CEIOPS-DOC-88/10
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# Quantitative Impact Study 5

# Questions & Answers

## QIS5 - List of Methodological Issues Raised by participants and supervisors – 220 items included

General Disclaimer

The answers given below are not official CEIOPS positions but tentative Working Group answers referring to QIS5 only.

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# General

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 41 | | Question:<br>The technical spec states that the position should be as at end of 2009.<br>If a company's year end is say the 31 October would you expect this to be the data used or should the position be updated to reflect the position at the end of 2009 i.e based on internal management accounts. Likewise if year end was 31 January 2010 would it be satisfactory to use this data. | |
| | | Answer:<br>The latest year end accounts available should be used as a basis for QIS5. When it is not 31 December 2009, participants should indicate it clearly in the spreadsheets and qualitative questionnaire. In such cases, undertakings have to assess risk free interest rates at that given date. | 18/08/2010 |

# Valuation – Assets and other liabilities

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 42 | | Question:<br>How to value e.g. software that has been purchased by the entity some years ago (it may be already depreciated to nil or it may be partly depreciated) if the version of this software is not available on market any more? Does it mean that there is no evidence of exchange transactions for the same or similar assets and it should be valued at nil, even if it is still used by the company and its depreciation has not been ended yet? | |
| | | Answer: yes, according to QIS5 Tech. spec. V.1.4 (Intangible assets) the value is nil for solvency purposes if a fair value measurement of an intangible asset is not possible. | 18/08/2010 |
| 43 | | Question:<br>How to value premium receivables (from signed insurance contracts, before collecting premium)? | |
| | | Answer:<br>Cash flows related to premiums that are within the boundary of a contract should be incorporated in the best estimate of the technical provisions.<br>Receivables (insurance recoverables - premiums due) should be valued at fair value (mark to model) by discounting the expected cash flows. The risk of non-payment by the policyholder can be ignored if that will result in waiving the insurance cover. | 18/08/2010 |
| 44 | | Question:<br>With regards to the valuation of bonds:<br>If the government bonds of a certain EU country cannot be valued on mark-to-market basis, could or should these be valued on a marked-to-model approach using the risk free CEIOPS curve? And should there be a relevant adjustment for credit risk? | |
| | | Answer:<br>If a bond (including a government bond) cannot be valued in an active market, then undertakings can use mark-to model value provided this gives a market consistent/ fair value for that bond. When using mark-to-model, undertakings must maximise the use of relevant observable inputs and minimise the use of unobservable inputs according to V.10 in the Technical Specification. There is no requirement to use the risk free rates for liabilities (CEIOPS curve). Adjustment for credit risk or liquidity risk should already implicitly be taken into account in the use of relevant observable inputs, but should be made when non-market inputs are used. | 18/08/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 45 | | Question:<br>We have a question regarding the treatment of Deferred Acquisition Revenue (DAR) (e.g. deferred reinsurance commission "DAC"):<br>• What is the treatment for DAR on the balance sheet?<br>• Should DAR be part of the premium reserves? | |
| | TP.2.126 | Answer:<br>Under the QIS5 valuation principles, there are no deferred acquisition revenues in the balance sheet, as all revenues should be recognised in earnings as they fall due and should therefore be part of the premium reserves with the exception for reinsurance deposits (TP.2.126). | 18/08/2010 |
| 98 | | Question:<br>As part of the QIS 5 exercise an insurer has to calculate the Solvency II economic balance sheet. In the technical specifications guidance is given regarding the measurement and principles to be followed. On one class of assets (and liabilities) a question remains on their measurement: accruals. For example on the IFRS balance sheet any pre-payment made by an entity is presented as an asset. For example an entity has an agreement to rent office space and part of the contract is that the entity is pre-paying a certain period of the rental term. This implies that on the balance sheet date of 31 december amounts are recognised as an asset. Under IFRS these amounts are recognised for the amount which has been paid to the counterparty. Each coming period a certain amount will be transferred to the income statement as rental costs.When preparing the Solvency II economic balance sheet the insurer has to assess the economic value of all assets and liabilities. How should the insurer measure this type of assets (and liabilities)? | |
| | | Answer:<br>For recognition, the IFRS-criteria apply. So accruals on the IFRS balance sheet, should also be included in the Solvency II balance sheet.<br>The SII valuation should be an economic value, which depends on whether it is transferable and at which price. The rights stemming from the contract are relevant. For materiality reason, it can be expected that in many cases the accounting value based in IFRS (usually the nominal paid) can be used, subject to a verification that it has some economic substance (like possible prepayment, collectability, right to use, right to sub-let and market-conform rates). In the cases of long term prepayments covering some years, it is questionable if the nominal value is representing the economic substance. The insurer should assess this more thoroughly. | 06/09/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 142 | | Question:<br><br>Long term bank deposits is mentioned in cell D32 of I.Valuation tab. Could you please explain what Long term bank deposits is suppose to include as it is not mentioned in the technical specification? | |
| | | Answer:<br>Deposits other than transferable deposits, with original maturity superior to 1 year, that cannot be used to make payments at any time and that are not exchangeable for currency or transferable deposits without any kind of significant restriction or penalty. | 23/09/2010 |
| 156 | | Question:<br>Under IFRS there is no impact on the value of financial assets when there are in place any restrictions on their use due to being pledged as security for liabilities. For example a property asset (land or building) which is pledged as security for liabilities. However there is a requirement that these restrictions are disclosed (e.g. see IAS 16.74). Under Solvency I, it is common that admissibility rules only allow the non-restricted part of the assets to be admissible.<br>If we look at the asset in isolation then this restriction should have an impact. However this approach would mean that overall there would be double counting of the liabilities. | |
| | | Answer:<br>Pledged assets shall be measured at fair value of the asset. The existence of any restriction on the use of the assets should not be taken into account in the valuation. | 01/10/2010 |

# Technical provisions – Segmentation

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 46 | TP.1.21 | Swedish life insurance companies issue life contracts denoted EL, with typically the following benefits:<br>• If the insured person dies before the age of 65, an annuity is paid out to survivors for 15 years.<br>• If the insured person lives at the age of 65, an annuity is paid out to the insured or to survivors for 15 years.<br>• If the insured person still lives at the age of 80, a life long annuity is paid out.<br><br>The risk driver for these contracts is mainly death before the age of 65 and survival after the age of 65. In TP.1.21, contracts are stipulated to be allocated to the line of business that best reflects the risk at inception. This is obviously misleading for contracts where the insured person is older than 65. We suggest that contracts should be allocated to the line of business that best reflects the underlying risks for the remaining insurance period. | |
| | | Answer:<br>QIS5 should be carried out in accordance with the Technical Specification including the provision that contracts should be allocated to the line of business that best reflects the risk at inception.<br>Concerning the specific contracts you mentioned, you should therefore decide whether mortality or longevity risk is the main risk at the inception of the contract.<br>Furthermore, the Qualitative Questionnaire will request both a description of any material problems or uncertainty in the application of QIS5 criteria as well as a question on the appropriateness of the segmentation for the measurement of your solvency and risk position. You therefore also have the opportunity to respond on the issue by that means. | 18/08/2010 |
| 47 | TP 1.25 | Question:<br>Regarding Health Insurance obligations:<br>In riders cases (e.g. Dread Disease riders) which can fall in the SLT category, and for which there are no morbidity rates available on an age by age basis, how are we going to calculate the BE for SLT riders on a policy by policy basis? | |
| | | Answer:<br>First we would like to clarify our understanding of the question: we are assuming that the undertaking only has an estimate of the morbidity rate assumption, for which the underlying (average) age may or not be known and that there are no other available sources of information that could be used to assess the behaviour of this rate for different ages. | 18/08/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | In this case, for QIS5 purposes, the undertaking may assume as a simplification that the morbidity rate is the same across all ages, as long as this rate is considered representative of the portfolio, i.e., it may be used as a reliable estimate of the real average of the morbidity rates associated to the set of ages which compound the portfolio. Thus, undertakings should take into consideration the available historical data (whether internal or external data) and compare the distribution of ages associated to the portfolio(s) which are related to these data (even if the information regarding this distribution is very limited, the undertaking should, at least have an idea in average terms) and try to obtain an average of the morbidity rate valid for the portfolio being assessed, including, if necessary a positive/negative adjustment to this average, where the population is older/younger than the portfolio(s) used as the source of information.<br>However, whenever possible, the undertaking should try to find additional information (e.g., from market experience or medical information) in order to, at least, differentiate this assumption by classes of ages. | |
| 72 | TP.1.15 | Question:<br>How should non SLT health obligations in case of insurance on accidental death be segmented? Should it be included in Income protection? | |
| | | Answer:<br>Yes this should be considered as Income protection. | 27/08/2010 |
| 143 | TP.1.10. | Question:<br>To which line of business should Energy business be allocated? From the technical specifications it would appear that Onshore Energy should be included in "Fire and Other Damage" whilst Offshore Energy should be included in "Marine". Is this allocation correct? | |
| | | Answer: The proposed allocation seems reasonable. | 23/09/2010 |
| 157 | TP.1.29-33 | Question:<br><br>An undertaking (which is a relatively small entity) sells nothing but travel insurance. The claims fall potentially into many different lines of business, including medical expenses, fire and other damage, general liability, legal expenses and assistance. Whilst it is possible to accurately allocate claims received into these lines of business, it is not (currently) possible to do the same for premium income - premiums are set at a total cover level and are not explicitly 'built up' from different cover components. Currently (under Solvency 1) this business is all allocated to the "accident" accounting class. How should this business be classified for QIS5? Is it acceptable, on proportionality grounds, | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | to allocate all the business to one line of business – perhaps Assistance? | |
| | | Answer:<br>Following the principles of TP.1.29-33, the policies should be unbundled into their constituent parts. Where premiums are set at a total cover level and do not split between lines of business, the split should be done in a reasonable manner, with respect to the principle of proportionality. You should explain, in the qualitative questionnaire, the assumptions you have made in order to derive any splits needed, as this may help in the development of appropriate Level 3 guidelines. | 01/10/2010 |
| 158 | Tab valuation of spreadsheets | Question:<br>Should Index-linked and **Pension Funds** be considered into "Unit Linked" cells? | |
| | | Answer:<br>The defining condition is whether the policyholder bears the investment risk. If yes, then the product should be classified as unit-linked. This will normally be the case in index-linked products. Pension fund activities that fall within Article 4 of the IORP Directive (i.e. carried out directly by the insurance or reinsurance undertaking) and where the policyholders bear the investment risk should be classified as unit linked as well. Pension funds that do not fall within Article 4 of the IORP Directive are not subject to Solvency 2 provisions and are not expected to participate in QIS5. | 01/10/2010 |
| 202 | I.Valuation D24 | Question:<br>What is the definition for "structured notes"? Does this comprise just multi-structured note or single structured notes as well? | |
| | | Answer:<br>Regarding the data required in cell D24 of Valuation spreadsheet a structured note is a security combining a fixed income instrument with a derivative component. Examples include Credit Default Swaps (CDS), Constant Maturity Swaps (CMS), Credit Default Options (CDO). | 26/10/2010 |
| 203 | | Question:<br>Percentage is required to be calculated on liabilities of the total balance sheet S II. However we suppose that total liabilities are not the amount calculated in cell H99 as Subordinated liabilities are required in cell F204. Which amount of total liabilities should we consider?<br>1. "Total liabilities (excluding other financial sector liabilities of groups)" + "Subordinated liabilities" (cell H99 + cell H129); or<br>2. "Total liabilities (excluding other financial sector liabilities of groups)" + "Own Funds"? | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | Answer:<br>since the percentage is of Total balance sheet SII then, the total assets has to be the same amount required as total liabilities | 26/10/2010 |
| 204 | | Question:<br>**DEFERRED TAX ON EQUALISATION RESERVE THAT ONLY COULD BE RELEASED UNDER CERTAIN RESTRICTIONS**:<br>A reserve of 1 000 classified as an Untaxed reserve in current accounting and is not part of the technical provisions. This is part of reserves from accounting in basic own funds in own funds. The reserve is tiered according to its loss-absorbency capacity. This reserve has an accounting value of 1 000, a solvency II value of nil and a value ascribed for tax purposes of 1 000?<br><br>This reserve can only be used to cover losses in the insurance business (not losses in the investment activities) and will normally not generate a net taxable income when the equalization reserve is released because the net taxable income is nil. The reason is that the taxable income related to the release of the equalization reserve, will reduce the tax deductible expenses that created the losses which could be covered by the release of the equalization reserve. The reserve cannot be voluntary released by the company and tax paid.<br>Should the undertaking recognise a deferred tax liability related to the equalization reserve of 1000 in the Solvency II-balance sheet? | |
| | | Answer:<br>Deferred tax liabilities should be established in relation to temporary differences between the Solvency II balance sheet and the tax balance sheet. Where the difference is permanent and not expected to lead to a future tax payment a deferred tax liability is not required. | 26/10/2010 |

# Technical provisions – Boundaries of contracts

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 18 | TP.2.15 (a) Annex D, Example A5 | Question:<br>We have the following question regarding the above topic:<br>1. Page 27, Para TP2.15 (a) of the final QIS5 spec - this paragraph states that if firms have "an unlimited ability to amend the premiums ... payable under a contract", premiums due after the date at which this ability applies should be ignored.<br>2. Annex D, Example A5 - this example assumes that if a firm can vary a premium based on a current market premium, with no reassessment of the individual policyholder's risk profile, then future premiums should be ignored in the QIS5 S2 balance sheet. A concrete example would be a regular premium unit linked life insurance savings product with a mortality charge priced used a published mortality table. Example B5 is similar.<br>If the above interpretation is correct, this would exclude all future premiums from many of our major business lines and would also mean that the expected future profits that we will earn on these future premiums would be excluded from own funds in the QIS5 S2 balance sheet.<br>We believe that the above interpretation is incorrect (mortality charges cannot in practice be amended to an unlimited extent) and we intend to carry out QIS5 on the same basis that we used for QIS4 (i.e. future premiums on regular premium unit linked life insurance savings products will be included in the QIS5 S2 balance sheet). | |
| | | Answer:<br>QIS5 should be carried out in accordance with the Technical Specification including the examples in Annex D. The Qualitative Questionnaire will request both qualitative and quantitative information on alternative contract boundaries and you therefore have the opportunity to respond on the issue by that means.<br>Regarding the interpretation of the contract boundary definition where the insurer offers current market premiums to existing policyholders, TP2.17 states that provided the undertaking is free to choose the premium for new policyholders, its ability to amend the premiums of the contract should not be considered to be limited. In practice, the undertaking will need to justify the contract boundary to the supervisor and this will include demonstrating that any restriction on the ability of the undertaking to amend the premium has economic relevance (TP.2.16). For the specific question raised, the undertaking needs to consider whether the restriction on the mortality charge has economic relevance. For example, consideration needs to be given to the extent that the mortality | 29/07/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | charge could deviate from the published tables and be increased to compensate the higher mortality cost if the mortality of the portfolio deteriorated. Should the undertaking have flexibility to increase the charges to fully offset potential losses, this is considered sufficient to meet the criteria of unlimited ability for the purposes of defining the contract boundary and hence no future premiums should be taken into account in the calculation. Should the undertaking only have the ability to charge the mortality based on the published table and as a result would suffer losses if the mortality of the portfolio deteriorated compared to the published table, then this could be considered a limited ability to amend the premium. In which case allowance should be made for expected future premiums. | |
| 19 | TP.2.15-19 | Question:<br>Let a product have the following characteristics:<br><br>• The contract has a fixed term of, for example, 8 years and the insurance undertaking cannot cancel the contract during the term.<br>• The policy holder pays an initial premium. The policyholder has the right to pay additional premiums during the contract term. The undertaking can neither compel the policy holder to pay additional premiums nor can it reject them.<br>• At the end of the term (or in case of an earlier death) the undertaking pays the following benefits:<br>o the paid premiums (probably with a minor discount that was fixed in the terms and conditions in advance);<br>o a guaranteed annual rate on the paid premiums (that is fixed by the undertaking annually in advance, i.e. at the beginning of the contract it is only known for the first year);<br>o discretionary benefits that the undertaking can decide upon.<br><br>Are the additional premiums included in the boundary of the contract? | |
| | | Answer:<br>Applying the principles set out in the QIS5 technical specification to this product it appears that the additional premiums and the resulting benefits are within the boundary of the contract. The ability to decide upon the guaranteed rate each year and to decide on the discretionary benefits does not constitute an unlimited ability to amend the benefits according to paragraph TP.2.15 of the QIS5 technical specifications. This is because the ability to decide on the benefits only relates to the guaranteed annual rate and the discretionary benefits and not to the repayment of the premiums paid by the policy holder. Therefore, there is not an unlimited ability to fully amend the benefits deriving from the product. | 29/07/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 48 | Annex D – Example B7 | Question:<br>When the insurance undertaking has the right to cancel a P&C contract in the case a claim occurs. This is in principle in line with the example B7 of Annex D. However, for other contracts than motor liability, where the agreed maturity is more than one year and the premiums can't be adjusted, e.g. a usual ten year property insurance contract, we think that the effect will not be negligible. On the other hand, it will be very burdensome for the undertakings modeling this effect.<br>How do we deal on a European level with this problem? Can you provide us a simplified method for modelling this effect? | |
| | | Answer:<br>If the premiums cannot be adjusted, these would be in the boundaries of the contract and should be included in the calculation of technical provisions. Simplifications can be used in the calculation of technical provisions provided that the conditions for using simplifications are met, including the condition that the "model error" resulting from the use of those simplifications is not material (see subsection V.2.6 on proportionality and particularly TP.7.27). | 18/08/2010 |
| 49 | TP.2.15-19 | Question:<br>Regarding the duration boundaries of contracts:<br>i) On our unit linked Life plan, we perform policy reviews on the policy (with the first policy review scheduled on the 11th policy anniversary), and (the company) has the right to either increase the premium (if the client agrees) or decrease the sum insured. Under this section, do we consider as a boundary the 11th year of the policy?<br>ii) On our medical card plan, we have the right to amend the premiums on an annual basis. Does this mean that the boundary is 1 year? | |
| | Annex D | Answer:<br>i)yes, the boundary of the contract would be the 11th policy anniversary, provided that the insurer has an "unlimited" right to increase the premiums, or reduce the sum insured – where unlimited is to be interpreted in line with TP.2.16-17<br>ii) again, if there is an "unlimited" ability to change the premium each year (in line with TP.2.117), then the contract boundary is the annual premium re-assessment date. | 18/08/2010 |
| 50 | | Question:<br>For participating contracts can you confirm that the undertaking's ability to amend the discretionary benefits would typically not constitute an unlimited amendment and that the ability would only be | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | considered unlimited if the contract did not provide guaranteed benefits (or not to a material extent) and the undertaking was free from any regulatory or contractual constraints to determine the discretionary benefits. | |
| | | Answer:<br><br>We can confirm that an undertaking's ability to amend the discretionary benefits would typically not constitute an unlimited ability to the benefits payable. The contract would be considered to have an unlimited ability to amend the benefits if the contract did not provide guaranteed benefits (or not to a material extent) and the undertaking was free from any regulatory or contractual constraints to determine the discretionary benefits. | 18/08/2010 |
| 73 | TP.2.12<br>TP.2.13 &<br>TP 2.112 | Question:<br>We have the following questions regarding the below topic:<br>Page 27, Para TP2.12 of the final QIS5 spec - this paragraph states that *"The calculation of the best estimate should only include future cash-flows associated with existing insurance and reinsurance contracts"*<br>Page 27, Para TP2.13 of the final QIS5 spec - this paragraph states that TP.2.13. *"A reinsurance or insurance contract should be initially recognised by insurance or reinsurance undertakings as an existing contract when the undertaking becomes a party of the contract and at latest when the insurance or reinsurance cover begins. In particular,* ***tacit renewals which have already taken place at the reporting date should lead to the recognition of the renewed contract****"*<br>*Page 42, Para TP.2.112. "The methods and techniques for the estimation of future cash-lows, and hence the assessment of the provisions for insurance liabilities, should take account of potential future actions by the management of the undertaking."*<br><br>Therefore, both *a) contracts effectively in force and b) tacit renewals* that become effective at the reporting date should be recognised in the technical provisions calculation.<br>Whereas contracts effectively in force are clearly identifiable at the valuation date and therefore the same criterion will be applied in the QIS5 exercise by all undertakings across Europe, the criterion to recognize tacit renewals will be different depending on the provisions in the contract and the national legislation of each Member State. For example, in some national regulations, contracts that will be renewed in the following 2 months from the valuation date ( from 1-Jan to 28-Feb 2010) could be considered tacitly renewed since, by national law, the policyholder should know the price, term and conditions of the renewal. | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | Depending on the final definition of the contract boundaries (tacit renewals included), the management will take decisions. If we consider the abovementioned example, in the short term managers will move the portfolio's renewal date in order to maximize the available capital that can be considered in the annual solvency report. Should these future management actions taken into account for QIS5 exercise? | |
| | | Answer:<br>The actions you refer to in question 1 are not within the scope of 'future management actions' as they do not meet the definition or requirements for 'future management actions' set out for the purpose of QIS5. Therefore such type of actions should not be considered in the calculations | 27/08/2010 |
| 99 | V.2.2 TP.2.15 and Annex D Example B5 | Question:<br>Following the answer to question 18 of the Q&A document-version 18-8-2010 and example B5 of Annex D, we still have some queries on the case of unit linked products and mortality charges. Let us say that we have a unit linked product were the premium is invested and then mortality charges are covered by cancelling units based on the sum at risk. Based on the policy conditions of the product we are able to increase mortality rates to compensate for higher mortality cost in case of deteriorating portfolio. What approach shall we follow as far as future premiums are concerned? Can we project future premiums for the whole policy duration and just not take account of any possible future increases in mortality charge? | |
| | | Answer:<br>In carrying out the assessment of the contract boundaries, premiums and benefits need to be considered together.<br>In the above mentioned example, it seems that the benefits of the contract depend on the amount to be paid for mortality risk. Therefore, there is not a separate contract boundary for mortality charges. See also clarified answer to question 18:" Should the undertaking have flexibility to increase the charges to **fully** offset potential losses, this is considered sufficient to meet the criteria of unlimited ability for the purposes of defining the contract boundary and hence no future premiums should be taken into account in the calculation." | 06/09/2010 |
| 100 | V.2.2 TP.2.19 | Question:<br>Solvency II states that "the definition of the contract boundary should be applied in particular to decide whether options to renew, to **extend the insurance period** …" Does this mean that an endowment policy with say 20 years policy term and an option of a 10 year policy extension (i.e. the | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | policy holder has the right to extend the insurance period of his policy) should or could (depending on the assumed decision) be valued assuming a total policy duration of 30 years? | |
| | | Answer:<br>Unless the undertaking has an unlimited ability to terminate the contract after 20 years, a unilateral right to reject the premiums for the extension, an unlimited ability to amend the premiums or the benefits for the extension, the policy duration of 30 years is within the contract boundary. and the valuation of the obligations should incorporate a realistic take-up rate of contract extensions. | 06/09/2010 |
| 101 | TP 2.15 | Question:<br>We have a question on the boundary of an insurance contract for a Health SLT product. The insurer has no right to cancel the contract, and cannot force the payment of premiums from the policyholder. Premiums can be adapted collectively for all policyholders (not if only 1 policyholder has bad claims record) of a specific product if claims experience for the whole product shows tariff insufficiency, following review by an independent expert (so the ability to amend the premium for the insurer is not unlimited but subject to pre-defined rules and conditions). If premiums are to be adapted following this mechanism, policyholders can cancel the policy within 3 months from the notification of premium adaptation, but not earlier than on a specified term (e.g. 2 years).<br>Would this kind of policy be considered to be a life-long policy and the corresponding premiums could be taken into account on a life-long basis? Or would the contract boundary be the date of the first premium adaptation, which is not known in advance and which would have to be assessed by the insurer? | |
| | | Answer:<br>We understand that the premium amendments follow predefined rules and conditions which limit the ability of the undertaking to choose the amended premium. According to TP.2.15 the policy can be considered a life-long policy. | 06/09/2010 |
| 102 | TP.2.15, Annex D | Question:<br>Para TP.2.15 of the final QIS5 technical specification states that if the undertaking has a "unlimited ability to amend the premiums […] at some point in the future, any obligations which relate to insurance or reinsurance cover […] after that date do not belong to the existing contract." From the examples A5 and B5 of Annex D it can be concluded that the undertaking has an unlimited ability to amend premiums if premiums for each year can be based on - or can be amended in line with – current market premiums, no matter whether a reassessment of risk takes place or not. | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | Our question relates to the boundary of existing group pension contracts in Norway. The policyholder is an employer. Insured persons/beneficiaries are his employees. The benefits to the employees are – inter alia - a function of the salary: the actual salary for mortality and disability benefits and the final salary for retirement benefits. The benefits accrue proportional during the employment period, as illustrated in the following simplified example.<br><br>Example:<br>Assume retirement age 67 and - based on the actual salary - a retirement benefit of 120. The accrued benefit for an employee aged 47 and employed for 10 years, is the retirement benefit based on the actual salary, times actual length of employment, divided by the length of employment at retirement, i.e. 120*(10/30)=40. As the benefits accrue to the employee, the employer has to secure them in an insurance undertaking by paying premiums into a group pension contract. The premiums are assessed as single premiums. As they do not cover all, but only part of the expenses and profit margins, the remaining expenses and profit margins will be charged to the employer on a continuous basis, until the last liability has run-off.<br>In our example, as long as the salary stays unchanged, the employer yearly pays a single premium to cover the annual increase of the accrued benefit by 4 = 120*(1/30). In addition to the premium for this new accrual, a charge for expenses and profit margin for the earlier insured amounts falls due.<br>If the salary now in year 11 increases and the retirement benefit based on this salary is 150, an accrued benefit of 55 = 150*(11/30) has to be secured. I.e. the employer will in year 11 pay the insurance undertaking:<br>1. a single premium for the difference between the accrued part on the new salary and the accrued part on the old salary, i.e. (150-120)*(10/30)=10,<br>2. a single premium for the accrual in year 11, i.e. 150*(1/30)=5, and<br>3. a charge for expenses, cost of guarantees and profit margins for the insured amount.<br>The insurance undertaking is free to amend the aforementioned single premiums (1) and (2) and the charge for expenses, cost of guarantees and profit margins (3) in line with the current market premiums for new contracts. The only constraint to the unlimited ability to amend the premiums is the competitive pressure in the market.<br>Based on the above description we believe that the future premiums mentioned in (2) do not belong to the existing contract, whilst the future charges mentioned in (3) lie within the boundaries of the | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | contract and thus have to be taken into account in the cash-flow projection of the existing contract.<br>Concerning the future premiums mentioned in (1) we are not sure whether they belong to the existing contract (they arise due to expected salary inflation) or not (as the undertaking is free to require the current market premium).<br>Can you confirm that the future premiums mentioned in (1) do not belong to the existing contract?<br>Can you confirm that the future premiums mentioned in (2) do not belong to the existing contract?<br>Can you confirm that the future premiums mentioned in (3) do belong to the existing contract? | |
| | | Answer:<br>In carrying out the assessment of the contract boundaries, premiums and benefits need to be considered together. It should also be considered whether or not TP.2.15.b applies to the contract.<br><br>In the above mentioned example, it seems that the part of the premiums of the contract referred to in (3) depend on the receipt of future amounts to be paid for the benefits referred to in (1) and (2). If such an interpretation is correct, there is not a separate contract boundary for the premium and benefits in (3). See also answer to question 99.<br><br>On the contrary, if TP.2.15.b applies to the contract mentioned in the question so that premiums and benefits in (1), (2) and (3) can be looked at in isolation, then it can be considered that the premiums and benefits in (1) and (2) do not belong to the existing contract as the undertaking is free to amend the corresponding premiums. In this case, it is still necessary to analyze premiums (i.e. the charges mentioned in (3)) and benefits (i.e. the payout to the pensioner and any other benefits) together.<br><br>See also clarified answer to question 18:" Should the undertaking have flexibility to increase the charges to **fully** offset potential losses, this is considered sufficient to meet the criteria of unlimited ability for the purposes of defining the contract boundary and hence no future premiums should be taken into account in the calculation. | 06/09/2010 |
| 103 | TP.2.15, Annex D | Question:<br>Our question relates to the boundary of existing contract and especially to the example B5 of Annex D as well as the answer to Q18 in QIS 5 Questions & Answers.<br>The common approach in our country (for unit linked and variable life contracts) is that there are many types of charges charged either directly from what the policyholder pays to the insurance | |

