Implementing Solvency II
A report from the practice

Market Event Russia 2019, Moscow, Lutz Wilhelmy
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Objectives and Features
Objectives of Solvency II

- Development of a sustainable, reliable, transparent, more competitive insurance market
- Consistent with financial markets
- Consistency across financial institutions by adopting a Basel-type, i.e. banking, three-pillar approach adapted to insurance
- Principle-based but without undue complexity
- Enhance policyholder protection
- Assessment of an insurer’s total balance sheet, comprehensive risk and solvency situation
- Better match to the true risks of an insurance company
Approach of Solvency II
(Optional slide to talk through)

- The key elements of Solvency II are:
  - Market consistent valuation of all assets and liabilities
  - Risk based calculations – incentive for integrated risk management (and, potentially, use of internal models)
  - Increased transparency concerning supervisory practice and the risk situation of insurance companies
  - Increased public and regulatory disclosure
  - Consistent market place – level playing with the EU and an increasing number of countries
  - Two-level approach to capital requirements:
    - Solvency Capital Requirements (SCR)
    - Minimum Capital Requirement (MCR)
Market Consistent Valuation
Allowing trading and risk managing without jeopardising the balance sheet and its solvency

• All assets and liabilities should be valued at all times at the value they (would) have in a market
• If a market exists it is the market value
• Else a “market consistent” value
• For insurance liabilities: the cost that a de-risked third party, the “reference undertaking” would incur to produce the liability safely, fulfilling regulation
  – In most cases: the insurance contract says if an event happens the insured obtains certain assets, often cash. The insurer must meet the claim with a high probability
• Anybody can produce the liability of the liabilities by
  – buying risk free bonds that match the expected cash flows: losses, costs etc.
  – Hold capital for the whole book of liabilities so that the real cash flows in each year can be met with high probability, e.g. 99.5%.
  – Add the cost of holding the capital for the entire run-off (returns to those that provide the capital – dividend) to the cost of the bonds
Deciding early on

• Treat Solvency II just as a regulatory constrain and steer the company entirely differently or

• have the ambition to steer the company on a market consistent basis.

• If the latter, consider to build a common ground which provides the regularly view **and** the steering information.
Three Pillars
Solvency II – Three pillar approach

Three pillar approach

Pillar I
- Quantitative Requirements
- Balance Sheet
- Standard vs Internal model
- Solvency Capital Requirement (SCR)
- Minimum Capital Requirement (MCR)

Pillar II
- Qualitative Requirements and Supervisory review
- Governance, risk management and required functions
- Own Risk and Solvency Assessment
- Supervisory review process

Pillar III
- Reporting, disclosure and market discipline
- SFCR and RSR
- Disclosure
- Transparency
- Support of risk-based supervision through market mechanisms

Market-consistent valuation
Risk Based requirements

Business Governance
Risk Based supervision

Disclosure
Transparent Markets
Pillar I – Quantitative requirements (supporting info only)

- Aim is sufficient prudent levels of capital held by insurance companies
  - less than 1 in 200 chance of inadequate capital over next 12 months

- Solvency Capital Requirement (SCR)
  - SCR calculated via internal or standard model
  - key design decisions of internal model made by management
  - internal model to be consistent with the way the company manages its risk

- Economic Balance Sheet (Valuation principles) and Own Funds
  - Sets out how amount of liabilities (incl. Tech provisions) is measured
  - which assets are eligible to match liabilities
  - how assets are to be valued
Pillar II – Supervisory review process and qualitative requirements *(supporting info only)*

- The effectiveness of risk management (RM) and RM tools within a company are the focus of interest:
  - Senior management responsibility
  - Risk Management Systems & controls
  - Operational Risk
  - Risk model, stress and scenario tests assumptions
  - Documentation

- Supervisory Process and intervention
  - Supervisory powers and measures (timing, extend, indicators etc)
  - Coordination of supervisory measures, control (eg peer reviews)
  - Intervention levels
Pillar III – Disclosure and market discipline (supporting info only)

- Supervisory disclosure
  - Risk Report
  - Losses under given scenarios
  - Valuation Methodology
  - Documentation of Risk Governance Processes

- Public disclosure, eg:
  - Annual report on solvency and financial conditions
  - Publication of capital add-on

- Obligation to inform investors and other stakeholders as regards:
  - Actual level of risk (portfolio, risk management)
  - Capital adequacy (eg risk capital, RORAC)
Implementation
at Swiss Re 2010-2013
Overview Solvency II Timelines for Swiss Re Implementation program

![Diagram showing timelines for implementation of Solvency II]

- Development
  - Q1 2011: TP P&C M1
  - Q2 2011: TP L&H M1
- Training / Readiness
  - Q1 2012: M2
  - Q3 2012: M3
- BAU / Dry run
  - Q4 2012: M4
  - Q1 2013: M5
  - Q3 2013: ORSA and internal model dry-runs
  - Q4 2013: M6

