



## General

No Q.	No paragr. (if provided)		Date (answer)
1		Question: Should QIS 5 submissions (to the Irish Regulator) be in EUR even if the reporting currency is in USD for example?	
		Answer: The local currency is the currency in which the undertaking prepares its financial statements. The submission should be in this currency.	17/09/10

## Technical Provisions

No Q.	No paragr. (if provided)		Date (answer)
2		Question: There are two Motor QIS5 risk groupings for the purposes of the analysis - what is the key differential between "Motor Vehicle Liability" and "Motor, other classes"? Is it third liability exposure versus property damage exposure? Or is it based on the type of vehicle insured?	
		Answer: Segmentation should be by risk driver rather than by legal form. In this case, the difference is between bodily injury and 3 <sup>rd</sup> party damage (Motor Vehicle Liability) and damage to one's own vehicle/property under a comprehensive policy (Motor, other classes). This reflects how motor insurance is written in continental Europe. To the extent that insurers have the split described above they should use it for the QIS 5 exercise. However, for motor insurance in Ireland (and UK) claims are normally segmented between Bodily Injury and Property Damage and so this split is readily available for participants in the QIS5 exercise,	17/09/10



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		<p>whereas a split between 3<sup>rd</sup> party property damage and own property damage may not be as readily available. In this case, it would be appropriate to segment motor business between bodily injury exposure and property damage exposure <b>where the more correct split is not available in time to complete the QIS 5 exercise.</b> (We understand that this was the approach taken by motor insurers in previous QIS exercises.) However, we would point out to undertakings that the segmentation described above is likely to be required when Solvency II goes 'live'. Note that the SCR premium and reserve volatility factors were calibrated with Irish and UK motor business excluded (for this reason of data availability). Segmentation is for companies to undertake. Every effort possible should be made to segment by key risk drivers. All possible sources of data should be utilised in making the segmentation.</p>	
3		<p>Question: When discounting the liabilities, is it correct that the currency-specific interest rate term structure is determined by the denomination of the liabilities rather than the location of the liabilities?</p>	
		<p>Answer: Yes, this is correct; however, to be clear, this is case when the currency of the liabilities matches the currency to which the liabilities are exposed. For example, a domestic credit book in Argentina may be settled in USD, but the value of the liabilities is clearly exposed to movements in the Argentinean peso. In this case, it would appear that the correct approach would be to discount using ARS discount rates and stress exposure to ARS in the Currency Risk module. On the other hand, an export credit book in Argentina, also settled in USD, would be more likely to be exposed to movements in USD and in this case the it would appear that the correct approach would be to discount using USD discount rates and stress exposure to USD in the Currency Risk module.</p>	17/09/10
4		<p>Question: In the Risk Margin Helper spreadsheet, "Allocation of RM to LoBs", can you please clarify what parameters are required for Lapse and Cat (columns AS and AT) in the Non Life Risk calculation?</p>	



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		<p>Answer: According to the "Read Me" tab, this tab can be used to allocate the risk margin to the different lines of business, based on the assumption that the allocated RM is proportional to the SCR at t=0 of the reference undertaking where only one LoB is transferred. Therefore, it would appear that the inputs should be the lapse and cat risk SCR figures for each line of business. However, it would appear that undertakings must allocate the Cat risk SCR figure by LOB themselves, based on the contribution of each LOB to the overall Cat risk SCR figure.</p>	17/09/10
5		<p>Question: Calculation of the Best Est of Recoverables (Net of Exp Default) requires the duration of the recoverables. Do we assume here that the modified duration of the recoverable cashflows equals that of the claims?</p>	
		<p>Answer: This is an assessment for undertakings to make. Depending on the class of business and the nature of the recoverable (eg reinsurance recoverable or subrogation), it is quite likely that there will be a lag between paying the claim and receiving the recoverable. This lag may or may not be material for the purposes of discounting – this is for each undertaking to assess. Note that the timing and amount of the recoverable may vary depending on the scenario being considered also.</p>	17/09/10
6		<p>Question: Should personal accident cover be included in income protection in QIS 5?</p>	
		<p>Answer: This depends on the policy, its terms and the cover provided. In general, segmentation is for companies to undertake. The treatment of various classes and any difficulties encountered should be disclosed in the qualitative questionnaire.</p>	17/09/10
7		<p>Question: Should Specie (e.g. fine art insurance) be included within MAT or Miscellaneous? If MAT, should it be included within the non-life natural catastrophe standardised scenarios?</p>	