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| | | company (let us call this a 'deposit') or from the 'policyholder's account'. The purpose of some charges is to provide insurance coverage (let us call this a 'risk premium') some other charges are to cover the company's costs (let us call this 'cost fees').<br>Speaking about the risk premium, the rates are not specifically disclosed to the client as, especially for mortality risk, they depend upon the age and thus are changing from month to month. However, even if they are not disclosed, the companies do not change them during the contract duration. We cannot say they are 'guaranteed' explicitly, but we believe that there exists an implicit guarantee.<br>Concerning the 'cost fees', these are subject to changes. Usually companies have a publically available list of cost fees that might be updated every year.<br>Based on the above description we believe that a) the boundary of these contracts is the date agreed with the policyholder as the end date of the contract and b) the change in 'cost fees' can be projected as management action.<br>Are we correct in our understanding? | |
| | | Answer: It all depends on the details of the policy wording and its legal interpretation. It seems clear that the undertaking in this case has some ability to change future premiums and charges – the decision then rests on whether the ability to amend premiums / charges is "unlimited" as per TP.2.15.(a). Unless the policy places some limitation on the ability of the undertaking to amend premiums, it should be assumed that the ability is de facto "unlimited" and the contract boundary would fall at the point when premiums could be changed.<br>When considering whether the terms of the policy place some limitation on the undertaking's ability to amend premiums / charges, it should be noted that competitive pressures (eg to stay in line with terms set by other undertakings in the market) would not be considered a limitation, as this is a management decision – see TP.2.17. The ability to vary policy terms should take into account regulatory and legal constraints. | 06/09/2010 |
| 117 | TP.2.15 | Question:<br>How the boundary of existing contract (TP.2.15) should be treated if by policy conditions the undertaking has unilateral right to change fees in saving/investment contract and these fees will affect both future premiums as well premiums paid in the past (accrued value)? Do obligations arising from future premiums of such a contract belong to the existing contract? Do obligations arising from past premiums (from accrued value) belong to the existing contract after the earliest date the undertaking could change the fees? | |
| | | Answer:<br>If the unilateral right allows for unlimited amendments and affects futures premiums and future | 13/09/2010 |

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| | | obligations arising from past premiums, both elements are out of the boundaries of the contract after the earliest date the undertaking could change the fees.<br>See also the answer to question 102. | |
| 159 | TP.2.15 | Previous answers to questions, e.g. number 102 and 117, states that no future cashflows referring to future charges can be taken into account for contracts where the undertaking has an unlimited ability to change the charges for future premiums and for obligations arising from past premiums.<br>Does the same rule apply to all future costs for the undertaking related to these contracts? If not, what costs should be included in the calculation of the best estimate?<br>Also, what risks should be included in the calculation of the SCR op and MCR for these contracts?<br>If only future costs and no future profits are included in the calculations concerning obligations arising from past premiums, the consequences for a great number of undertakings who deal only with unit-linked contracts will be more or less fatal.<br>How does this approach comply with the Directive and the rules of best estimate?" | |
| | | Answer: The principle of correspondence between future costs and charges should apply in the valuation. Therefore, costs should only be valued where the corresponding charges have been valued. The SCR and MCR only cover the risks from existing business (over the following 12months) and therefore any inputs to the SCR and MCR calculations should be consistent with the contract boundary definition defined in the Technical Provisions calculations. | 01/10/2010 |
| 160 | | Question:<br>For reinsurance contracts should there be a look-through to the underlying business?<br>The question concerns the treatment of reinsurance versus a direct writer when it comes to contract boundaries. As an example if we looks at group life cover, which renews annually and where the reinsurer has a five year 50% quota share treaty with the direct writer. The direct writer is obliged to pass all business to the reinsurer, and the reinsurer is obliged to accept it, at the rates agreed. As per the description of contract boundaries in the Technical Specification and the example (B1) given in Annex D it seems straightforward that for the direct writer the contract boundary is one year even though most business will renew etc.<br>However, the reinsurer's contract is with the direct writer not the policyholders. For our example, the reinsurer has no unilateral right to terminate the reinsurance contract or reject or vary premiums/benefits, which suggests that for the reinsurer the contract boundary is five year until the reinsurance contract ends. For reinsurance should there be a look-through to the underlying business so in our example the contract boundary is also one year? | |

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| | | Answer:<br>The contract boundary should be based on the contract between the reinsurer and the direct writer as it is the terms and conditions of the contract between reinsurer and direct writer that determine the obligation borne by the reinsurer.<br>From the perspective of the direct writer, the estimated reinsurance recoverables have to be consistent with the boundaries of the direct writer's gross technical provisions. | 01/10/2010 |
| 161 | | Question:<br>In a situation where an insurer has issued a quote and, if the potential insured decides to accept, the insurer has no option except to cover them for the premium quoted, should there be an allowance in the technical provisions?<br>One example of this situation would be the personal lines motor market. Given that the insurer has no choice in this situation, I would categorise it as a legal obligation. However, no contract will be in place. Clearly, if allowing for such quotes, it would be necessary to explicitly allow for the proportion of quotes that would be expected to be accepted. | |
| | | Answer:<br>TP.2.13 states that a reinsurance or insurance contract should be initially recognised as an existing contract when the undertaking becomes a party of the contract. As a contract is between two parties, quotes should not be recognised as an insurance contract until the potential insured has accepted the quote. | 01/10/2010 |
| 162 | | Question:<br>Can you confirm that the undertaking's ability to amend management fees to be charged to the policyholder after one year would not be considered an unlimited ability to amend the premium or benefit, unless the undertaking was able to increase the management fees in such a way that they fully consumed all other benefits of the contract. We envisage this to be applicable to contracts like universal life type contracts, unit-linked and investment-linked contracts among others. | |
| | | Answer:<br>Yes | 01/10/2010 |
| 163 | TP.2.15, Annex D | Question:<br>We are not yet sure how the answer to question 102 applies to group pensions in our country. To give an idea on why this still seems difficult, we would like to describe in more detail our example from question 102 by providing the relevant legal features that hold for that business: | |

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| | | (a) The insurance undertaking can charge the premiums for expenses, guarantees and profit margins related to the insured amount – i.e. the premiums mentioned in question 102 under (3) – only as long as the benefits insured are part of a "collective" contract, i.e. a group pension contract. The benefits insured are part of a "collective" contract only as long as the defined benefit pension plan of the policyholder is in force for these benefits.<br>If an employee resigns his job, or if the group pension policyholder decides to close down the defined benefit pension plan, or if he defaults on his premium payments, the insurance undertaking has to issue policies – as a rule individual paid-up policies - to the beneficiaries.<br>For these "individual" policies the following holds true:<br>• The insured benefit has to cover at least the benefits accrued so far.<br>• When issuing these policies, the single premium charged to the group pension policy-holder is the premium based on the insured benefit, the interest rate guarantee at which the benefits have accrued in the group pension contract, and the biometrical tables that were used for the accrual. No further premiums can be charged on the individual paid-up policy.<br>(b) The insurance undertaking has no possibility to avoid or reject issuing the paid-up policies referred to in (a).<br>(c) Furthermore, a policyholder of a group pension contract always has to pay all three types of premium as long as the group pension contract is in force. For example, the policyholder can not choose to drop (1) or (2) - or both - while continuing to pay (3). In case one kind of premium is not being paid, the insurance undertaking has to transform the whole group pension contract into individual paid-up policies as described in (a).<br>As explained in the example given in question 102, the ability to amend premium (1) or premium (2) can be seen as limited only by competitive pressure. On the other hand, due to the legal constraints (i.e. it would become an individual paid up policy under(c)above), the ability of the insurance undertaking to amend premium (3) is limited.<br>From the answer given to question 102 the following alternative interpretations seem to be possible:<br>• <u>Alternative A</u>:<br>As the future premium referred to in (3) depends on the receipt of the future amounts referred to in (1) and (2), no separate contract boundary holds for the premiums and benefits in (3). | |

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| | | Therefore, depending on whether or not the whole premium is deemed to be unlimited amendable, one of the following alternative interpretations holds true:<br>• Alternative A1: The whole premium is deemed to be unlimited amendable because (1) and (2) are unlimited amendable.<br>In this case no future premiums are taken into account. Since premiums and benefits need to be considered together, no benefits due to future accrual belong to the existing contract. But also the benefits already accrued to the beneficiaries do not belong to the existing contract, because - as long as they are group pension benefits - they are conditional on the payment of (3) as maintenance charge.<br>However, the question then arises how to value the liabilities of the existing contract.<br>• Alternative A2: The whole premium is deemed as not being unlimited amendable because premium (3) is not unlimited amendable.<br>In this case all cash flows relating to future premiums and future benefits belong to the existing contract and have to be taken into account for valuation.<br>• Alternative B:<br>It is deemed that TP.2.15.b can be applied to the contracts, i.e. premiums and benefits in (1), (2) and (3) can be looked at in isolation. (In light of the above description of the legal constraints, this is not a "realistic" scenario in the sense that the continuation of the group pension contract is conditional on the policyholder paying all parts of the premium.)<br>In this alternative, (1) and (2) do not belong to the existing contract. Only the cash flows relating to the accrued benefits, including the future premium payments mentioned under (3), belong to the existing contract and have to be taken into account when valuing the liabilities.<br>Based on the above description, could you please indicate which interpretation can be seen to be the one most in line with the provisions for contract boundaries in QIS5? | |
| | | Answer:<br>Within the contract boundary are only the cash-flows which relate to the "individual policies" for the currently accrued benefits as defined in point (a) of the question.<br>From the answer alternatives offered in the question, alternative A1 describes the situation most properly. However, the following statement isnot accurate:<br>"But also the benefits already accrued to the beneficiaries do not belong to the existing contract, because - as long as they are group pension benefits - they are conditional on the payment of (3) as | 01/10/2010 |

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| | | maintenance charge."<br>The benefits relating to the individual policies are not conditional on the payment of (3) as maintenance charge. Therefore the contract boundary is not empty as concluded under alternative A2, but includes the cash-flows of those individual policies. | |
| 205 | TP.2.15 | Question:<br>*Where an undertaking can change the charges for unit-linked business (cf. Q103) and national law requires that the charges are reasonable, does this provision constitute a limitation of the ability to change the charges?* | |
| | | Answer: *If the requirement that the charges are reasonable implies that they need to correspond to the expected costs of the undertaking, then this constitutes a limitation of the ability to amend the charges of the contract.* | 26/10/2010 |
| 206 | | Question:<br><br>The company has accumulating with profits contracts (also referred to as unitized with profits). There are material guarantees under the contracts. Hence with respect to benefits the contract boundary appears to fit within Question 50 of the Q & A. However explicit charges are made to the contract e.g. policy fee, mortality charge. These charges can be varied to an unlimited extent with 90 days' notice. This part of the contract fits Question 18 and suggests that the contract boundary would be 90 days.<br><br>The specific questions are:<br>1) Would this contract have a boundary of 90 days?<br>2) If we apply a penalty (i.e. a reduction in accrued benefits) on a contract becoming paid up would this influence the decision on where the contract boundary lay?<br>3) If our practice is to remove death benefits in excess of accrued maturity benefits on a contract becoming paid up, does this influence the contract boundary?<br>4) Does the contract boundary apply to all cash flows associated with the contract or just those associated with future premiums after the termination boundary?<br><br>. | |
| | | Answer:<br><br>1) TP.2.15 refers both to amendments of premiums and to amendments of benefits. It may often be necessary to | 26/10/2010 |

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| | | analyse both elements in combination to capture the economic nature of the contract. TP.2.15(a) is a minimum condition. Where the undertaking has at two points in time an unlimited ability to amend premiums or benefits then the earlier ability determines the contract boundary. Based on your description provided the contract boundary would be at 90 days.<br><br>2) and 3) The application of the penalty or adjustment to benefits would be dependent on the policyholder exercising an option i.e. the policyholder would need to choose to make the policy paid-up before the penalty or adjustment could be applied. This would therefore not influence the decision on where the contract boundary lies.<br><br>4) The valuation of an insurance or reinsurance obligation should be based on all the cash-flows required to settle the obligations related to existing contracts on the date of the valuation as defined in TP.2.20. | |

# Technical provisions – Best estimate

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| 21 | TP.2.93<br>TP.2.94<br>TP.2.97 | Question:<br>Should the growth rate for unit-linked business differ in each of the scenarios where the different levels of illiquidity premia are allowed for? The growth rate should probably be consistent with the assets backing the unit-linked fund, but the technical specifications require the following:<br>• Section 2.93 on discretionary benefits says that the assumptions on the future returns of the assets should be consistent with the relevant risk-free interest term structure for QIS5.<br>• 2.94 on Assumptions underlying the best estimate calculation says that your assumptions should be consistent with the relevant risk-free interest rate term structure.<br>• 2.97 on the principles to be followed in determining the appropriate calculation of a market consistent asset model - The asset model should be calibrated to the current risk-free term structure used to discount the cash flows. | |
| | | Answer:<br>Where unit-linked liabilities are not valued as a whole (see subsection V.2.4 of the QIS5 technical specifications), their best estimate depends on the future development of the value of the assets backing the unit-linked fund. The valuation can be performed by using simulation tools based on different reference measures, as e.g. the risk-neutral measure or the real-world measure. All measures should lead to the same market-consistent value for the liabilities.<br><br>If the market-consistent valuation is based on a risk-neutral model, the assets are projected forward at the risk-free rate. (This same principle holds whether unit-linked or with-profit contracts are valued.) All accumulation and discounting in the risk-neutral model is done at the risk-free rate. The risk-free rate that has to be used in QIS5, is the basic risk-free rate adjusted for the relevant illiquidity premium (50, 75, or 100 per cent scenario) for the liability to be valued.<br><br>The question could be asked whether assets should be accumulated with a risk-free rate different from the one used to discount the best estimate (e.g. unadjusted swap rates for assets, credit adjusted swap rates plus illiquidity premium for the best estimate). This would not make sense, as it would automatically create specious profits or losses. The only consistent approach is to roll up assets and discount liabilities at the same rate, and this is the rate adjusted for credit and illiquidity premium that has to be used to discount the technical provision in QIS5. | 10/08/2010 |

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| | | If the market-consistent valuation is based on a 'real-world' modeling, the assets are projected forward at the rate of the expected asset growth. The risk inherent in the asset growth is accounted for by (stochastic) discounting with so called deflators. (Deflators are strongly related to the risk-free rate.) I.e. all accumulation in the real-world model with deflators is done with asset growth rates that in addition to the risk-free rate take into account the risk premia for the asset in question, and all discounting is done with deflators. The risk-free rate that has to be used in QIS5, is the basic risk-free rate adjusted for the relevant illiquidity premium for the liability to be valued.<br><br>The question could be asked whether the risk premia stay unchanged in the different illiquidity premium scenarios, or whether the risk premia should be reduced in each illiquidity premium scenario in such a manner that the resulting asset growth rates stay unchanged. The argumentation for the latter could be that the risk premia cover all sources of risks, including illiquidity. Thus, if an illiquidity premium is added, the risk premium has to be reduced accordingly. As any change in the risk premia cancels out in the construction of the deflator in the real-world modeling with deflators, the chosen adjustment to the risk premia will make no change to the value of technical provisions. Therefore both solutions are seen as viable. | |
| 51 | TP.2.48. | Question:<br>Paragraph TP.2.48 seems somewhat contradictory.<br>The general principle of substance over form, applied in QIS5, means that whenever non-life policies give rise to the payment of annuities, those insurance obligations should be unbundled and recognized under the 17th life LoB "Annuities stemming from non-life contracts". The risks emerging from such obligations should be included in Life or Health-SLT underwriting risks.<br>Under TP.2.48, the specifications state in the first place that the assessment of (expected) annuity obligations stemming from incurred claims shall be dealt with consistently with the principle of substance over form (which seems to point to the inclusion of such obligations under life technical provisions).<br>However, it also states that such assessment should be included in premiums provisions, which by definition only exist under non-life obligations. This is also confusing because we are linking claims incurred in the past with premium provisions...<br>For the sake of consistency across EU, we would appreciate if CEIOPS could clarify where obligations stemming from (expected) annuities arising from incurred claims are supposed to be included. The question should also be extended to (expected) annuities stemming from future claims, regarding premium provisions or future premiums in those LoB's for which these are taken into account in the | |

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| | | assessment of technical provisions. | |
| | | Answer:<br>The underlying principle is that obligations are life insurance obligations if life insurance techniques are used for their valuation and obligations are non-life obligations if non-life techniques are used for their valuation.<br>Existing annuities arising from non-life contracts should be treated as life insurance obligations. An annuity exists once the annual annuity amount has been fixed. From that time on, the claim is only under longevity risk, expense risk and (if the annual amount depends on changes in the legal environment or the health status of the beneficiary) revision risk and life techniques are used for its valuation.<br>On the other hand for future annuities that do not currently exist the annual amount of these claims is not fixed yet. The main risk of these claims is usually the uncertainty of the annual amount and this risk is not captured in the life u/w risk module. For this reason non-life techniques are usually used to value these claims.<br>Note that we are focusing on the situation where a material amount of annuities is expected to occur in the future. Thus, the principle of proportionality is assumed not to allow the use of simplifications. | 18/08/2010 |
| 52 | TP 2.51 | Question:<br>Regarding the valuation techniques for non-life business:<br>Are unearned premium reserves (UPR) and Incurred but not reported (IBNR) methods acceptable? | |
| | TP.7.70 - 88 | Answer:<br>Unearned Premium Reserves in non-life insurance, as commonly seen in current accounting approaches including Solvency I, do not exist within Solvency II. They have been replaced by the concept of premium provisions – see TP.2.43 – 46. This represents quite a significant change from current approaches, and we would encourage participants to adopt methods, including simplifications set out in TP.7 where appropriate, in line with Solvency II principles wherever possible.<br>Incurred But Not Reported (IBNR) forms part of the outstanding claims element of technical provisions, and is not a recognised technique by itself. For Solvency II purposes, the IBNR element does not need to be separately identified and reported.<br>The technical specifications set out several simplifications that can be used for the calculation of technical provisions for non-life insurance (V.2.6.2). These include two simplifications for incurred but not reported claims provision and a simplification for the expected claims ratio (which uses unearned premium reserves). The use of these simplifications is subject to the conditions set out in the | 18/08/2010 |

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| | | technical specifications being met. However, provided these conditions are met there is no prioritisation between the different simplification methods. Undertakings using simplifications are also encouraged to carry out the standard calculations. | |
| 53 | TP 2.23 | Question:<br>Regarding the investment return to be taken into account:<br>Does this paragraph refer to the unit growth assumption we are using on the clients investment funds, i.e. assume a unit fund growth of 0% for each fund? or the return on the company's net cash-flows? | |
| | | Answer:<br><br>Where the future cash flows associated with insurance or reinsurance obligations can be replicated using financial instruments for which a reliable market value is observable, the value of the technical provision is equal to the market value of the financial instruments used in the replication, see subsection V.2.4 - Calculation of technical provisions as a whole - of the QIS5 technical specifications.<br><br>TP.2.23 refers to the case where the future cash flows of the liability can not be replicated using financial instruments from deep, liquid and transparent markets, i.e. the technical provision can not be calculated as a whole. In this case the technical provision has to be determined as the sum of a best estimate and a risk margin.<br><br>The best estimate has to be determined as the probability weighted average of future cash flows – both cash-inflows and cash-outflows - discounted to the valuation date. The cash-inflows that have to be taken into account are future premiums and receivables for salvage and subrogation; the cash-outflows are benefits to the policyholders, expenses and other cash-outflows (see TP.2.22 for cash-inflows and TP.2.24 for cash-outflows).<br><br>TP.2.23 is only a clarification that when calculating the best estimate of the liability, investment returns can not be accounted for as cash-inflows. However, for insurance contracts where the benefits to policyholders or beneficiaries depend on future investment returns of certain assets, the projected future benefit cash-outflows have to be modeled consistently (depending on which market-consistent valuation method is used) with the investment returns of the assets they depend on. | 18/08/2010 |

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| | | Market-consistency can be achieved, for example, both in a risk-neutral model and in a real-world model with deflators. If risk-neutral modeling is used, the benefits will depend on expected investment returns that are modeled as the risk-free rate for all assets; if real-world modeling with deflators is used, the modeled benefits depend on the real-world expected investment returns. | |
| 74 | TP.2.69 | Question:<br><u>Determination of Best Estimate for insurance contracts which are based on cash flows in different currencies at the same time</u><br>It is typical for some insurance companies to have obligations in different currencies. In this case, according to TP.2.69, the best estimate should be calculated separately for the obligations in the different currencies using the risk-free term structure for each relevant currency. Difficulties now arise in the case where cash flows of the very same insurance contract occur in different currencies.<br>**Illustrative Example**<br>Consider an insurance company in Liechtenstein that sells unit-linked insurance contracts into Germany. In this case, expenses of the insurance company (such as administrative expenses or claims handling expenses) incur in the local currency **CHF**, whereas premiums are received in **EUR** and insurance benefits are also due in **EUR**. Furthermore, premiums are invested in different investment funds. The majority of such funds is denominated in **EUR** as well, but a relevant number of funds may be denominated in **USD** and one insurance contract may be invested in both EUR and USD funds at the same time. (We may assume in the example that a deterministic valuation approach (i.e. cash flow projection in the so-called certainty equivalent scenario) is sufficient since no material embedded options and guarantees are to be dealt with.)<br>In this context, we are seeking guidance on the following questions:<br>• How should the different currencies be reflected in the calculation of the best estimate for insurance contracts like the one described above?<br>• Proposed <u>Approach:</u><br>i. The currency of premium and benefit payments defines the currency of the contract. Convert investments in other currencies (e.g. USD) into the currency of the contract (in our example: EUR) at the actual exchange rate at time t=0.<br>ii. Project all investments of a single contract in the currency of the contract (EUR) in the certainty equivalent scenario (i.e using EUR risk-free rates) and discount the resulting cash flows based on the risk-free rates corresponding to the currency of the contract (i.e EUR curve). | |