**Technical Provisions**:
- TP P&C: M1, M2, M3, M4, M5, M6
- TP L&H: M1, M2, M3, M4, M5, M6

**Reporting & Other Valuation**:
- Reporting: M1, M2, M3, M4, M5, M6

**ORSA & Capital Requirements**:
- Risk Measurement: M1, M2, M3, M4, M5, M6
- RMS & ORSA: M1, M2, M3, M4, M5, M6

**Governance & Policies**:
- Governance: M1, M2, M3, M5
- Documentation: M1, M2, M3, M5

**Data & Systems**
- See Data & Systems timeline slide for detailed milestones
  - M4

**Dry Run / Practice Run (s)**

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M1: Gaps identified
M2: Processes, policies and others documented
M3: User & system readiness
M5: Processes rolled out
M6: Ac-life run completed

- Red diamond: Changes since last PRB
- Orange: No changes since last PRB
Business Readiness Timeline *(supporting info only)*

**2012**
- SII Implementation Program prepares everyone for Business Readiness

**2013**
- Ownership is with respective Line Managers
- Dry runs are used for Line Managers to optimise processes and determine resource gaps if any.
- SII Implementation Program still provides people and training support
- Some Program activities still taking place i.e. Model Approval still being finalised.

**2014**
- Business As Usual in place
- SII Implementation Program totally dispersed
Overview Solvency II Timelines – Data & Systems
as of 11-June-2012

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**Finance (Wave 1)**

### Reporting
- Quarterly Reporting (J. Harpum / S. Schirmer): Q2 2011, Q1 2012, Q1 2013
- Annual Reporting (J. Harpum / S. Schirmer): Q3 2011, Q2 2012, Q3 2013

### Risk Management
- RM DWH (K. Böhni / U. Raetz): M6

### Asset Management
- FAH (A. Cardoza / J. Bunn): M6

### Group Systems related to Admin Re
- RM/Admin Re UK (tbd / M. Nussbaumer): M6
- AM/Admin Re UK (tbd / M. Nussbaumer): M6

### Risk Agility in the Group

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**Legend**
- 1: Project Setup Completed
- 2: Construction Completed
- 3: User Readiness Achieved
- 4: Post-rollout Activities Completed
- 5: Analysis & Design Completed
- 6: System Readiness Achieved
- 7: Rollout of Processes & Systems

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Reports

to supervisors and to the public
Three Key Deliverables to Supervisors

- **Quantitative Reports**
  - 50 + QRT templates
  - annual reporting
  - quarterly reporting
  - opening balance sheet

- **Narrative Reports**
  - To Supervisors - Regular Supervisory Report (RSR)
  - Public – Solvency & Financial Condition Report (SFCR)

- **ORSA Report**
## Quantitative Reporting Templates

**Summary of the 50+ Quantitative Reporting Templates**

*(supporting info only)*

<table>
<thead>
<tr>
<th>Balance Sheet components</th>
<th>Reinsurance / Retro</th>
<th>P&amp;L Related</th>
<th>Capital Requirements</th>
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</thead>
<tbody>
<tr>
<td>Invested Assets (D..)</td>
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<td>(J)</td>
<td>SCR / MCR (B..)</td>
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<td>Technical Provisions (TP) (F.. E..)</td>
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<td>Own Funds (OF)</td>
<td>OF Annual</td>
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<td>OF Quarterly</td>
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<td>Investments data – qtrly summary</td>
<td>L&amp;H TP Annual</td>
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<td>L&amp;H TP Quarterly</td>
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<td>Projection of future cash flows</td>
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<td>Life obligation</td>
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<td>Guarantees by</td>
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<td>Annuities from Non Life</td>
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<td>Non Life TP Annual</td>
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<td>Non Life TP Quarterly</td>
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<td>Non Life projected cash flows</td>
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<td>Non Live Insurance claims</td>
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<td>Overall Balance sheet Template</td>
<td>Facultative covers Non Life &amp; Life (Basic)</td>
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<td>Facultative covers Non Life &amp; Life (shares)</td>
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<td>Outgoing reins prog in next reporting year (Basic)</td>
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<td>Outgoing reins prog in next reporting year (Shares)</td>
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<td>Change in OF due to TPs</td>
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<td>Change in basic Own Funds (OF)</td>
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<td>SCR Market risk</td>
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<td>SCR Counterparty risk</td>
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<td>SCR Life</td>
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<td>SCR Health</td>
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<td>underwriting risk</td>
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<td>SCR non life</td>
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<td>underwriting risk</td>
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<td>SCR non life</td>
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<td>catastrophe risk</td>
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<td>SCR Operational</td>
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<td>risk</td>
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<td>MCR</td>
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<td>Overall SCR Template</td>
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Core elements of the QRT's are the Balance Sheet, Off BS items, A&L by currency and Duration of Liabilities
**Regular Supervisory Reporting (RSR) and Solvency and Financial Condition Report (SFCR)**

