

**Minutes of the Solvency Subcommittee Meeting
Dublin, Ireland
Thursday, October 25, 2007 – 9:00 to 17:00**

Members Present:

Stuart Wason, Chairperson
Henk van Broekhoven, Vice-Chairperson
Allan Brender
John Darvell
Marius Du Toit
Felipe Gomez Rojas
R. Kannan
Toshihiro Kawano
Dieter Köhnlein
Christoph Krischanitz
Glenn Meyers
Harry Panjer
Frank Rasmussen
James Rech
Richard Roth
Arne Sandström
Rolf Stölting
Igor Zoric

Observers Present:

| | |
|-------------------------|-------------------|
| Félix Arias Bergadà | Katsumi Hikasa |
| Réjean Besner | Luc Kaiser |
| Tim Buckner | Tom Karp |
| Malcolm Campbell | John Kollar |
| Seamus Creedon | Bev Margolian |
| Rob Curtis (IAIS) | Tomio Murata |
| Maria De Nazaré Barroso | Thierry Poincelin |
| Karen Doran (IAIS) | Helen Rowell |
| Rob Esson (NAIC) | Paul Seymour |
| Michael Eves | Pentti Soininen |
| Jeremy Goford | Brian Valentine |
| Agarwal Gorakh Nath | Doug Van Dam |

1. Opening and minutes from Mexico City

Stuart Wason welcomed the participants. He also welcomed Rob Curtis, Chair of the IAIS Solvency and Actuarial Issues Subcommittee, Rob Esson from the NAIC and Karen Doran from the IAIS Secretariat.

The [minutes of the Mexico City meeting](#) were adopted without change.

2a. Internal Models – IAIS update

Rob Curtis provided an update on the activities of the IAIS Solvency and Actuarial Issues Sub-Committee (see attached IAIS annual meeting [presentation](#) for additional information). The IAIS recently approved as guidance papers the following at its annual meeting:

- [“The structure of regulatory capital requirements”](#)
- [“Enterprise risk management for capital adequacy and solvency purposes”](#)
- [“The use of internal models for risk and capital management by insurers”](#)

Rob reported that his committee expects to meet 4 times between the IAA Dublin meeting and its next June 2008 meeting. It will be focusing on standards for the above guidance papers as well as advancing further work, during 2008 and 2009 on the issues of:

- group issues
- valuation of assets and liabilities, including technical provisions for solvency purposes
- capital resources, the forms of capital

He indicated that the IAIS will also be looking at ERM as it relates to the “use” test for internal models.

Rob reported that the IAIS internal model paper identifies 10 key features of internal models for regulators. Some significant aspects of the paper include,

1. bringing internal models together with economic capital needs as a starting point, then setting regulatory minimum capital requirements (99.5% confidence level)
2. introducing “statistical quality”, “calibration” and “use” tests
3. providing a broad definition of internal model (chapter 4).

Rob indicated that a challenge for the IAA will be to be to provide guidance in the area of methodologies and recommended practices for solvency assessment that span small and very large firms.

2b. Internal Models – Updates on other internal model papers

Discussion ensued regarding available internal model guidance for insurers. Only the work of the IAIS, IAA, Canadian Institute of Actuaries and Australian actuarial standards board were noted during the meeting. The Chair invited committee members to suggest the links to other useful internal model papers. It was noted that through Solvency II in Europe, guidance on internal models will be developed and the Groupe Consultatif has formed a working group in this regard in support of Solvency II. The chair invites other work in the area of insurance internal models to be brought forward and recognized. Further discussion focussed on (without conclusions) appropriate approximations for internal models and approval processes.

2c. Internal Models – IAA guidance paper

Discussion points of [October 22, 2007 draft](#):

- Stuart Wason summarized the progress in developing the paper since Mexico City. Notably there was a drafting session in late May at the UK FSA offices at which time the contents of the paper were re-ordered to better align with the IAIS internal model

paper and address the IAIS need for additional application guidance. Consequently the IAA paper now makes direct reference to the concepts of a “soundness” (a.k.a. IAIS “statistical quality”), “calibration” and “use” tests.

