



2008 Enterprise Risk Management Symposium

Solvency II





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Background and Overview





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Solvency II – Background

- The proposed new Europe-wide framework for prudential supervision of insurance.
- Replacement for Solvency I regulations
- Problems with Solvency I
 - Outdated system (rules date from 1970s)
 - Insufficiently risk-sensitive
 - Did not reflect best practice
 - Difficulties in supervising multinational, diversified groups
 - Does not address risk management issues adequately





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Solvency II – Overview

Fundamental change to Solvency requirements

- Principles based approach to supervision
- Capital linked to risks on a market consistent approach
- Convergence of economic capital and regulatory capital
- Recognises diversification benefits – important for groups
- Lead supervisor for groups
- Major focus on risk management
- Significant disclosure requirements
- Capital add-ons for deficiencies
- Links to other reporting measures

Contribution to the emergence of a world-wide standard?





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Key Players and Timeline





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Solvency II – Who is involved?

- European Institutions: Commission, Parliament & Council
- Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS)
- Chief Risk Officers (CRO) Forum
- Comité Européen des Assurances (CEA)
- Groupe Consultatif Actuariel Europeen



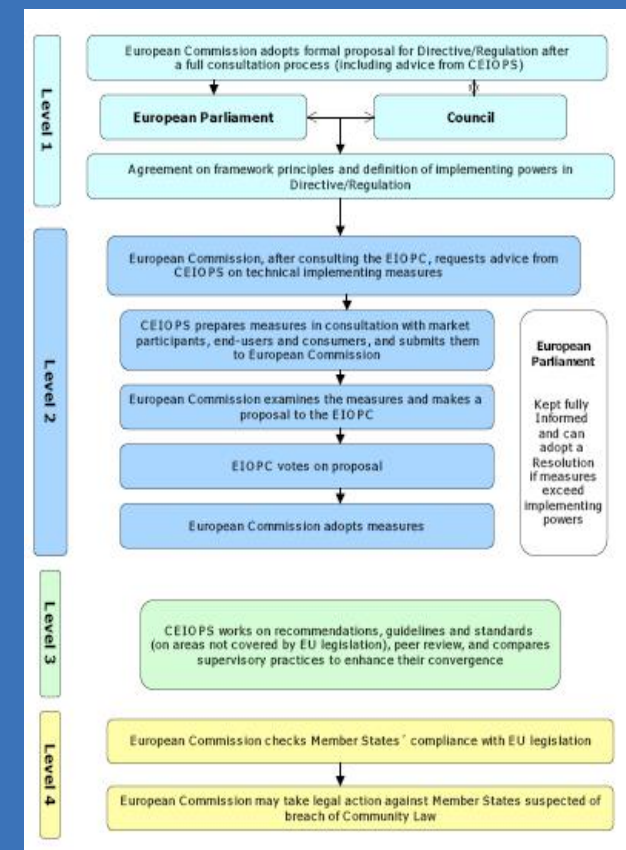
Solvency II – Lamfalussy process

Level 1 – Framework directive

Level 2 – Implementing measures

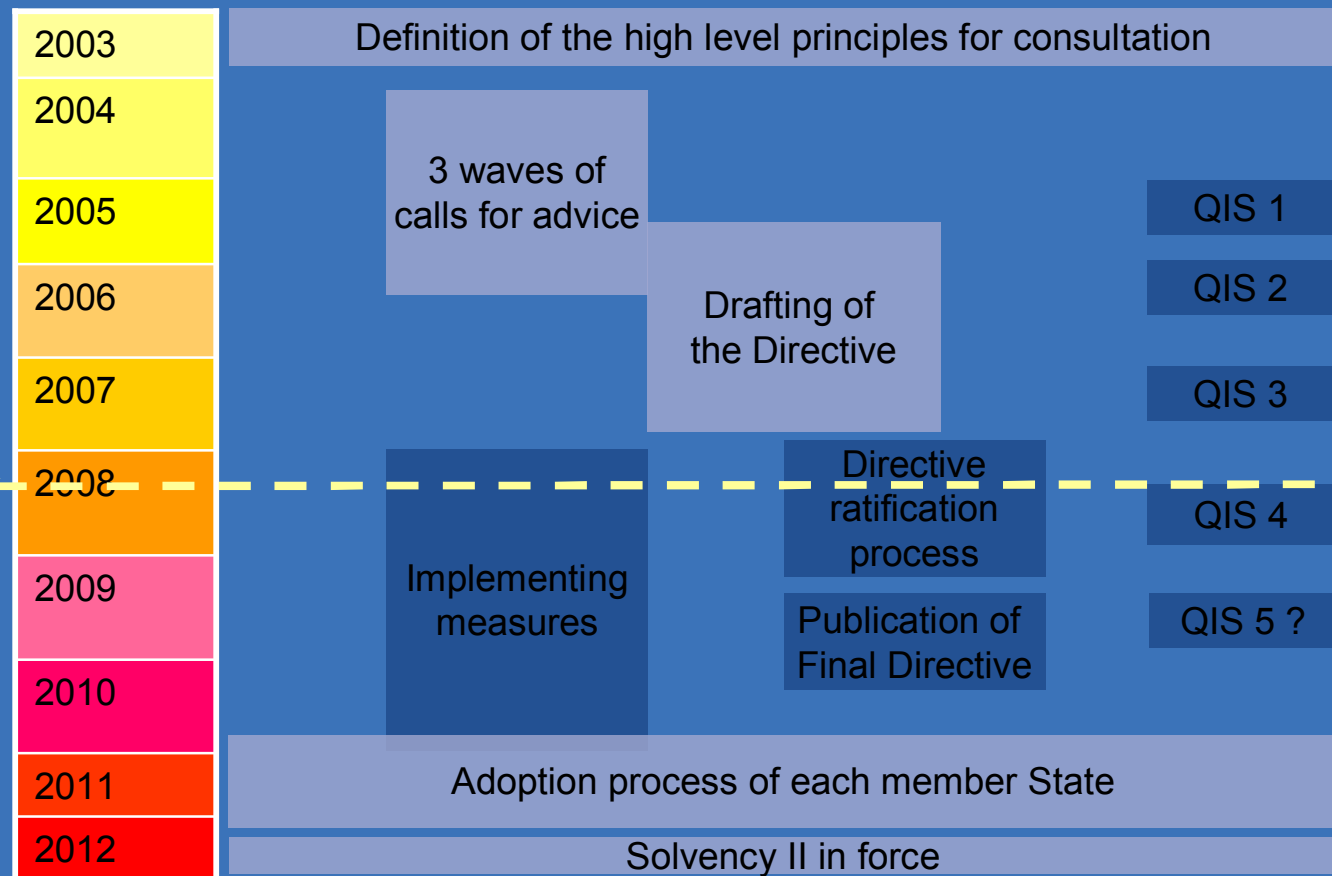
Level 3 – Supervisory guidance

Level 4 – Enforcement and compliance



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Solvency II – Timeline





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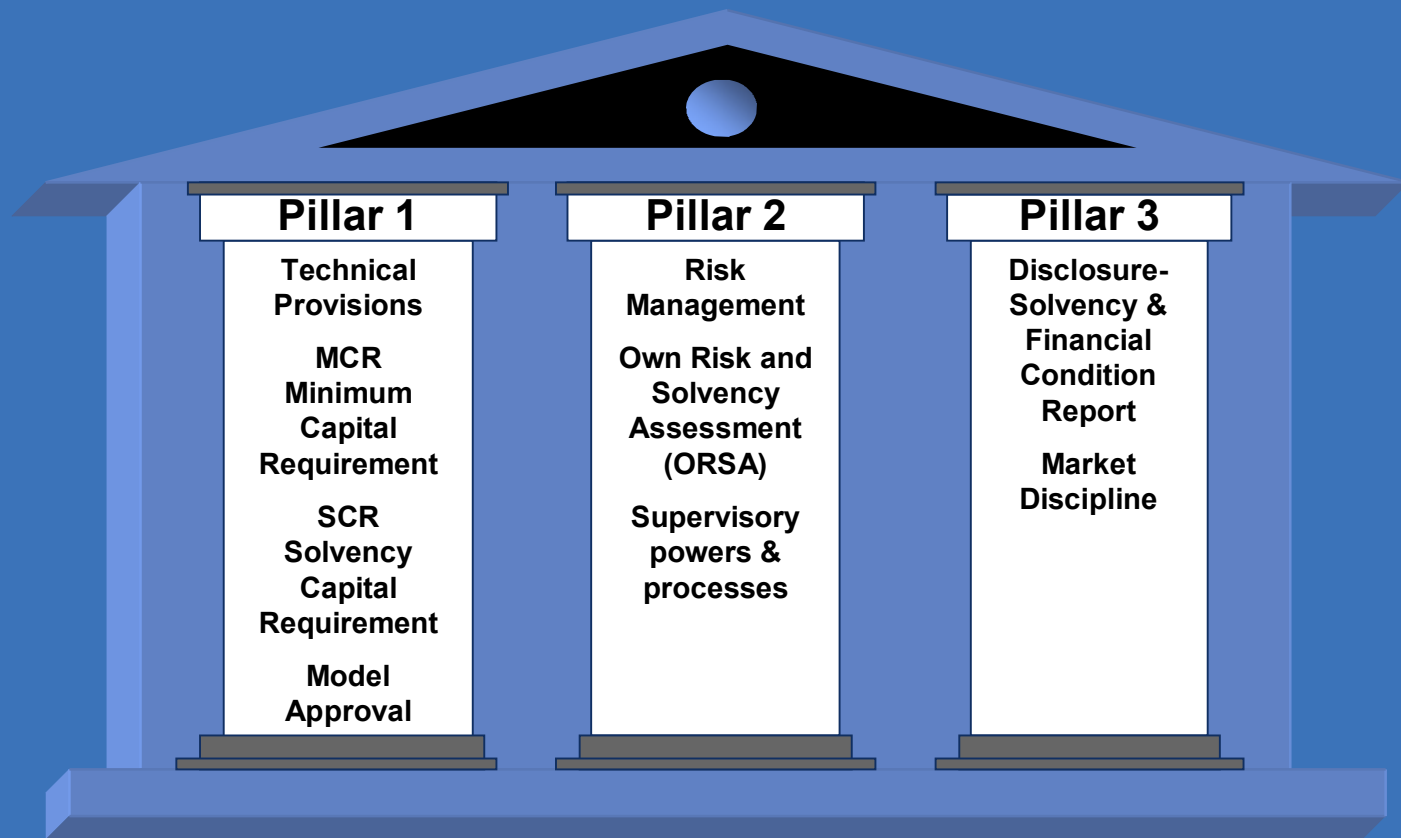
Solvency II Framework





