LLOYD'S

SOLVENCY II

2012 STANDARD FORMULA DATA SUBMISSION INSTRUCTIONS

MAY 2012 - UPDATED FOR TEMPLATE VERSION 4

INTRODUCTION

The Solvency II standard formula has been assessed within the Lloyd's market over recent years at various time points and on different calibration bases as part of the Lloyd's market Solvency II preparations. These exercises have been a useful tool for Lloyd's both in terms of internal testing of the impact of the standard formula on individual syndicates and the market and for lobbying on changes to the calibration. These exercises have also allowed agents to demonstrate the ability to calculate a standard formula SCR (a key Solvency II requirement) and to assess the impact of the standard formula on each syndicate they manage in comparison to results from internal models. For more recent standard formula exercises Lloyd's has also provided detailed feedback to each contributor along with comparisons of their results to peers and the market.

The most recent standard formula exercise conducted within the Lloyd's market was as at 2010 year-end on a QIS5 basis. As a result of changes to the standard formula calibration (from QIS5) within the latest level 2 text, produced by the European Commission, Lloyd's now considers the specifications and templates provided by CEIOPS to be out of date and no longer representative of the standard formula in its current form. As a result **Lloyd's will not be collecting syndicate results of the standard formula under the QIS5 specifications in 2012**. The standard formula calibration as detailed in the European Commission's latest draft of the level 2 text is however currently at pre-consultation stage and therefore not public. As a result there are no calculation templates available in line with this new calibration.

As part of the Internal Model Application process it is, however, necessary to supply standard formula results alongside those of the internal model. This comparison is needed at a syndicate level and at the same time point as the latest submitted internal model results. Lloyd's will therefore structure the standard formula assessment on this new basis slightly differently from previous QIS based exercises. The following approach will be adopted:

- Along with this guidance Lloyd's has produced and published a 'data collection template' for managing agents. This **data collection template should be completed and returned to Lloyd's by 31 July 2012** in line with the guidance below and within the template.
- Upon receipt of these templates Lloyd's will conduct high level validation tests and (where appropriate) challenge agents on their submissions with the possibility of resubmissions required.
- Lloyd's will then derive each syndicate's standard formula SCR and MCR from the data provided using an internally produced calculation template.
- Lloyd's will calculate an estimated syndicate and Lloyd's level standard formula SCR on a consistent basis by the end of September 2012. These will be shared with the FSA.
- Detailed results will then be fed back to managing agents in October 2012 on a confidential basis. If requested, meetings may then be held with managing agents to discuss these results towards the end of 2012. Lloyd's will flag any results that appear to be exceptional with syndicate earlier.

This guidance aims to give more details on the above steps, specifically around the requirements of the data collection template and sources of additional guidance. Changes are expected to be made to the level 2 text but details of these are not publically available. Therefore, this guidance or the template does not disclose any "level 2 Standard Formula" calibrations. The Lloyd's approach is on a best efforts basis in view of the potential impact of the changes to level 2; this approach will be applied consistently across the market. It is anticipated there may (and will) be further changes before the level 2 text is finalised.

Participation in the 2012 Standard Formula Exercise

All syndicates participating in the Solvency II dry run at 2011 year-end will be required to complete this exercise. This includes life, non-life and RITC syndicates. Submissions are required at syndicate level and so special purpose syndicates must also complete a separate return. As part of the dry-run process these syndicates should have completed an LCR return for the 2012 underwriting year, these internal model SCR results will be compared to the results from this exercise.

Submission of Results

Completed data collection templates should be submitted electronically by 31 July 2012 to solvency2@lloyds.com. One submission template (or two in the case of fully aligned syndicates with Funds In Syndicate – FIS) excel file should be submitted for each syndicate using the standard naming convention "**2012SF_Data_SYND_PTF_v#.xlsx" or** "**2012SF_Data_SYND_FIS_v#.xlsx"**, where "SYND" represents an individual syndicate number (4 digits) and "v#" represents the version number of the spreadsheet downloaded from lloyds.com. The distinction between the PTF/FIS submissions refers to the assets on which the calculation is based (see 'Capital Supporting Syndicates' section below). Agents should ensure they are using the most up to date version of the template to avoid any errors in their submissions, please check lloyds.com regularly for any updates. Lloyd's will attempt to notify agents where updates are made, this is likely to be via email or relevant FAQs published on the TP&SF section of the Solvency II website on lloyds.com.

Contact for queries and support

Lloyd's will set up FAQs for this exercise which will be updated with answers of use to other agents; managing agents are encouraged to check these regularly for updates. Any questions not answered by the FAQs should be raised via solvency2@lloyds.com or through account managers.

In terms of the data collected to perform the standard formula calculation, many of the QIS5 specifications are still relevant for this exercise, Lloyd's has attempted to identify where these still apply. Agents can refer to these specifications where relevant. Links to relevant sources of information can be found at the end of this guidance.

