Solvency II
Actuarial Sign-Off on Underwriting and Reinsurance Policy Working Party
GIRO Edinburgh
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Agenda

- Solvency II re-cap and the actuarial function (Graham)
- Regulation of the actuarial function (Graham)
- Underwriting Policy (Ajay)
- Reinsurance Adequacy (Ian)
- Q&A
The Three Pillars of Solvency II

**PILLAR 1**
Measurement of Assets, Liabilities and Capital
Harmonised standards for the valuation of assets and liabilities, and the calculation of capital requirements
Asset and Liability calculations
Solvency Capital Requirement

**PILLAR 2**
Supervisory Review Process
To help ensure insurers have good monitoring and management of risks, and adequate capital.
Own Risk and Solvency Assessment

**PILLAR 3**
Disclosure Requirements
Requirements that allow capital adequacy to be compared across institutions.
Solvency and Financial Condition Report

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**Lamfallusy Process**

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<td>The Directive</td>
<td>Implementing Measures</td>
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<td>Who advises</td>
<td>European Commission</td>
<td>CEIOPS</td>
<td>Industry (e.g. CEA) Expert bodies (e.g. Group Conseil)</td>
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<td>Who decides</td>
<td>European Parliament Council of Ministers</td>
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**Frequency of review**

**Level of detail**
### Level 1 requirements

- An adequate and transparent organisational structure with clear allocation and appropriate segmentation of responsibilities
- Mandatory functions:
  - Internal control system (including compliance function)
  - Internal Audit
  - Risk Management system (including Risk Management function)
  - Actuarial function
- Written policies required on internal control, internal audit, risk management (and outsourcing) but not on actuarial work
- Organisations must provide an effective actuarial function
- Carried out by:
  - Persons with sufficient knowledge of actuarial and financial mathematics
  - Able to demonstrate applicable experience and expertise with applicable professional and other standards
Level 1 - Actuarial responsibilities

a) Co-ordinate calculation of technical provisions
b) Ensure appropriateness of methodologies, models and assumptions used
c) Assess sufficiency and quality of data used
d) Compare best estimates against experience
e) To inform management of reliability and accuracy of calculations of technical provisions
f) Oversee calculation of technical provisions for areas not susceptible to actuarial analysis
g) Express an opinion on overall underwriting policy
h) Express an opinion on adequacy of reinsurance arrangements
i) Contribute to effective implementation of a risk management system in particular with respect to risk modelling for:
   Standard Capital Requirement (SCR)
   Own Risk and Solvency Assessment (ORSA)
Level 2 - Impact Assessment

- Standards
  - CEIOPS Level 3 guidance
  - Widely accepted standards
  - European technical standards to be developed by body of stakeholder representatives

- Interpretation of the mandatory tasks
  - Up to undertakings
  - Prescribed in Level 2

- Reporting of the function
  - Annual reporting, with Level 2 guidance on structure and content
  - Annual reporting with decision on details up to each undertaking
Agenda

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- **Regulation of the actuarial function (Graham)**
- Underwriting Policy (Ajay)
- Reinsurance Adequacy (Ian)
- Q&A

Actuarial Guidance 2009

**GN12: General Insurance Business: Actuarial Reports**

*Classification*
Practice Standard

MEMBERS ARE REMINDED THAT THEY MUST ALWAYS COMPLY WITH THE PROFESSIONAL CONDUCT STANDARDS (PCS) AND THAT GUIDANCE NOTES IMPOSE ADDITIONAL REQUIREMENTS UNDER SPECIFIC CIRCUMSTANCES

*Purpose*
The purpose of GN12 is to give guidance on the circumstances in which a member should normally prepare a formal report in the field of general insurance, and to describe the basic elements that should normally be included in such a report.
Actuarial Guidance 2009-2010

Annex 2
Draft of a communication standard

A. Areas of application

This standard applies to communication by parties carrying out the actuarial function in regard to:

- reports on the calculation of technical provisions and their reliability and adequacy;
- reports on comparison of best estimates with experience and recommendations for improving the quality of the best estimate;
- reports on solvency management issues as they affect the evaluation of the technical provisions;
- statements of opinion on the adequacy of the reinsurer’s arrangements;
- statements of opinion on the overall underwriting policy;
- reports on risk modeling underlying calculation of the capital requirements;
- annual reports to the administrative or management body documenting the tasks that have been undertaken, any shortcomings identified and giving recommendations as to how any shortcomings could be remedied.
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Underwriting Policy
CEIOPS Guidance (1)