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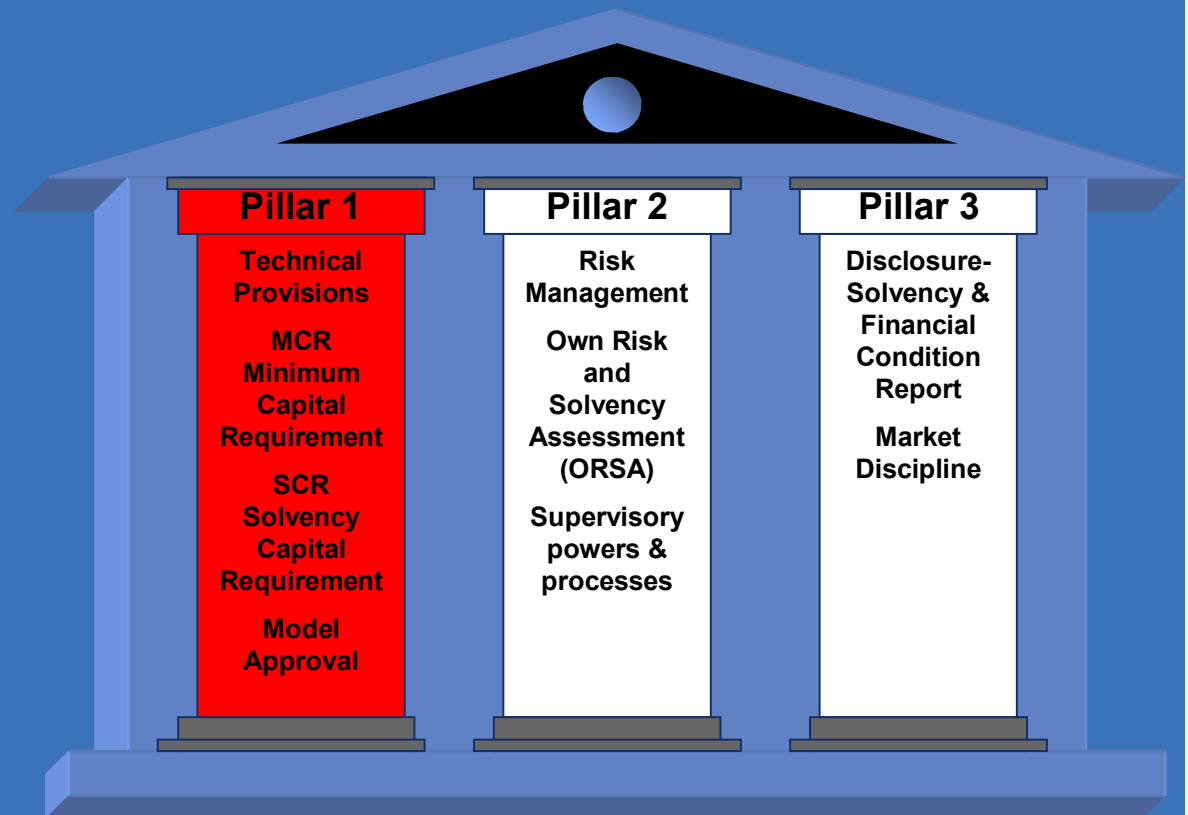
Solvency II – Framework





