

QIS3

Guidance on the QIS3 Package

April 2007

Guidance through the third Quantitative Impact Study on Solvency II

This note is intended to guide participants through the QIS3-package and to facilitate an efficient and smooth processing of the material provided. We hope that this note will help undertakings to navigate their way through this material, and to identify the key pieces of information for this study, and thereby are optimistic that there will be a wide level of participation across Europe in this QIS.

All immediate information requirements should be covered by the QIS3 documents. For all further inquiries CEIOPS has, as for QIS2, set up a Q&A process: That is, participants are encouraged to consult the CEIOPS Q&A collection on www.ceiops.org and, if unable to find an answer there, ask their respective contact person at the national supervisory level for guidance.¹ If the issue is of major importance or if the national supervisor cannot provide a full response, the inquiry will be transferred to CEIOPS. CEIOPS will usually provide the appropriate guidance within a week. To improve consistency, all answers will not only be returned to the inquirer, but also disclosed (on an anonymous basis) through the Q&A database on CEIOPS' website.

Participation in QIS1 or QIS2 is not a prerequisite for participating in QIS3. Indeed, CEIOPS would like to encourage all insurance undertakings to be fully involved in the process of developing Solvency II by participating in QIS3. QIS3 is not the final exercise and does not pre-empt decisions that are to be made for the new solvency framework. By participating in QIS3, undertakings will have the opportunity to make their views known and to identify specific issues for both CEIOPS and the EU Commission to consider further. In addition, this will allow participants to get acquainted with the concepts applied at an early stage, thereby gaining firsthand knowledge about the latest developments and their implications for the future running of their business.

The documents and how to navigate them

The following documents are provided at CEIOPS' website (www.ceiops.org):

	File name	Format
	Manual:	
1	Cover note (CEIOPS-FS-10/07)	Pdf
2	Technical Specifications PART I: INSTRUCTIONS (CEIOPS-FS-11/07)	Pdf
3	Technical Specifications PART II: BACKGROUND INFORMATION (CEIOPS-FS-12/07)	Pdf
4	Technical Specifications Annexes (CEIOPS-FS-13/07)	Pdf
5	Calibration Papers (3 parts) (CEIOPS-FS-14/07)	Pdf

¹ A list of contact persons is available on CEIOPS' website.

	Work book:	
6	Spreadsheet (CEIOPS-FS-15/07)	Excel
7	Spreadsheet instructions (CEIOPS-FS-16/07)	Pdf
8	Term structures of interest rates (CEIOPS-FS-17/07)	Excel
	Additional / clarifying information:	
9	Qualitative Questionnaire Solo (CEIOPS-FS-18/07)	Word
10	Qualitative Questionnaire Groups (CEIOPS-FS-19/07)	Word
11	QIS 3 Guidance (CEIOPS-FS-20/07)	Pdf

The table covers all the files provided to QIS3 participants. The first five documents constitute the QIS3 manual, which covers all the essential information on the QIS3 framework. The work book is intended to facilitate the provision of information by participants, in a standard format, about the quantitative effect of these proposals. The qualitative questionnaires will provide CEIOPS with additional or clarifying information which is either not covered in the spreadsheets, or which is needed to allow a proper interpretation of the answers given in the spreadsheets (e.g. with regard to internal model specifications, etc.).

Technical Specifications, Part I: This part of the technical specifications sets out the solvency calculation model tested and covers the essential information that may be needed for the participant to complete the QIS3 tasks (and to complete the provided spreadsheet). For additional information, participants are referred to the relevant chapters in Part II, the annexes, or the calibration papers.

Technical Specifications, Part II: This part is intended to provide additional (background) information on the respective issues. The information contained in this document may clarify certain aspects of the procedure presented in Part I. However, unless certain arguments in Part I remained unclear and need further clarification, Part II is not compulsory reading for taking part in the exercise. This part was also not designed to provide guidance on how to handle the spreadsheets.

Technical Specifications, Annexes: These annexes provide additional information with special emphasis on alternative, less advanced approaches. This information can be particularly relevant for small and medium sized insurance companies.

Calibration Papers: The calibration papers reflect CEIOPS' choice of parameters. The information therein can be helpful to comprehend the approach manifested in the technical specifications. Participants that are not convinced about certain approaches may then use this information to flesh out their arguments in the respective questions in the qualitative questionnaire (especially those parts where they are expressly asked about their opinion on the various modules).