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| | | iii. Convert the discounted cash flows (in EUR) into the local currency (CHF) at the actual exchange rate at t=0.<br>iv. Project actual expense cash flows in the local currency (CHF) and discount these expense cash flows at the corresponding risk-free rates. | |
| | | Answer:<br>The proposed approach is usually not appropriate since as indicated in TP.2.69, participants should distinguish between obligations in different currencies. This is also necessary in order to calculate accurately the currency risk.. | 27/08/2010 |
| 75 | TP.2.88 | Question:<br>On our creditor business, there exist profit sharing arrangements whereby a specified percentage of the profit pool net of claims cost, expense retention and commission is shared with the distributor. Such arrangements give the companies substantial cushion against adverse fluctuations in experience. Under normal conditions, profit share payments are expected to be made to the distributor. However, the amount of profit share payable would be reduced under an adverse scenario.<br><br>We would like to know whether our proposed treatment of the profit share arrangements as "future discretionary benefits" is appropriate. We believe that it has the following characteristic as noted in TP2.88 "the benefits are legally or contractually based on the performance of a specified pool of contracts" | |
| | | Answer:<br>The profit share payments you describe are not benefits that are dedicated to policyholders and a treatment according to "future discretionary benefits" would thus not be appropriate. They can be considered as "expense charges" that can be reduced in case of adverse situations. Reducing this expense charge can be considered as a management action according to TP.2.113.<br><br>To determine the Best Estimate these expenses should be valued in accordance with TP.2.26-33. In this context, adverse scenarios under which these charges are lower than expected as well as scenarios under which these charges may be higher than expected, along with an appropriate probability of the scenario occurring, need to be identified. The final allowance for expenses in technical provisions will thus include an appropriate allowance for the entire range of expense charges that may be made in the future. | 27/08/2010 |

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| 76 | | Question:<br>The answer to question 21 in the Q&A asks us to include the appropriate liquidity premium for both projecting and discounting. In this way, assets roll up and get discounted at the same rate. The answer does not give any indication of whether or not we accept that option prices will change. Specifically, if we simply generate scenarios using an altered starting yield curve that includes the liquidity premium, without re-calibrating to option prices, then we will alter the price of options. Put and floor type options which are prevalent in the industry will become cheaper. For example, consider the value of a 5 year, at the money European put option. Using the Black Scholes formula with an interest rate of 4% and a volatility of 30%, a dividend of 0%, we get a price of 15.84%. Increasing the risk free rate by 41bps, for example (50% of GBP liquidity premium at 12/31/2009) decreases the value of this put option to 14.99%. This is the result of the higher accumulation rate, leading to fewer and less severe payouts, and a higher discount rate. However, if we only discount the put cash flows, in this example, this would decrease the value of the put option to roughly 15.4%, which reflects only the impact of discounting at a higher rate, effectively assuming that we could replicate this option with (partially) illiquid assets. | |
| | | Answer:<br>Your understanding of the answer to question 21 is correct: the appropriate illiquidity premium for the valuation of the liabilities has to be included both for projecting and for discounting the assets, thus assuring that the assets are rolled up and discounted with the same rates.<br>According to TP2.97.b, asset models should be calibrated to a risk-free interest rate curve that includes an illiquidity premium - and thus differs from the risk-free term structure implicit in the market price of some options.<br>The convention in the over-the-counter option market is to use swaps as risk-free rates. As QIS5 is based on a different relevant risk-free rate, market option prices and market implied volatilities can no longer be replicated simultaneously.<br>The asset models should nevertheless be market-consistent and comply with TP2.97 c.<br>The market-consistency of the asset models that no longer reproduce observable market prices can be demonstrated in a two stage approach. In the first stage relatively simple closed form solutions can be parameterized to match the market value of observable options using the swap rate, i.e. the market implied discount rate. These closed form solutions and the same parameters should then be reused with the relevant QIS 5 risk-free rate to establish theoretical market values consistent with the definition of risk-free used in the valuation of the liabilities in QIS5. These theoretical market values can then be used to validate the market consistency of the liability valuation approach by | 27/08/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | confirming that the liability approach adequately reproduces those theoretical market values. | |
| 77 | TP.2.1 | Question:<br>TP.2.1 says that the best estimate should correspond to the probability weighted average of future cash flows taking account of the time value of money. The Directive itself, in Article 76(2), refers to the TP's corresponding to the amount the insurance undertaking would have to pay if they were to transfer their insurance obligations immediately to another insurance undertaking. The question relates to how the term "transfer to another insurance undertaking" should be interpreted for QIS5.<br>The insurer in question is a warranty insurer, and has a legal obligation to pay to remedy certain defects arising in the product. The insurance is taken out by manufacturers to provide protection to people buying the product. In practice, the insurer has a relationship with the manufacturer which means that in practice a majority of claims are in fact met directly by the manufacturer at limited cost to the insurer. However, the insurer has a strict legal liability to pay the full claim should the manufacturer fail to remedy the product. The manufacturer has an incentive to pay the claims directly in order to keep its future premium costs down. In practice the insurer does not necessarily know about the full extent and costs of claims that the manufacturer settles directly.<br>Should the insurer establish its best estimate technical provisions on the basis that it expects to not have to pay the majority of its claims, as it expects the manufacturer to continue to pay (making appropriate probability weighted allowance for scenarios when the manufacturer fails to pay for whatever reason)? If it were to actually transfer its liabilities to another insurer, then there would seem to be no incentive for the manufacturer to continue its past practice of paying claims, and so the insurer accepting the transfer would need to establish a best estimate provision based on the strict legal liability of the claims. The difference between the 2 values could be quite material. For the purposes of QIS5 which approach should be taken to determining the best estimate technical provisions. | |
| | | Answer:<br>The individual relationship between the undertaking and manufacturer is not relevant to the calculation of the best estimate since it is entity-specific and should not inform the transfer value. | 27/08/2010 |
| 118 | TP.7.84 | Question:<br>What do you mean by "the earned premium should exclude prior year adjustments"? | |
| | | Answer:<br>Prior year adjustments aim to separate economic events that affect prior years from those events that effect the current financial statements. Requirements that earned premium should exclude the | 13/09/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | prior year adjustment means that we should take into account earned premium without taking into account later events that effect prior years. | |
| 119 | TP.7.60 | Question:<br>We do not see how discounting can be taken into account. | |
| | | Answer:<br>Considering that this is simplified method, the Technical Specifications do not prescribe a specific methodology to calculate the adjustment factor (factor to take into account future inflation and discounting), but each undertaking should find the most appropriate way to value it, and should be able to justify its choice in the qualitative questionnaire as well. | 13/09/2010 |
| 120 | TP.7.71 | Question:<br>How is the average cost of IBNR claims calculated (plus inflation and discounting), taking into account the nature of IBNR claims: they are uncertain until they become fully settled?<br>R needs to have an index of t rather than t-i | |
| | | Answer: Just because of the uncertain nature of the IBNR claims, their average cost, in this simplified method, is based on the average cost of claims reported in the relevant accident year, as defined in TP7.71:<br>The historical average cost of claims = C(t) = Overall cost of claims in the year t / R(t)<br>For further clarification, see also the simplification spreadsheet on technical provisions.<br>We agree that the expression $R_{t-i}$ should be replaced by $R_{t.}$ | 13/09/2010 |
| 121 | TP.7.78 | Question: What is the index i for $R_i$? I.e. does the expression 'last two exercises' mean the last two valuations? Or what? | |
| | | Answer: Yes, it refers to the last two valuations. | 13/09/2010 |
| 122 | TP.2.33 | Question: How the future investment management expenses should be estimated for cash flows in case of different expense levels for different asset classes? As we assume that investment returns are based on risk free rates should we predict that investment management expenses are close to expense level of asset class which is most similar to risk free asset? If not then should the best estimate of investment management expenses be based on existing or predicted future split of assets? | |
| | | Answer: The best estimate of investment management expenses should be based on existing and predicted future split of assets. | 13/09/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 144 | TP.2.27., 2.28., 2.29. & 2.32. | Question:<br>Currently (under Solvency I) Non-life companies typically include direct claims expenses (Allocated Loss Adjustment Expenses - ALAE), such legal costs, assessor costs etc., and indirect claims expenses (Unallocated Loss Adjustment Expenses - ULAE), such as the claims department salaries, office space etc., in their technical provisions. Other overhead in some jurisdictions, costs are not typically included in the technical provisions; presumably this is on the basis that they are covered by new business. On the other hand, Life companies explicitly include overhead expense allocations in their technical provisions.<br><br>Under Solvency II, the concept of unearned premium reserves (UPR) does not exist; instead there are premium provisions. Considering a company which writes business uniformly throughout the year. On the valuation date, under Solvency I such a company would have UPR equal to half a year's premium. Under Solvency II this company would have no UPR on its balance sheet but instead premium received and a premium provision. The premium received minus the premium provision would equal to half a year's underwriting profit (assuming it is writing business on profitable terms). Noting the final sentence of paragraph TP.2.32, should this company therefore add half a year's overhead expenses, in addition to ALAE and ULAE, to the premium provision? (It should be noted that this would be a significant change in approach for Non-life companies and should be highlighted as such.) | |
| | | Answer:<br>The approach to valuing the technical provisions under Solvency II for Non-Life companies will be significantly different compared to the existing approaches adopted by many companies. As noted in the question, TP.2.32 states that a share of overhead expenses should be taken into account in the assessment of future expenses. Specific details of the approach to calculate the premium provision are described in the technical specification in TP.2.44 to TP.2.46. | 23/09/2010 |
| 145 | | Question:<br>How does inflation have to be treated in the context with the calculation of technical provisions? Are there any guidelines for a consistent way of treatment on an European level? Or do the undertakings have to use undertaking specific assumptions, which would lead to inconsistency in our opinion. | |
| | | Answer: Generally, appropriate assumptions for future inflation should be built into the cash-flow-projections underlying the calculation of technical provisions. The assumptions for future inflation should depend on the type of inflation considered (e.g. price inflation, salary inflation, claims inflation) and should make use of available information about current inflation rates within the | 23/09/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | relevant markets. Assumptions about (financial) market inflation rates should be consistent with any relevant price index provided by the relevant financial markets. Consideration should also be given to inflation implied by market data and to central bank inflation targets. Regarding expenses undertakings should consider their own analysis of expenses and any relevant market data, including potential future inflation. For example salary inflation might depend on undertaking specific arrangements included in the contracts with employees. In such cases the use of general market indices of salary inflations would not reflect the undertakings own development of expenses. | |
| 164 | TP 2.22. | Question:<br>Have kickbacks from funds and index linked business to be considered as Cash-in-Flows? | |
| | | Answer: Yes, in accordance with Article 77 paragraph 2 of the directive, all cash-in flows and cash-out flows required to settle the insurance or reinsurance obligations should be taken into account. | 01/10/2010 |
| 181 | TP.2.24, 2.35 | Question:<br>Currently there is a so called "bank tax" in force that applies to the premium and according to these points in the TS, the tax is a cash outflow. In order to maintain consistency in the best estimate assumption on this special tax it would be reasonable to apply a single interpretation of assumptions on future bank tax in terms of base of the tax (e.g. adjusted written premium), the tax rate and the time horizon for which this special tax is to be applied.<br>If this tax is not deemed to be a "premium tax" in the sense of the TS then it necessarily will be an expense item and the same issues arise. | 15/10/2010 |
| | | Answer:<br>It is impossible to give a single interpretation of assumptions on future bank tax in terms of base of the tax (e.g. adjusted written premium), the tax rate and the time horizon for which this special tax is to be applied. This could also not be done because different taxation regimes exist across Member States. Paragraphs TP.2.34. to TP.2.37 set criteria for how and which tax payments should be taken into account when calculating technical provisions. | |
| 182 | TP 2.44 | Question:<br>TP.2.44. The best estimate of premium provisions from existing insurance and reinsurance contracts should be given as the expected present value of future in- and out-going cash-flows, being a combination of, inter alia cash-flows from future premiums …<br>For consistency with the written premium calculation used for SCR purposes, shouldn't the future premiums included in the premium provisions exclude the future premiums which are already | 15/10/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | accounted for in the written premiums?<br>For example, for<br>• Future premium installments already accounted for in the written premiums and/or<br>• Future premiums for multi-year contracts already accounted for in the written premiums. | |
| | | Answer:<br>The calculation of premium provision includes consideration of cash flows in respect of future claims, future expenses and future premiums (among other items), subject to the contract boundary set in the specifications. It is important to recognise that the emphasis for technical provisions is on cash flows, and does not take into account other accounting concepts such as written premiums.<br>Thus, cash inflows relating to future premium installments that are within the boundary of the contract, that also form part of "written premiums" shall be included in premium provisions to the extent that they relate to future claim events. (See also answer to question 10.6) | |

# Technical provisions – recoverables

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 78 | TP.2.132-162 | Question:<br>For life insurance companies, it is typical to have in place long-term reinsurance contracts linked to a specified portfolio of insurance contracts. In general, the maturity of these reinsurance contracts is greater than one year (and typically coincides with the maturity of the primary insurance contracts). Reinsurance premiums are usually not paid upfront, but on an ongoing basis. According to TP.2.120 the best estimate should be calculated gross, without deduction of amounts recoverable from reinsurance contracts.<br>In this context, we are seeking guidance on the following questions:<br>Is it correct, that in the case of reinsurance contracts with ongoing premium payments as described above, the amounts recoverable from reinsurance contracts according to TP.2.120 should also reflect future reinsurance premiums to be paid by the primary insurer (provided that the requirements in TP.2.15-2.19 are satisfied by the corresponding reinsurance contract)? | |
| | | Answer:<br>Yes. When calculating the amounts recoverable from reinsurance contract and special purpose vehicles, the cash-flow should take into account future reinsurance premiums. | 27/08/2010 |

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| 79 | TP.2.132-162 | Question:<br>When subtracting future premium payments from the recoverables, the best estimate of reinsurance cash flows (i.e. the expected value of discounted reinsurance recoverables minus discounted future reinsurance premiums) may be negative (reflecting the reinsurer's profit margin). Thus, in case of a default of the reinsurance company, the insurance company may realize a profit instead of a loss under this valuation approach. How should the expected default of the reinsurer be reflected in the best estimate of reinsurance cash flows for these types of reinsurance contracts? | |
| | | Answer:<br>Reinsurance premiums are assumed to be paid by the primary insurer as long as the reinsurer has not defaulted. Similarly, reinsurance payments are assumed to be received by the primary insurer as long as the reinsurer has not defaulted. Timing differences between payments to policyholders and payments received from the reinsurer should be reflected in the calculation of the best estimate. Consequently, in case of default, only the outstanding recoverables at the time of default are lost and the (typically negative) best estimate of reinsurance cash flows is reduced by the corresponding loss.<br>Please note that the amounts of recoverable from a special purpose vehicle should not exceed the value of the assets recoverable from that special purpose vehicle that the insurance or reinsurance undertaking would be able to receive. | 27/08/2010 |
| 80 | TP.2.120 – TP.2.131 | Question:<br>Which cash-flows should be included in the calculation of amounts recoverable from reinsurance contracts?<br>(As according to TP.2.131 the general administration expenses (overheads) relating to administration of reinsurance are not included in 'amounts recoverable' but in the best estimate of technical provision.) | |
| | | Answer:<br>Reinsurance recoverables should include all cash flow in and cash flow out arising of the reinsurance contracts. The general administration expenses (overheads) are in the best estimate of technical provision because no allowance for expenses related to the internal processes should be made in the recoverables. Payments due to the reinsurers (i.e. when their payment is already due, and the reinsurance has a legal right to force the undertaking to pay them immediately) are to be included in "reinsurance accounts payable". | 27/08/2010 |
| 104 | | Question:<br>Coinsurance is typically organized in such a way, that the leading company of a coinsurer-consortium satisfies the claim w.r.t. the injured/damaged party. The leading company then allocates the claims payment - say Y- due to quota shares q(i) of the coinsurers to the resp. coinsurer. If a | |

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| | | settlement of a claim takes a longer time such invoices to the coinsurers may happen several times e.g. every half a year. In the case we refer to, each undertaking of the coinsurer-consortium is jointly and severally liable (gesamtschuldnerische Haftung ). This means if one undertaking defaults all remaining undertakings have to take over this part in dependency of their quota share.<br>What is the Best Estimate of undertaking i? | |
| | | Answer:<br>The best estimate of the co-insurer should be based on the cash-flows between the co-insurer and the leading insurer. The best estimate should take account of expected losses due to default of the leading insurer and other counterparties of the arrangement. Like for other calculations, the principle of proportionality should be applied. | 06/09/2010 |
| 165 | TP 2.132 | Question:<br>Our gross technical provisions are negative i.e. assets, across all our business lines (Life and impaired annuities). We have internal/external retrocessions in place which reduce this asset. This means that the reinsurance recoverable we are reporting on the asset side of our balance sheet is a liability i.e. if any of our retrocessions were to default, we would recapture a profitable block of business.<br>The technical specifications state that 'the reinsurance recoverable should be adjusted to take account of expected defaults of the counterparty'. In our case, we would be reducing a negative reinsurance recoverable or a liability. Can you clarify if this is the correct approach or can you advise an alternative? | |
| | | Answer:<br>The reinsurance recoverable should be adjusted to take account of expected default of the counterparty irrespective of whether the reinsurance recoverable is a negative or positive amount. | 01/10/2010 |

# Technical provisions – Discount rate

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 10 | | Question:<br>What are the compounding conventions of the spot rates in the yield curves provided? | |
| | | Answer:<br>The spot rates in the delivered yield curves are with annual compounding for all maturities. | 29/07/2010 |
| 11 | TP.3.7 | Question:<br>TP.3.7 states that "All liabilities not falling under one of the two previous paragraphs should be discounted with the risk-free interest rate term structures with a 50% illiquidity premium."<br>Could you please confirm whether this only applies to insurance liabilities, and not firms' other liabilities (such as sub debt)? | |
| | | Answer:<br>TP.3.7 is only relevant for the valuation of insurance liabilities that are considered in the technical provisions.<br>Valuation of all assets and liabilities other than technical provisions have to be carried out in conformity with International Accounting Standards as stated in V.4 on page 6 of the technical specification.. | 29/07/2010 |
| 12 | | Question:<br>Should the liquidity premium stress be applied on grandfathered business which takes account of a liquidity premium when performing the grandfathering process? | |
| | | Answer:<br>TP.3.11. states that 'For the purpose of running all other calculations in QIS5, the technical provisions currently discounted at the interest rate referred to in Article 20.B.a.ii of Directive 2002/83/EC should be discounted according to the two previous subsection of this section V.2.3.', This means that only the impact on Technical Provisions (not on the SCR) of the transitional provisions on the discount rate is expected to be calculated for QIS5. | 29/07/2010 |
| 13 | | Question:<br>The spot yield curves supplied imply forward curves which include some negative forward rates between the years 31 and 35 (the period over which the liquidity premium is being run down to zero). This affects the 75% and the 100% liquidity premium curves. Is this intentional? | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | Answer:<br>This is not intentional, but a consequence of the methodology that was chosen to allow for the liquidity premium. The liquidity premium was interpreted as a spot rate adjustment to the basic risk-free interest rate curve. Thus, it can happen that the forward rates implied by the adjusted risk-free term structure do not behave smoothly in the phasing-out period. For a high liquidity premium adjustment and high liquidity premium maturities, the forward rates implied by the adjusted risk-free term structure can even become negative, as can be seen in the case of the curve for British Pound between years 31 and 35 that the question refers to. However, this is not expected to happen very frequently.<br><br>The above mentioned methodology was chosen because utmost weight was attached to the condition that no liquidity premium should be included in the extrapolated part of the basic-risk free spot rate curve. The impact of forward rates becoming negative in exceptional situations was considered an acceptable drawback in the QIS5 context.<br><br>Nevertheless, we agree that extrapolation has to ensure that forward rates stay positive for the interest rate curve including liquidity premium and therefore it is intended to work further on this issue and provide a solution for final Solvency II implementation. | 29/07/2010 |
| 123 | TP.3.2 | Question:<br>Paragraph TP.3.2.states that<br>*"For durations less than one year, the discount rate is the same as the one year rate."*<br>Does this mean that when the duration of a cash-flow is less than one, then no rate curve is used for discounting but instead a fixed interest rate is applied?<br>In case of short term non-life insurance, is this fixed interest rate the one-year rate plus 50% of the illiquidity premium? | |
| | | Answer:<br>In case of non-life insurance, the relevant risk-free interest rate term structure is the risk-free interest rate term structure with 50% illiquidity premium, see TP.3.7.<br>The discount rate for maturities less than one year has been set equal to the one year rate for QIS5 purposes. | 13/09/2010 |
| No Q. | No paragr. (if provided) | | Date (answer) |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 183 | V.2.3 | Question: We are given 4 complete risk –free interest rate term structures. ”The undertakings should indicated which liabilities we discount with the different curves”. It’s our understanding that assets backing those liabilities should be valued (in case there is no market value available) using the same term structure e.g. life insurance contracts with profit participation should be discounted using the term structure that includes a 75% illiquidity premium. Assets (like bonds and deposits) backing these liabilities should be valued (if no market value is available) using the same structure? | 15/10/2010 |
| | | Answer:<br>If assets that are backing insurance liabilities have no market value, undertakings can use mark-to-model methods to value them, see also answer to question 44. The mark-to-model methods used have to ensure that the values assigned to the assets are market-consistent. There is no requirement to use the same term structure used to discount the liabilities.<br>When calculating the best estimates of liabilities that depend on projected values of the assets (i.e. not only valuation but revaluation), then the requirement set out in TP2.97 shall be taken into account: "The asset model should be calibrated to the current risk-free term structure used to discount the cash flows." | |

# Technical Provisions - Risk margin

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 124 | TP.5.10 | Question:<br>According to TP.5.10 when discounting $SCR_{RU}$’s for the risk margin the discounting should be made without illiquidity premium. The specification doesn’t explicitly state what discount rate should be used when those $SCR_{RU}$’s are calculated. According to TP.5.4 sixth bullet point – assets minimizing the market risks – and the arguments expressed in TP.5.10 one could conclude that they should be calculated without illiquidity premium, too. What’s the correct interpretation? | |
| | | Answer:<br>TP.5.10 refers only to the discounting of the $SCR_{RU}(t)$'s, not the assessment of individual $SCR_{RU}(t)$'s. The calculation of the best estimates and the $SCR_{RU}(t)$'s follows the rules given in the QIS5 Technical Specifications. The same illiquidity premium applies to the cash-flows of the original and the cash- | 13/09/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | flows of the reference undertaking.<br>As a consequence the unavoidable market risk includes the illiquidity premium risk. | |
| 125 | TP.5.4 | Question:<br>In the calculation of the risk margin the amount of the assets is specified in TP.5.4. fourth bullet point as the amount needed for the SCR of the reference entity or $SCR_{RU}$. But $SCR_{RU}$ is not known and cannot be calculated without knowing the amount of the assets. This seems to lead to the iterative calculation. It is obviated in the calculation of the capital requirement of the reporting entity itself by using only the best estimate in the calculation of the change of NAV. But this same method cannot be applied for the reference entity because the amount of assets is not known. The amount of the assets has impact also to the $SCR_{RU}$'s of the non-hedgeable risks. How to specify the amount of the assets of the reference entity? | |
| | | Answer:<br>It is impossible to avoid market risk with respect to the assets that cover $SCR_{RU}(t)$. The attempt to minimize this risk leads to a circular calculation, as the question points out. In order to avoid this, it can be assumed that the market risk linked to the assets that cover $SCR_{RU}(t)$ is nil.<br>A similar circularity problem arises with respect to the assets that cover the risk margin. Based on the principle of proportionality this market risk can be ignored. | 13/09/2010 |
| 126 | TP.5.28 | Question:<br>This simplification must have another condition (beyond the one specified): there must not be a material line for which the TP is calculated as a whole. Otherwise the formula is defective.<br>E.g. if there is only one LOB then COCM> 0 while COCMlob=0<br>If there are two LOBs, the "as a whole" is big, the other is small then<br>COCMsmall=COCM<br>COCMbig=0 | |
| | | Answer:<br>The approach defined in TP.5.28 is a simplification and should only be applied if it is proportionate to the nature, scale and complexity of the risk. In particular, the approach is based on the assumption that obligations which are valued as a whole are matched with the replicating assets and therefore do not contribute to the SCR.<br><br>If the whole business of an undertaking is calculated as a whole then there is no need to apply the formula because there is no risk margin that needs to be allocated. | 13/09/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 166 | TP.5.49. | Question:<br>In the level 4 simplification for calculating the RM a modified duration formula is used. In the subsection "(a) Allocation of TP in illiquidity premium buckets + duration of liabilities" of the section 4 "illiquidity premium" of the sheet "I.QIS5 insurance obligations" it is asked to enter the Technical Provisions and the modified duration of liabilities for each illiquidity premium bucket.<br>The modified duration is then used in the risk margin helper ("H_Risk_Margin_201000906.xls") to compute the modified duration of reference undertaking's insurance obligations net of reinsurance at t=0 (TP.5.49)<br>But the reinsurance recoveries belong to the asset side of the balance sheet. So the modified duration of liabilities does not take into account reinsurance recoveries.<br>The question therefore is:<br>Is it the modified duration of best estimate net of reinsurance recoveries needed in the QIS 5 spreadsheet instead of the duration of liabilities? | |
| | | Answer:<br>There appears to be an inconsistency in the spreadsheet here.<br>The additional data to be reported in section 4 (a) of the tab labelled 'I. QIS5 insurance obligations' is requested in order to "facilitate a possible further analysis of the sensitivity of the (best estimate) technical provisions to the discount rate used, more particularly the illiquidity premium thereof" (page 34). The requested information is the best estimate technical provisions gross of reinsurance as well as the corresponding modified duration of (re)insurance obligations gross of reinsurance.<br>On the other hand the requested information referred to above is used in the risk margin helper tab when calculating the risk margin according to simplification no. 4, cf. the calculation of the duration per LoB in the tab labelled 'Intermediate calculations'.<br>In accordance with para TP.5.49 of the QIS5 TS it is the modified duration of (re)insurance obligations net of reinsurance that should be used as input when calculating the risk margin according to simplification no. 4. | 01/10/2010 |
| No Q. | No paragr. (if provided) | | Date (answer) |
| 184 | | Question:<br>The response to question 124 raised a further question. The response didn't take any position to the argumentation of the question whose main point was that the undertaking itself and reference undertaking have different kind of assets. The undertaking has the current assets 31.12.2009 | 15/10/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | (TP.2.92) but the reference undertaking assets minimizing the market risk (TP.5.4 sixth bullet point). More generally, should this difference not to be taken into account when calculating the SCRRU's of the non-hedgeable risks? The costs of guarantees differ for the undertaking and the reference undertaking. Should the calculation of SCRRU follow also here the rules given in the QIS5 TS not the properties of the reference undertaking? TS seems to be unclear whether the risk margin specifications should be read from the view of the principles or rules or i.e. by which amount to take into account the properties of the reference undertaking. | |
| | | Answer:<br>From TP.5.4, bullet point seven, it follows that for the calculation of the risk margin the undertaking only has to take into account "unavoidable" market risk. The "unavoidable" market risk is the market risk that a reference undertaking would be exposed to if it would invest all assets in financial instruments available in the market, such that its exposure to market risk becomes minimal over all possible allocations. This is the meaning of the statement made in TP.5.4, sixth bullet point.<br>Hence, for the part of the risk margin stemming from market risk, the actual asset allocation of the reporting undertaking is of no importance. What has to be taken into account is only the market risk that a reference undertaking would not be able – not even hypothetically – to avoid.<br>The main example here would be an unavoidable duration mismatch between the cash flows of the insurance liability and the financial instruments available in the market. | |