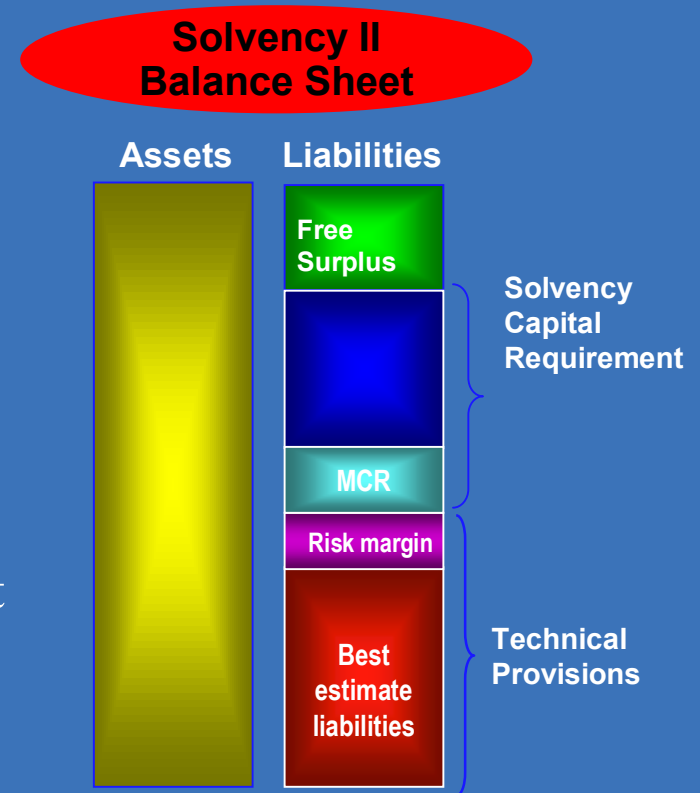
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Solvency II Framework Pillar 1



Pillar 1 – Market Value Balance Sheet

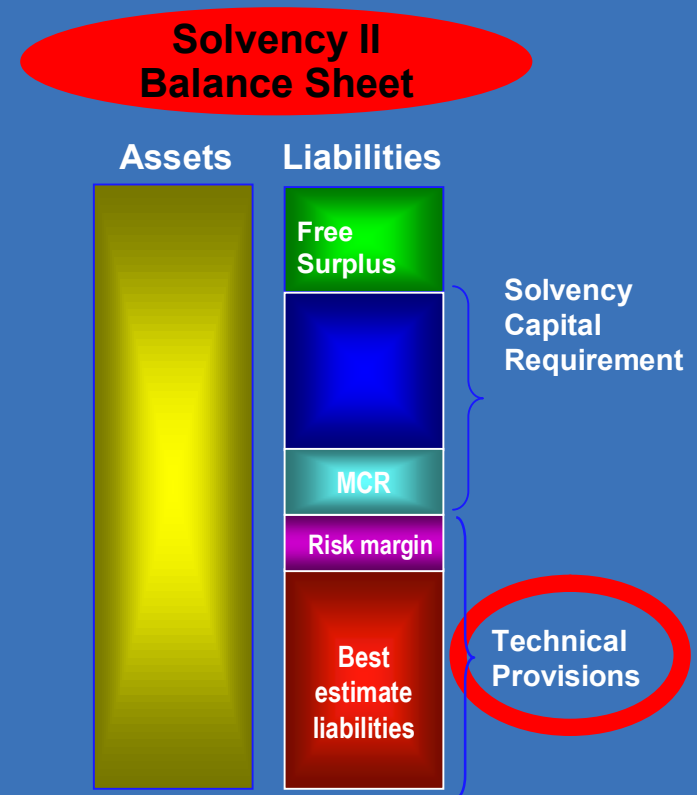
- Market value of assets
- Technical provisions
 - Hedgeable risks
 - Non-hedgeable risks
- Capital Requirement
 - Solvency Capital Requirement (SCR)
 - Minimum Capital Requirement (MCR)
- Free Surplus