- Allan Brender discussed the need for insurers to ensure that their operations are truly represented by their internal model.
- Rob Curtis suggested that the main target for the paper and the IAIS should be smaller companies since the largest companies are already active in economic capital modelling.
- Tom Karp suggested that we should not be trying to do “all things for all people”. The paper could be targeted to actuaries or to senior directors or other groups for companies for all sizes. The paper should be focused on the outcomes that are most relevant to the various types of insurers.
- Rolf suggested providing guidance in the appendices on better methods of modelling risk.
- There was discussion on the use of “partial” internal models focused on the key risks of the organizations for the purpose of Pillar II.
- General comments on paper
 - Need for an executive summary for senior management or the board of directors
 - Need for greater description of a model’s purpose, framework, structure, output, etc.
 - Need for description of limitations, tracking error etc.
 - Concern about “minimum requirements” for internal models.
 - Models for capital requirements are the primary focus of the paper
- Section 1
 - Rewrite third paragraph pursuant to the discussion about large and small size insurers
 - Reference should be made to the CEA’s glossary of insurance terms
- Section 2
 - Adjust time horizon material to reflect more general discussion around the various uses of different time horizons
 - Section 2.4. The 99.5% value and 99% CTE should be shown as illustrative only
 - Need for clarity that terminal provision captures post-stress risk properly needs to be emphasized
 - Section 2.2 - Independence discussion needs rewriting.
- Section 3
 - No comments
- Section 4
 - Reliability of data
 - i. For smaller insurers the best estimate is industry data plus uncertainty measure
 - ii. Management actions in shock scenario need clarification (i.e. different from “business as usual” actions)
 - Needs adjustment between 4.12 and 6.4 on Documentation

- Section 5
 - The IAA believes a more appropriate term for the IAIS “Statistical quality” test might be a “soundness” test.
- Section 6
 - No comments
- Section 7
 - It is just as important for management to know what the internal model can and cannot do.

Stuart Wason asked committee members to submit via email their wording changes to the October 22nd draft. Volunteers for drafting portions of the draft were invited to contact the chair or vice-chair before the end of the meetings in Dublin. A full draft must be complete by December in order to meet Solvency II needs. The support of the Groupe Consultatif internal model team will be sought in order to incorporate the differing needs of large versus small insurers. Rolf Stölting indicated that he would help to arrange this support.

3a. Emerging Capital Frameworks – Solvency II

Rolf Stölting provided an [update on Solvency II](#) and reported that QIS 3 results were reported to key stakeholders on October 12. The results are expected to be published in November 2007. QIS 4 is scheduled to be prepared by CEIOPS for the European Commission by December with consultation expected in early 2008 and reporting of results by June 2008.

3b. Emerging Capital Frameworks – Canada

Bev Margolian provided an [update on Canadian progress](#) towards its new solvency assessment framework as well as a discussion of apparent differences in approach with that being used in Solvency II. The ensuing discussion was helpful in better defining the IAA views on key principles.

Specifically, the risk horizon discussion confirmed that shorter than lifetime risk horizons must also include appropriate terminal provisions at the end of the risk horizon using stressed scenario assumptions. The committee also discussed the usefulness of viewing an insurer using a variety of risk horizons (i.e. one year for capital requirement and several years for a future financial condition analysis).

3c. Emerging Capital Frameworks – US

Dave Sandberg provided an [update on US initiatives](#) to move to principle based reserving.

3d. Emerging Capital Frameworks – Denmark

Frank Rasmussen provided a brief update on Denmark’s solvency framework initiatives.

4. Risk Margin Working Group

Henk van Broekhoven [summarized](#) the recently released draft report of the ad hoc Risk Margin Working Group.

5. Solvency issues requiring further debate

The possible discussion points for this agenda item were adequately discussed during the previous agenda items and there was no further discussion on them.

6. Key issues

Stuart Wason reviewed the existing Terms of Reference for the committee which were established in 2003. They are (in summary) to,

1. To continue the work of the IAA in solvency and risk assessment of insurers
2. To be a point of contact with the IAIS
3. To coordinate related projects with various actuarial associations

The committee re-affirmed these ToR but suggested they might be expanded to more explicitly refer to the need for education (needs further definition) on solvency topics and the need for the committee to continue to focus on the range of risks to which insurers are subject (i.e. a link to ERM).

Finally the committee reviewed the key issues it had identified during the Mexico City committee meeting. These were as follows (including committee commentary from this meeting):

- Internal model paper (still priority #1)
- Response to Risk Margin Paper (work is nearing completion but the committee stands ready to provide assistance and review as needed)
- Responses to IAIS Solvency Sub-Committee draft papers (a priority item as these papers develop such as the expected papers on liabilities, group issues and capital resources)
- Aggregation/correlation (low priority expressed)
- Editing of Blue Book (felt to be important due to need for education and would in fact bring in some of the other items in this list)
- Risk mitigation (felt to be somewhat important for the committee to prepare a paper on this topic)
- Parameterization of ESG's and real world models (a useful extension of the internal model paper)
- Insurance risk (a useful extension of the internal model paper)
- Group risk (paper needed to respond to IAIS paper on this topic)
- Market consistent framework (NEW – suggested that this topic will be needed as Solvency II and IASB Phase II develop)
- Quantifiable or not? (NEW – paper to flesh out the very real risks which may not be quantifiable and the issues they pose for internal models and solvency assessment more generally)

The chair suggested that the committee review these key issues and an electronic poll of the committee will be sought in November in order to establish the committee work plan for 2008.

7. Review of relevant IAIS initiatives

The possible discussion points for this agenda item were adequately discussed during the previous agenda items and there was no further discussion on them.

The meeting adjourned at 5pm.