REQUIREMENTS FOR THE DATA COLLECTION TEMPLATE

General Requirements

The excel template provided on Lloyds.com should be **completed as at 31st December 2011**. This is to be taken as year-end 2011 where a syndicate may have earlier cut off dates.

The template is intentionally set out in a standard format to enable all data to be exported for the analysis performed by Lloyd's. **Please do not change the structure or the formula of the template; this will result in Lloyd's asking for a resubmission on the original unmodified template.** Throughout the template the following colour convention has been used:

- yellow cells relate to input values;
- green cells are calculated amounts including results; and
- grey cells are parameters or blank cells.

Agents are requested that technical provision amounts submitted for the standard formula reconcile to those provided on both the Technical Provisions Data (TPD) return and the Solvency II balance sheet at 31 December 2011.

Note that as per previous standard formula exercises much of the premium risk calibration is based on premium amounts. These premiums should be gross of acquisition costs.

Basis of Submission and Lloyd's Expectations

For consistency, agents are required to **report all figures in thousands and converted to Sterling**. Where conversion from underlying currencies is required, the Lloyd's 31st December 2011 period end spot rates as set out in market bulletin Y4551 should be used. All monetary amounts which feature in the calibration of the calculation have been converted by Lloyd's at these year-end rates.

This return will not necessarily require formal managing agent sign-off and is not audited but does form part of the Solvency II dry run process. Lloyd's would however encourage managing agents to check the returns for reasonableness prior to submission to ensure accuracy of the information provided. Lloyd's will also be conducting a number of validation tests on the submissions to ensure credibility of the data provided. This may include reconciliations to other returns provided to Lloyd's such as the Technical Provisions Data (TPD), Syndicate Business Forecasts (SBF) and Lloyd's Asset Data (LAD).

Balance Sheet Submissions

The data collection template will not collect a full balance sheet on either UK GAAP or Solvency II bases. A year-end 2011 Solvency II basis balance sheet is however being collected in a separate exercise as part of the Valuation and Balance Sheet (VBS) workstream at Lloyd's. Managing agents should use the template and guidance as part of the VBS workstream to complete these balance sheets. This is to be submitted to Lloyd's by 29 June.

Details of Overseas Trust Fund Deposits

For the 2010 year-end standard formula exercise managing agents were provided with syndicate security level information for the Overseas Trust Funds as at 31 December 2010 to be included within PTF asset submissions. This has again been provided to agents as at 31 December 2011. If this has not been received it can be requested from the Treasury Analysis team directly via treasuryanalysis@lloyds.com.

Overseas deposits are to be included within the relevant risk sub-modules for premium trust funds. For the purpose of the standard formula return these are not to be considered ring-fenced funds.

Capital Supporting Syndicates

Following market consultation, submissions on the following funds supporting syndicates should be made to Lloyd's:

- Premium trust finds (PTF) – all syndicates participating in the 2012 standard formula exercise (as described on page 1) should provide a submission in respect of their premium trust fund assets and liabilities including overseas trust funds as covered above.
- Surplus assets – These should be excluded from any analysis. To avoid overstating capital requirements, agents should calculate their syndicate standard formula capital requirements based on the best estimate Solvency II liabilities and the assets which support these liabilities.
- Funds at Lloyd's (FAL) – Funds at Lloyd's which are managed by Lloyd's (i.e. not Funds in Syndicate – FIS) should not be included within the submission or modelled by the managing agent, Lloyd's will conduct this modelling centrally. Where Funds at Lloyd's are managed by a managing agent in respect of a fully aligned syndicate, a separate submission in respect of this syndicate's 'FIS' assets should be included – Lloyd's anticipates this including Market Risk and possibly Counterparty Default Risk only. Please see the naming convention for these submissions above.
- Central Fund – Lloyd's will model assets in respect of the central fund to be included in the market level calculations,

Proportionality and Simplifications

Lloyd's understands that certain areas of the standard formula will not be material to all syndicates. The data collection template currently requires inputs in respect of each risk module as fully as possible to allow Lloyd's to model the standard formula SCR accurately. If an agent feels that, for a particular risk (sub-) module, the work required to complete an area of the template is disproportionate to the expected contribution to the overall standard formula SCR (this expectation may be based on the year-end 2010 standard formula on a QIS5 basis), the following approaches could be taken:

- The agent may use the collection template as it stands, but simplify the inputs. This may include (for example) allocating all amounts to one geographical region, duration bucket or making simplifying assumptions around certain inputs. Please note that this is likely to result in a higher standard formula SCR for the syndicate.