# SCR - General

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 22 | SCR.1.14 | Question:<br>SCR 1.14 states that<br><br>"For life insurance and SLT health insurance the calculation of underwriting risk in the standard formula is based on scenarios. The scenarios consist of an instantaneous stress that occurs at the valuation date and the capital requirements are the immediate loss of basic own funds resulting from the stresses. The scenarios do not take into account the changes in assets and liabilities over the 12 months following the scenario stresses. Therefore these capital requirements do not take into account the expected profit or loss of the business written during the following 12 months."<br><br>The phrase "do not take into account the changes in assets and liabilities over the 12 months following the scenario stress" implies that no allowance should be made for business not already in force as at the valuation date.<br><br>In addition, the reference to the calculation of life underwriting risk can be interpreted to mean that the exclusion of new business only applies to life underwriting risk and not to market risk. It would appear inconsistent to exclude future new business for some modules but not others when calculating the capital requirements for the same portfolio of business, so we assume that it should be excluded within the market risk calculation as well. | |
| | | Answer:<br>Also the scenario-based calculations of the market risk module should be based on the assets and liabilities at the valuation date, i.e. taking only into account the existing insurance and reinsurance contracts (as defined in TP.2.15-18 of the QIS5 technical specifications) and the assets currently held. *"no allowance should be made for business not already in force as at the valuation date":* the interpretation is correct. | 10/08/2010 |
| 54 | SCR 5.36<br>SCR 15.3<br>SCR 5.16<br>SCR 15.10 | Question:<br>Definition of '***strategic***' participations for the purposes of QIS5 | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | Answer:<br>For the purposes of QIS5 undertakings should make their own assessment as to whether a participation is strategic based on the circumstances of the individual undertaking and where appropriate the group to which it belongs. The QIS5 spreadsheets will require QIS5 participants to state why a participation is considered to be strategic. Where is not possible for an undertaking to determine whether a participation is strategic or not, a participation should be classified as strategic and information should be provided as to why the determination was not possible. | 18/08/2010 |
| 55 | V2-Technical Provisions, and SCR.9 | Question:<br>We have a question regarding the definition of written premiums and also the definition of earned premiums (particularly for non-life business):<br>• Is the premium to be used for TP and SCR purposes, going to be the gross premium with or without policy fees?<br>• Should any discounts be taken in consideration?<br>• Could discounts be classified as expenses rather than a deduction in premium? | |
| | | Answer:<br>Premiums should be consistent with those that are currently used for Solvency I purposes. So they should be based on the actual premiums payable, inclusive of any discounts or additions.<br>If the "policy fees" are in relation to the costs of the insurer (eg policy issue, maintenance costs), then they should be included in premium. Insurance premium taxes would not normally be included in premium. | 18/08/2010 |
| 105 | | Question:<br>How should an index-linked or unit-linked life insurance contract which provides an investment guarantee (for example a minimum rate of return) be classified for the calculation of the capital requirement for operational risk of the SCR and for the calculation of the MCR? | |
| | | Answer:<br>Such a life insurance contract should not be assigned to the class "life insurance where the risk is borne by the policyholders" that is referred to in paragraph SCR.3.3 nor to the classes C.2.1 or C.2.2 in paragraph MCR.24 because the investment risk is not fully borne by the policyholders. For purposes of the calculation of the SCR for operational risk, it should not contribute to $Earn_{life\text{-}ul}$, $pEarn_{life\text{-}ul}$ or $TP_{life\text{-}ul}$. For purposes of the MCR calculation, it should be assigned to the class C.3. | 06/09/2010 |
| 127 | | Question: | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | Whilst it is clear how to value the post employment benefits it is not clear if these benefits are to be included in the SCR calculation using the standard formula. For example does the interest rate risk have to include a revaluation of the post employment benefit asset and liabilities? | |
| | | Answer: The value of the liabilities relating to "employment benefit" will be shocked in all the SCR sub-module calculations that include a "Net asset value" calculation as part of the total balance sheet approach. | 13/09/2010 |
| No Q. | No paragr. (if provided) | | Date (answer) |
| 185 | SCR 9.12, SCR 9.23 SCR.9.155 SCR.9.177 SCR.10.13 etc | Question:<br>We have the following questions regarding the treatment of written premiums in non-life policies. The written premiums for each line of business are used in several places in QIS5. These include the non-life underwriting risk and the counterparty risk for outstanding premiums. An additional consideration is that the definitions regarding the boundaries of contracts will also impact the amount of the written premiums. As a result the following questions arise regarding the treatment of written premiums in QIS5:<br>(1) In the case of contracts which pay premiums in instalments how should the future premiums (past the balance sheet date) be accounted for?<br>(i) Should the future instalments be included in the written premiums?<br>(ii) Should the future instalments be discounted accordingly?<br>Example: If the premium of an annual policy is 120 Euros payable in monthly instalments of 10 Euros and the policy started in December, under each option above:<br>(i) Should the written premiums for the year be the first instalment of 10 Euros or all 120 Euros?<br>(ii) If all, should the 110 Euros be discounted?<br>(2) In the case of multiyear contracts how the future premiums (past the balance sheet date) should be accounted for?<br>(i) Should the future premiums be included in the written premiums?<br>(ii) Should the future premiums be discounted?<br>Example: If the premium of an two year policy is €200 payable as €100 in each year, under each option above:<br>(i) Should the written premiums for the year be 100 Euros or all 200 Euros? | 15/10/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | (ii) If all, should the 100 Euros be discounted?<br><br>It appears as if written premiums should only include the premiums which payment "falls" within the year following the balance sheet date, for to the following reasons:<br>(i) This is what is suggested in SCR 9.23 in the definition of the volume measure for non-life underwriting risk since future earned premiums might be added to the written premiums, and<br>(ii) The future premiums are included in the premium provision and including them in the written premiums might be double-counting. | |
| | | Answer: Written premiums are indeed used as part of the volume measure in the non-life underwriting risk module.<br>The insurance accounting directive defines written premiums for life insurance as "all amounts due during the financial year in respect of insurance contracts regardless of the fact that such amounts may relate in whole or in part to a later financial year". This approach should also be applied in non-life insurance.<br>Therefore, written premiums are not based on the actual cash flow profile of premiums, but reflect the total premium the undertaking is entitled to receive under the policy that are due, and includes all charges for expenses that are part of the premium. Written premiums are not discounted.<br>Turning to the specific situations in the question,<br>(1) Assuming the policy is written in December 2009 as described in your example, then written premium in 2009 would be €120, and written premium in 2010 would be €0 – it is not discounted.<br>(2) The question is not clear in relation to the premium amounts due. If a premium of 100 euro is due in each year then the written premium of each the first and the second year is 100 euro. However, if the whole premium of 200 euro is due in the first year but can be paid in two annual instalments of 100 euro, then the written premium of the first year is 200 euro and the written premium of the second year is nil.<br><br>Please note that, the counterparty default risk module applies to "policy holder debtors" which only includes amounts that were expected to have been paid but where the undertaking has not yet received payment – and are treated as "Type 2" items. | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 186 | TP 2.15<br>SCR 9.3 | Question:<br>Our understanding of paragraph TP 2.15 from the QIS5 Technical Specifications is that any insurance business that has been agreed by an insurer prior to the valuation date (such that the insurer is unable to terminate the contracts) must be included in the calculation of the insurer's technical provisions as at the valuation date. This is the case even if the associated insurance cover begins after the valuation date.<br><br>Paragraph SCR 9.3 then states that underwriting risk needs to cover new business expected to be "written" over the following 12 months. Does this include business agreed over the following 12 months but not incepting until the following year? For example, based on the QIS5 valuation date of 31 December 2009, if contracts are agreed in October 2010 for cover beginning in January 2011, do these contracts need to be allowed for in the calculation of underwriting risk? | 15/10/2010 |
| | | Answer: The recognition of insurance and reinsurance obligation is based on the earler point of inception of cover and becoming party of the contract.<br>Paragraph SCR.9.3 only sets out the general idea of the premium and reserve risk sub-module. The volume measure for non-life premium risk should be calculated as specified in paragraph SCR.9.23. Contracts which are agreed in October 2010 for cover beginning in January 2011 would contribute to P^(t,written) with any premiums written in 2010 (possibly no premium) and to P^PP with any premiums earned 2011 onwards. | |

## SCR – Equivalent scenario

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 23 | SCR.2.18 | Question:<br>The equivalent scenario requires that all shocks are calculated „simultaneously". Regarding certain underwriting scenarios, we are not sure what that actually means. In Life and Health there are mortality as well as longevity shocks affecting non-disjunct obligations. It is not possible to calculate those simultaneously in one run. The same applies for lapse-up and lapse-down. Thus, we have at least 4 alternative outcomes. What is the decision rule for choosing one of them for the SCR? | |
| | | Answer:<br>For longevity and mortality risk, the shocks are one sided. In order to apply the shocks, the obligations should be disjointed (without overlap) into obligations subject to mortality risk and obligations subject to longevity risk. For lives which are exposed to mortality risk, the mortality shock should apply, and the longevity shock should not. Where lives are exposed to longevity risk, the converse should apply. Where a contract provides benefits both in case of death and survival of the same person the net risk should be analysed and the whole contract be either assigned to the mortality risk segment or the longevity risk segment, depending on which risk prevails. No unbundling is required.<br>For lapse risk and other two sided shocks (e.g. interest rate), whichever shock was the most onerous (and thus used) in calculation of the BSCR should be taken. | 10/08/2010 |
| 81 | SCR.2.12. | Question:<br>The effect of a single equivalent scenario has to be calculated where all shocks occur at once. However, in the scenario based approaches for life underwriting the capital charges are in general calculated considering only the contracts contingent on the risk. Is this still true for the calculations in the equivalent scenario? | |
| | | Yes, within the equivalent scenario capital charges are applied only to contracts contingent on the risk. See Q.23 for further instruction on life-risk. | 27/08/2010 |

# SCR – Loss absorbing capacity of technical provisions and deferred taxes

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 24 | SCR 2.26 / SCR 2.15 | Question:<br>Paragraph SCR 2.15 / SCR 2.26 sets out that where a loss of *SCRshock* would result in the setting up of deferred tax assets, insurance and reinsurance undertakings should take into account the magnitude of the loss and its impact on the undertaking's financial situation when assessing whether the realization of that deferred tax asset (DTA) is probable within a reasonable timeframe.<br>Are there any concrete criteria to assess a sufficient degree of reliability in such realization? | |
| | | Answer:<br>QIS5 TS do not provide any concrete criteria, other than those set out in the relevant IFRS. However insurance and reinsurance undertakings should build on the assessment already carried out of the likely realization of DTA when drawing up the Solvency II balance sheet. They should ensure that appropriate and consistent assumptions and projections are used for the further assessment under SCR 2.15 and SCR 2.26.<br>Nevertheless, where the SCR before the allowance for the amount mentioned in SCR 2.14 and SCR 2.25 is materially higher than the amount of the eligible own funds, insurance and reinsurance undertakings shall not consider as realizable the deferred tax asset assessed in SCR 2.14-15 and SCR.2.25-26, unless it has sufficient evidence demonstrating such realization is likely.<br>See also answer to Question 25. | 10/08/2010 |
| 25 | SCR 2.15 / SCR 2.26 | Question:<br>SCR 2.15 / SCR 2.26 requires an assessment under the valuation criteria as to whether the DTA should be recognised in the loss absorbing calculation. It could be argued that if the DTA passes this test you should then see whether it would be eligible as own funds. However to do this properly you would have to consider all the other own funds items (i.e. the whole balance sheet in stress) to see how the tiering would operate in stress. | |
| | | Answer:<br>The recognition of deferred taxes both in the solvency balance sheet as well as under the scenario SCRshock for the calculation of the loss-absorbing capacity of deferred taxes is independent from the eligibility of own funds. See question 24 for guidance on the recognition of deferred taxes under SCRshock. | 10/08/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 26 | | Question:<br>The QIS5 Technical Specifications allow adjusting the SCR for the loss-absorbency of deferred taxes. This adjustment is to be calculated under the assumption that the undertaking incurs an instantaneous loss of an amount equal to *SCRshock*. This guidance is not sufficient to evaluate the change in the deferred tax position. In our jurisdiction, the basis for tax assessment is the evaluation of balance sheet items according to local GAAP. Hence we need to know to which extent different items in the tax balance are affected by *SCRshock*. In other words, we need to identify risk drivers.<br><br>On group level, we need information not only on risk drivers but on their allocation to single entities as well. Does CEIOPS suggest a default method for the calculation of the deferred tax adjustment to allow for a consistent treatment within the industry? | |
| | SCR 2.17 and SCR 2.28<br><br>G.52 | Answer:<br>SCR 2.17 and SCR 2.28 cover the approach to be adopted for Methods 1 and 2 respectively<br>At group level, a proxy is suggested in G.52. Comments on the appropriateness are welcomed. | 10/08/2010 |
| 27 | | Question:<br>For the calculation of future discretionary benefits and their risk mitigating effect, regulation (Austrian regulation of discretionary benefits in Life insurance – GBVVU) currently stipulates that in each financial year, the expenses for the performance-related refund of premiums or participation in profits of the policyholders (section 81e para 4 no. III.8. VAG - insurance supervision act) including any direct credits shall amount to at least 85% of the assessment base.<br>Which steps have to be taken into account for the calculation of the FDB within TP and their loss absorbing capacity in the SCR? | |
| | TP.2.93 | Answer:<br>To obtain consistent results regarding discretionary benefits and their risk mitigating effect, under QIS5, insurance undertakings should perform the associated calculations according to the following principles:<br>• The management rules for the calculation of the profit distribution have to be in line with the regulation of discretionary benefits. This means especially that the profits for the policyholders may not fall below the minimum amount.<br>Furthermore, the management rules have to be clearly defined and agreed upon by the management board.<br>• The assumptions of future returns of investments have to be consistent with the risk free interest | 10/08/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | rate (cf. QIS5 Technical Specifications, TP.2.93.).<br>• If there is no complete simulation of the values for the calculation of FDB, the TP for FDB should be equal to the set percentage (for Austria for example: 85%) of the assessment base plus possible additional contractual obligations.<br>• The non allocated amount of the special reserve (for example in Austria, this is called „freie RfB") has to be treated as surplus fund according to Article 91(2) of the directive hence not as insurance liabilities.<br>• The risk mitigating effect of the FDB may not result in a negative risk capital for a module.<br>• When calculating the net capital requirement for interest rate risk, it should be considered that in case of an upward shock of the interest curve, the distributions of future profits might have to be increased. Hence, no risk mitigation effect might be accounted for.<br>Furthermore, for the purpose of QIS 5 and according to the principle of proportionality the following simplified assumptions are tolerable, though they have to be justified explicitly when being applied:<br>Possible simplifications for the calculation of TP for FDB<br>• The special reserve could be assumed as constant, i.e. expenses for profit participation equal the declaration.<br>• The underwriting result could be assumed as constant (according to the results of the last years and common practice).<br>• It could be assumed that investment income can always be realized. However, it must be pointed out that:<br>  • Hidden losses have to be restored first.<br>  • If there are no hidden losses, the earnings equal the annual forward rates for the particular year. | |

# SCR Operational risk

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 28 | SCR.3.3 | Question:<br>Can you clarify the definition of 'earned premium' for the operational risk calculation? | |
| | | Answer:<br>Unearned premium means the part of premiums written which is to be allocated to the following financial year or to subsequent financial years. (IAIS Glossary)<br>Earned premium means the portion of the written premium which is considered as earned by the insurance undertaking, calculated as the written premium related to the coverage period plus the variation of the unearned premium during the same period. | 10/08/2010 |
| 106 | | Question:<br>What about the health business? Is it excluded from the SCR Operation Risk Sub-module? | |
| | | Answer:<br>As shown on the tab with QIS5 insurance obligations and spreadsheets of the spreadsheets, health business is to be allocated according to its technical nature between life and non life in the calculation of the operational risk. | 06/09/2010 |
| 146 | SCR.3.3 | Question:<br>Exactly what types of expense are to be included under "Expul = Amount of annual expenses incurred during the previous 12 months in respect life insurance where the investment risk is borne by the policyholders." Specifically, should any acquisition type expense be included? | |
| | | Answer:<br>Administrative expenses (including acquisition expenses) should be used | 23/09/2010 |
| 207 | SCR 3.3 | Question:<br>The answer to Question 146 in the SCR Operational Risk section of the CEIOPS Q&A document reads: "Administrative expenses (including acquisition expenses) should be used". Please could you confirm whether 'acquisition expenses' are taken to include commission paid? | |
| | | Answer:<br>Acquisition costs should include relevant commission amounts | 26/10/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 187 | SCR.3.3<br>SCR 9.12 | Question:<br>Can you please clarify the definition of earned premiums for above risks for QIS5 purposes?<br>In Q&A 28 the definition provided was:<br>"Unearned premium means the part of premiums written which is to be allocated to the following financial year or to subsequent financial years. (IAIS Glossary)<br>Earned premium means the portion of the written premium which is considered as earned by the insurance undertaking, calculated as the written premium related to the coverage period plus the variation of the unearned premium during the same period."<br>Can you also clarify whether in the context of QIS5, the 'unearned premium' refers to the premium provisions as calculated using the QIS5 principles or as calculated using the current Solvency I UPR principals? | 15/10/2010 |
| | | Answer: For the operational risk module, earned premiums and unearned premium provision should be calculated based on current accounting methodologies. So unearned premium provision is written premium less that which has been earned, and earned premiums are based on premiums spread over the term of the policy taking into account the incidence of risk over the term. In particular it would be wrong to calculate earned premium for a period as: "written premiums in that period less the increase in QIS5 premium provisions over the period". | |

# SCR Market Risk- General

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 1 | | Question<br>The question relates to the classification of infrastructure fund investing in physical facilities and structures such us tunnels, bridges, toll roads, airports, water, electricity and gas supply, etc, as well as infrastructure fund-of-funds investing in single funds that then respectively invest in such real assets.<br>In our opinion, and due to the similarities in investment characteristics between infrastructure with real estate (e.g. stable, current, partially inflation linked cash flows; long duration; low correlation with | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | other asset classes, relative independence of the economic cycles, etc), it might be best classified under the property risk sub-module.<br><br>Guidance for such infrastructure classification will be appreciated. | |
| | SCR.5.43 – SCR.5.46 | Answer:<br><br>There is no specific sub-module for the risk of infrastructure investments in QIS5. The legal form of the investment does not determine its treatment in the market risk module of the SCR standard formula.<br><br>In order to allocate infrastructure funds, as well as for any other investment funds to the relevant market risk sub-module, the look-through approach should be applied, whereby the undertaking will look through the fund to the underlying assets (see sub-section SCR.5.4 of the QIS5 technical specifications).<br><br>Where all of the risks of the infrastructure investment can be classed as property risk, then the property risk sub-module is appropriate (see subsection SCR.5.7, in particular paragraphs SCR.5.43-46 of the QIS5 technical specifications). Otherwise, the fund should be assigned to the 'other equity' category of the equity risk sub-module (see paragraph SCR.5.31 of the QIS5 technical specifications).<br><br>Please note that the qualitative questionnaire will collect information on infrastructure investments. | 22/07/2010 |
| 4 | SCR.6.4<br>SCR.6.31 | Question<br><br>What does "cash at bank" mean? The term is used in the description of the counterparty default risk module in paragraphs SCR.6.4 and SCR.6.31. | |
| | | Answer:<br>The term corresponds to the term "cash at bank" used in the Accounting Directive 91/674/EEC (Article 6, item F), no further definition being provided within that Directive.<br><br>Cash at bank includes deposit bank accounts where the depositor can withdraw the cash at any time and arrangements of a comparable risk profile. | 22/07/2010 |
| 7 | | Question<br><br>Having studied the technical specifications and calibrations for QIS5 as well as Article 111b it seems | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | that with respect to asset-backed and structured credit products there is substantial room to manoeuvre with regard to attachment point definition and thus risk capital requirement in the case of secondary structured credit or asset-backed positions in the calculation of capital requirements.<br><br>As is the case with many secondary positions the collateral has a market value substantially below par and in extreme cases it is worth less than the relevant attachment points resulting, on a market value basis, in a tranche effectively being unsecured. For example, if one owns a tranche with attachment point 60% and detachment point 90% but overall collateral value being less than 60% of the notional asset pool, the tranche would be effectively unsecured yet it appears presently QIS5 would calculate the capital requirement as though the collateral pool is still worth 100% or is assumed to repay 100%.<br><br>What would be the appropriate risk capital calculation under this scenario? | |
| | | Answer:<br>The Market Value of the product is used as an input in the formula in 5.92.<br>It is this Market Value, and not the market value of the underlying assets that is used in the formula. Whether the market value of the underlying assets is below the "attachment point" times "nominal value" or not, is therefore only indirectly relevant for the application of the formula in as much as it conditions the market value of the product, which should be valued according to the "valuation " section of the specifications (V1), allowing the application of 5.92 for the calculation of the shock | 29/07/2010 |
| 56 | SCR.5.88<br>SCR.5.124 | Question:<br>Are local authority (communal) bonds exempted from credit spread risk and market risk concentrations similarly to exposures guaranteed by national government of an EEA state (paras. SCR.5.88. and SCR.5.124)? | |
| | | Answer:<br>The capital requirement for local authority (communal) bonds is 0 in credit spread risk and market risk concentrations only when local authority (communal) bonds are demonstrably guaranteed by national government of an EEA state and are issued in the currency of the government. If local authority (communal) bonds are covered bonds and meet the criteria for public sector covered bonds, then undertakings may apply lower risk factors assigned to covered bonds. Otherwise, standard risk factors should be applied." | 18/08/2010 |
| 57 | SCR 5.83 | Question:<br>With regards to the ratings used for bonds, ABSs and credit derivatives issued-offered by investment companies, banks e.t.c.: | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | (a) if the investment vehicle-product itself does not have a rating, but the company does, can we use the rating of the company as the rating of the investment vehicle-product?<br>(b) if such investment vehicles-products are issued-offered by a subsidiary of a company, e.g. a corporate bond is issued by a subsidiary of a Bank, and the subsidiary does not have a rating, can we use the rating of the parent company, i.e. in our example of the Bank? | |
| | | Answer:<br>For unrated counterparties that are undertakings that are subject to SII and which would meet their MCR, the probability of default depends on the solvency ratio (SCR.6.16). Unrated banks that comply with the Capital Requirements Directive (2006/48/EC) should be treated as if having a BBB rating.<br><br>It is not possible to use the issuer rating for ABS and other structured credit products which are tranched (i.e. have a waterfall structure of payments), as the rating of the issuer is not necessarily representative of the rating of the instrument. | 18/08/2010 |
| 82 | SCR 5.5<br>SCR 5.6<br>SCR 5.9 | Question:<br>Please can you advise as to whether Preference shares are to be included in the interest rate risk calculation or should they be modelled as equities? | |
| | | Answer:<br>Preference shares come in many forms, and as such we urge caution in allocating an appropriate amount of risk capital. Preference shares with features similar to debt-instruments, i.e. where the level of dividends is linked to the amount paid at issuance or subject to a cap and which have a set call date, should be included in the interest rate risk and spread risk calculations and treated the same as corporate bonds. | 27/08/2010 |
| 83 | SCR 5.9<br>SCR 5.10<br>SCR 6 | Question:<br>Please can you clarify which SCR modules (from Spread risk, Concentration risk and Counterparty risk) apply to:<br>• Cash on call held with banks.<br>• Term deposits with banks.<br>I can see that cash at bank is covered by the Counterparty risk module, but it is not clear to me whether this also applies to term deposits, or whether they are covered elsewhere (e.g. SCR.5.74. states that the spread risk module covers "deposits with credit institutions"; does that mean term deposits? In which case, are they also subject to Concentration risk?) | |
| | | Answer:<br>An exposure can only be subject to counterparty default risk or spread risk. Only in the latter case it | 27/08/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | can also be subject to concentration risk (if it is larger than the threshold). Cash on call should be treated like cash at bank in the counterparty default risk module while term deposits should go the spread risk sub-module. | |
| 84 | SCR 5.9 (SCR 5.83), and SCR 6 | Question:<br>With regards to the ratings used for companies, for the purposes of calculating the counterparty default risk, if the company under consideration is a subsidiary of a company, e.g. a subsidiary of a Bank, and the subsidiary does not have a rating, can we use the rating of the parent company, i.e. in our example of the Bank? | |
| | | Answer:<br>If a subsidiary is unrated, the rating of the parent can be used only if the parent has provided a recognized guarantee (see in particular SCR6.44 and section SCR12) and the rating accurately reflects the credit risk that the undertaking is exposed to. | 27/08/2010 |
| 107 | SCR 5 | Question:<br>We have the following questions regarding the treatment of certain assets in the market risk module:<br>• <u>Convertible bonds</u><br>How and in which sub-modules should these be included? Perhaps a conservative approach is to treat them as equity?<br>• <u>Perpetual bonds</u><br>How and in which sub-modules should these be included? | |
| | | Answer:<br>**Convertible bonds** shall be subject to the concentration risk, interest rate risk, spread risk and equity risk sub-modules. (SR.5.73 specifies that spread risk is not exclusive).<br>They are subject to the equity risk submodule if their value is sensitive to a change in the equity prices (SCR.5.26). The exposure is not necessarily the full value of the bond (SCR5.35 refers to "indirect exposures").<br>In the scenario-based approaches of these sub-modules, one should take into account the impact of the scenarios on the exercise of the embedded option of conversion.<br>**Perpetual bonds** shall be subject to the concentration risk, interest rate risk and spread risk submodules.<br>In the spread risk submodule, the duration cap might be hit. | 06/09/2010 |
| 108 | SCR.5.4 | Question:<br>Do we have to apply the stress scenario calculations on every single stock held within a collective investment fund e.g. Global Equity fund which invest in 200 equities? | |