Spreadsheets (workbook): For the sake of convenience all participants are provided with one single Excel file. A solo institution, i.e. a standalone insurance company, is expected to complete the tabs containing solo information. A parent (insurance) company² is asked to complete the spreadsheets twice: once for the institution itself and once for the group, aggregating the information provided from the solo spreadsheets. The tabs are ordered in a way that allows proceeding from one sheet to the next, whereby CEIOPS tried to put special emphasis on the comprehensibility of this sequence.

Several measures were taken in order to improve the readability of the spreadsheets and to allow an efficient processing for the participant:

- Colour code:
 - To categorise the various issues the *tabs* were assigned different colours: grey for guidance and parameters, light green for basic (qualitative) participant information, dark green for summary information on activities, light blue for detailed information on activities, light yellow for the various modules, orange for additional group data, and finally olive green for the helper tabs.
 - To provide immediate guidance on how to proceed at each tab (and where input from the participant is needed), the *cells* were assigned to different colours or patterns. Light blue cells mean that the participant has to input the respective data. The other colours (yellow, light brown or purple) refer to cells that contain default information, formulae or references from other tabs and thus do not require any input. In certain cases, however, yellow cells may be overruled in order to improve the adequacy with the participant's data. Dotted cells indicate that cells cannot be filled. Cells with a dotted border are reported in the activity summary tab.
- Grey shaded header line: In cases where tabs are not to be filled out, the header line is shaded in grey. Additionally, a warning notice indicates this point. This is particularly relevant for the group part. If reporting basis is the legal entity (cf. I.A.1 participant information) this warning signs appear on each group tab (and disappear if one switches to group basis).
- Grey shaded cells (cf. II.A.4. activity summary): A grey cell indicates that cells are not be filled out or are irrelevant given a certain option choice (yes / no).
- Helper tabs: There are nine helper tabs in this spreadsheet. These tabs are meant to facilitate the participants' (auxiliary) calculations. Nevertheless, the participants may use their own approaches if those appear more suitable to them.

² Or whichever company is responsible for the collection of group data.

Not every participant will be able to provide all the information asked for. There are certain parts that are relevant for a smaller number of companies only and required tasks may differ.

- Internal model data: This information is asked for in IV.B.2 (SCR and BSCR) and in IV.C.2 (group solo inputs). These cells are only relevant for participants that already have in use their own internal model. For all others these cells remain blank. The objective is to allow comparability with the results of standard formula calculation (cf. Section 4 of Part I of the Technical Specifications).
- Health modules (III.B; IV.A.4): These tabs concern health insurance that is practised on a similar technical basis to that of life assurance. This form of health insurance is only applicable to a small number of member countries (primarily Germany and Austria). Thus, those participants not concerned can immediately skip these parts of the spreadsheets.
- CAT risk (cf. IV.A.5): For each country the national supervisor defines certain CAT risk scenarios that have to be calculated. Furthermore, participants have to select their own man-made scenario and are encouraged to provide additional examples.

Spreadsheet instructions: The instructions are intended to provide detailed guidance on how to fill in the light blue input cells in the spreadsheets³. However, where necessary, guidance is also provided to other parts of the sheets. Where available, references are also made to the respective paragraph in the technical specifications. Where relevant, the spreadsheet instructions also contain useful technical information to assist in the completion of the spreadsheet.

Term structures of interest rates: CEIOPS provides participants with various interest rate term structures. These can be used for discounting future cash flows; however, participants are not obliged to use these predefined term structures. The spreadsheet includes term structures in EUR, CZK, DKK, GBP, HUF, NOK, PLN, SKK, SKR, CHF, JPY and USD both for end of 2005 and end of 2006. Also included are the shifts in all these term structures following the upward and downward shocks specified in the interest rate risk module (cf. paragraph I.3.36 of Part I of the Technical Specifications). For your convenience, the term structures are also incorporated into the main (workbook) spreadsheet.

Qualitative questionnaire: The qualitative questionnaire fulfils two tasks: First, it provides the opportunity to the participants to express their opinion on the various aspects in QIS3. Secondly, it contains topics that are not covered by the

³ Due to the diversity of the companies / the groups in some cases no detailed guidance for the calculations can be provided. Nor is it possible to offer standardised "helper tabs" for these issues in the spreadsheet (cf. ΔNAV market risk, or life underwriting risk, non-life details for group inputs, risk mitigation effects, etc.). These parts may require particular effort by the participants which can hardly be diminished by the spreadsheets (instructions).

spreadsheets but are necessary for understanding results or further development of the solvency framework. These are primarily qualitative questions on internal models and group issues. Participants are asked to respond to those questions that are relevant to them.