  In this instance please provide a comment on the Information tab to explain what has been done and the reasoning for this. Where certain simplifications are used without justification Lloyd's is likely to assume the most punitive method/assumption applies in modelling that syndicate's SCR. If the agent is in doubt as to the appropriateness of a simplification, please contact Lloyd's via solvency2@lloyds.com to discuss the issue.
- Secondly, the agent may wish to simplify the workings by providing alternative data or estimates on which to model the SCR for that (sub-) module for the syndicate. Please contact Lloyd's via solvency2@lloyds.com with justification of how this element is deemed immaterial, why the above approach could not be applied and a proposal for an alternative modelling approach. Lloyd's may then (following discussion) allow certain simplifications and/or alternatives to be applied.

Please note that if certain risk modules of the standard formula SCR are considered by the agent to be zero (e.g. life underwriting risk for non-life syndicates and vice-versa) these should be left blank. Please do not delete tabs. Where a tab has been left blank intentionally, please note this in the Information tab.

Solvency II Classes of Business

Much of the standard formula calculation for underwriting risk is done at a Solvency II class of business level. This requires much of the data for these risk elements to be entered by Solvency II class of business. Descriptions of these classes can be found in the 'Lines of Business' tab towards the back of the data collection template. Lloyd's has also produced a mapping of risk codes, transaction types (as per GQD) and annuity flags (as per TPD) to assist agents with this mapping. This is available on the Technical Provisions and Standard Formula area of the Solvency II section of lloyds.com.

Geographical Region Information

Geographical diversification credit is permissible within much of the underwriting risk module. To estimate this, several premium and claims related measures are required to by split by 18 geographical regions. The allocation of countries to each of the regions is listed in the 'Region Information' tab towards the back of the data collection template. Managing agents may use any reasonable basis to allocate business to geographic area. This may include data on location of risk or claims. For multi-region policies spanning more than one of the geographic segments, agents should consider materiality (or whether there would be a dominant region for the risk) and allocate in a reasonable way.

Look Through Approach

Agents are requested that where possible the valuation of the standard formula SCR in relation to assets (i.e. predominantly market risk and counter-party default risk) invested in collective investment vehicles or other indirect exposures uses a look-through approach to the underlying investments in these funds. Note that investments in related undertakings are excluded from this. Alternative methods to the look-through approach are set out in the QIS5 specifications and may be applied (e.g. assuming the vehicle invests in such a combination of assets (as permissible by its mandate) to maximise the capital requirement or consideration of all these schemes within the Equity risk sub-module). However agents should note that these alternative approaches may result in higher capital charges for the syndicate.

Data Requirement Changes from QIS5

In certain cases the data input requirements are slightly different from QIS5, or Lloyd's has made adjustments to the data requirements (to ease data collection). Where this is the case, Lloyd's has attempted to provide a detailed description within the individual data collection tabs. In other cases however there has been no material change to the data requirements from QIS5.

Agents should not rely on this template as a guide to the changes in the Standard Formula data requirements or calibration. The purpose of this exercise is to collect data for Lloyd's internal model application; the template and this guidance may not exactly reflect the latest Standard Formula specification.

SHEET BY SHEET GUIDANCE ON DATA COLLECTION TEMPLATE

Information Tab

This tab collects and provides high level submission information:

- Summary Details – These should include the key personnel which Lloyd's may wish to contact with queries on the submission. These contacts will also receive the feedback results produced by Lloyd's.
- Scope and Purpose – This provides high level information on the reasons for the exercise and template.
- Version history – This details the version history of the template and details of changes from previous versions.
- Key – This provides details of the colour coding of cells used throughout the template.
- Notes and Comments – This is a free-form section which allows agents to input comments and notes on the data provided. Lloyd's requests that agents use this section fully to avoid unnecessary questions from Lloyd's on unusual results and provide commentary on specific methods, assumptions or simplifications used in completing the template.

Non-Life and Health NSLT (Not Similar to Life Techniques) Underwriting Risk Tabs

This group of tabs collect the data for Lloyd's to derive the key risk component to the market. The tabs are split in to premium and reserve risk data, lapse risk data and separate tabs for data relating to non-life and health catastrophe risk.

Non-Life and NSLT Health Premium and Reserve Risk

This tab collects technical provisions and volume measures to facilitate the derivation of premium and reserve risk including geographical diversification. Premium risk is the risk arising from fluctuations in timing, frequency and severity of business to be written in the SCR time period and the unexpired risks on existing contracts. Reserve risk is the risk arising from fluctuations in timing and amounts of claim settlements.

- Technical Provisions – A high level summary of the syndicate's non-life and health related technical provisions split by Solvency II class of business should be provided (direct and proportional classes have been grouped). At a total level these amounts should reconcile to the TPD and Solvency II balance sheets as at year-end 2011.

  The table separates claims and premium provisions by insurance losses and premium (gross of acquisition costs and acquisition costs separately), for gross and reinsurance. It also separates ULAE and non-ULAE expenses, reinsurance bad debt and risk margin.