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| | | Answer: The ”Look-through” approach (SCR 5.4) should be applied to assess the market risk inherent to collective investment funds.<br>If the holding in the fund is not material as compared to the volume in other comparable assets held, the look-through approach might not be applied, based on the principle of proportionality. | 06/09/2010 |
| 109 | | In some cases it is possible that a single asset ends up with an overall capital charge of more than 100% of its economic value.<br>We experienced this result in the case of structured credit products. As the capital requirement for spread risk of structured products is extremely burdensome most products end up with an SCR close to 100% from the spread risk module only. As some of those structured products are denominated in USD, we also have to charge capital for currency risk. Furthermore, we have interest rate risk and could maybe have concentration risk on these assets. After all we end up with a capital requirement far higher than 100% of the economic value of the products (even after diversification effects).<br>Thus, it cannot be a solution to hold more than the economic value for the particular assets. Where and how should the SCR be reduced? It makes a significant difference where (in which risk module) the capital charge is reduced because of correlation and also risk mitigation effects.<br>One thought was to add the economic value of the structured products concerned to the overall SCR Market, while not considering them in the submodules. However, this is also not satisfying because we would loose all diversification effects and above all the risk mitigation in life insurance. | |
| | | Answer:<br>In case such an inconsistency occurs please report about its cause and its quantitative impact in the qualitative questionnaire. | 06/09/2010 |
| 128 | SCR 5.2 Introduction | Question:<br>Should the fixed short term deposits (up to 1year) be excluded from the market risk module or should they be covered under any or all of the spread, concentration and counterparty risk sub-modules? | |
| | | Answer:<br>Fixed short term deposits (up to 1year) are not excluded from the market risk module: see for instance the altered term structure table in SCR 5.21 in the interest rate risk sub-module.<br>In the “spread” risk sub-module, they are considered as having a one year duration (see SCR 5.83 “duration floor”). | 13/09/2010 |
| 147 | SCR 5.87 | Question:<br><br>SCR.5.87 refers to mortgage covered bonds that have a AAA credit quality and meet the requirements under Article 22(4) of the UCITS directive 85/611/EEC. Amongst other things the latter | |

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| | | includes the requirement that the bonds are "issued by a credit institution which has its registered office in a Member State", so it will exclude any MBS issued by other countries such as the US, for example MBS issued US Government Sponsored Agencies of Fannie Mae, Freddie Mac, Ginnie Mae. Please clarify the rules for non EEA mortgage covered bonds? | |
| | | Answer:<br>The proposed answer is correct: If the credit institution does not have its registered office in a Member State as in required in Article 22(4) of the UCITS, the provision of SCR 5.87 is not applicable to the covered bond. | 23/09/2010 |
| 148 | SCR 5.87 | Question:<br>Please clarify which specific instruments do the mortgage covered bond rules refer to - presumably it covers the basic mortgage securities such as pass through, but what about the more complex mortgage covered bonds such as Collateralised Mortgage Obligations. Should the latter be dealt with as mortgage covered bonds or should these be dealt with under the Structured Credit rules? | |
| | | Answer:<br>The complex mortgage bonds securities, such as Collaterised Mortgage Obligations should be treated in SCR 5.91 "structured products", whereas SCR 5.87 refers exclusively to the basic mortgaged covered bonds. | 23/09/2010 |
| 149 | SCR 5.94 | Question:<br>Please clarify the duration that should be used for floating rate Asset Backed Securities and Mortgage Backed Securities? These bonds are usually expected to be repaid very much earlier than the latest possible repayment date. However, the estimated repayment date is a subjective assessment and the actual timing can vary. Unfortunately whilst you can explain price movement with changes in the expectation for repayment there is no quoted market view on the expected repayment date. | |
| | | Answer: The duration of assets to be used is the modified duration. An alternative, "best estimate" of the duration would only be considered if it were based on active market data. | 23/09/2010 |
| 167 | | Question:<br>a) Should loans with other subsidiaries of a group or inter/intra company loans with the parent be considered under counterparty or spread/concentration?<br>b) Does the answer change if the loan is non-interest bearing?<br>c) Does the answer change if the loan is immediately callable?<br>d) Does the answer change if the undertaking is a captive and the loan is to its cedant? | |
| | | Answer: SCR 5.74 provides the answer for a): intra-group loans are subjected the "Spread risk" shock, but not the concentration risk sub-module. The same answer holds for b); c); d). | 01/10/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 188 | SCR.5.14. | Question: If undertaking uses that choice (third of look-through), should undertaking apply in addition to the equity risk stress also other risks (e.g currency risk) | 15/10/2010 |
| | | Answer: Other sub-modules, such as the currency risk are also applicable to the currency of the fund, as specified in SCR 5.54: "… The design of the currency risk sub-module is intended to take into account currency risk for an undertaking arising from all possible sources" | |
| 208 | Q&A 167<br>SCR 5.74<br>SCR.5.127<br><br>Q&A 57<br>Q&A 172 | Question1:<br>According to Q&A 167 intra-group loans are subjected the "Spread risk" shock, but not the concentration risk sub-module. The reference given is SCR 5.74.<br>Can you please clarify why the concentration risk does not apply? The only reference which seems applicable for the absence in concentration risk in intra-group exposures (other than participations) is SCR.5.127 where it clarifies that this only applies in the case where the counterparty is an insurance or reinsurance undertaking or a financial holding company, asset management company or ancillary services undertaking subject to appropriate prudential requirements. Is this correct?<br><br>Question2:<br>There seems to be an inconsistency in the answers given in Q&A 172 and Q&A 57 regarding the credit rating applicable to unrated banks (subject to CRD) in the market risk.<br>In particular:<br>• In Q&A 57 it is clarified that a BBB rating can be applied.<br>• In Q&A 172 it is suggested that the rating applied should be "unrated", contrary to the treatment in the counterparty risk component.<br>Which approach should be followed? | |
| | | Answer:<br>Answer: 1) Yes, the correct answer for Q&A 167 would be: "SCR 5.74 and SCR 5.127 provide the answer …"<br>2) Q&A 57 adresses a context of the application of the "spread" risk only, whereas Q&A 172 addresses both the "spread" risk, where the answer is similar to Q&A 57, and the "counterparty default" risk, where the dissimilarity between both sub-modules is highlighted. | 26/10/2010 |

# SCR Market Risk – Interest Risk

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 3 | SCR.5.21 | Question:<br>To which interest rate term structure should the interest rates shocks (given for maturities 0.25 years to 30 years in paragraph SCR.5.21 of the QIS5 technical specifications) be applied? | |
| | | Answer:<br>The shocks are applied to the risk free term structures provided in the excel file "relevant risk-free interest rate term structure" (see<br>http://ec.europa.eu/internal_market/insurance/docs/solvency/qis5/201007/relevant_risk_en.xls).<br>For currencies where no term structure is provided the shocks should be applied to the corresponding term structures derived with a similar method (see Annex F of the QIS5 technical specifications).<br>The shocks should **not** be applied to the **illiquidity premium** that is included in the risk-free interest rates. The illiquidity premium before and after the shock should be the same. | 22/07/2010 |
| 14 | SCR.5.21 | Question:<br>SCR.5.21. provides a table of multiplicative shocks specified by 'maturities'. This raises the question as to whether, when applying shocks to the cashflows associated with a single asset (such as a bond), the shocks applied to each coupon/maturity payment should all be determined by the maturity date of the asset and therefore the same for each cashflow, irrespective of timing differences. I assume that this is not the case and that the shocks applied to each coupon/maturity payment should in fact differ (depending on the timing of each cashflow). Please could you confirm? | |
| | SCR.5.21 | Answer: The proposed answer is correct:<br>The shock to be applied to the cash flow at maturity M with current interest rate iM is the value of the cash flow at maturity M time the rate iM shocked by the interest rate stress at maturity M, as from the table in SCR 5.21 | 29/07/2010 |
| 15 | | Question:<br>In relation to the interest rate stress, I assume that the specified shocks should not apply to the liquidity premium component of yields (where used), or to the spread component of yields. So, for | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | example, if the base yield is equal to (risk free + credit spread + liquidity premium) then I assume that the stressed yield should be equal to (risk free * shock factor + credit spread + liquidity premium). Please confirm. | |
| | SCR.5.11 | Answer: The proposed answer is correct: The shock factors should be applied to the risk-free interest rates without inclusion of the illiquidity premium. | 29/07/2010 |
| 85 | SCR.5.15 | Question:<br>The QIS5 interest rate stress implies that the same multiplicative factors should be applied to both real and nominal yields (SCR.5.15). However, for terms at which the base real yield is negative, this approach means that the real yield moves down (becomes more negative) in the 'interest rates up' stress and moves up (becomes less negative) in the 'interest rates down' stress. This seems counter-intuitive. Is this the intention of the stress or should a workaround be used? | |
| | | Answer:<br>For real interest rates, we suggest stressing the nominal curve as provided by CEIOPS in the discounting tool, you would then strip out inflation risk using your current method. | 27/08/2010 |
| 129 | SCR.5.5 | Question:<br>Which is the correct way to calculate the capital requirement for interest risk Mktint?<br>In QIS5 TS. SCR.5.17 – 25 it is prescribed that one should calculate □NAV as results of different pre-defined scenarios for interest rate term structures. This includes changes of value for both interest sensitive assets and liabilities. But assets should, according to SECTION 1 – VALUATION, be valued to their market values, without mentioning any interest rate term structure. And if the market values in fact are calculated using interest rate curves, they do probably not coincide with those prescribed in QIS5 TS. So the question is: how should one calculate the change of values of a bond portfolio under the scenarios given in SCR.5.21?<br>For some smaller undertakings this could be very burdensome. | |
| | | Answer: Risk free interest rate curves provided for QIS5 have been calibrated from market data (see background documents). Any difficulty should be reported in the qualitative questionnaire.<br>By application of the "interest rate risk" sub-module, the stresses apply to all the maturities specified in table SCR 5.21 | 13/09/2010 |
| 130 | SCR.5.98. | Question:<br>How is the capital requirement on a CDS written on an EEA state calculated? Will it fall under SCR.5.98 or only be subject to interest rate risk and counterparty default risk? | |
| | | Answer: There is no exemption of the application of SCR 5.98 for CDS based on EEA government bonds. | 13/09/2010 |

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| 131 | SCR 5.21 | Question:<br>**Change of inflation in interest rate stresses (SCR.5.21 and Q&A Document, question #85)**<br>We understand that the stress factors given in SCR.5.21 are applied to the nominal interest rates. However, it is unclear from the QIS 5 Technical Specifications if inflation rates should remain unchanged in the interest rate stresses (i.e. if real interest rates should move by the same absolute amount as nominal interest rates).<br>In this context, we are seeking guidance on the following questions:<br>a. Is it correct that inflation rates should remain unchanged in the interest rate stresses?<br>b. If yes, is it correct that expense inflation and claims inflation assumptions remain unchanged in the interest rate stresses?<br>c. If no, how should inflation rates after stress be derived (e.g. by applying the same multiplicative factors to the real interest rates before stress) and how should expense/claims inflation assumptions be adjusted? | |
| | | Answer: a: Yes<br>b: Yes | 13/09/2010 |
| 150 | SCR 5.16 | Question: According to this statement (SCR 5.16) Policy loans are included in the assets that are sensitive to interest rate movements. It's our understanding that the interest rate shock should be applied only on the accrued interest since policy loans are sensitive to changes in the term structure of interest rates only in respect of the accrued interest. Please confirm | |
| | | Answer: No general answer can be provided, as the way of applying the interest rate shock to policy loans depends on their legal structure with regards to the contractual arrangements of the underlying policy. | 23/09/2010 |
| 168 | SCR.5.21. | Question:<br>The table on par SCR.5.21 does not provide the values relative to the shocks for the maturity from 25 to 30 years. What is the level of shocks to be used for these maturities? | |
| | | Answer: Shock up is 25% from year 26 to year 30 included; shock down is -30% from year 26 to year 30 included | 01/10/2010 |
| 169 | | Question: How can we apply the interest rate shock to debentures with a value based on market prices (i.e. market values/Stock exchange) and a floating interest rate? | |
| | | Answer: By application of the principle of substance over form, is this product closer to an equity, or closer to a fixed interest bond ?<br>If the analysis of the product leads to consider it closer to an equity, then the equity shock should apply and the interest shock should not apply unless the value of the product is sensitive to interest | 01/10/2010 |

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| | | rate changes (in which case both equity and interest rate risks shall be calculated). | |

# SCR Market Risk - Property Risk

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 59 | SCR 5.7 (Pg 116) | Question:<br>We have the following question regarding the value of property assets to be used for property risk?<br>• Can we include in this value the value of equipment, plant and machinery as well?<br>• If not, then where could these assets be modeled or are they considered to be risk free? | |
| | | Answer:<br>The property sub-module only applies to those classes of property defined in SCR 5.44, this may well not include plants and machinery. Where such assets are not explicitly treated in the market risk module, they should be stressed by the 'other equity' charge as described in SCR 5.31. | 18/08/2010 |
| 86 | SCR.5.45, SCR 5.46 SCR 5.50 | Question:<br>We invest in property through a vehicle/fund/company in which a limited number of other institutional investors participate. This vehicle attracts external funding. Which approach applies in the calculation of the property shock:<br>- SCR 5.45 third bullet (treatment equal to equity); or<br>- SCR 5.46 (look through approach) and thereby SCR 5.50<br>In this alternative, how should we interpret the last sentence of SCR 5.50:<br>- does the assumed shock of 25% already take into account any effect of gearing/hedging etc; or<br>- should we apply a shock of 25% on say the initial value of 'bricks and mortar' and in addition include further effects due to gearing/hedging etc | |
| | | Answer:<br>In general, only those investments that give rise to property risk shall be treated as property. Usually, this is only the case if the business of the real estate company is restricted to the direct or indirect holding of property. Otherwise, if the company engages also in real estate management, project development or similar activities, the company shall be treated as equity. Further, if the real estate company takes out loans in order to leverage its investments in properties, the company should be also treated as equity.<br>You should therefore examine the economic substance of your investment. For clarification, we draw your attention to SCR.5.45 and SCR.5.46.<br>Any gearing effect should automatically show, given that the stress applies to the property held by the | 27/08/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | vehicle/fund/company, not directly to the market value of the vehicle/fund/company. | |

# SCR Market Risk – Currency risk

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 29 | SCR.5.62 SCR.5.65-66 | Question:<br>There seems to be an inconsistency in the Standard Formula calculation for Mkt(fx).<br>In SCR.5.62, Mkt(fx,C) is calculated as the max of Mkt(fx,C,up) and Mkt(fx,C,down) for each currency C. Then, Mkt(fx) is calculated by summing Mkt(fx,C) across all currencies C.<br>However, SCR.5.66 calculates Mkt(fx) as the follow:<br>If nMkt(fx,up)>nMkt(fx,down), then Mkt(fx)=Mkt(fx,up), else Mkt(fx)=Mkt(fx,down) (ignoring the statement in QIS5 that says Mkt(fx)=nMkt(fx,down) in the else case which I assume including the n to be a typo).<br>The formulation in SCR.5.66 seems to compare the up and down scenarios across all currencies instead of each individual currency as described in SCR.5.62. Further, SCR.5.65 and SCR.5.66 doesn't seem to describe how to calculate Mkt(fx,up) and Mkt(fx,down) across all currencies from the resulting Mkt(fx,up,C) and Mkt(fx,up,C) for each individual currency. This is also true for nMkt(fx,up) and nMkt(fx,down).<br>Any clarification or further direction you could give about the currency risk capital calculations would be very useful and much appreciated. | |
| | | Answer:<br>SCR.5.62 provides for the right calculation. An errata to the technical specifications published by the European Commission will address that issue. | 10/08/2010 |

# SCR Market Risk- Spread risk

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 16 | SCR.5.78 | Question<br>SCR.5.78. states that 'where several ratings are available for a given credit exposure, the second-best rating should be applied'. Should 'available' be understood to mean available in the market-place, or available to a particular firm? For example, if a firm's asset data currently includes ratings from Moody's and Fitch, but not from Standard & Poor's, should this firm investigate Standard & Poor's ratings in order to determine the second-best rating, or should it simply use its readily-available data from the other two agencies? | |
| | | Answer: The interpretation that "available ratings" means available to a particular firm would clearly lead to cherry picking, which is not the intention: a more extensive meaning should therefore be applied: "available ratings" means available in the market place, on a best effort basis. | 29/07/2010 |
| 60 | SCR 5.83<br>SCR 5.88<br>SCR 5.89 | Question:<br>The treatment of exposures to governments bonds denominated in another currency than the one of the issuing government (an example would be a bond issued in sterling by the Italian government) does not fall under paragraph 5.88 of the technical specifications. Can you confirm whether paragraph 5.89 applies in this case or whether the bond should be treated as a corporate (i.e. in accordance with paragraph 5.83)?<br>In addition to this, please confirm whether the same treatment would apply to, for example, to a bond issued by the European Investment Bank and denominated in sterling? | |
| | | Answer:<br>For exposures to government bonds the approach is as follows:<br>1) Government bonds issued by an EEA state in their domestic currency attract a 0% capital requirement<br>2) Government bonds issued by an EEA state in the currency of another Member State also attract a 0% capital requirement. So, an Italian Sterling bond would be 0% because Italy is an EEA country and the bond is issued in the currency of another Member State.<br>3) Government bonds issued by non EEA countries in their domestic currency the charge would be determined using the rating of the country issuing the debt, and the table in SCR 5.89.<br>4) All other government bonds should be treated in the same way as corporate bonds. | 18/08/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | No spread risk capital charge applies to issues by multilateral development banks and international organisations as defined in SCR.5.88, irrespective of the currency in which the issue is denominated. | |
| 61 | SCR.5.92. | Question:<br>In the formula what should be assumed in case G(ratingdist, tenure) is smaller than attach? In this case the shock would be negative which does not make sense. In the previous version of the draft Technical Specifications there was a minimum floor of 0 in the formula (SCR.5.118. of the draft version). Why has this been deleted? | |
| | | Answer: SCR.1.7 gives general guidance on scenario-based calculations. This states that where the scenario results in an increase in NAV, the scenario does not reflect a risk for the undertaking and the corresponding capital requirement should be set to 0. | 18/08/2010 |
| 62 | SCR.5.92. | Question:<br>In the formula what should be assumed in case G(ratingdist, tenure)-attach is larger than detach-attach? In this case the implied shock or market value loss is larger than the market value itself which does not make sense. In the previous version of the draft Technical Specifications there was a cap of 100% of MV and a floor of 10% of MV in the formula (SCR.5.121. of the draft version). Why has this been deleted? | |
| | | Answer: The cap of 100% of MV is in line with the general characteristics of a scenario-based approach. The floor of 10% of MV has been deleted. | 18/08/2010 |
| 63 | | Question:<br>In the case of callable bonds, which duration should undertakings use for the calculation of the spread risk sub-module? (e.g. maturity at which the bond can be called, or the duration calculated with the assumption that the option is not exercised) | |
| | | Answer:<br>The duration of callable bonds should be used in the spread risk module, as for any other corporate bond (SCR.5.77). If the duration cannot be observed in the market or cannot easily be modelled, then the ultimate maturity date can be used as an alternative. Undertakings should make clear where this is the case. | 18/08/2010 |
| 64 | SCR.5.82 | Question:<br>The calculation of the spread risk used to include the component "delta Liab ul" in order to account for the overall impact on the liability side for policies where the policyholders bears the investment risk with embedded options and guarantees of the stressed scenario. We assume that this component has just been forgotten, such that it must be added? After all it is included in the respective simplification for the spread risk module as outlined in SCR.5.103. Can you confirm that this is true? | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | Answer:<br>The overall impact on the liability side for policies where the policyholders bears the investment risk with embedded options and guarantees of the stressed scenario ("delta Liab ul") should be included, which is in line with the general characteristics of a scenario-based approach (see SCR.1.5 – SCR.1.7). | 18/08/2010 |
| 87 | SCR.5.74 | It is required that participating interests are to be assigned to the spread risk module. Could you please indicate how the (modified) duration of a participating interest can be determined? | |
| | | Answer: Participating interests should be included in the equity risk module. | 27/08/2010 |
| 110 | SCR.5.92 | How are structured credit products to be treated, if they are designed as combo-notes? Is it correct to determine weighted averages for attachment and detachment points, which depend on the different tranches? | |
| | | Answer:<br>The "Look-through approach" ( SCR 5.4) would normally apply to complex structured credit products in order that its components fit to the "structured credit product" types used in the QIS 5 TS.<br>If a different approach seems more appropriate for a particular complex structured credit product type, it could however be suggested with the detailed justification in the qualitative comments. | 06/09/2010 |
| 170 | SCR.5.89 | Q.60 from a previous batch clarifies the treatment of government bonds issued in various currencies. We seek guidance on one missing case: Does SCR.5.89 to non-EEA government bonds issued in an EEA-currency (e.g. EURO)? | |
| | | SCR.5.89 applies to non-EEA government bonds issued in an EEA-currency. | 01/10/2010 |
| 171 | SCR.5.82 | How is the mod. duration of a fund investing in bonds only to be determined? | |
| | | As a default approach, the look-through principle shall apply (cf paragraph SCR.5.9.), i.e. , a modified duration should be calculated for each asset instead of a pool duration. Where this is not possible because the fund is not sufficiently transparent, SCR5.13 shall apply. In case none of the previous situations apply, the fund shall be treated as "other equity" (cf SCR.5.14) | 01/10/2010 |
| 172 | SCR.5.47<br>Q.83 | According to SCR.5,47 in combination with Q.83 term deposits with banks are subject to the spread risk module, whereas cash at bank is subject to the counterparty risk module. In the counterparty module, unrated banks are subject to a risk charge similar to BBB rated counterparties (SCR.6.17). Does the same rule apply to term deposits with unrated banks in the spread module? | |
| | | The table in SCR 5.83 specifies that the Fup value is not the same for BBB bonds and "unrated" | 01/10/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | bonds, therefore the treatment of term deposits in SCR 5.83 and the treatment of cash at bank in SCR 6.18 is dissimilar.<br>Undertakings are invited to comment in the qualitative questionnaire, if this dissimilarity is not consistent with their own risk assessment. | |
| No Q. | No paragr. (if provided) | | Date (answer) |
| 189 | SCR 5.83<br>SCR 5.88<br>SCR 5.89 | Q&A No. 60 is inconsistent as bonds by an EEA-government issued in an non-EEA-currency would fall under the spread risk. However, there is no additional spread risk included in this type of bond except a currency risk, which is, however, to be included in the currency risk anyway. | 15/10/2010 |
| | | There is no specific treatment for government bonds issued by an EEA state in a currency other than its own currency. Paragraph SCR.5.88 and SCR.5.89 apply only to government bonds denominated and funded in the domestic currency. For bonds issued by an EEA government in a non-EEA currency paragraph SCR.5.83 shall apply. | |
| 190 | SCR.5.85 | Question:<br>For variable interest rate bonds, the modified duration used in the calculation should be equivalent to a fixed income bond with coupon payments equal to the forward interest rate. Should instruments with embedded derivatives where coupon payments could be complexly linked to the underlying index (e.g. steepness of the yield curve, digital daily accrual if certain conditions are met (range accrual notes), coupon linked to the level of equity index…) be treated in the same way? | 15/10/2010 |
| | | Answer: Within the framework of QIS5, no further complexity is modeled in the standard formula, so the default approach in QIS5 for more complex products would be the same as for the variable interest rate bonds.<br>Undertakings are invited to provide any comment in the qualitative questionnaire if they consider that the technical specifications are not suited to a particular asset class, indicating why this is the case and suggesting an alternative treatment that they would find appropriate.<br>. | |
| 191 | | Question:<br><br>Spread risk on structured products and credit derivatives: Why is a CLN classified as a credit derivative and not as a structured product? A CLN could be considered as a simple version of a more complicated CDO structure – underlying basket with attach and detach point. | 15/10/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | Answer:" Credit Linked Notes" are classified so far in the "credit derivative" category for cross-sectoral consistency with the banking sector. | |
| 192 | SCR 5.91 | Question:<br><br>Would it be possible to give a more detailed definition of »structured product«? Spread risk sub-module starts with »structured products« but reduces to »structured credit products« in SCR 5.91. Which other sub-modules should be applied to structured products/structured credit products. | 15/10/2010 |
| | | Answer: The spread risk results from the sensitivity of the value of assets, liabilities and financial instruments to the changes in the level or in the volatility of credit spreads over the risk-free interest rate term structure:<br>Financial instruments sensitive to such changes, and which do not fall in the "bonds" category, nor into the "credit derivative" category, should be considered as "structured products" for the purpose of QIS 5.<br>The "structured products" should also be stressed in the "interest rate" sub-module, in the "currency" sub-module and in the "concentration risk" sub-module if relevant, but not in the "counterparty default" risk module. | |
| 209 | SCR 5.89, 5.125, 5.83 | The second part of our question deals with SCR 5.89 and SCR 5.125. We understood that government bonds from Non-EEA governments, issued in the local currency of the government would fall under this para. However, we have some doubts about the term "domestic currency". As this could also refer to the domestic currency of the insurer. Question 170 of the current Q&A document states that government bonds from Non-EEA countries, issued in an EEA currency would fall under this treatment. That means, that the term domestic currency refers to the currency of the insurance company and not to the issuing government. According to that, a bond issued by Brazil in Brazilian Real would fall under SCR 5.83, but a bond issued by Brazil in Euro (or any other EEA currency) would be inside SCR 5.89. Another example would be a Serbian bond in Euro (i.e. within the scope of SCR 5.89). Is this the right understanding? If yes, could you please insert this in the Errata also. | |
| | | Answer: In the context of Q&A 170, "Domestic currency" is to be understood as the currency of the issuing government and not as the domestic currency of the insurer. A bond issued by Brazil in Brazilian Real would fall SCR 5.89 since it is an exposure to a governments funded in that government's domestic currency. A bond issued by Brazil in Euro would fall SCR 5.83. | 26/10/2010 |