Undertakings are free to complete the questionnaire in what they deem to be the most efficient way. For certain questions (e.g. on groups) it can be reasonable to treat them in parallel while filling out the spreadsheets. Other parts may ideally be answered after having terminated the whole quantitative work.

How groups should approach the issue

QIS3 is to a large extent constructed to gather information on the effects of group diversification as compared to the Solvency I regime. To this end it is necessary to incorporate three sets of information in the QIS:

- solo constituents' results, as received by the head of the group
- the groups SCR as calculated using the Groups SCR standard formula, thus benefiting from group diversification
- the group SCR calculated as if it were a solo company, thus benefiting from diversification 'internally'

Groups are not only the big, multinational players, but also smaller, nationally active insurance companies. Sometimes groups will be headed by holding companies, which will add to the layers to be considered.

Generally speaking, CEIOPS therefore recommends the following:

There will be people responsible for QIS3 reporting at solo entity level and ideally there should be one or more persons coordinating the group's efforts from the beginning. Their tasks may reach from harmonising the assumptions/methods used across the group and collecting data for group calculations, to tasks like coordinating internal modelling efforts.

As many solo companies of the group as possible should fill out the spreadsheet, in order to allow for maximum comparability of group and solo results. The solo results will, of course, be analysed by the national supervisor, and the 'group output' (Tab. IV.C.1) shall be transmitted to the person who is responsible for the group calculation. This person will fill out the solo 'group outputs' vectors he or she receives into the 'group solo inputs' table (Tab. IV.C.2). This way the automated calculation of the group aggregation takes place, taking account of the diversification effects allowed for in the group SCR formula.

If information about some participations is not obtainable, this should not be a problem for the completion of QIS3: this should be noted and the participations should be deducted from capital.

In order to obtain information on a possible divergence between the optimum result of economic reality and the group SCR formula, another calculation may be performed at group level – using the same spreadsheet: consolidated group data have to be used for calculating group SCR as if the whole group were a solo company.

If the group is headed by a holding company (including Mixed Financial Holding Companies in the sense of the Financial Conglomerates Directive), this holding company will have to fill out the 'ultimate' spreadsheet, while it would be most helpful if the insurance companies directly beneath perform subgroup calculations.

Composite insurers

Composite insurance companies are companies that run life and non-life-business in parallel within one legal structure, according to Articles 18 and 19 of Directive 2002/83/EC.

For QIS3 purposes, composite insurers are requested – in order to facilitate broad participation – to fill in one solo spreadsheet only, thus not treating separately their life and non-life business.

The European Commission would be interested to measure the analytical value added by the attribution of diversification effects. Therefore the composite insurers are asked on an optional basis – if separate data for both life and non-life business exist- to fill out three spreadsheets. One spreadsheet for life business (on a virtual 'solo' basis) and one for non life business (on a virtual 'solo' basis), combining them in the group tables in a third spreadsheet (cf. to the explanations on groups).

With the exception of a separation of the assets, the data requirements and calculation efforts for this optional method should in principle remain the same.

If a composite insurer itself has subsidiaries, they will be simply added as additional input to the group calculation.

Additional information to keep in mind

Accuracy of calculations / availability of data: CEIOPS encourages every insurer to participate in the QIS3, being well aware of the high demand on smaller institutions that do not have the resources to afford an extensive risk management. Therefore, those companies may use the proposed simplified approaches and complete the spreadsheet and questionnaire(s) as far as possible, leaving those parts blank that cannot be filled out without disproportionate effort. CEIOPS asks those participants that use simplifying assumptions to indicate (and if necessary describe) these in the qualitative questionnaire.

Confidentiality of data: The data sent to the national supervisor are kept confidential. Only aggregated information of the respective national market is transferred to CEIOPS. If the number of respondents from a national market is very small, CEIOPS may opt to restrict this information in the final Summary Report or pool it, in case there is more than one national market with a small number of participants. CEIOPS strives to make it impossible to draw conclusions about individual entities.

Informative meetings and first points of reference: Please refer to your local supervisor for detailed information. A list of contact persons for QIS3 at national supervisors can be found on CEIOPS' website (www.ceiops.org). Further to this, CEIOPS will organise a meeting with industry representatives in Frankfurt on 2 May in order to exchange views on this QIS for possible midway corrections. Please make use of this possibility to address topical issues through your industry representative.

Written comments are best addressed to your national supervisor, but may – on technical spreadsheet issues – also be directed to the CEIOPS secretariat (qis3@ceiops.org).

Closing date: The completed documents shall be submitted to your local supervisor by June, 29th 2007.