- CP33 expands on the Directive as follows:
  - Requirement to provide opinion on underwriting policy does not imply independence of actuarial and underwriting functions
  - Actuarial involvement in underwriting decisions should provide
    - Detailed explanations for decisions made
    - Examination of other possible decision options
  - No requirement to express view on each and every policy
    - Opinion on “general” underwriting policy
    - Scope of opinion:
      - “that required to provide administrative / management body with sufficient relevant information to review underwriting policy”
Underwriting Policy
CEIOPS Guidance (2)

- CP33 also states that an opinion should consider:
  - Sufficiency of premiums
    - Future losses
    - ALAE / ULAE
    - Embedded options and guarantees
  - Risks
    - Inflation
    - Legal
    - Change of mix
    - Anti-selection
    - Adequacy of bonus / malus systems

Underwriting Policy
Our Initial Feedback to CEIOPS

- Premium sufficiency
  - Actuarial opinion on premium sufficiency should be mandatory under Level 2
  - Require clarification in Level 3 as to whether assessment is:
    - retrospective (i.e. after business has been written)
    - prospective (based on proposed rates, but before business is written)
  - Suggest that premium sufficiency should be determined in relation to claims arising from 1 year’s future new business

- Risk assessment
  - List of risks too specific for Level 2, and not appropriate for all classes (e.g. bonus / malus)
Underwriting Policy
Groupe Consultatif Feedback

- Specific GC suggestions, in addition to our own feedback:

- Risk Assessment
  - Opinion should include consideration of:
    - underwriting risk management policies
    - consistency of underwriting policy with firm’s risk appetite

- Governance
  - Actuarial function should be independent of operational functions
  - Appointed actuary as the actuarial function holder reporting to, and hired by, the Board

Underwriting Policy
Other Feedback

- Lloyd’s
  - Generally supports existing wording
  - Premium inadequacy
    - Underwriters may knowingly write short-term loss-making business
    - Actuarial opinion of premium inadequacy need not be a ‘red flag’

- BAS
  - Clarification on premium sufficiency
    - By policy? By class? In aggregate?

- Various sources
  - Clarification required on the scope of premium adequacy
  - CEIOPS' list of risks considered is impractical and non-exhaustive
Underwriting Policy
Minimum Standards

- Some participants (e.g. CRO Forum, ABI, Aviva) feel the suggested scope of actuarial opinion is too broad
- Opining on premium adequacy is unreasonable
- Reduced scope could just require sign-off on overall underwriting policy as defined by CEIOPS

Underwriting Policy
“Rolls Royce” opinion (1)

- What might constitute excellence in an actuarial opinion?

  Underwriting Strategy

  - Clearly defined statements of risk appetite
    - Type of risks
    - Classes of business
    - Underwriting guidelines
    - Size of risks
    - Accumulation limits

  - Use of technical pricing in underwriting decisions
    - Requirements to produce a technical price
    - Appetite to accept risks that fall below technical price
    - Willingness to lose market share in soft cycle
Underwriting Policy
“Rolls Royce” opinion (2)

- Underwriting Risk Management
  - Clearly defined processes
    - Process diagram from risk submission to underwriting
    - Documentation of basis of underwriting decisions
    - Peer review / audit requirements
  - Governance
    - Compliance with underwriting strategy and risk management policies
    - Responsibilities of key individuals / parties
    - Compliance with local regulations
    - Formal sign-off and review of policy wordings
    - Identification and controls for major operational risks, e.g.:
      - Key person risks
      - Delegated underwriting arrangements
      - Multi-year policies

Underwriting Policy
“Rolls Royce” opinion (3)

- Monitoring
  - Premium rates
  - Business mix and risk profile
    - e.g. new vs. renewal business
    - e.g. by rating groups
  - Concentrations
    - e.g. by peril, sector etc.
  - Performance
    - Ongoing profit analysis of business written
    - Target vs. actual performance achieved
Underwriting Policy
Challenges Faced (1)

- Feasibility
  - “Rolls Royce” suggestions may be unfeasible
  - …and proportionality should be applied as an overriding principle

- Actuarial involvement in underwriting process
  - Lloyd’s business historically underwriter-led with little actuarial involvement
  - Particularly where data are sparse

- “Turf wars”
  - Whose judgement wins?

Underwriting Policy
Challenges Faced (2)

- Independence
  - CEIOPS states that actuarial and underwriting function need not be independent
  - Can actuaries provide a suitable challenge, if not independent?

- Conflicts
  - Potential for conflicts between commercial pressures and professional duty
  - Will actuaries receive support from the business?