- Premium Volume Measures – The tables within this section collect earned premium data split by Solvency II class of business (direct and proportional classes have been grouped) split by the 18 global geographical regions. The following earned premium amounts are collected:
  - Net (of reinsurance) Earned Premium in the previous 12 months – This is the net of reinsurance, gross of acquisition costs earned premium in the 2011 calendar year.
  - Net (of reinsurance) Earned Premium in the next 12 months – This is the net of reinsurance, gross of acquisition costs premium estimated to be earned in the 2012 calendar year.
  - Gross (of reinsurance) Earned Premium in the next 12 months – This single column is not being collected by region but is needed by Solvency II class to facilitate the calculation of other risk components. This is the gross of reinsurance and acquisition costs earned premium in the 2012 calendar year.
  - Net (of reinsurance) Earned Premium earned after the next 12 months which has incepted at 2011 year-end – This is the net of reinsurance, gross of acquisition costs premium estimated to be earned from the 2013 calendar year onwards which has already incepted at 2011 year-end.

   - Net (of reinsurance) Earned Premium earned after the next 12 months which is contractually obliged but not incepted at 2011 year-end – This is the net of reinsurance, gross of acquisition costs premium estimated to be earned from the 2013 calendar year onwards which is contractually obliged but not incepted at 2011 year-end.

- Reserve Volume Measures - The tables within this section collect reserve related measures split by Solvency II class of business (direct and proportional classes have been grouped) split by the 18 global geographical regions. The following measures are collected:
   - Net (of reinsurance) Best Estimate Technical Provisions (excluding risk margin) – These amounts should be as at 2011 year-end, be discounted and include all related expenses and other technical provisions elements but exclude the risk margin.
   - Discounted Net (of reinsurance) Claims Provisions within Technical Provision Best Estimate (PCO) – This is the net (of reinsurance) insurance losses (including binary events), expenses and reinsurance bad debt included within the claims provisions of the best estimate technical provisions. This should exclude any associated future premium and risk margin.

Non-Life and NSLT Health Lapse Risk

Lapse risk relates to the risk that the profit which is assumed to be included within the technical provision future premiums does not materialise, due to policy lapses and discontinuance. Agents should provide details of the profit assumed to be included within the net future premium amounts in the net technical provisions at 2011 year-end. This is assumed to be future premiums within technical provisions less future anticipated claims and expenses relating to this business. This should be split by business which has already incepted and that which is contractually obliged but unincepted at the valuation date. Expected profit should be calculated only on policies for which there is an expected profit within technical provisions (i.e. future premium is greater than future claims plus expenses).

Lloyd's anticipates that incepted business will have relatively little (or even negative) profit included within technical provisions as most premium will have already been received (and therefore is not included within technical provisions); as such insurance losses are likely to dominate these provisions. In determining where future profit is included within technical provisions, agents should apply principles of proportionality. Ideally the identification of this profit should be on a policy by policy basis however this may be impractical for many agents so a class by class assessment could be made. The data collection is also split by non-life and health classes of business.

Non-Life Catastrophe Risk

Non-life catastrophe risk relates to the risk of loss or of adverse change in the value of insurance liabilities, resulting from significant uncertainty of pricing and provisioning assumptions related to extreme or exceptional events. This module of the standard formula has seen the most significant changes since QIS5. As previously highlighted by Lloyd's this now includes an allowance for geographical diversification across non-European perils. Agents should use any reasonable method to allocate the data across each country or region (see 'Geographical Region Information' section above for more details).

Given some of the major changes to this risk module Lloyd's has tried to give as much guidance as possible around the inputs required on the data collection template. All data is required gross of reinsurance; Lloyd's will use other syndicate specific sources of information to estimate reinsurance recoveries for the gross losses. The sheet collects the following data:

- Natural Catastrophe Risk – These are split by European and non-European catastrophes. The property classes covered (Fire, MAT and Motor) by each peril (Windstorm, Earthquake, Flood, Hail and Subsidence) are detailed below each of the premium input tables. Note that the classes are direct and proportional only, non-proportional business is captured within other sections of the non-life catastrophe risk sub-module.
   - European Natural Catastrophes – These relate to regions 1 to 4 of the 18 geographical regions shown on the 'Region Information' tab but only in respect of the countries shown in this section of the data collection tab. Note that not all perils are applicable to each country - greyed out cells should be left blank. The inputs should be the total sum insured for each class of business in each country which has exposure to each peril. Note that sum insureds will be

double counted across perils but may be different as certain policies may not be applicable to certain perils.

  - Non-European Natural Catastrophes – These relate to regions 5 to 18 shown on the 'Region Information' tab. The inputs should be Gross Earned Premium amounts to be earned in the next 12 months (i.e. 2012 calendar year) by region for each class of business which has exposure to that peril. Note that premiums will be double counted across perils but may be different as certain policies may not be applicable to certain perils.