Pillar 1 – Technical Provisions (1)

Best Estimate Liability

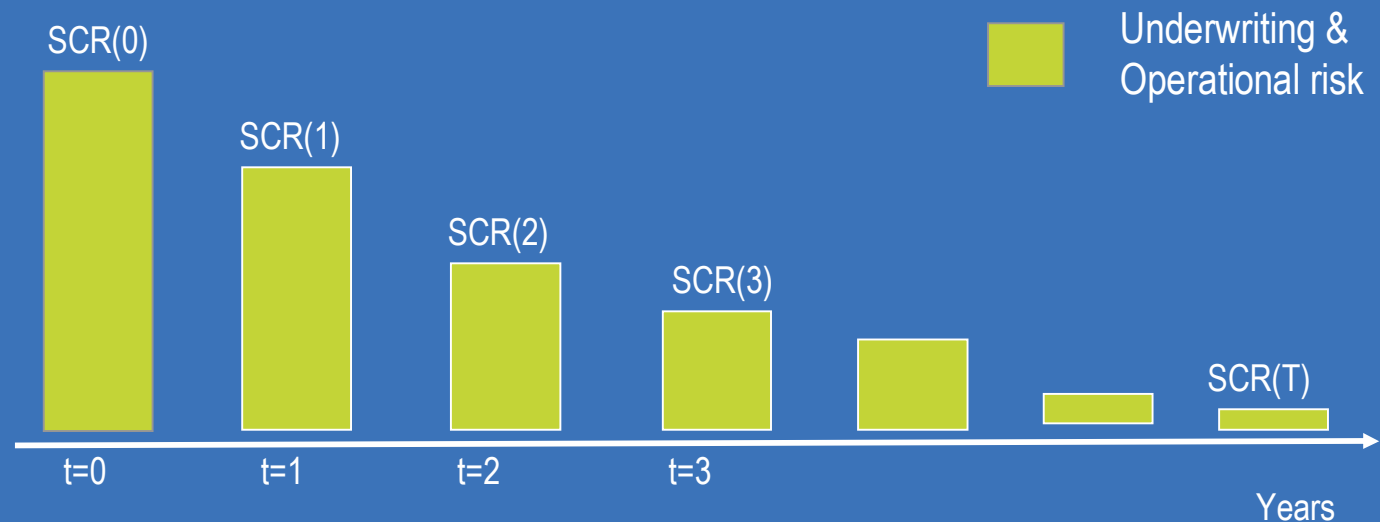
- Realistic assumptions – no bias
- Prospective basis
- Probability-weighted expected present value
- Cash flows discounted at risk-free discount rate
- Reflect all cash in- and out-flows



Pillar 1 – Technical Provisions (2)

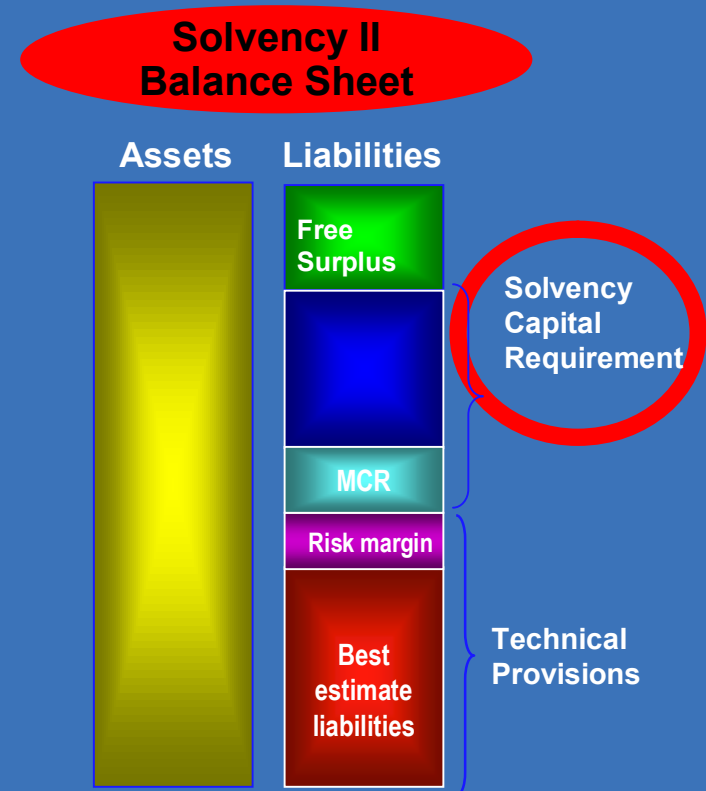
Risk Margin (non-hedgeable risk only)

