

# SOLVENCY II QIS5 WORKSHOPS

7 / 8 September 2010

# Agenda

- **General**
- **Technical Aspects**
  - **TPs**
  - **Balance Sheet**
  - **Non-Life Cat Risk**
  - **USPs**
  - **Market Risk**
- **Life and Health Business**
- **Internal Model / Qualitative Questions**
  
- **Discussion then wrap up**



# General:

## Spreadsheets, References & Errata

- QIS5 materials available:
  - CEIOPS website
    - QIS5 spreadsheet
    - Helper sheets
    - Spreadsheet instruction manual
    - Q&A
  - Lloyd's QIS5 guidance
  - FSA QIS5 web page
- Errors in some sheets and technical specifications

# General: Current timeline

<b>6 July</b>	Final QIS5 specification released
<b>Mid July</b>	Lloyd's issues high level guidance
<b>End August</b>	QIS5 spreadsheet available
<b>Early September</b>	Lloyd's issues detailed guidance
<b>7 / 8 September</b>	Lloyd's holds QIS5 workshops
<b>29 October</b>	Lloyd's submits aggregate results to FSA
<b>29 October</b>	Syndicates submit results to Lloyd's
<b>November</b>	Lloyd's analyses syndicate returns
<b>December</b>	Results / analysis fed back to syndicates

# General: Submission requirements

- QIS5 completion is mandatory for all in Lloyd's dry run process
- Better than best efforts
  - Test all aspects of standard formula as accurately as possible
  - Tech. Prov. methodology tested/used many times over next 2 years
- 3 sheets for submission with naming convention:
  - No Geographic Diversification and no USPs ("SYND\_nogd\_nousp")
  - Geographic Diversification ("SYND\_gd\_nousp")
  - USPs ("SYND\_nogd\_usp")
- We will treat "not good enough" as failing part of dry run process

# General:

- QIS5 – many changes from QIS4
  - Changes in non-life premium and reserve risk factors
  - Changes in non-life catastrophe risk methodology and factors
  - Increase in correlation between UW and cat risk elements
  - Different methodologies for calculation of USPs
  - Changes to technical provision risk margin calculation
  - Illiquidity premium

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# Technical Provisions: key test for QIS5

*CEIOPS: “Probably the fundamental part of the Solvency II calculation”*

- Would expect majority of aspects of QIS5 specification for TPs to remain under final Solvency II requirements
  - QIS5 is a good test
  - Use QIS5 for setting up systems and processes
- Dry run review of technical provisions will look into the approaches used for Solvency II (QIS5) technical provision valuation



# Technical Provisions: segmentation (i)

- Currency is important:
  - Discounting
  - Proposed reporting to Lloyd's
- Homogeneous risk group is key
  - Allocation to SII line of business
  - Validation
- Substance over form
- Unbundling of contracts

# Technical Provisions: segmentation (ii)

- Lines of business set out in QIS5 technical specification / spreadsheet:
  - 12 non-life / non-SLT health insurance
  - 12 non-life / non-SLT health proportional reinsurance
  - 4 non-life / health non-proportional reinsurance
  - Annuities from non-life / SLT health contracts
  - Life business
- Under SCR calculation sheets:
  - All health separate
  - Direct and proportional reinsurance combined

# Technical Provisions: binary events

- Our methods and suggestions not compulsory – just to give ideas
- Must try something:

FSA QIS5 FAQ:

*Q: “Do I need to include extreme events/binary events in the best estimate of technical provisions?”*

*A: “Yes. The best estimate is the probability-weighted average of future cash flows. This means extreme/binary events should be included based on the cash flows that would take place and the probability of these cash flows occurring.”*

- Want to try to quantify explicit allowance for them
- Will need documentation and rationale
- More methods the better at this stage
  - All ideas welcome

# Technical Provisions: unincepted business

- Should attempt to allow for “existing” business not yet incepted
- Will generally reduce technical provisions
- Consider data available and methods for estimating
  - Information from underwriting systems
  - Historic patterns plus expert judgement
  - Links to business planning
  - Links to pricing
- For 31<sup>st</sup> December 2009 valuation, actual “unincepted” now known
  - How would this be estimated for future exercises?