- Non-Proportional Property Catastrophe Risk – Similar to non-European natural catastrophe perils, this section collects Gross Earned Premium to be earned in the next 12 months (i.e. 2012) by the 18 worldwide geographical regions. This section relates purely to the non-proportional coverage of property risks. A further split of the inputs is required by the sub-classes falling under this non-proportional class. These classes are Other Motor, Fire and Other Damage, Legal Expenses, Assistance and Miscellaneous Financial Loss. There should be no double counting of premium across classes or regions within this section. Where premium relates to more than one class or region, these should be apportioned by the managing agent, using any reasonable basis. Where premium relates to multiple classes of business, including classes not covered under non-proportional property, only the portion of the premium relevant to these classes should be included in this section,

- Man-made Catastrophe Risk – The calculation of the capital charge for man-made catastrophes is based on global exposure (not split into regions), and the charge is derived under a series of scenarios for each peril. Lloyd's has provided a detailed description of the data requirements for each peril within the data collection template. Data entry for each peril is as follows:

  - Motor Vehicle Liability – number of vehicles insured with a 'deemed policy limit' below and above €24m separately. This scenario covers direct and proportional motor vehicle liability risks only. This can be classed as £20m for the purposes of this calculation (i.e. £1 = €1.20). The 'deemed policy limit' should be determined as the overall limit of the motor vehicle liability insurance policy or, where no such limit is specified in the terms and conditions of the policy, the sum of the limits for damage to property and for personal injury. Where the policy limit is specified as a maximum per victim, the deemed policy limit should be based on the assumption of ten victims.

  - Marine – The scenario for marine risk combines the results from a tanker collision and a platform explosion. The inputs are the results of each of each of these scenarios. The classes covered in these scenarios are the marine elements of the direct, proportional and non-proportional MAT classes.

    The capital requirement for the tanker collision is based on the maximum sum insured for a single (oil or gas) tanker across hull, liability and pollution exposures.

    The capital requirement for the platform explosion is the maximum sum insured for a single (oil or gas) platform. This should cover the sum insured for compensation for property damage, removal of wreckage, loss of production, capping/securing the well and liability losses arising from the explosion.

  - Aviation – The aviation scenario requires the single largest aircraft sum insured across both hull and liability perils. The classes covered in this scenario are the aviation elements of direct, proportional and non-proportional MAT classes.

  - Fire – The fire scenario requires the sum insured for the largest single building concentration covering damage due to fire or explosion, including as a result of terrorist attacks within a region of 200 metres. This concentration may occur over one or multiple insurance or reinsurance contracts. The classes covered within this scenario are direct and proportional fire and property.

  - Liability – The liability scenario separately requires Gross Earned Premium in the previous 12 months (i.e. 2011 calendar year) and the largest limit of indemnity for each risk group under liability risk. These groups are Professional Malpractice, Employers Liability, Directors and Officers, General Liability (Direct and Proportional) and General Liability (Non-Proportional) as defined in the data collection template. These classes would largely fall under direct, proportional and non-proportional liability classes however please note that there are other segments of these classes covered elsewhere in the non-life catastrophe risk sub-module (notable 'Other Non-Life Catastrophe Risk').

  - Credit and Surety – The scenario for credit and surety risk combines the results from a Default Risk scenario and a Recession Risk scenario. The inputs are the results of each of these scenarios. The classes covered by these scenarios relate to direct and proportional credit and surety classes. Catastrophe Risk arising from the non-proportional credit and surety class is covered within the 'Other Non-Life Catastrophe Risk' section.

    The capital requirement for the default risk scenario is based on the loss in own funds which would arise from an immediate default of the two largest credit insurance exposures of an insurance or reinsurance undertaking. The calculation of the capital requirement is based on the assumption that the loss-given-default, without deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles, of each credit insurance exposure is 10 % of the sum insured in relation to the exposure. The determination of the two largest credit insurance exposures of the insurance or reinsurance undertaking should be based on a comparison of the net loss-given-default of the credit insurance exposures, being the loss-given default after deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles.

    The capital requirement for recession risk is equal to the loss in basic own funds of insurance and reinsurance undertakings that would result from an instantaneous loss of an amount that, without deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles, is equal to 100% of the premiums earned by the insurance or reinsurance undertaking during the last 12 months in lines of business 9 and 21 (direct and proportional credit and suretyship insurance).

- Other Non-Life Catastrophe Risk – Other non-life catastrophe risk is intended to capture other risks not covered by the natural, non-proportional or man-made catastrophe risk sections above. The input required is gross earned premium in the next 12 months (i.e. 2012 calendar year) split by the following classes of business:

  - Insurance and reinsurance obligations included in lines of business 6 and 18 (direct and proportional Marine, aviation and transport insurance) other than marine insurance and reinsurance, and aviation insurance and reinsurance.
  - Reinsurance obligations included in line of business 27 (Non-proportional marine, aviation and transport reinsurance) other than marine reinsurance and aviation reinsurance.
  - Insurance and reinsurance obligations included in lines of business 12 and 24 (direct and proportional Miscellaneous financial loss) other than extended warranty insurance and reinsurance obligations provided that the portfolio of these obligations is highly diversified and these obligation do not cover the costs of product recalls other than extended warranty insurance and reinsurance obligations provided that the portfolio of these obligations is highly diversified and these obligation do not cover the costs of product recalls.
  - Reinsurance obligations included in line of business 26 (Non-proportional casualty reinsurance) other than general liability reinsurance.
  - Non-proportional reinsurance obligations relating to insurance obligations included in lines of business 9 (Credit and Suretyship Insurance).