- Cost to transfer the portfolio to a third party or to recapitalize the company
- Cost of Capital approach, 6% factor in QIS4 draft specifications



Pillar 1 – Capital Requirements

- 2 requirements
 - Minimum Capital Requirement (MCR) and
 - Solvency Capital Requirement (SCR).
- SCR
 - Absorb significant unforeseen losses
 - Standard approach
 - Internal models
- MCR
 - minimum regulatory capital
 - breach triggers major regulatory intervention.





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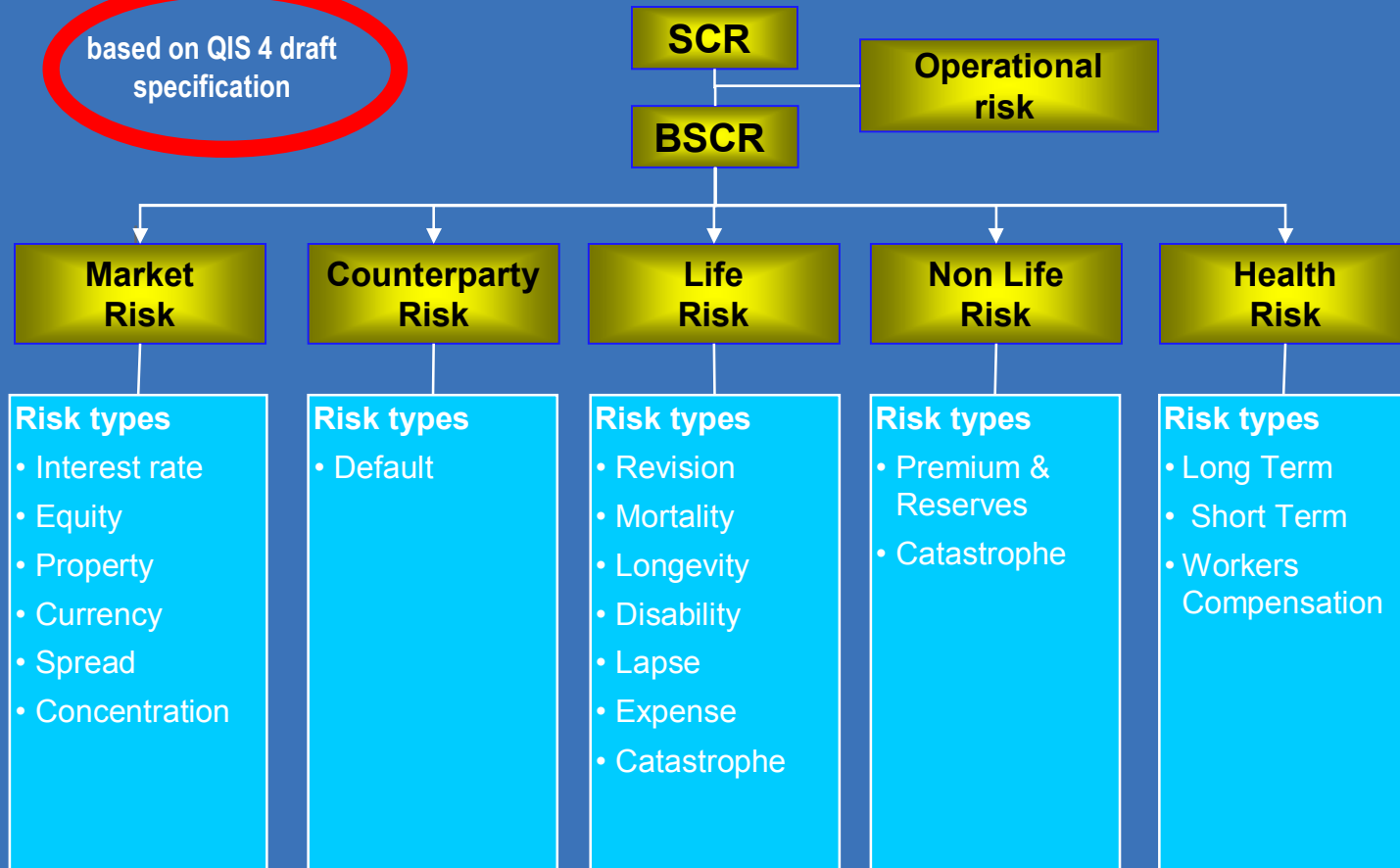
Pillar 1 – Solvency Capital Requirement