# Technical Provisions: EPIFP

- “Expected profits included in future premiums” is a required QIS5 input, by SII line of business:
  - TPs include premiums to be received in future in respect of “existing” policies
  - Best estimate of future premiums less associated expected claims generally reduce TPs
- What is value of TPs if contracts with these premiums lapse?
- Important as could have large impact on Lloyd’s capital tiering

# Balance Sheet: general comments

- Mapping in guidance from AR may need further splitting to fit into QIS5 balance sheets
- Take care in allowing for items such as:
  - Premiums due in future from “existing” contracts (now in Premium Provisions)
  - DAC (not part of a SII valuation)
  - Make sure not double or zero counting them
- Lloyd’s guidance states AR2 column A for assets: should be column C. If the ‘reanalysis’ column has been used this will be different from column A.

# Non-Life Cat Risk: new approach

- QIS5 sets out where method 1 is inadequate:
  - Where non-life exposures outside EEA are significant (scenarios given)
  - Where non-proportional reinsurance is written
  - Where business is written in “Miscellaneous” line of business
- Expect majority to require use of method 2
- Method 2 has complications:
  - Estimating GWP affected by cat event, by SII line of business
  - Netting down gross capital requirements in line with method 1
- Should be able to complete some analysis to test factors/method

# Undertaking Specific Parameters: important to try

- USPs have not been extensively tested to date
- Is important to test these
  - may bring standard formula factors to more reasonable level
- However, data and methodology likely to be key issues
  - Data requirements for USPs set out in QIS5 Annex O
- More ammunition we have the better
  - Want all to try and follow methodologies as set out in QIS5
  - Helper spreadsheets available



# Non-life premium factors: adjustment for Non-Prop RI

- Premium standard deviation factors can be adjusted for effect of non-proportional reinsurance
- Set methodology for doing this
- Need agents to derive these factors
  - Must understand their impact
  - Must understand feasibility of calculation methodology
  - Helper spreadsheet is available

# Market Risk: many changes from QIS4

- Many changes:
  - Look-through basis required (alternative approaches may penalise)
  - Factors applied have increased
  - Correlations between modules increased
- New module for effect of illiquidity premium
- Important to test the impact of the changes
  - Helper sheets are available for many risks
- Currency risk impact on assets and liabilities was a problem for QIS4
  - Link QIS5 market risk calculation to granularity within TP calculation

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# Health Business: general comments

- SLT Health (treated with life for TPs, separately for SCR)
  - expect majority at Lloyd's to be disability/morbidity; annuities
- Non-SLT Health (treated with non-life for TPs, separately for SCR)
  - Worker's compensation (direct / proportional RI)
  - Income protection (direct / proportional RI)
  - Medical expenses (direct / proportional RI)
  - Non-proportional RI
- Health cat risk in SCR - No factor method, will have to test scenario approach
  - Arena disaster; concentration scenario; pandemic scenario
  - All health (SLT/Non-SLT) treated together

# Life Business: general comments

- All syndicates part of dry run must do QIS5, including life syndicates
- Needs testing
- Life business is split into the 17 classes as per the technical specifications.
  - Expect that almost all life business will fall into the “Other life insurance (death)”, and “accepted reinsurance (death)” classes, with potentially some from SLT Health mapping to the “(Disability/Morbidity)” classes.
- Annuities – none expected in life
- Catastrophe risk simplification available.

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# Internal Model/Qualitative Questionnaire

- Use draft SII model if possible
  - Can use ICA
  - Will be best efforts here (no results at all are NOT best “efforts”)
- This can be tough but data implications are useful to feedback
- Refer to CEIOPS Manual for the completion of the QIS5 internal model sheets
- Qualitative Questionnaire
  - Try to fill out as much as possible
  - Where duplication with dry run then can reference in submission. Data needs to be available for that very issue

**DISCUSSION TIME**



# **ROUND UP AND QUESTIONS**

# Summary

- Slides will be made available on lloyds.com shortly
- Look out for updates to the guidance & QIS5 final specification
- Lloyd's will maintain a FAQ document on the QIS5 web page
- Keep up to date on CEIOPS Q&A and Errata
- As before any comments/feedback on format and content welcome