Health Catastrophe Risk

Health catastrophe risk covers the risk of loss, or of adverse change in the value of insurance liabilities, resulting from the significant uncertainty of pricing and provisioning assumptions related to outbreaks of major epidemics, as well as the unusual accumulation of risks under such extreme circumstances. The standard formula SCR for health catastrophe is derived from the aggregation of 3 different scenarios as discussed (along with the required data inputs) below. In general these scenarios are based on number of lives and events which may affect those lives under each scenario. Note that detailed data requirements are given within each of the sections of the data collection template.

- Mass Accident Risk – This scenario covers health insurance and reinsurance contracts other than workers' compensation insurance and reinsurance classes across 31 European countries (non-European regions are not applicable to this section) as specified in the data collection template. The data required ($E_{(e,s)}$) is the total sum insured for each inhabitant of each country and event type covered. Note this will give rise to double-counting across events where insureds are covered across multiple perils but there should be no double counting across countries. More detail on how sum insured should be determined can be found within the data collection template.

- Accident Concentration Risk - This scenario covers insurance and reinsurance obligations arising from workers' compensation and group income protection contracts classes. This section includes risks arising from global exposures; this includes the 31 European regions as per Mass Accident Risk. To allow for non-European exposures Lloyd's is collecting each syndicate's top 10 countries outside of Europe. Agents should use any reasonable assumptions to estimate their top 10 exposures, this could be (for example) by the largest concentrations of insured lives. The data required is as follows:

    - C_c - The largest accident risk concentration of the insurance and reinsurance undertaking in each country, this should be derived based on the instructions within the data collection template.

    - $CE_{(e,c)}$ - The average value of benefits payable by the insurance and reinsurance undertaking for each event type e for the largest accident risk concentration in each country c.

  Note this will give rise to double-counting across events where insureds are covered across multiple perils but there should be no double counting across countries.

- Pandemic Risk - This scenario covers health insurance and reinsurance contracts other than the workers' compensation insurance and reinsurance classes. This section includes risks arising from global exposures; this includes the 31 European regions as per Mass Accident Risk. To allow for non-European exposures Lloyd's is collecting each syndicate's top 10 countries outside of Europe. Agents should use any reasonable assumptions to estimate their top 10 exposures, this could be (for example) by the largest number of insured lives in each country.

  The data required is as follows:

    - N_c – The number of insured persons of the insurance and reinsurance undertaking which are inhabitants of each country and are covered by insurance contracts covering medical expenses.

    - $CH_{(h,c)}$ - The best estimate of the amounts payable by insurance and reinsurance undertakings for an insured person in each country c in relation to medical expense insurance or reinsurance obligations for healthcare utilisation h in the event of a pandemic.

    - E - The income protection pandemic exposure of the insurance or reinsurance undertaking calculated as the sum over all insured lives covered by income protection insurance or reinsurance of the benefits payable in case of a permanent work disability caused by an infectious disease. The value of the benefits should be the sum insured or where the contract provides for recurring benefit payments the best estimate of the benefit payments assuming that the insured person is permanently disabled and will not recover.

SLT (Similar to Life Techniques) Underwriting Risk Tab

Lloyd's calculations do not include a capital charge for SLT Health, as we assume it to be immaterial. Previous Standard Formula calculations performed by the Lloyd's Market on a QIS5 basis have indicated that this is nil.

Life Underwriting Risk Tab

Life syndicates are required to complete this return and value underwriting risk in relation to these operations. The tab collects the following details.

- Technical Provisions – Similar to non-life and health NSLT the top of this tab collects technical provisions summarised by life Solvency II class of business split by gross and reinsurance best estimate and risk margin. This section also collects provisions relating to annuities stemming from non-life contracts valued similarly to life techniques.

- Life Insurance Underwriting Risk – To quantify the SCR in relation to risks arising from the underwriting of life insurance including the perils covered and the processes followed in the conduct of this business Lloyd's is requesting that the inputs are as per the QIS5 specifications. This includes life insurance underwriting risk arising from mortality, longevity, disability/morbidity, lapse, expense, revision and catastrophe risk. Agents should refer to the QIS5 specifications to complete this tab, a link to these specifications can be found at the end of this guidance.