# SCR Market risk - Concentration risk

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 9 | SCR.5.108<br>G.47 | Question<br>Query on the concentration risk module when applied at group level:<br>According to paragraph SCR.5.108, the legal entities in a group "that contribute to own funds should be treated as ONE EXPOSURE in the calculation of the concentration risk capital requirement". However, paragraph G.47 for non-financials uses wording that suggests that the assessment is done by entity (i.e., ... "THAT participation" ...) when section SCR 5 is addressed in the course of calculating the Group SCR. In other words, this suggests that the limit is calculated for EACH individual solos entity first, with the results then added up because the "one exposure" rule really means that a 100% correlation requirement should apply for the formula in SCR.5.117.<br>The table in paragraph SCR.15.3 on page 282 is also confusing. Concentration limits are expressly eliminated in rows 3 and 5, but strangely they are not explicitly excluded in row 4. If the concentration charge does not apply in row 5, it seems much more sensible that they should not apply as well for those entities in row 4. Do you think this is an oversight? | |
| | SCR.5.117 | Answer:<br>G47 does not change the content of SCR.5.108 even in a group context so the assessment is still done considering each group as a single exposure for market concentration risk keeping in mind the provisions set out at the end of SCR.5.117.<br>The table included on page 282 is included for illustrative purposes only and does not change the approach for participation in the concentration risk module as laid down in SCR.5.127. Participations included in rows 3, 4 and 5 shall not generate capital requirement for the concentration risk sub-module provided that the conditions in SCR 5.127 are met. | 29/07/2010 |
| 17 | SCR.5.119 | Question<br>SCR.5.119. states that a 15% concentration risk threshold applies to mortgage covered bonds and public sector covered bonds when certain criteria are met. The first criterion is that 'the asset has a AA credit quality'. Should 'AA' read 'AA or higher'? I wasn't sure on the rationale for excluding AAA-rated | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | bonds here. | |
| | | Answer:<br>It certainly should read "The asset has a "AA" credit quality <u>or above"</u> | 29/07/2010 |
| 30 | | Question:<br><br>What is the right way of interpreting the concentration threshold for simple mortgage securitisation (RMBS) exposures - would it be at the issuing program level or individual deal level? Please note that the counterparty in RMBS investments would be the SPV and not the originating bank. | |
| | SCR.5.106<br><br>SCR.5.108 | Answer:<br>Both direct and indirect exposures should be considered, and exposures which belong to the same group should not be treated as independent.<br>The relevant distinction would not be as much the "issuing program level" versus "individual deal level" rather than clearly identifying the accumulation of risk for a given counterparty in the broader sense as defined in 5.106 and 5.108 | 10/08/2010 |
| 31 | SCR.5.115<br>SCR.5.120<br>SCR.5.124 | Question:<br>Is the clarification on the inclusion of the governments bonds in the "total assets" mentioned in SCR.5.120 (inclusion in total assets of government bonds excluded from the concentration risk in SCR.5.124) also relevant for "Assetxl" defined in SCR.5.115? | |
| | | Answer:<br>The assumption is correct; the assertion of SCR.5.120 also applies to the definition set out in SCR.5.115. | 10/08/2010 |
| 65 | | Question:<br><br>Let's assume undertaking has exposure to counterparty i with rating AA. Exposure is equal to 7% of Assetsxl, of which 3%*Assetsxl is excluded from capital requirement (risk factor = 0%). What is the assumed order of exposures to in excess exposure in order to calculate risk concentration capital requirement per 'name'? Possible approaches:<br>1) Exposures excluded fall first under the concentration threshold (i.e. 3%*Assetsxl in CT), so capital requirement is calculated from 4%*Assetsxl with standard risk factors. | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | 2) Exposures are proportionally divided to fall un CT and above CT,<br>3) Exposures with standard risk factors fall first under the concentration threshold (i.e. 4%*Assetsxl in CT), so capital requirement is calculated from max(0;(4%-CT))*Assetsxl =(4%-3%)*Assetsxl =1%*Assetsxl with standard risk factors and 3%*Assetsxl with 0% risk factor. | |
| | | Answer:<br><br>The 3rd approach is the most consistent with purpose of special provisions for certain type of concentrations exposures. | 18/08/2010 |
| 66 | SCR.5.119 | Question:<br><br>As regards the special reference to covered bonds, what is the right way of interpreting the 15% limit - because the counterparty would be the issuing bank, to which the insurer could be exposed via senior debt or other instruments (which have a concentration threshold of 3%). Is it the case that non-covered bond exposures to a bank would be subject to 3% threshold, while simultaneously, the insurer could have a 15% exposure to the bank via covered bonds? | |
| | | Answer:<br><br>For the concentration threshold on a bank counterparty, the 3% threshold and the 15% are not "additive": if the exposure to a bank through covered bonds is above a threshold of 12 % (e.g. : 13%), and the exposure to this bank through non covered bonds is above 2% (e.g. 4%), the threshold to be applied is 15% and not: 13 + 3= 16%. | 18/08/2010 |
| 111 | SCR.5.119 | What is the rating of the counterparty for mortgage covered bonds? Is it the rating of the bond that defines the threshold in SCR.5.119 or is it the rating of the counterparty? | |
| | | For mortgage covered bonds the rating of the bond should be used as counterparty rating in the concentration risk submodule. | 06/09/2010 |
| 173 | SCR.115 b) | Question:<br>There is an exemption for exposures to a counterparty which belongs to the same group. As counterparties are mentioned (re)insurance undertakings, asset management companies, financial holding companies and ancillary services undertakings subject to appropriate prudential requirements. Should deposits in bank which belongs to the same group be excluded in the calculation or not? Banks are not mentioned explicitly but on the other hand what was the reason to include financial holding companies and to exclude banks? The same undertakings are listed in | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | the SCR 5.127, but the case of participation is different as participation in financial and credit institutions are excluded from own funds. | |
| | | Answer: The deposits in bank which belong to the same group (art. 212) are included in the concentration risk module calculation.<br>The deposits in bank which belongs to the same group are included in the calculation, as they are not mentioned in the list of exclusions in SCR 5.115 b).<br>Undertakings are invited to comment in the qualitative questionnaire, if this difference of treatment between financial holding companies and banks is not consistent with their own risk assessment. | 01/10/2010 |
| 193 | SCR.5.127<br>SCR 15.3 | Question:<br>We have the following questions for the Solo SCR regarding the concentration risk of balances with or investments in:<br>(1) Parent undertaking<br>(2) Other undertakings which belong to the same group,<br><br>In particular SCR 5.127 seems to provide additional instructions on the treatment of the above compared to SCR 15.3. As a result of this the following questions are raised:<br>1 Does SCR 5.127 only apply to participations as suggested by the heading? Or does it also apply to:<br>I. Investments in the bonds of the parent undertaking<br>II. Balances with the parent undertaking<br>III. Term Deposits in the parent undertaking when it is a bank<br>IV. Cash in the parent undertaking when it is a bank.<br>Please note that Q&A 68 for counterparty default risk has clarified that there is no special treatment in relation to these items for counterparty default risk and market risk, but does not make clear if it is applicable or not.<br>2 Does SCR 5.127 only apply to the value of the participation or also to the exposures (e.g. other investments and balances) with a subsidiary?<br>3 Does SCR 5.127 also apply to companies which are not participations but belong to the same group as the undertaking? | 15/10/2010 |
| | | Answer: 1) From the Solo point of view there is no difference in the application of SCR 5.127 according to the nature of the counterparty belonging to the same group: the exemption would apply similarly to an exposure to a participation or to the parent undertaking, provided the three conditions are met: it is not possible to decide from examples I and II if these exposures would be free of | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | current or foreseen practical or legal impediment, but these exposures would be considered in the application of the criteria.<br>A "bank" is not included in the list of counterparties in 5.127, therefore the exemption would not apply in the examples III and IV<br>2)SCR 5.127 refers to "exposures" and not specifically to the value of the participation<br>3) The reference definition for the belonging of the same group is Article 212 of Directive 2009/138/EC as specified in SCR 5.127 | |
| 210 | SCR.5.120<br>SCR 5.10 | Question1:<br>The concentration risk helper tab in the case of property exposure seems to ignore SCR.5.120 since the total assets considered under the 10% threshold do not seem to include EEA government bonds. Should the calculation be done manually?<br><br>Question2:<br>According to Q&A 59 equipment, plant and machinery should be included in the market risk module under "other equity". In the concentration risk how these assets should be treated? | |
| | | Answer:<br>Question 1 The input in C9: «total amount of assets considered in the market risk concentrations submodule» should include EEA government bonds in order to be consistent with SCR 5.120<br>Question 2: The treatment consistent with the answer of Q&A 59 is also to consider these assets as "equity" for the concentration risk sub-module | 26/10/2010 |

# SCR Market risk – Illiquidity premium risk

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 20 | | Question:<br>Should the liquidity premium stress be applied on the liabilities only, or the asset and liability side? | |
| | | Answer:<br>The illiquidity premium being recognised in the calculation of the Technical Provisions (paragraph SCR 5.128), the "illiquidity premium risk" shock is defined in paragraph SCR 5.129 as the risk of increase of the value of technical provisions due to a decrease in the illiquidity premium. | 29/07/2010 |
| 67 | SCR.5.134 | Question:<br>If you hold a set of long term liabilities for which you are claiming a liquidity premium, and you also hold some corporate bonds which you believe have a liquidity premium, do you:<br>a) Calculate your stress as the value of the liabilities increasing due to a discount rate reduction of 65% of recognised LP with no allowance for change in the value of your assets, or;<br>b) Calculate your stress on a net asset basis, so increase the value of liabilities as above, and also increase the value of your corporate bonds by decreasing the yield (by the same number of bps) and therefore increase the value (on a mark to model basis)? | |
| | | Answer:<br>Approach a is correct. The illiquidity premium shock is the impact on NAV of a 65% decrease in the illiquidity premium observed in the financial markets as used in the calculation of technical provisions. Undertakings are not expected to include the effect of the illiquidity premium shock on the value of assets in their balance sheet. | 18/8/2010 |

# SCR Counterparty default risk

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 2 | | Question<br>How are listed futures to be treated? The market normally considers a listed future to be without counter party risk as it is listed and with daily transfer of cash. But how is a listed future to be treated in QIS5. Should one use the rating of the exchange to calculate $SCR_{def}$? Or alternative is a listed future assumed to have zero SCR. | |
| | | Answer:<br>Within the one year time horizon, the counterparty default risk of the exchange might not deemed to be zero. If a clearing agency is the counterparty of the listed future, the rating of the clearing agency should be used to calculate the counterparty default risk of the future. | 22/07/2010 |
| 5 | SCR.6.16 | Question<br>For counterparty default risk, when taking into consideration the solvency ratio rating (see paragraph SCR.6.16 of the QIS5 technical specifications), what is the default option regarding transitional measures for hybrid capital? The solvency ratio of the counterparty may depend on whether it applies the transitional provisions or not. | |
| | | Answer:<br>Undertakings should assume that for the purposes of the SCR calculation that all subordinated liabilities and hybrids are at least classified as Tier 3. They should not assume that transitional measures (see subsection OF.4 of the QIS5 technical specifications) apply and that the instrument could (if it met the relevant criteria) be classified as either Tier 1 or Tier 2. | 22/07/2010 |
| 32 | SCR 6.6 | Question:<br>In terms of valuation salvage and subrogation assets should be netted immediately in the best estimate calculation, but how do they have to be treated in the counterparty default calculation? Do they have to be included? Type 2? | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | Answer:<br>The expected salvage and subrogation values are netted in the best estimate calculation.<br>The unexpected loss on salvage and subrogation assets should be treated in the counterparty default calculation as Type 2. | 10/08/2010 |
| 33 | SCR 6.15 | Question:<br>Probabilities of defaults were provided depending on the S2 ratio for companies not having a credit rating (eg internal reinsurance). How these additional categories should be integrated in the calculation of V (SCR 6.14). Should these be considered as additional rating classes?<br><br>One practical solution might be to change the table of SCR 6.16 and create categories of solvency ratios that create probabilities of default similar to the ones based on the rating class, so that each probability of default can be associated with a rating-class or a range of solvency ratio's. | |
| | | Answer:<br>Although a different presentation could have lead to using the same probabilities of default in the table in SCR 6.14, and in the table of SCR 6.16, for the QIS 5 exercise, undertakings wanting to test SCR 6.16 for unrated counterparties are nevertheless invited to used the probabilities of default from the table in SCR 6.16 in the application of the formulas as defined in SCR 6.14. | 10/08/2010 |
| 34 | SCR 6.21 | Question:<br>In the calculation of the LGD, are the "recoverables" assumed to be gross or net of expected loss due to counterparty default? | |
| | | Answer:<br>As stated in SCR 6.21, the "Recoverables" are the best estimate of the recoverables, and are assumed to be net of expected loss due to counterparty default, as stated in TP 2.124 | 10/08/2010 |
| 35 | SCR 6.21<br><br>TP.2.162 | Question:<br>In TP.2.162 the recovery rates are different per rating class. This approach can be used for calculating the expected loss due to counterparty default. SCR 6.21 suggests using a recovery rate of 50%. This is inconsistent. | |
| | | Answer:<br>Recovery rate in SCR 6.21 applies to "unexpected" loss, whereas TP2.162 to "expected" loss | 10/08/2010 |
| 36 | SCR 6.29-30 | Question:<br>The method that has to be applied in estimating the capital effect for one individual reinsurance | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | counterparty is based on individual Line of Business inputs. SCR 6.30 suggests calculating the overall counterparty effect by adding the results of 6.29 (calculated per individual business line) across the Lines of Business.<br><br>Assume a counterparty is participating in multiple reinsurance programs that protect both man-made and nat-cat scenario's. How should the (NLhyp/cat – NLwithout/cat)² be calculated ? If we simply add all the individual calculated Standard Formula Cat scenario's, calculate the effect of the counterparty in these scenario's and use this in the above suggested formula, we take the assumption that all scenario's could occur in the same year.<br><br>One suggestion could be to calculate the counterparties share in each individual cat-scenario and then apply the cat correlation structure to obtain a diversified cat loss for the counterparty (which could be allocated proportionally to the individual business lines). | |
| | | Answer:<br>These additional calculation steps might provide a finer granularity in taking into account the diversification between the cat scenarios, but would introduce too much complexity within the framework of the Standard Formula. | 10/08/2010 |
| 68 | | Question:<br>We have the following question regarding balances with or investments in parent undertakings in the solo SCR calculation when the parent undertaking is not an insurance undertaking:<br>• Does a different treatment apply for counterparty risk and market risk for these kinds of investments? For example for:<br>  • Investments in the bonds of the parent undertaking<br>  • Balances with the parent undertaking<br>  • Investments in the equity of the parent undertaking<br>  • Deposits in the parent undertaking when it is a bank | |
| | | Answer:<br>In respect of these items, there is no special treatment for Counterparty and Market risk foreseen within the solo-calculation. However please refer to OF8 (k) which explains the need to eliminate the effect of a subsidiary investing in the own funds of its parent. | 18/08/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| 69 | SCR 6.35 | Question:<br>With regards to the 3 months period which is involved in the formula in paragraph 6.35, we would like to know whether, in the cases where a company provides a 2 or 3 months credit period for the submission of collected premiums, will the 3 months period start from the inception or renewal of the policy, or from the end of the submission of collected premiums credit period? Would this depend on the assumption used in the calculation of the Best Estimate of the income-outgo cash-flows, thus the undertakings would have two ways of treating the 3 months period? | |
| | | Answer:<br>If the customer is allotted a credit period in the insurance policy or an intermediary is granted such a period within his contractual terms, premiums should not be considered overdue within this credit period and the 3 month period will start from the end of the credit period. This assessment is independent from the assumptions used to calculate the Best Estimate. | 18/08/2010 |
| 88 | SCR 6.2-6.14 (in combination with TP 2.159-2.163) | Question:<br>When determining the risk mitigating effect of reinsurance (see SCR.6.26 – SCR.6.30), a (hypothetical) capital requirement for underwriting and market risk has to be calculated under the condition that the risk mitigating effect of the reinsurance arrangement is not taken into account. Do you share the view, that for this purpose, both the best estimate NAV (before stress) and the NAV in all stress scenarios are calculated without consideration of reinsurance (so that hypothetical SCR = NAV(before stress, without reinsurance) – NAV(after stress, without reinsurance))? | |
| | | Answer:<br>We agree: SCRhyp = NAV(before stress, without reinsurance) – NAV(after stress, without reinsurance) | 27/08/2010 |
| 89 | SCR 6.21 | Question:<br>Within this module, the calculation of the loss-given-default (LGD) for reinsurance arrangements take account of the risk mitigating effect on underwriting risk. There is no explicit allowance for the risk mitigating effect on market risk. Please can you advise on the appropriate calculation of the LGD for reinsurance arrangements that mitigate <u>both</u> market and underwriting risk. Should we allow for the risk mitigating effect on market risk in the LGD calculation? | |
| | | Answer:<br>SCR.6.25 allows for the risk mitigating effect on market risk for derivatives.<br><br>Where an reinsurance arrangement covers both market and underwriting risk, both should be taken into account: | 27/08/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | LGD = max (RR*(Recoverables + $RM_{re}$ + $RM_{fin}$ - Collateral) ; 0) | |
| 90 | SCR 6.36 and SCR 6.41 | Question:<br>Should the haircut percentage mentioned in SCR.6.36 (the additional information section on mortgage loans) be applied to the collateral mentioned in SCR.6.38 and SCR.6.39? Or should one use the adjustment specified in SCR 6.41 (and is SCR.6.36 is not relevant to the collateral value adjustment in SCR.6.38 and SCR.6.39)? Commercial mortgages would have a different treatment. | |
| | | Answer: SCR6.6 requires that counterparty default risk on mortgage loans is calculated according to SCR.6.34 and SCR.6.35. SCR.6.36 serves just reporting purposes. | 27/08/2010 |
| 91 | SCR.6.6 | Question:<br>Are loans (not in form of a bond) to other than "policyholder debtors" included in the counterparty risk module or spread module, cf. second bullet point in 6.6.? Is it right that loans issued by i.e. regional governments shall be included in the counterparty risk module and bonds issued by the same issuer shall be included in the spread risk module? | |
| | | Answer: If the risk structure of loans is similar to that of bonds, they are subject to the spread risk module and not to the counterparty default risk module. This will be the case for most loan exposures to government institutions and business undertakings. All other loans, especially small-scale loans with individual debtors like policyholders are subject to the counterparty default risk module | 27/08/2010 |
| 92 | SCR 6.6./6.36/6.37 | Question:<br>According to the technical specifications SCR 6.6 mortgages are included in the counterparty risk module (type 2 exposure). In TP SCR 6.37 it is said that the value of the exposure may be reduced by the risk-adjusted value of the collateral. As far as we can see from TP SCR 6.36 and 6.37, this means that there will be no capital requirement for loans secured by residential real estate if the loan to value ratio is less than 75%. Is this correct? | |
| | | Answer: For type 2 exposures, value of the exposures might be reduced under the conditions set in SCR6.38 to SCR6.42. SCR.6.36 serves just reporting purposes | 27/08/2010 |
| 93 | SCR 6.29 | Question:<br>Please clarify what premiums and in respect of what time periods of risk exposures are being referred to in SCR 6.29? | |

| No Q. | No paragr. (if provided) | | Date (answer) |
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| | | Answer:<br>The Plob terms are both in relation to the premium volume measure as used for the non-life underwriting risk (see eg SCR.9.23):<br>• 'Without' is the volume measure used in the SCR calculation<br>• 'Hyp' is the equivalent volume measure if the reinsurance had not been taken out.<br>If appropriate, it may be proportionate to make suitable approximations to obtain this amount for each reinsurer, eg to ignore the adjustment for geographic diversification in SCR.9.33. | 27/08/2010 |
| 112 | SCR.6.19 | Coinsurance is typically organized in such a way, that the leading company of a coinsurer-consortium satisfies the claim w.r.t. the injured/damaged party. The leading company then allocates the claims payment - say *Y*- due to quota shares *q(i)* of the coinsurers to the resp. coinsurer. If a settlement of a claim takes a longer time such invoices to the coinsurers may happen several times e.g. every half a year. In the case we refer to, each undertaking of the coinsurer-consortium is jointly and severally liable (gesamtschuldnerische Haftung ). This means if one undertaking defaults all remaining undertakings have to take over this part in dependency of their quota share.<br>1. Is it correct to assume that the default risk of coinsurance consortiums is subject to the counterparty default risk<br>module and not to the spread risk module?<br>2. How should the expected default of such a coinsurer consortium be calculated:<br>a. Similar to reinsurance? Would this mean that each insurer i of the consortium has the total exposure *X*(1-q(i))?*<br>b. Alternatively: for insurer i with quota share *q(i)* the total expected exposure (similar to recoverables from reinsurance) of default is<br>sum(j not i) [PD(j)*q(j)**X*)], i.e. the sum of the expected defaults across all other undertakings of the consortium? | |
| | | ad 1. Yes.<br>ad 2. The commitments resulting from the "gesamtschuldnerische Haftung" should be treated like guarantees (type 1 exposure). The calculation should take into account the probabilities of default of the several co-insurers and the loss that the undertaking incurs in case of default (see SCR.6.32). | 06/09/2010 |
| 113 | SCR.6.25 | Given the formula *LGD = max(90%*(MarketValue+RM-Collateral);0)*, collateral tends to reduce the LGD. In the case of a zero-cost-collar-strategy, there are constellations where a long put and a short | |