Contents of Swiss Re’s Narrative disclosures and the responsible area

<table>
<thead>
<tr>
<th>Business and Performance</th>
<th>System of Governance</th>
<th>Risk Profile</th>
<th>Valuation for Solvency Purposes</th>
<th>Capital Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>Governance Structure</td>
<td>Underwriting risk</td>
<td>Assets</td>
<td>Own funds</td>
</tr>
<tr>
<td>Performance of underwriting activities</td>
<td>Fit and proper requirements</td>
<td>Market risk</td>
<td>Technical provisions</td>
<td>SCR and MCR</td>
</tr>
<tr>
<td>Performance of Investment activities</td>
<td>Risk management system including ORSA</td>
<td>Credit risk</td>
<td>Other liabilities</td>
<td>Comparison of Internal model and Standard formula</td>
</tr>
<tr>
<td>Performance of other activities</td>
<td>Internal control system</td>
<td>Liquidity risk</td>
<td>Any other disclosures</td>
<td>Non compliance with MCR and significant non compliance with SCR</td>
</tr>
<tr>
<td>Any other disclosures</td>
<td>Internal Audit function</td>
<td>Operational risk</td>
<td>Any other disclosures</td>
<td>Any other disclosures</td>
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<tr>
<td>Outsourcing</td>
<td>Other material risks</td>
<td>Duration based equity risk sub module in SCR calcs</td>
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<tr>
<td>Any other disclosure</td>
<td>Any other disclosures</td>
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<tr>
<td>Actuarial function</td>
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</tbody>
</table>

**Finance**  |  |  |  |  |

**Legal & Compliance**  |  |  |  |  |

**Risk Management**  |  |  |  |  |

**Actuarial**  |  |  |  |  |

**Capital Requirements**  |  |  |  |  |
ORSA – a Process
The assessment of risk and solvency provides a holistic view of the company's risk and enables the management and the board to shape and take appropriate decisions regarding its strategy.

A set of related processes guarantee good quality and ensure that the ORSA is useful for strategic planning and decision making.

Results, methods and assumptions are reported to the supervisor.

ORSA is done regularly and at change of risk profile.

The scope are all identifiable risks - also the risks the company may face in the longer term.
ORSA – a process not a report
(supporting info only – choices Swiss Re has taken)

• ORSA is a top-down process owned by the board
• ORSA is connecting Business strategy and capital planning
• It is core board responsibility not to take on more risks than the capital base is allowing
• Two main goals: The board should know that the company can “afford” its strategic plan 3-5 years ahead including bumps on the way and the board should know how to execute its strategic plan
• There is no fixed recipe for an ORSA
• ORSA is not an internal model
• ORSA is an integral part of the business strategy and needs to be performed at least annually, has to be performed whenever the risk profile changes significantly, has to be documented and has to be reported to the supervisor
Although ORSA is a process, not a report, there is a requirement to report on the ORSA
(supporting info only – choices Swiss Re has taken)

- Four Main sections to the Swiss Re ORSA report
  - Business Plan
  - Investment Plan
  - Risk Assessment and own solvency need (including scenario analysis and stress testing)
  - Capital plan and solvency assessment
## ORSA – components of the document
(supporting info only – choices Swiss Re has taken)

<table>
<thead>
<tr>
<th>Business Plan</th>
<th>Investment Plan</th>
<th>Risk Assessment and Own Solvency Need</th>
<th>Capital Plan and Solvency Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Financial overview – 3 years</td>
<td>b. Portfolio &amp; strategy overview</td>
<td>b. Risk Profiles – Gross and Net</td>
<td>b. 3 year Capital plan</td>
</tr>
<tr>
<td>c. Initiatives, large transactions</td>
<td>c. Change since last ORSA</td>
<td>c. Risk tolerance &amp; limits</td>
<td>c. Solvency P&amp;L and Balance Sheet</td>
</tr>
<tr>
<td>e. Change since last ORSA</td>
<td>e. Risk mitigation including hedges</td>
<td>e. Emerging risks &amp; change drivers</td>
<td>e. Available capital over the planning time horizon</td>
</tr>
<tr>
<td>f. Risk impact</td>
<td>f. Key risks to investment plan</td>
<td>f. Volatility buffer and details to local add-on</td>
<td>f. Liquidity and funding impact</td>
</tr>
<tr>
<td>g. Key risks to bus plan</td>
<td>g. Limits</td>
<td>g. Material change to risk profile since last ORSA</td>
<td>g. Solvency Assessment</td>
</tr>
<tr>
<td>h. Adequacy of TP</td>
<td></td>
<td>h. Internal reqd capital and reconciliation with reg cap reqmt</td>
<td>h. Recommendations</td>
</tr>
</tbody>
</table>
Readiness
Solvency II reporting deliverable timelines

- **ORSA**
- **Quarterly QRT**
- **Opening balance sheet & SCR**
- **SFCR (Solvency & Financial Condition Report)**
- **RSR (Regular Supervisory Report)**

*Based on Draft L2 Implementing Measures October 2011 from European Commission.*
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