Market Risk Tabs

Market risk is another significant risk to the Lloyd's market and relates to uncertainty in the level or volatility of market prices of financial instruments. This is assessed by the impact of movements in the level of financial variables such as stock prices, interest rates, real estate prices and exchange rates. Each of the sub-modules is addressed in turn below.

Interest Rate Risk

Interest rate risk exists for all assets and liabilities for which the net asset value is sensitive to changes in the term structure of interest rates or interest rate volatility. This primarily relates to fixed interest securities for assets and technical provisions for liabilities.

The inputs required on this tab are as follows:

- Assets – the market value of the assets within each currency along with the average modified duration within each currency.
- Liabilities - the undiscounted cashflows in relation to each currency in each specified maturity. Note that a maturity of '1' refers to all cashflows deemed to occur between time 0 (i.e. the valuation date) and time 1.

Equity Risk

Equity risk arises from uncertainty in the level or volatility of market prices for equities. Agents are required to provide details of their held equity investments split as follows:

- Type 1 exposures (listed in regulated markets which are members of the OECD or EEA); and
- Type 2 exposures (not listed in EEA or OECD countries, unlisted equities, private equities, hedge funds, commodities and other alternative investments. They should also compromise all other assets not included within property risk, spread risk and interest rate risk).

These exposures are further split as follows:

- Investments of a strategic nature – these are investments in related undertakings (i.e. the same operating group) of the managing agent which meet certain criteria as set out in the data collection tab; and
- All other investments which are not strategic.

Agents are required to enter the market value of the above investments at 31 December 2011 in each of the four cells on this tab.

Property Risk

This tab uses the value of all property investments within the syndicate to estimate the risk arising from the sensitivity of the market value of these assets. As per the QIS5 specifications property investments for the purpose of this risk module are classified as the following:

- land, buildings and immovable-property rights;
- direct or indirect participations in real estate companies that generate periodic income or which are otherwise intended for investment purposes; and
- property investment for the own use of the insurance undertaking.

Otherwise, the following investments should be treated as equity risk and considered accordingly in the equity risk sub-module:

- an investment in a company engaged in real estate management, or
- an investment in a company engaged in real estate project development or similar activities, or
- an investment in a company which took out loans from institutions outside the scope of the insurance group in order to leverage its investments in properties.

Any other queries raised by this tab may also be addressed by the QIS5 specifications and FAQs.

Spread Risk

Spread risk covers the sensitivity in the values of assets, liabilities and financial instruments to changes in the level or volatility of credit spreads over the risk-free interest rate term structure. This will apply particularly to corporate bonds, subordinated debt, hybrid debt, asset-backed securities and the others listed in the technical specifications. Different spread risk scenarios are applied, with reference to different rating categories, for bonds, structured products and credit derivatives. Each of these is addressed in turn below:

- Bonds and Loans (other than Mortgage Loans) – These relate to all bonds and loans (other than mortgage loans) split by covered bonds, bonds issued by governments outside of the EEA in their domestic currency and all other bonds and loans (including all government bonds not issued in their domestic currency). Note that, in line with QIS5, EEA government bonds issued in their domestic currency do not attract a spread risk charge and should not be included in this tab. Other entities attracting zero spread risk charge are bulleted at the foot of this page.

  Agents are requested to provide the market value of the bonds split by duration bucket and credit rating band as defined in the QIS5 specifications. The average modified duration of the bonds covered in each of the duration buckets is also requested.

  For bonds or loans issued by unrated insurance or reinsurance undertakings there is a table within the data collection template which shows how the credit quality of each undertaking should be derived based on the solvency ratio.

- Tradable Securities or Other Financial Instruments, Based on Repackaged Loans – These relate to investments in instruments based on resecuritisation and all other tradable securities or financial instruments.

  For each of the above two categories agents are requested to provide both the market value and average duration in buckets of credit rating band (as defined in the QIS5 specifications) and modified duration. Note that the duration increments are different from those for the bonds and loans category above.

- Credit Derivatives – The inputs for spread risk arising from credit derivatives should be as per the QIS5 technical specifications which can be found in a link at the end of this guidance. This is based on a scenario approach applied to credit default swaps (CDS), total return swaps (TRS), and credit linked notes (CLN) based on the loss in basic own funds arising from a change to the credit spreads of the above instruments. These shocks are as per the QIS5 specifications (i.e. an increase varying by credit quality step and decrease of 75%). Where the underlying financial instrument for the derivative is a bond or loan from the below organisations a credit derivative spread charge of zero will be given.

  - The European Central Bank; or
  - Central government or central banks which are member states of the EEA issued in their domestic currency; or
  - Multilateral development banks; or
  - The European Community; or
  - The International Monetary Fund; or
  - The Bank for International Settlements.