- **Framework**
 - VaR subject to ruin probability of 0.5% over 1 year
 - Option to use Internal Model - subject to approval
 - Total balance sheet approach
- **Standard Formula**
 - Modular and hierarchical approach with multiple aggregation levels using correlation matrices
 - Mostly based on change in net asset value
 - Combination of stress tests and factor based approximations



Pillar 1 – SCR Structure

based on QIS 4 draft specification





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Pillar 1 – Internal Model Approval

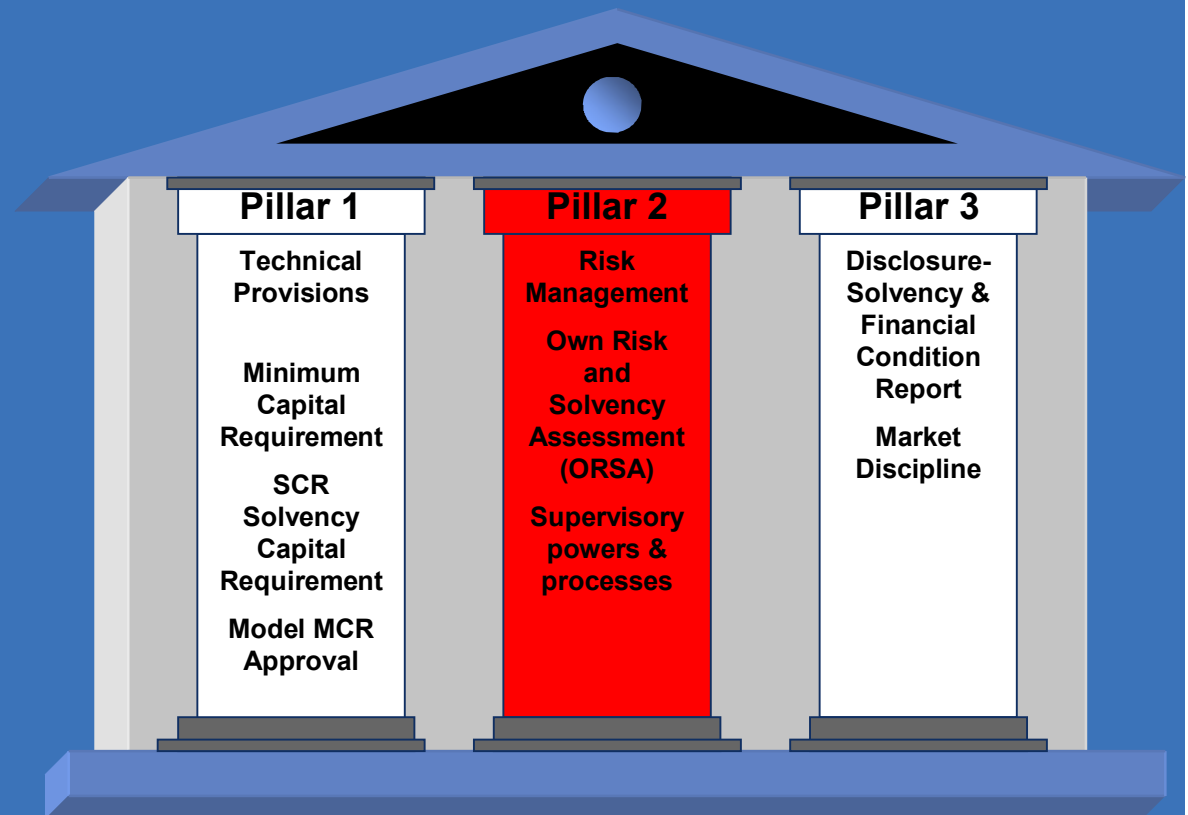
- Internal models require approval from the local regulator.
- Proposed criteria for model approval includes:
 1. Statistical Test
 2. Calibration Test
 3. Use Test
 4. Profit and Loss attribution
 5. Validation standards
 6. Documentation standards
- Even if an internal model is used, the standard formula SCR must be calculated for 2 years





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Solvency II Framework Pillar 2