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| | | call are signed by the same counterparties. If so, the net collateral is equal to zero. However, the performance of the short call and the long put are contrary (by definition) depending on market developments. How is the calculation to be exercised? We believe that it would be correct to set off the performance of the short call against the LGD of the long put? Can you confirm that this is true? | |
| | | Answer:<br>The term $Collateral_i$ should be determined as set out in SCR.6.38 to SCR.6.42, based on the market value of the currently existing collateral. | 06/09/2010 |
| 132 | SCR.6.16 | Question:<br>For unrated counterparties that are undertaking that will be subject to Solvency 2 and that would meet their MCR, the probability of default is dependent on the solvency ratio (own funds/SCR). As yet no solvency 2 ratios are available and the counterparty is still in the process of completing QIS5. How should the solvency ratio be calculated: Solvency 1; QIS4; or tentative QIS5? | |
| | | Answer:<br>For unrated counterparties, the "solvency ratio" meant in SCR 6.16 is the tentative QIS5 "ratio": if not available, "Credit quality step 6" should be used from the table in SCR 6.14 | 13/09/2010 |
| 133 | | Question:<br>Where a daily call for margin takes place for a given asset subject to the counterparty risk (e.g. Listed futures), how should this collateral be stressed for the market risk (SCR.6.39) considering that the company bears risk only during one day? | |
| | | Answer: As the shock giving rise to the call for margin is instantaneous, the counterparty risk should be also assessed on the assumption that the loss on the value of the "call for margin" happens in the same day | 13/09/2010 |
| 134 | | Question:<br>Should the MktRisk considered in SCR.6.39 be gross or net of adjustments for loss-absorbing capacity of technical provisions where the policyholders can support a part of the risk? For the calculation of RM (SCR 6.23), should we consider also the risk mitigating effects of the counterparty gross or net of the loss-absorbing capacities of technical provisions? | |
| | | Answer: In the "gross" calculation of $SCR_{def}$ it should be "gross" of adjustments, but in the calculation of n $SCR_{def}$ the "net" values should be used | 13/09/2010 |
| 135 | SCR.6.26-30 | Question:<br>It is not clear how to calculate the risk mitigating effect for health insurance and what are the correlations between life, health (and non-life) | |
| | SCR.6.30 | Answer: For the purpose of the "Calculation of the risk mitigation effect" (SCR 6.26 to 6.30), "Health SLT" should be treated as "Life" (SCR 6.27 and SCR 6.28), whereas "Health NSLT" should be treated as "Non Life" (SCR 6.29 and SCR 6.30). | 13/09/2010 |

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| | | Where a risk mitigation instrument transfers two or three of the Life, non-Life and Health underwriting risks, the risk mitigating effect should be given by the aggregation (assuming the correlations set out in SCR.1.32) between the risk-mitigating effects in relation to the respective underwriting risks. | |
| 151 | SCR.6.6. | Question:<br>We have the following question regarding the treatment of certain assets on the balance sheet<br>In which risk modules should the following assets be modeled?<br>1 Prepayments for services<br>• Counterparty risk seems more appropriate<br>2 Cheques received but not yet cashed<br>• Counterparty risk seems more appropriate<br>3 Current tax asset<br>• No counterparty risk since the counterparty is the government<br>• However there is the risk that the tax assessment will be higher than expected. Should that be modeled?<br>4 Accrued Rent<br>• Counterparty risk seems more appropriate | |
| | | Answer: As SCR 6.1 states, the scope of the counterparty module covers "any [other] credit exposures which are not covered in the spread risk sub-module", which seems to be the case of all the examples in the question, including current tax assets.<br>The specification regarding the valuation of "Deferred tax assets" is in V1.4, but no specific shock is dedicated to a sudden change in fiscal legislation. | 23/09/2010 |
| 174 | | Question:<br>How shall we treat defaulted assets still on balance sheet (valued already, from an accounting point of view at current market recovery rate) for the purpose of QIS5? Are they subject to any risk charge? | |
| | | Answer: A defaulted asset, valued at market recovery rate on the Solvency II balance sheet, is still subject to potential losses on a one year time horizon (VaR 99,5%): therefore the market module is applicable to the discounted value of the defaulted asset, each sub-module if relevant according to the nature of the underlying asset. | 01/10/2010 |
| 175 | SCR.6.29. | Question:<br>Counterparty's share of CAT losses. According to section SCR.9.4 - Non life CAT risk sub-module, the capital charge for CAT risk is calculated by peril and not by line of business. Therefore it is not clear what it should be input in the formula 6.29. If the reinsurance treaties with a counterparty | |

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| | | affect more than one non-life line of business, how to allocate the CAT share among the different LoB? | |
| | | SCR 6.30 specifies that for reinsurance treaties with a counterparty affecting more than one non-life line of business, the terms defined in SCR 6.29 can be summed up.<br>The allocation of the terms per peril should be made on a best effort basis per line of business.<br>Undertakings should provide their comments in the qualitative questionnaire on any difficulty that this method might represent for them. | 01/10/2010 |
| 211 | SCR.6.44. | Question:<br>If a reinsurance arrangements is covered by a third party letter of credit, which is the benefit in terms of SCR? A loss occurs when both the reinsurer and the LoC provider default and such event has clearly a default probability much lower than the stand alone default probability (suppose independent and equally rated entities). | |
| | | Answer: Before the default of the reinsurer, the Letter of credit is not valued on the Solvency II balance sheet of the cedant: therefore no shock is required on this potential asset.<br>After the default of the reinsurer, the value of the asset on the reinsurer is split into two, as specified in SCR 6.8 for the composition of the "Recoverables": "Best Estimate recoverables from the reinsurance contract (or SPV) i plus any other debtors arising out of the reinsurance arrangement or SPV securitization": the value of the recoverable directly on the defaulted reinsurer ("reinsurance contract"), and the value of the asset on the counterparty that has delivered the Letter of Credit ("any other debtors arising out of the reinsurance arrangement"): in this situation both assets, for their respective value, have to be shocked in the SCR.<br>The benefit is therefore not in terms of SCR, but in terms of Own Funds: If the asset corresponding to the Letter of Credit were not valued in the case of a defaulted reinsurer, then the Own funds of the cedant would be reduced by that amount.<br>The standard formula does not include probabilities of default of more than one undertaking at the same time. | |
| 212 | | Question:<br>If we have correctly understood "cash at bank" receive a 0% recovery rate in case of default and the same probabilities of default as for derivatives and reinsurance. Consequently CASH is considered riskier than these two types of exposures. Does it make sense? | |
| | | Answer: The "loss given default" of cash at bank is specified in SCR 6.31.<br>Undertakings are invited to comment in the qualitative questionnaire, if this valuation is not consistent with their own risk assessment. | 26/10/2010 |

## SCR – Life lapse risk

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 194 | SCR.7.44, 7.49-51 | Question:<br>SCR.7.44 stipulates that this sub-module applies to all options that, in a sense, increase or decrease the insurance cover. SCR.7.49 defines the notion of the surrender strain. However, this definition is applicable directly to the surrender/lapse option and not necessarily to other options. For example take a presumably significant option: indexation by the policyholder. A straightforward interpretation could be taking the BE assuming non-exercising the option and BE* assuming exercising the option (where the BE* includes all present payments, like the [partial] surrender payments, made by the insurer under the exercise of the option) and determine the (positive) surrender strain as $(BE^*-BE)^+$.<br>Still, if we applied the above principle, there remain some issues to be resolved. E.g. for indexation, there is a series of options. So which one should be tested? The very first? Or all? Or some of them?<br>Also, should participants test for surrender strain each type of option separately (i.e. test the exercise of one and keep all others non-exercised) but then apply all option take-up rates in one single shock up and one single shock down? | 15/10/2010 |
| | | Answer: The "lapse risk" sub-module stresses the surrender strain due to changes in option take-up rates.<br>Undertakings are invited to suggest a calculation method in the qualitative questionnaire, if some options do not lead to a clear surrender strain, but changes in their exercise rate would have a material effect on the Technical Provisions. | |

## SCR Life underwriting – Longevity risk

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 136 | SCR.7.32 | Question:<br>'Increases' should be replaced by 'decreases'. | |
| | | Answer: No. For longevity risk the simplification is based on a decrease on the expected average death rate of 25% over the following year. Due to ageing of the portfolio the expected | 13/09/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | average death rate for the second year will then be increased by 10% and so the decrease of 25% should be applied on the updated rate. This effect will be applied for n years, being n the modified duration of liability cash flows. | |
| 176 | SCR 7.22. and SCR 7.24 | Question:<br>In our opinion the part "*where there is no death benefit or the amount currently payable on death is less than the technical provisions held and, as a result*" of SCR.7.22 is misleading since it may lead to an inconsistency with the later part of the sentence *„ a decrease in mortality rates is likely to lead to an increase in the technical provisions"*. Therefore the first part of the sentence, i.e., "*where there is no death benefit or the amount currently payable on death is less than the technical provisions held and, as a result*"**,** should be deleted. The same is true for the remaining submodules of SCR Life and SCR Health (SLT). Can you confirm this opinion? | |
| | | Answer: Undertakings should provide a comment in the qualitative questionnaire as to why this wording would seem inappropriate for certain products or product classes, including their alternative wording suggestions. | 01/10/2010 |

# SCR Life underwriting Risk – Mortality risk

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 114 | TP. SCR.7.12 SCR.7.24 | Question:<br>The technical specification states that obligations that provide benefits in case of death and survival do not need to be unbundled for the mortality and the longevity risk if these benefits are contingent on the life of the same insured person. However, the resulting netting effect is restricted, as a floor of zero applies at the level of contract if the net result of the scenario is favourable to the insurer. Can you confirm that in case of group pensions, this would be the level of the group pension contract, and not the level of the individual insured? | |
| | | Answer:<br>As per SCR7.12 and SCR7.14, netting of longevity and mortality contracts would only take place at the level of the individual life, and any floor would only be applied at the level of the individual life. As such, this netting could not take place at the level of the group portfolio. | 06/09/2010 |

# SCR Health Underwriting - General

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 8 | | Question<br>Unlike in the TS of the QIS 4 the segmentation for the workers' compensation liabilities within the Health underwriting risk module is not clear. In the QIS 4 (TS.XII.D.2) it was specified what to do with annuity- claims which are paid under the form of a lump sum on a short-medium period. This is not clear in the new health underwriting risk module. This has an impact on the calibration of the different risks within the $SCR_{Health}$. | |
| | TP.1.23-28<br>SCR.8.1 | Answer:<br>Workers' compensation obligations should be split between SLT Health and Non-SLT Health and assigned to the corresponding sub-modules of the health underwriting risk module (see paragraphs TP.1.23-28 and subsection SCR.8.1 of the QIS5 technical specifications).<br>The split should be carried out taking into account the technical nature of the insurance obligations and the risks which materially affect the underlying cash-flows. The fact that claims are paid as a lump-sum is not per se an indicator for the classification of the product. | 29/07/2010 |

## SCR Non-SLT Health

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 215 | | Question:<br><br>If a firm writes cost-plus medical insurance contracts with stop loss contracts attached, then in the premium calculations that flow into the SCR in the non-SLT health calculation, should the firm include only the premiums relating to the stop loss benefit, or should the income under the cost-plus contract also be included?<br><br>A firm writes cost-plus medical insurance business (ie an arrangement where up to a certain point they provide an administration service for managing claims on behalf of a large corporate scheme and beyond that they provide stop loss cover). What premium should be used for the purposes of the premium risk sub-module – should it be just the premium in respect of the stop-loss cover, or should it be the total payment from the corporate scheme. | |
| | | Answer: Yes<br>The premium in respect of the stop loss cover is needed for the premium risk module, but also the premiums for the service (as well as any technical provisions set up for it) should contribute to the volume measures for premium and reserve risk and operational risk, since the administrative service is part of an insurance contract. | 26/10/2010 |

## SCR Health underwriting - Cat risk

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 6 | | Question<br><br>Can you clarify the application of the Arena scenario in worker compensation in case accidents outside of working hours are not covered? | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | Answer:<br>Insurance and reinsurance contracts that only cover accidents at work are exempted from the arena scenario. Where a contract covers both accidents at work and other accidents it should be included in the arena scenario in relation to the cover of other accidents.<br>However, any Workers' Compensation portfolio would be affected by the Concentration Scenario. | 22/07/2010 |
| No Q. | No paragr. (if provided) | | Date (answer) |
| 195 | SCR 8.110 | Question:<br>Where a product covers more than one of these type of benefits how should it be treated? For example, should it be allocated to the different categories included therein? | 15/10/2010 |
| | | Answer: If a product cannot be allocated mainly to one product type in the list SCR 8.110, it should be split into the relevant product types from the list:<br>e.g. if claims cost of product A are usually split 60% "accidental death", and 40% "permanent total disability", then product A should be split into two products: A' "accidental death", and A'' "permanent total disability".<br>Undertakings are invited to report in the qualitative questionnaire of any impractibility in the approach specified in the QIS 5 TS . | |

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| 137 | SCR 8.5 Par. 8.110 & 8.123 | Question:<br>If a life insurance policy has attached to it several SLT Health - classified riders (say disability, accidental death, waiver of premium and income protection) should 4 separate calculations (one for each rider) take place to ascertain the catastrophe risk? | |
| | | Answer: Yes | 13/09/2010 |
| 138 | SCR8.103 and 9.69. | Question:<br>If L is a market loss then MS is needed (MS was deleted by the Errata issued by CEIOPS). Does L mean the loss for the entity? How this loss will be determined? | |
| | | Answer: L is the total gross amount for the undertaking (the second sentence:"the total gross loss amount of the catastrophe will be provided …" should be deleted) | 13/09/2010 |

# SCR – Non life underwriting – Premium and Reserve risk

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 139 | Annex N: Computation of Mgross,lob. | Question:<br>What do you have in mind concerning the claims? Closed claims or also open claims? If we must use the open claims, we assume the payments+reserves should be used? Best estimate of reserves or accounting values? When you mention the last n years, do you mean accident years or claims closed in the last n calendar years? Are all the claims to be included in the computation (also CATNAT claims)? | |
| | | Answer:Claims are valued on a ”best estimate” basis, with an underlying ”accident year” basis | 13/09/2010 |
| 177 | SCR 9.25<br>SCR 9.27 | Question:<br>It is very unlikely that firms will have in place single non-proportional reinsurance contracts that provide cover at the level of granularity of the Solvency II class of business. This, together with simplistic assumptions relating to the structure of the contract (e.g. single XoL layer, no allowance for proportionality or aggregate deductibles, unlimited reinstatements etc.) mean that it is unclear how undertakings can allow for non-proportional reinsurance where these simplifying assumptions are not applicable. I would further argue that, if only because of the granularity issue, this is likely to be the case for almost every undertaking).<br>So, the questions are:<br>(1): Is it possible for undertakings to calculate the Non-Proportional adjustments using alternative techniques, which can then be described in detail in the qualitative sections of the QIS5 questionnaire?<br>(2): If (1) is not possible, where the simplifying assumptions are not directly applicable (e.g. where the reinsurance contracts do not exist at a Solvency II class level), is it allowable for undertakings to calculate parameters based on simplifying assumptions, e.g. set the input field for the "limit" of the contract to be a volume-weighted average of limits of non-proportional reinsurance contracts for all the classes that map to the Solvency II sub-classes?<br>(3): If (2) is not possible, is it the case that undertakings must set the adjustment factor to 100% (i.e. take no credit for non-proportional reinsurance), or are there other methods that may be adopted? | |
| | | Answer:<br>Participants should apply the adjustment as prescribed in the technical specifications not their own methods (otherwise this is an internal model). If participants consider that some parts of the | 01/10/2010 |

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| | | specifications need further improvement, it should be reported under the qualitative questionnaire. | |

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| 213 | SCR.9.27 &Annex N | Question:<br><br>1 Please clarify the units (e.g. in thousands) of each input for the simplification tab NP_adjustment:<br>• V(prem, gross, lob)<br>• Average cost per claim<br>• Number of claims<br>• Retention of non-proportional reinsurance contract<br>• Limit of the non-proportional reinsurance contract<br>• Standard deviation of the cost per claim<br><br>2 "The adjustment factor for non-proportional reinsurance should only be calculated in relation to per risk excess of loss reinsurance which complies with the following conditions:"<br>The following non-proportional reinsurance can also cover per risk claims which fall within the scope of the treaty:<br>• Per event XL<br>• Aggregate XL<br>• Cat XL<br>Can these reinsurance types be taken into consideration? | |
| | | Answer:<br>1 Number of claims: per unit of claim. All others: use the same unit convention for every input, but any homogeneous convention will do (unit, thousand, etc),<br>2 The current proposal for the Standard Formula does not permit the inclusion of some of the more complex forms of reinsurance of the types mentioned because the underlying model only fits the "excess of loss per risk" type of reinsurance treaty. In particular no catastrophe type reinsurance cover can be included, as this forms part of the catastrophe risk sub-module. If undertakings have any suggestions for improvements to this part of the specifications these should be included in the qualitative questionnaire. | 26/10/2010 |
| 214 | SCR.9.70. Annex L.3. | Question1<br>According to Q&A 154 all inputs in the NL CAT modules are meant to be gross of facultative reinsurance. The examples in Annex L3 only relate to XL reinsurance and quota share reinsurance. Can you please | |

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| | SCR.9.79<br>SCR.9.178 | provide a simple example for each of the following reinsurance types and for how they can be considered in order to calculate the net capital requirements for non-life catastrophe risk?<br>• Facultative reinsurance<br>• Fronting<br>• Surplus treaty<br><br>Question 2<br>In the calculation of the NL cat risk two methods are provided. When calculating the earthquake cat risk there seems to be an inconsistency between method 1 and method 2. In particular:<br>• Under method 1 the earthquake risk applies to Fire and Marine lines of business only<br>• Under method 2 the earthquake risk applies to Fire and Motor Other lines of business only<br><br>So, for example, an undertaking which chooses to apply method 1 will not incur an earthquake cat risk for the Motor line of business. Is our interpretation correct? | |
| | | Answer:<br>Question 1: Facultative reinsurance, fronting, can take multiple reinsurance treaty type forms: undertakings should assess each contract to one of the classical types as provided in Annex L3.<br>If a particular reinsurance contract does not fit any of the classical reainsurance treaty forms, undertakings are invited to comment in the qualitative questionnaire, and provide any suggestion on the appropriate treatment Question 2: Under method 2, the earthquake risk should also apply to Fire and Marine lines | 26/10/2010 |

# SCR – Non life underwriting – Cat risk

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 37 | Section SCR.9.4 | Question:<br>We are concerned about the high level of detailed data required for some of the scenarios. In particular, for flood, it requires the sum insured information of motor policies by zones.<br>Motor property is a floating element which cannot be allocated specifically to a Cresta zone. Can you provide us with advice on how we may be able to allocate the floating element please?<br>We currently have the information available for property but we do not have the information by zone available for motor. It is something we foresee in collecting in the future. I understand we may be able to use a proxy, but the fact that we have the sum insured information of property policies by zones mean that either we will have to use proxy for both classes or sum insured for both classes. Can you provide us with advice on this also please? | |
| | | Answer:<br>It is highly likely that some form of address is already available for private motor vehicles (eg as obtained when the policy was sold), and it would therefore seem reasonable to use this in the absence of anything more appropriate. There may potentially be some difficulties in the case of commercial fleet policies where the only address information that may be available relates to the location of the overall fleet administrator, rather than individual vehicles. In this situation there are (at least) 2 possible options:<br>1. simply assume all of the vehicles for a fleet relate to the address that is available for that fleet. This may not be an unreasonable assumption especially where the fleet is fairly small. If the fleet relates to a company, then many of the vehicles may be parked during the day in the same company car park.<br>2. Alternatively, for larger fleets, some more general assumptions could be made about a reasonable representative distribution of vehicles taking into account the spread and nature of the underlying business of the particular fleet policyholder.<br>In many situations it may well be proportionate for QIS5 purposes to adopt option 1 for most fleets, although other approaches could be adopted where this is considered more appropriate.<br>Firms are requested to explain the approach they have actually taken for QIS5 in the qualitative questionnaire, and also comment on the practicalities of arranging to collect more complete information in time for the implementation of Solvency II.” | 10/08/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 94 | SCR.9.148 | Question:<br>SCR.9.148 refers to a summary of 10 possible scenarios included within QIS 5 TS to show the impact of the dampening mechanism and give an example of how the calculation should be set up: are these meant to be included in the specifications or annexes? I could not see them in either. | |
| | | Answer:<br>Those scenarios are included in the helper tab on Man Made cat risk. | 27/08/2010 |
| 152 | SCR.9.75. | Question:<br>SCR.9.75. states "*Within the Marine class, the material components are Cargo (=static warehouse risks) and Marine XL.*" Does this mean that undertakings should ignore other Marine components (e.g. Offshore Energy) which are exposed to Windstorm risk for the purpose of calculating $Cat_{Windstorm}$?<br>In general, should MAT risks other than static warehouse risks and risks from classes other than those listed, be excluded from the natural catastrophe risk calculation, or should these be calculated using Method 2? | |
| | | Answer: The loss of offshore platform assets is part of the NL Cat calculation in the "Marine" sub-module (SCR 9.137), and as the cause of the loss might be amongst other a windstorm, it is excluded from SCR 9.75 so there should not be double counting.<br>No MAT risk should be excluded from the NL CAT calculation: only if by application of principle over form, neither the Natural catastrophe sub-modules, nor the Marine sub-module seem appropriate, should the Method 2 be applied | 23/09/2010 |
| 153 | SCR.9.156 | Question:<br>There is reference to an aggregation matrix but it does not appear to be defined. Should the aggregation matrix from paragraph 248 of the Report of the Catastrophe Task Force be used? | |
| | | Answer:<br>Please refer to the correlation matrix in cells C18-F21 of the "liability calculation" tab of the H__Cat_Man_Made helper tab published on CEIOPS website. | 23/09/2010 |
| 154 | SCR.9.4.<br>SCR 9.9.6<br>SCR 9.106<br>Annex L3<br>etc | Question:<br>We have the following questions regarding the inputs in the sheet for the non-life catastrophe risk.<br><br>What premium should be used as the volume measure to calculate the catastrophe risk?<br>What Sum insured should be used to calculate the catastrophe risk?<br><br>In both cases the technical specifications require "gross" amounts to be used.<br>However should the premiums and the Sum insured amounts used be net of facultative reinsurance? | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | • This depends also on whether the calibration for QIS5 was done using data which is net of facultative reinsurance<br>• It should be noted that gross capital requirements are probably not possible to be adjusted to net amounts by considering facultative reinsurance<br>• It should also be noted that if gross of facultative reinsurance inputs are used in some cases the results are not correct<br>  • For example in SCR 9.106 the "Sum insured of largest known concentration of exposures under the fire and other damage line of business in a 150m radius" would correspond to different properties than if the largest concentration net of facultative reinsurance was used | |
| | | Answer:1) All inputs in the NL CAT modules are meant to be gross of facultative reinsurance<br>2) If the application of the technical specifications for QIS 5 lead to arguable or inconsistent results for an undertaking, or if they cannot be used, it should report the information and the underlying analysis in the qualitative part of its answer to QIS 5 | 23/09/2010 |
| 178 | SCR.9.174 | Question:<br>Please clarify SCR 9.174 2nd and 4th bullet points on the following issues:<br>2nd bullet: "the premium for a given line of business should be **split** between different events before applying the factors". If £100 of Property business is written we take it that this £100 should be split between Fire/Explosion, Storm Flood and Earthquake, eg perhaps 40/30/20/10, rather than applying £100 to each "event"? So in this example £40 to Fire Explosion, £30 to storm etc. Does this split need to add to £100 or can allowance for other potential heads of loss be allowed? For example motor other is affected by 4 "events"; storm, flood, earthquake and hail. Would £100 of Motor other premium need to be split between these 4 broadly pro-rata to the assessed mean loss cost of each (or indeed by proportionate extreme loss probability?) such that it sums to £100 or can some allowance for, say, collision own damage. In reality only a small part of the premium would represent cat loss potential.<br>4th bullet - We assume that gross premium is before all commissions. | |
| | | Answer: See errata on SCR 9.174: no split of premium is required.<br>4th bullet: Gross premium before all commissions | 01/10/2010 |
| 179 | SCR.9.75<br>SCR.9.79<br>SCR.9.82 | Question:<br>We have a number of countries where we are unable to find out what the zones refer to – and the information does not seem to be available on www.cresta.org. An example is Czech Republic – what do the 61 zones in the Nat Cat Helper | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | SCR.9.86<br>SCR.9.90 | tab refer to? In other cases, there are zones on the Cresta website but they don't seem to correspond with the helper tabs – eg Romania has zones numbered 1-41 on Cresta, but the helper tab requests details for 41 zones, but includes some numbered 42-45. How are these mapped across? | |
| | | Answer:<br>When Cresta zones are not available, 2 digit post code information has been used instead, as specified in Paragraph 34 of the Cat Task Force Report on Standardised Scenarios for the Cat Risk Module of the Standard Formula (https://www.ceiops.eu/fileadmin/tx_dam/files/publications/submissionstotheec/CEIOPS-DOC-79-10-CAT-TF-Report.pdf) :<br><br>"Undertakings will find detailed information of CRESTA zone information at www.cresta.org. The information is publicly available. Depending on the country there are several levels of zoning, with higher or lower spatial<br>resolution. Where CRESTA has multiples levels of zoning for a country, e.g.Greece, the CTF has been working with the lowest resolution scheme. Where CRESTA zones are not available for a particular country or are not available at the subzone level, the CTF has worked with two digit post code information." | 01/10/2010 |
| 196 | SCR.9.150. | Question: Regarding the man-made scenario Aviation: Input requirement is the share for hull and the share for liability per airline. What does share mean? Does it mean the total insurance sum for hull or liability per airline or does it mean the highest insurance sum offered for hull or liability per airline? On which extreme scenario is the aviation scenario based? | 15/10/2010 |
| | | Answer: **Limit is the maximum amount you have agreed to cover for an airline for any one loss. The undertaking should enter its share of the policy limit for any one airline for hull and for liability. For example if the limit on the policy is 100M for hull for a particular airline and the undertaking has a 10% share then the input is 10M for hull. The limit on the policy should be stated in the policy slip or cover. The aviation scenario is not based on a specific scenario because that is too prescriptive and would not be applicable to everyone. this scenario has been kept simplified for standard formula.**<br>. | |
| 197 | | Question:<br>How should we net down the man-made liability scenario for risk mitigation? I can find no guidance on the nature of the scenario envisaged and the net result depends heavily on whether the scenario consists of many small claims or smaller number of large claims. | 15/10/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | Answer: Indeed both scenario types can underlay the man-man liability scenario: undertakings are invited to report for the "net" the highest of both scenarios; "many small claims" and "smaller number of large claims" | |