Concentration Risk

This risk sub-module relates to the concentration risk arising from assets considered in the equity, spread risk and property risk sub-modules, and excludes assets covered by the counterparty default risk module in order to avoid any overlap between both elements of the standard calculation of the SCR. The risk arising from concentration risk only includes the accumulation of exposures in financial investments in the same counterparty. It does not include any other types of concentration.

This is considered a relatively immaterial risk to individual Lloyd's syndicates. Inputs in this tab should be as per the QIS5 helper tab.

Currency Risk

Currency risk arises from changes in net asset values from uncertainties in the level or volatility of currency exchange rates. As per the QIS5 inputs, please provide details of total asset and liability exposure by currency in order to estimate a charge for currency risk. For each relevant foreign currency, the position should include any investment in foreign instruments where the currency risk is not hedged.

Counter-cyclical Premium Risk

This risk module has replaced the illiquidity premium risk module under the latest calibration of the standard formula. That is the impact of any immediate changes to any risk premium loaded on to the risk-free rate for the purpose of discounting. Lloyd's has not requested the market to include a counter-cyclical premium over and above the risk-free discount rates and therefore any charge arising from volatility in this premium will not impact the SCR. This charge for this risk module is therefore assumed to be zero.

Counterparty Default Risk Tab

This module estimates the risk of losses arising from unexpected default or deterioration in credit standing of counterparties and debtors of the undertakings within the SCR period. This includes risks arising from:

- Type 1 exposures such as risk-mitigating contracts (including reinsurance, securitisations, and derivatives); and
- Type 2 exposures such as future receivables from intermediaries and other credit exposures not covered within the spread risk sub-module of market risk.

The inputs and data collection for this risk module are as per the QIS5 specifications. Lloyd's has used the QIS5 helper tab as a basis for the structure of this sheet. Column by column guidance on the inputs required are found at the top of this tab. Agents may wish to refer to the QIS5 specifications and other QIS5 references (such as the Lloyd's detailed guidance) to assist them in completing this template. Links to these references can be found at the end of this guidance.

Please note that, under a full calculation, in order to derive the risk mitigating effect and benefit of collateral of particular counterparty exposures the SCR on various differing bases needs to be known. As this is not possible to provide or calculate within the data collection template Lloyd's will estimate this based on the SCR calculations, data provided elsewhere in the template and certain simplifying assumptions.

Operational Risk Tab

This tab is used to estimate operational risk arising from inadequate or failed internal processes, systems, personnel, procedures or external events. This tab collects high level Gross Earned Premium data for 2010 (12 months prior to previous 12 months) and 2011 (previous 12 months) calendar years split by life obligations, non-life obligations, unit-linked obligations and unit linked expenses in respect of life insurance contracts where investment risk is borne by policyholders.

Geographical Region Details ("Region Information")

This tab is for informational purposes only. It gives details of the mapping of countries to the 18 global geographical regions for non-life and health premium and reserve risk and catastrophe risk tabs.

Solvency II Lines of Business Descriptions ("Lines of Business")

This tab is for informational purposes only. It gives a detailed description of each Solvency II class of business including the classification in to non-life, health or life insurance. Agents should use this as a reference to allocate the data provided in to the Solvency II classes.

Exchange Rates

This tab is for informational purposes only. It provides details of 2011 year-end spot rates and is used in the Counterparty Default Risk tab to convert original currency amounts in to GBP.

SOURCES OF INFORMATION AND ADVICE

As mentioned above many of the data entry requirements for the Solvency II standard formula are similar to those required under QIS5, this makes the specifications and templates relevant in these cases. Lloyd's has attempted to identify this within the data collection template. In some cases this is through referencing the QIS5 requirements within the descriptions (e.g. Life Underwriting Risk) and in other cases Lloyd's has reproduced the helper tabs to calculate the capital requirements for these risk modules (e.g. Counterparty Default Risk).

Lloyd's would encourage agents to refer to these sources initially to check if any queries they may have already been identified and answered. A separate set of FAQs will also be produced for this exercise which Lloyd's would also encourage agents to check regularly. If agents still have questions after referring to these sources then please email these to solvency2@lloyds.com.

CEIOPS/EIOPA

https://eiopa.europa.eu/consultations/qis/quantitative-impact-study-5/index.html

As part of the exercise in 2010, CEIOPS produced full technical specifications, annexes, questions and answers and errata to accompany the spreadsheets. These are all still available on the EIOPA website.

FSA

http://www.fsa.gov.uk/Solvency2

The FSA website contains an overview of the submission requirements and several FAQs pertaining to QIS5.

Lloyd's

http://www.lloyds.com/The-Market/Operating-at-Lloyds/Solvency-II/Information-for-managing-agents/Guidance-and-workshops/Technical-Provisions-and-Standard-Formula

As part of the two previous QIS5 basis exercises (as at 2009 and 2010 year-end) Lloyd's issued several guidance notes and published FAQs throughout the process, these can be found on the Technical Provisions and Standard Formula section of the Solvency II area of lloyds.com.

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