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Pillar 2 – Requirements

- **Supervisory Review:** governance, ORSA, balance sheet components, internal models
- **Capital add-ons:** applied for weaknesses in calculations or inadequacies governance and risk management
- **Governance Requirements:** robust and documented system of governance
- **Risk Management Requirements:** covers processes to identify, assess, mitigate, monitor and report risks
- **Internal Control Requirements:** includes requirement for internal audit function





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Pillar 2 – ORSA

Own Risk and Solvency Assessment (ORSA):

- Assessment of capital required based on internal risk profile and risk tolerance
- If internal model is used, reconciliation of SCR to own assessment
- Onus is placed on insurer management to consider all risks and capital related to all risks

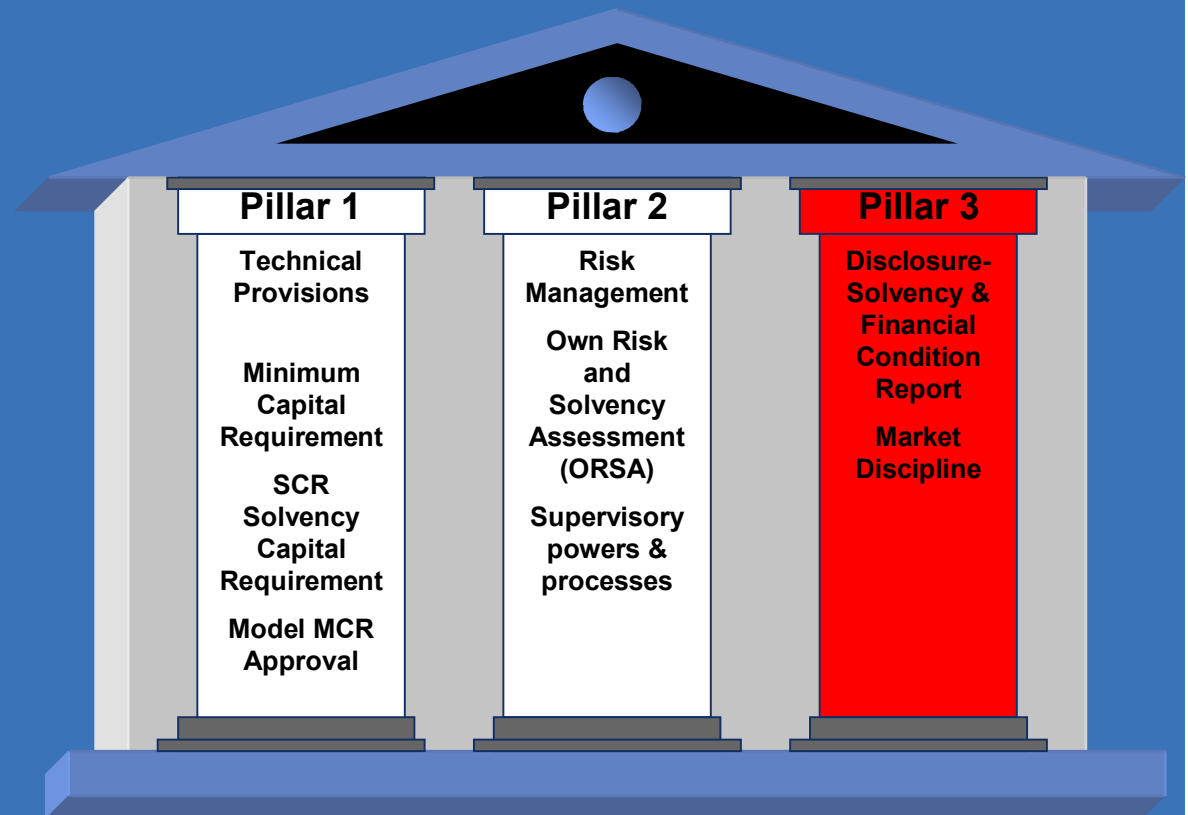
Pillar 2 requires a step change in the risk culture and governance





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Solvency II Framework Pillar 3





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Pillar 3 – Disclosure & Market Discipline

- 3 aspects:
 - Information to submit to regulator
 - Public disclosures
 - Disclosures by regulators
- **Solvency and Financial Condition Report** – publicly disclosed and includes:
 - Business overview
 - Governance structure, especially for risk profile
 - Valuation methodology and assumptions for assets and technical provisions
 - Risk management process
 - Capital – MCR, SCR, including capital add-ons and available capital
 - Internal model – methodology, assumptions, validation process





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Implications





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Implications

There are many! Here are some:

- Products
- Capital
- Risk management
- Transparency
- Organisation
- Group structure





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