides an opportunity to present a summary:
 - Keeps key stakeholders aware of the firm’s more significant activities
 - Evidences the firm’s risk, capital and solvency management processes and procedures



10. Use test

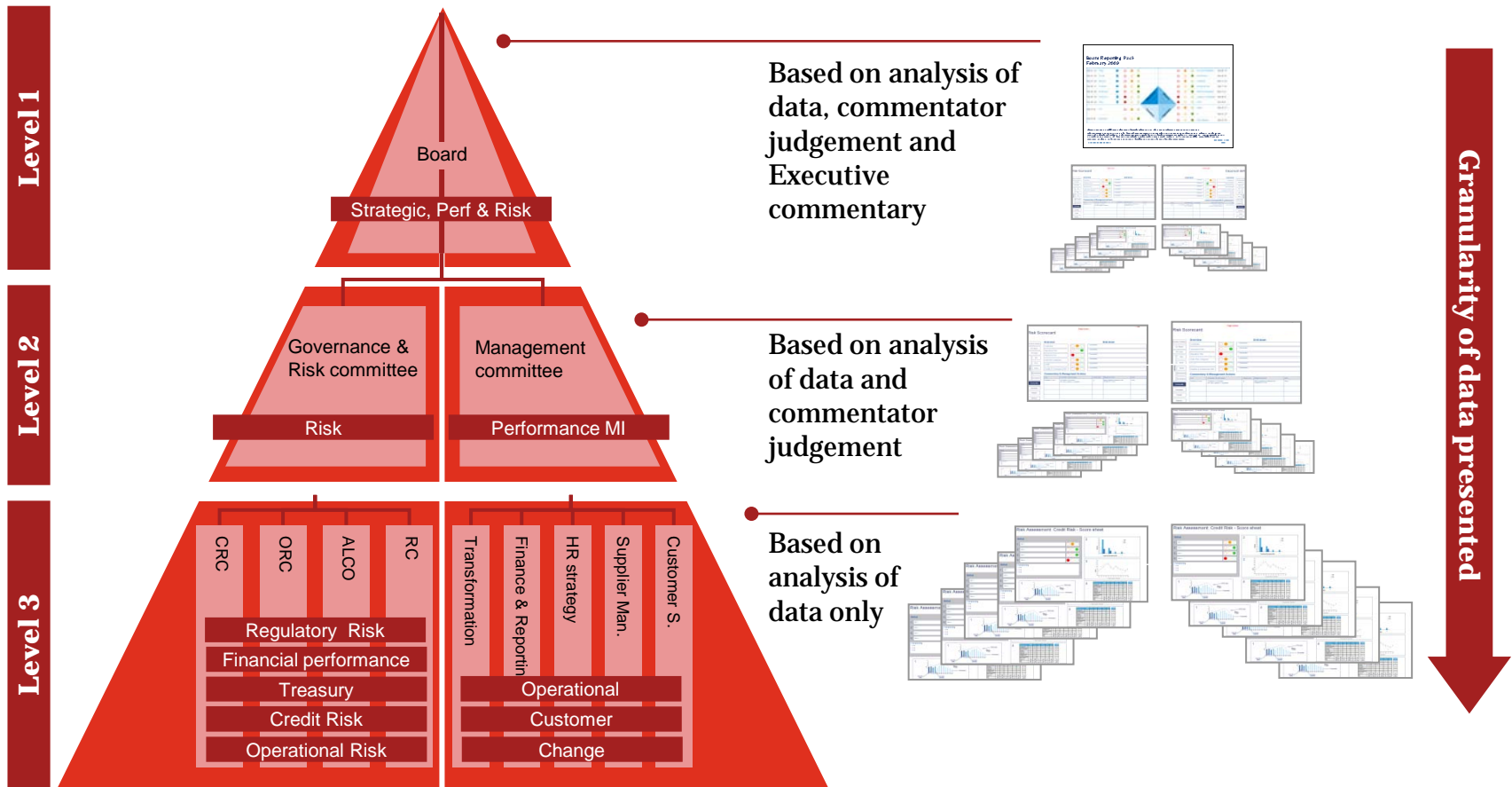
An overview of how the firm's risk and capital management activities are fully integrated into the management process and operations



- Demonstrate how risk and capital management is more than adherence to regulatory requirements
 - Integral to business performance measurement and management (e.g. business performance measured and managed on risk adjusted metrics)
 - Product design influenced by risk factors
 - Product (technical) pricing reflects full extent of risks
 - Monitoring and management of firm's surplus capital (capital strategy, capital auctioning etc))
 - Executive compensation aligned with risk adjusted performance

Getting the audience right

Who should see what?



Common ORSA challenges

Understanding the requirements

Being seen as a reporting task, rather than a process
And as a result limited buy-in at senior executive and Board level

Modelling developments

Capturing all risks

Programme delivery risk

Structuring the ORSA across a group

Scale of the ORSA documentation

Adherence to risk philosophy/risk governance

Communication and Training

Embracing the ORSA process

PwC's view of progress in the UK industry

PwC view

Most have developed a clear understanding of the outputs and MI that needs to be produced:

- Overall solvency needs
- Projections, with links to business plans and scenario analysis, to demonstrate continuous compliance
- Suitability of the SCR

Many have focused developments around an ORSA policy, articulating:

- Governance
- Process
- The approach to the quantitative assessments

Draft management reports and processes are becoming well-developed

- At least in draft form, based on current numbers...
- ...allowing road-testing the format and MI with the Board and management

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Questions?

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