## Undertaking Specific Parameters

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 140 | SCR.10.17 & SCR.10.21 | Question:<br>In section SCR.10.17 and SCR.10.21, it is mentioned that $V_{lob}$ should be computed with $C^{PP}_{lob}$ (expected present value of net claims and expense payments which relate to claims incurred after the following year and covered by existing contracts). Nevertheless, the definition of $V_{lob}$ in SCR.9.23 changed from the draft technical specification (now $P^{PP}_{lob}$ is used and not anymore $C^{PP}_{lob}$). Is it correct that both definition are not the same? If it is correct, why are they different? | |
| | | Answer: "P" is meant for a "Premium" volume measure; "C" was meant for a "Claims" volume measure | 13/09/2010 |

# SCR – Ring fenced funds

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 216 | | Question:<br>In the ring-fenced fund calculation we are not able to find indications on the calculation of the loss absorbency of deferred taxes. The technical specifications seem to treat only the loss absorbency of technical provisions (that should be calculated separately within the ring-fenced fund). Do we need to interpret that the loss absorbency of deferred taxes should be calculated separately within the ring-fenced fund as well as the loss absorbency of technical provisions, or should it be calculated at an entity level? | |
| | | Answer:<br>Loss absorbing capacity of deferred taxes should be addressed in calculating the notional SCR of the ring-fenced fund along with all other elements of the SCR relevant to the assets and liabilities within the ring-fenced fund. | 26/10/2010 |
| 217 | SCR 11.4 | Question:<br>In Austrian Insurance Supervision Act we can find such a restriction on the technical reserves in life and health insurance referred to as "Deckungsstock" in Article 20 which reads as follows:<br><br>"**Article 20.** (1) A *Deckungsstock* shall be established in the amount of the cover requirement, with the exception of reinsurance acceptances, which shall be administered separately from the other assets.<br>(2) A separate group of the *Deckungsstock*, to which the provisions concerning the *Deckungsstock* shall be applied separately, shall be set up:<br>1. for life assurance, as far as it does not fall under nos. 2 to 5;<br>2. for occupational group insurance (Article 18f);<br>3. for unit-linked life assurance with the exception of unearned premiums, the provision for claims outstanding and additional technical provisions for guaranteed minimum benefits;<br>4. for index-linked life assurance with the exception of unearned premiums, the provision for claims outstanding and additional technical provisions for guaranteed minimum benefits;<br>4a. for investment-oriented life assurance, where the policyholder shall at least be entitled to the invested premiums which are guaranteed by the insurance undertaking;<br>5. for the state-sponsored retirement provision pursuant to Articles 108g to 108i EStG 1988, unless it shall be allocated | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | to a different *Deckungsstock* group;<br>6. for health insurance;<br>7. for other insurance classes, for which a life/health insurance provision shall be established.<br>(2a) The FMA shall be notified immediately of the establishment or release of a separate group of the *Deckungsstock*.<br>(3) The insurance undertakings shall undertake to ensure that the cover requirement is always fully met by assets dedicated to the *Deckungsstock*. If necessary, they shall allocate assets to the *Deckungsstock* during the year as well and, at the FMA's request, prove that they have fulfilled said obligation. Except for the end of the financial year, a mere estimation of the cover requirement shall be admissible."<br><br>The assets an insurance company decides to dedicate to this "Deckungsstock" can be replaced by other assets at any time just as long as the cover requirement is fully met. Profit or loss resulting from the dedicated assets are not usually posted separately in the books of an insurance company which means that profit can be used to cover risks deriving from other assets or contracts that are not in the scope of the "Deckungsstock".<br><br>The actual idea behind the Austrian "Deckungsstock" becomes clear when Article 87 of the Insurance Supervision Act is taken into consideration. This Article describes the rights of life or health insurance policyholders in case of a winding-up and reads as follows:<br><br>"**Article 87.** (1) *Deckungsstock* assets may only be subject to execution for the benefit of an insurance claim which had to be included in the cover requirement.<br>(2) In the life assurance business and the accident insurance business operated according to the principles of the life assurance business access shall be limited to the amount which has the same proportion to the cover requirement for the individual insurance contract as the total amount of the *Deckungsstock* assets to the entire cover requirement, but no more than the amount of the cover requirement attributed to the individual insurance contract.<br>(3) If the *Deckungsstock* consists of several groups, the calculation of the amount subject to execution shall be carried out separately for each group.<br>(4) Paras. 1 to 3 shall not affect provisions on landlord and tenant."<br><br>As the solvency margin of an insurance company has to be calculated on the basis of a going-concern scenario I would assume that Austrian "Deckungsstock" should not be considered to be ring-fenced | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | funds. Am I correct? | |
| | | Answer:<br>Yes. From the description it is apparent that there is no restriction on the transferability of the own-fund items within the undertaking on a going-concern basis and therefore we agree with the conclusion that a ring-fenced fund does not exist. | 26/10/2010 |

## SCR Financial Risk mitigation

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 115 | SCR.12.18 | Indicates that the costs of renewing a given hedge over a one-year period are reflected in the SCR-calculation by reducing the level of protection of the hedge. Is our assumption correct that costs for a one-year hedge (which is renewed in, say, November) can be broken down and allocated to each calendar year, such that only the costs for 2 months (in this example) would have to be allocated to the respective calendar year? | |
| | | The calculation should take into account the impact of the costs caused by the renewal on the net asset value). | 06/09/2010 |
| 218 | SCR.12.29-SCR.12.31 | Question:<br>Can a letter of credit be posted as collateral in terms of SCR.12.29-SCR.12.31? | |
| | | Answer: Yes. A letter of credit can be treated as a risk mitigation technique in accordance with SCR.12.29-SCR.12.31 provided that the requirements in section 12 and the principles in Annex P are met. For the purpose of the counterparty default risk module a letter of credit is treated as a *Guarantee* rather than as collateral. | 26/10/2010 |

# SCR – Insurance risk mitigation

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 70 | SCR 13. SCR.12.8 | Question:<br>We have a question from the Swedish industry on "Insurance risk mitigation". If a risk mitigation technique includes the use of reinsurance contracts that cover only part of the next twelve months should this be allowed as risk mitigation techniques in the same way as SCR.12.8 and the same conditions should be met? | |
| | | Answer:<br>Where an insurance risk mitigation technique covers just a part of the next twelve months it should only be allowed with the average protection level over the next year (i.e. pro rata temporis), unless the conditions in SCR.12.18 apply mutatis mutandis. | 18/08/2010 |

# SCR - Participation

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 38 | SCR.15.2 | Question:<br>SCR.15.2 states the following: *"In the case of a subsidiary undertaking where requirements set for a market consistent valuation are not satisfied an adjusted equity method should be applied."*<br>Market consistency is defined in Annex A, page 4, point 1*: "consistent with information provided by the financial markets and generally available data on underwriting risk (Article 76(3) of Solvency II Framework directive)."*<br>Article 76(3): "*The calculation of technical provisions shall make use of and be consistent with information provided by the financial markets and generally available data on underwriting risks (market consistency)."*<br>Can you give us a clear definition of market consistent valuation, which conditions have to be fulfilled? An exact definition is necessary, because in the section SCR15.2: - in the case of a subsidiary undertaking where the requirements set for a market consistent valuation are not satisfied an adjusted equity method should be applied. | |
| | | Answer:<br>If the participation is listed and it is traded in an active market you can use the market price. Otherwise the adjusted equity method is deemed to be the most appropriate. For the valuation principles to be applied for the purpose of QIS5 see the table in V.1.4 in the QIS5 Technical Specifications. | 10/08/2010 |
| 95 | SCR 15.3 | Question:<br>What is the treatment for the calculation of the solo SCR of the participating undertaking where the participation is a holding company that owns one or more (re)insurance companies? | |
| | | Answer:<br>Where the participation is an intermediate holding company, whose primary purpose is to hold participations in insurance or re-insurance undertakings subject to Solvency II Directive, and which do not hold any participations in financial and credit institutions, this should be treated as an insurance or reinsurance undertaking. | 27/08/2010 |

| | | | |
|---|---|---|---|
| 116 | SCR.15.3 | According to SCR.15.3. any investment in Tier 2 own funds of the participation should be deducted from Tier 2 basic own funds. Is our assumption correct, that an insurance undertaking's investment in Tier 2 own funds of a financial and credit institution is only to be deducted from the insurance undertaking's Tier 2 basic own funds, if the insurance undertaking holds a participation in the financial and credit institution at the same time? If there is just an investment in Tier 2 own funds of that financial and credit institution, then no deduction would have to take place? | |
| | | Yes, your assumption is right.<br>The first row in the table contained in SCR.15.3 should read as follows:<br>If an insurance or reinsurance undertaking holds a participation in a financial or credit institution, this should be excluded from own funds by deducting an amount representing the value of the participation. | 06/09/2010 |

# MCR

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 199 | | Question:<br>How to allocate AMCR for a reinsurer? There are only cells for life (J17) and non-life (J22) undertakings. | 15/10/2010 |
| | | Answer:<br>Reinsurer only needs to calculate one SCR, not a notional SCR for life and non life so reinsurer should fill MCR "like" a non life undertaking. | |

# SCR Adjusted– Intra-group transactions

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| o | | Question:<br>For cell C7 of I.SCR Adjusted tab, please could you advise which line of the consolidated balance sheet should be used to calculate the required percentage ('% share used for consolidated accounts')? Is it Total Assets, Net Assets, Shareholder Funds or Net Retained Earnings line? | 15/10/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | Answer:<br>It is the percentage used for the establishment of the consolidated accounts as referred in Article 221 of Directive 2009/138/ECto integrate the entity in the consolidated accounts. | |

# Own Funds

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 96 | OF 4 (1)(d)(i) | Question:<br>How should foreseeable dividends payable by a participation be treated in QIS5 by (i) the participating undertaking and (ii) the participation? | |
| | | Answer:<br>Assuming that B is valued using the adjusted equity method, Our view is that foreseeable dividends should be treated as outlined in the example below.<br>A is a participating undertaking which owns 100% of B; B has a NAV of 100; A and B are both insurers.<br>B has own funds of 100; A's (100%) holding in B is worth 100. B's directors have declared an interim dividend of 50.<br>Treatment:<br>B's own funds are reduced to 50 (in light of the foreseeable dividend of 50) and the value of A's holding in B remains at 100 .<br>*Rationale:*<br>1. The requirement is to adjust B's own funds for foreseeable dividends. For A, up to the point the dividend is received, the value at risk is the whole NAV of the participation.<br>2. Avoids a scenario in which A's calculation of the portion of its SCR attributable to its holding in B changes merely because B has declared (but not yet paid) a dividend.<br>3. There is no loss of capital to the system and this avoids any additional complexity or calculations for A.<br>However, if B is listed the above approach should also apply when dividends are foreseeable. The value of A's holding should be the market value; B's market price will be quoted on a "cum dividend" basis rather than an "ex-dividend" basis. | 27/08/2010 |

| | | | |
|---|---|---|---|
| 141 | OF.31 | Question:<br>Does the wording in OF.31.a.<br>"letters of credit […] which are held in trust for the benefit of insurance creditors by an independent trustee and provided by credit institutions […]"<br>mean<br>a) the letter of credit has to be provided for insurance creditors, i.e. the insured person, as beneficiary so that the insurance creditor can generate the proceeds of the letter of credit; or<br>b) the letter of credit has to be provided for the insurance undertaking as beneficiary so that the undertaking can generate the proceeds of the letter of credit? | |
| | | Answer<br>Ancillary own funds are defined as "items that can be called up to absorb losses". Where an ancillary own-fund item has been paid in or called up, it shall be treated as an asset (Article 89 of Directive 2009/138/EC). It should therefore be understood that the item must be callable by the undertaking (and not only by the insurance creditors).<br>The particular case included in OF.31.a refers to a letter of credit that is held by an independent trustee which is able to draw on the letter of credit in order to ensure that funds are available to meet obligations to insurance creditors. The undertaking for which solvency is assessed must not have an obligation to the bank to repay the amount drawn down on the letter of credit.<br>According to OF.32, QIS5 participants can include other ancillary own funds available under Solvency I justifying the treatment. | 13/09/2010 |

# Own Funds – Criteria for classification

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 71 | OF.8.(k) | Question:<br>QIS 5 requires that all three tiers of capital are "*free of any encumbrances and must not be connected with any other transaction, which when considered with the item could undermine the characteristics and features of that item.*" Examples cited include guarantees. OF8(k) also states that "*where an investor subscribes for capital in an undertaking and at the same time that undertaking has provided financing to the investor, only the net financing provided by the investor is considered as eligible own funds*", but it is unclear whether the provision of a guarantee would also result in a netting down of the position.<br>The "*in connection with*" concept is not new and I am aware of situations where it has been used to effectively downgrade the equity issued by an insurer to its parent. A real life example is set out below:<br>• Parent issues hybrid debt to the market, which is guaranteed by insurance subsidiary<br>• Parent then invests the proceeds of that issue into that subsidiary as equity<br>• Treatment was to require the insurance subsidiary to 'reclassify' the equity to treat it as if it were the market issue, which resulted in it being treated as innovative tier one capital instead of tier one, with the innovative tier one capital limits then applying to it.<br>What needs to be clarified is whether, in this type of situation, the giving of the guarantee by the insurer means that from a solo perspective, the capital it has issued to its parent is "encumbered" which seems to be the case. The previous approach has been to change the classification of the tier of capital, but under Solvency II all three tiers have the same term, so it sounds as if this means the equity issue wouldn't count as any tier of own funds at all. The part cited from OF8 above also seems to suggest the capital would be treated as nil.<br>Please can you advise on whether this is/is not an "encumbrance" (and why) and also advise on how this would be treated under Solvency II? | |
| | | Answer: As suggested the capital issued to the parent is encumbered by the guarantee of the debt issue used by the parent to fund the investment that equity capital. The precise terms of the guarantee would need to be examined carefully before making a specific decision. However, in general, the specifications should be interpreted as meaning that an item must be free of any encumbrances that could undermine the characteristics and features of that item for the appropriate tier of capital.<br>Thus, if the guarantee undermined a Tier 1 criteria but not a Tier 2 one, the item may still count as Tier 2 own funds. However if the nature of an encumbrance was such as to undermine the capacity of the item to function as own funds at all (i.e. it did not absorb losses on a going concern basis or in a | 18/08/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | winding-up) then it would need to be excluded. | |

# Own Funds – Expected profits in future premiums

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 39 | OF.15-25 | Question:<br>QIS5 sets out a calculation of EPIFP in OF 2.4. This states that the undertaking should use a lapse rate of 100%, but also says that policies should be treated as paid up rather than being set to a surrender value. It goes on to say that a paid up treatment should be adopted regardless of whether this is required or permitted under the policy terms. Where an insurer writes short term life assurance, the consequence of a lapse is that the policy ceases cover with immediate effect. There is no concept of a surrender value or a paid up value.<br>Can you confirm that the intention is not to require undertakings to calculate an artificial and arbitrary paid up value that has no meaning to the business or its policyholders as it would never apply in real life, but that they should treat these lapses just like any other lapse of a policy, with effectively a zero paid up value. | |
| | | Answer:<br>We agree that it is appropriate to assume a lapse and hence a zero paid up value for short term life assurance contracts for which there is no surrender value. If the contract is expected to be profitable, then the expected future profit included in future premiums will be the absolute difference between the negative technical provision and the zero paid up value, although in practice the expected future profit assessment will be carried out at the level of homogeneous risk group in accordance with the technical specification. | 10/08/2010 |
| 40 | OF.15-25 | Question:<br>There appears to be an error in the calculation of expected profits included in future premiums. The technical provisions are calculated gross of reinsurance whereas the calculation should be net of reinsurance otherwise it captures the expected profit the reinsurer expects to make on the reinsurance. The calculation of the value of future premiums should be max(0, delta TP - delta reinsurance asset). Any thoughts?<br>For term assurance where we reinsure up to about 90% of the sum assured both the TP and reinsurance asset are negative. | |
| | | Answer:<br>We agree that the change in the reinsurance asset should be captured in a comprehensive assessment of the Expected Profits Included in Future Premiums. | 10/08/2010 |
| 155 | OF.2.4 | Question 39 refers to a proposed approach for calculating EPIFP for short term life contracts. Is it intended that this approach is to be used to calculate the EPIFP for all life insurance contracts? | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | If not, would any of the following approaches be considered acceptable to calculate technical provisions under 'Step 2' in the OF.2.4 of the technical specification?<br>1. Assume no change in benefits after the policy has lapsed, but assume no future premiums<br>2. Assume benefits paid are set to a penal level to discourage selection and recoup expenses, and assume no further premiums<br>3. Assume benefits paid are set so that the profit in the policy post alteration is equal to the profit in the policy pre alteration, and assume no future premiums. | |
| | | Answer:<br>The method discussed in Q39 is only intended for short term contracts such as some types of short term assurance. It is not intended that this method be used for longer term life contracts, as it is likely to provide a misleading estimate of the EPIFP. The method described in Q39 would not give a reasonable approximation of this figure for all contracts, and furthermore it may produce a misleading value for some contracts. The same applies for the three approaches in the question, we consider that they would generally be likely to produce unacceptably inaccurate allocation of profits to premiums not yet received.<br>As outlined in OF.15, the EPIFP calculation is intended to provide an allocation of profits for in-force business which can be attributed to premiums which have not yet been received. As such, a pragmatic approach needs to be taken to perform the 'Step 2' calculation in OF.20, to determine the technical provisions in the case that no more premiums are to be received in the future.<br>One possible suggestion of such a pragmatic approach to determine the correct allocation of profits to future premiums, is to allocate profits arising on the contract on a pro-rated basis, based on the proportion of premiums received, in some cases this could be simplified to merely changing the present value of the benefits by pro-rating down in proportion to premiums received. In some countries, for say a typical endowment insurance the contractually guaranteed amount payable on surrender to the policyholder could be a reasonable proxy for this amount provided no surrender penalties are applied. The EPIFP is thus the difference between this amount and the technical provisions according to SII. | 23/09/2010 |
| 180 | | Question:<br>We have a question concerning the calculation of EPIFP in non-life insurance.<br>For the larger part of our business, we are applying the second simplification outlined in the Technical Specification (paras TP.7.83 and following) to calculate the best estimate of premium provisions in non-life insurance. This uses the formula:<br>$BE = CR \bullet \left[ \; UPR / (1 - \textit{commission rate}) \; \right] + (CR - 1) \bullet PVFP + AC \bullet PVFP$ ,<br>where CR is the estimate of combined ratio for LoB, excluding acquisition expenses, AC is the estimate of acquisition expenses ratio for LoB, UPR denotes the unearned premium reserve and PVFP denotes the present value of future premiums (discounted using the prescribed term | 01/10/2010 |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | structure of risk-free interest rates).<br>Following the specifications to determine EPIFP, we assume that in this context the calculation of the best estimate of the premium provision in step 2 (i.e. assuming that no more premiums are received in the future) would mean to drop the last two components of the formula, i.e. would yield at determining the BE as<br>$BE = CR \bullet [\ UPR\ /(1 - commission\ rate)\ ]$<br>Hence EPIFP would simply be given by:<br>$(CR - 1) \bullet PVFP + AC \bullet PVFP$<br>In a similar manner, we further assume that where the first simplification outlined in the specification for the calculation of premium provisions is used (paras. TP.7.80 following), EPIFP could be determined as:<br>EPIFP = (Provision for unexpired risks)/(1+i/3)<br>Can you confirm that this understanding is correct? | |
| | | Answer:<br>Given that the conditions of application for the simplifications referred to are fulfilled, we can confirm that this approach seems compatible with the specifications. | 01/10/2010 |
| 198 | OF.20 | We would like to ask for clarification on the calculation of EPIFP for SLT Health insurance business.<br>OF.20 states that undertakings should assume a lapse rate of 100% not allowing for a surrender value but effectively treating policies as paid up regardless of whether this is required or permitted under the policy terms.<br>Can you confirm that a pragmatic approach can be used where the strict application of the concept of lapsation/paid up treatment cannot capture the correct allocation of profits to future premiums as described in OF.2.4? For SLT Health insurance business, EPIFP could be calculated by applying the following steps:<br>Assuming a change of all policyholders into a tariff with reduced benefits where all future claims are paid by the provisions that have yet been accrued. This approach would exclude exactly that amount of future profits that are related to future premiums but would consider those relating to past premiums (as stated in OF.21). Can this approach be considered acceptable to calculate technical provisions under 'Step 2' in the OF.20? | 15/10/2010 |
| | | As outlined in OF.15, the EPIFP calculation is intended to provide an allocation of profits for in-force business which can be attributed to premiums which have not yet been received. As such, a pragmatic approach needs to be taken to perform the 'Step 2' calculation in OF.20, to determine the technical provisions in the case that no more premiums are to be received in the future. The suggested approach seems to be reasonable to capture the amount of EPIFP as intended in the Technical Specifications. | |

## Internal models

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 97 | IM.2 | Question:<br>Please clarify which document on internal models is being referred to on page 286 of TS?<br>"IM.2 Further information on the treatment of internal models can be found in the separate QIS5 document on internal models. This document is relevant for undertakings that currently use a full or partial internal model or that intend to apply to use a full or partial internal model under Solvency II." | |
| | | Answer:<br>This is a reference to the QIS5 qualitative questionnaire on internal models. | 27/08/2010 |

## Group Coverage

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| 201 | | Question:<br>Cell C24 of G.Group coverage tab requires to input 'Total balance sheet amount'. Please, could you advise whether Net Assets (Total assets - liabilities = s/holders funds) or Total Assets (bottom line of the Balance Sheet) or Total Assets less Other Liabilities that needs to be entered in this cell? | 15/10/2010 |
| | | Answer:<br>Total assets | |
| 219 | OF.28 | When an entity is bound by a profit transfer agreement to a holding and does not pay taxes on solo level, where can net deferred taxes be attributed to own funds? Just on group level, on solo as well as on group level or not at all? | 04/11/2010 |
| | V.1.4 | IFRS should be followed where it delivers a market consistent value (TS V.4).<br>IAS 12 states that deferred tax liabilities (DTL) are not required to be set up if both the following are satisfied:<br>a) the parent, investor or venturer is able to control the timing of the reversal of the temporary difference, and<br>b) it is probable that the temporary difference will not reverse in the foreseeable future.<br><br>IAS 12 states that deferred tax assets (DTA) can only be set up if<br>a) the temporary difference will reverse in the foreseeable future; and | |

| No Q. | No paragr. (if provided) | | Date (answer) |
|---|---|---|---|
| | | b) taxable profit will be available against which the temporary difference can be utilised.<br><br>The existence of a profit transfer arrangement which results in no taxes being paid at solo level would suggest that at solo level neither DTA nor DTL should be set up. In the case of DTL both the conditions in a) and b) are met and therefore DTL are not required to be set up. In the case of DTA, neither a) nor b) are met and therefore DTA can not be set up. Consequently, there are no deferred taxes at solo level. DTL should be set up at group level unless the conditions in a) and b) are not met and DTA can be set up at group level provided the conditions in a) and b) are met. | |
| 220 | G.Group details on aggregation | In G.Group details on aggregation the cells:<br>- F28:G30 contain a wrong cell reference, F28 and G28 should refer to cell I28 in their formula (instead of I29),<br>- F29 and G29 should refer to cell I29 in their formula (instead of I30),<br>- F30 and G30 should refer to cell I30 in their formula (instead of I31) | 04/11/2010 |
| | | This is right. Figures deriving from those cells are not used elsewhere in the spreadsheets and for the statistical analysis, they are only there to help consistency checks therefore groups can change those cells if they think it is necessary (the password is blank for the tab). | |