- Compliance
  - An opinion on underwriting policy is no guarantee that the policy is followed!
Underwriting Policy
Groupe Consultatif Proposals (1)


- Effectiveness
  - Principles, procedures and practice for material classes of business
  - Writing risks in line with underwriting criteria and avoidance of anti-selection
  - Documentation and approval of policy
  - Highlight where policy is weak, or has not been followed, and consequent risks

- Risk Classification
  - Assessment of effectiveness of classification of risks
  - Can premiums differentials be justified?

Underwriting Policy
Groupe Consultatif Proposals (2)

- Compliance
  - Sampling to be used to test compliance of underwriting by company and 3rd party agents with binding authority

- Consistency
  - Between underwriting policy and pricing of product

- Good Underwriting Practice
  - TCF
  - Not contrary to the general good
  - In line with good market practice
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Reinsurance Adequacy
SII Directive (Level 1)

- Article 47 – Actuarial Function

“1. Insurance and reinsurance undertakings shall provide for an effective actuarial function to undertake the following:

…

(h) To express an opinion on the adequacy of reinsurance arrangements.

…”
Reinsurance Adequacy
Example Opinion ?!

- “We’ve included our reinsurance arrangements in our (approved) internal model/standard formula calculation and we have more than enough capital to cover the resulting SCR. Therefore our reinsurance arrangements are adequate.”

Reinsurance Adequacy
CEIOPS Level 2 Draft Advice

CP33 Draft Advice (3.305)

“Regarding the overall reinsurance arrangements, the opinion to be expressed by the actuarial function should include an opinion on the adequacy of the reinsurance and other mitigation techniques strategy in relation to the underwriting policy and the adequacy of the calculation of the technical provisions arising from reinsurance.”
Reinsurance Adequacy
CEIOPS Level 2 Draft Advice

Explanatory Text has more (3.277)

- “… adequacy of **significant** reinsurance arrangements as well as expected cover **under stress scenarios** …”
- “… address possible **deficiencies** and the possible **consequences** … make constructive **suggestions** for improvements”

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Reinsurance Adequacy
Level 2 Advice Responses

30 responses to CP33
9 mentioned opinion on reinsurance adequacy
- inconsistencies pointed out
- technical provisions - supported
- adequacy – “potentially out of place in solvency standard”
- link to risk appetite
- more details needed on “stress scenarios”
Reinsurance Adequacy
Scope Of Opinion – Clues from CP52?

Allowance of Reinsurance Mitigation Techniques in SCR

1. Effective Risk Transfer
   ▪ documentation reflects economic substance
   ▪ extent of risk transfer clearly defined and beyond dispute
   ▪ basis risk

2. Economic Effect over Legal Form
   ▪ reduction in risk to reflect economic risk transfer
   ▪ allow for new/increases in other risks as a result

3. Legal Certainty, Effectiveness & Enforceability
   ▪ in all relevant jurisdictions
   ▪ allow for possibility that reinsurance protection might not be renewed on expiry.

4. Liquidity & Valuation

5. Credit Quality of the Provider
   ▪ subject to level 1 text or at least of BBB rating or standard
   ▪ assessed using objective techniques and generally accepted practices
Reinsurance Adequacy
Scope of Opinion – 29/9/09 GC Standards Paper

1. Coverage and Scope
   - response to stress scenarios
   - exhaustion
   - gaps in coverage

2. Security of Reinsurers
   - diversification of cover
   - undue concentrations
   - review of security of reinsurers
   - risk of being unable or unwilling to pay claims in full & timely manner

3. Appropriate level of Reinsurance
   - consider whether company holds sufficient reinsurance with right risk protection characteristics

4. Financial Reinsurance
   - particular attention needed
   - effective & transparent
Reinsurance Adequacy
UK Company “Survey”

- What is the current extent of actuarial input into reinsurance decision making in UK Insurance Companies?

  41% none
  23% passive
  23% active / some aspects
  13% active / all aspects

(unscientific “survey” based on our existing knowledge of UK co’s reinsurance buying people and processes)

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Reinsurance Adequacy
More Straightforward Areas for Actuaries?

- Stress Scenarios
- Vertical (fgu) Coverage
- Retention
  - link to Risk Appetite
  (though RA often expressed through Reinsurance)
Reinsurance Adequacy
More Challenging Areas for Actuaries?

- Wording / Coverage / Legal Issues
  - reinsurance wordings not simple
- Credit Quality
  - won’t as well as can’t pay?
  - allowed to rely on Credit Rating Agencies?
- Suggesting Improvements
  - r/i purchase is restricted to what is available in the market

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