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No Q.	No paragr. (if provided)		Date (answer)
		<p>Answer: Per TP.1.10, (Re)insurance obligations should be allocated to the line of business that best reflects the nature of the underlying risks. In this case, the underlying risk driver is possibly Fire and Other Damage, although if the main risk is in transportation (e.g. to and from exhibitions) then the allocation should perhaps be to MAT. If the allocation is to MAT, then as per Q11 above it is not clear if it should be included in the natural catastrophe scenarios; it appears not (not being Marine Cargo) but we have forwarded this question to CEIOPS for confirmation. As noted above, segmentation is for companies to undertake. Every effort possible should be made to segment by key risk drivers. All possible sources of data should be utilised in making the segmentation. All methodologies should be disclosed</p>	17/09/10
8		<p>Question: How should Energy business (offshore and onshore) be segmented and should it be included within the non-life natural catastrophe standardised scenarios?</p>	
		<p>It would appear that Onshore and Offshore Energy business should be allocated to 2 different LOBs (Fire and Other Damage and MAT) – we have sought confirmation from CEIOPS. Offshore Energy business is included within the Marine man-made catastrophe scenarios. It is not clear whether Offshore energy should be included in the natural catastrophe scenarios – it appears not (not being Marine Cargo – static warehouse risks) but again we have sought confirmation from CEIOPS. It would appear that Onshore energy should be included in the natural catastrophe scenarios; this is dependent on the answer to the first part of this question.</p>	17/09/10
9		<p>Question: Should Business Interruption be classified as "Fire and other damage" or "Miscellaneous"? From a practical perspective, Fire would make more sense but a strict interpretation of the LOB wording suggests Miscellaneous.</p>	



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		Answer: Per TP.1.10, (Re)insurance obligations should be allocated to the line of business that best reflects the nature of the underlying risks. In this case, the underlying risk driver would appear to be Fire and Other Damage.	17/09/10
10		Question: Unbundling Serious Illness Cover (SIC) and Life within same policy: QIS5 specs require you to unbundle disability from life but it is very difficult to do so, is accelerating SIC benefit a life benefit or disability benefit?	
		Answer: Every effort possible should be made to segment by key risk drivers. All possible sources of data should be utilised in making the segmentation. Where it is deemed to be impractical, the key risk driver at inception should be used as the basis. All methodologies should be disclosed.	17/09/10
11		Question: Do standalone SIC policies fall under Life or Health? There is a category for disability in Life section so this suggests they can fall into either box.	
		Answer: Health, but this is then allocated back to SLT Health and Non-SLT Health where the respective life or non-life shocks are used.	17/09/10
12		Question: QIS5 specs suggest that for linked contracts you need to split the technical provision into the whole amount (the unit reserve) and the expense reserve (which could be negative). Is this correct?	
		Answer: The calculation of the technical provisions is probably best approached by looking at the two portions separately, but there is no requirement to report the amounts separately for QIS5.	17/09/10
13	TP.5.18.	Question: How should we allow for unavoidable market risk in the Risk Margin calculation? TP.5.18 seems to	



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		invite us to ignore it but in some cases significant portions of business can have very long duration liabilities. But if we can't ignore it, how can we quantify it?	
		Answer: The Technical Specification specifically states in TP 5.70 that this is a situation where the risk is unavoidable. In this situation undertakings should look at asset fit that gives the lowest market risk, allowing that in the future assets of suitable duration may become available as the remaining term of the liabilities shorten.	17/09/10
14		Question: Calculation of Risk margin based on monthly or yearly SCR figures. Is Risk margin to be calculated assuming that SCR move monthly or that they only move yearly?	
		Answer: Yearly	17/09/10
15		Question: 35% to 25% disability SCR shock makes calculation of future SCRs for Calculation of risk margin extremely difficult, is a simplification allowed to use an average rate and what rate should that be?	
		Answer: Simplifications are allowed and the specifications state "undertakings should consider what kind of simplified methods would be most appropriate for the business" In general, simplifications should be proportionate to the nature, scale and complexity of the risks of the business in question. Where simplifications are used it is important to assess additional uncertainty (model error) introduced by use of the simplifications. There should be "reasonable certainty" that model error is immaterial.	17/09/10
16		Question: If undertakings include Expected Profit in Future Premiums (EPIFP) in the linked Technical Provisions then the linked Technical Provisions will be less than unit reserves and in theory undertakings can match on a Solvency 2 basis by under holding units and thereby reduce market risk and the risk	



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		margin associated with this market risk. Would this be possible (to under hold units), and if not must undertakings hold the full market risk SCR and the risk margin associated with this market risk?	
		Answer: The premise here is that the EPIFP element will move in the same way as the unit assets so that if unit assets fell by 20% say then the liabilities (unit plus negative EPIFP) would fall by 20%. In most instances we would not expect this to be the case and so market risk would not be minimised by under holding unit assets.	17/09/10
17		Question: We have several large bulk schemes that make up a large proportion of our business. For our technical provision lapse assumption, whether each scheme is going to be in force is a binary issue (i.e. they are either there or they are not there). There are no surrender rates (other than 100%). How do I allow for this in the technical provision? Each scheme is not likely to disappear tomorrow nor will it be there forever.	
		Answer: TP2.1-2.4 gives the appropriate treatment. The best estimate is not the discounted value of the cash flow using best estimate assumptions but the probability weighted average of future cash-flows taking account of the time value of money. In this instance future cashflows can be calculated assuming each scheme is in force and a declining probability that the scheme remains in force can be applied. A critical assessment would also be the determination of the contract boundary for these contracts. From the way the question is worded, it would appear that the contract boundary is one year.	17/09/10
18	TP.2.23	Question: The cash in-flows should not take into account investment returns (i.e. interests earned, dividends...) The CEIOPS' Q&A document provided clarification that when calculating the best estimate technical provisions for unit linked liabilities the unit linked assets should be projected forward at the risk free rate with an allowance for illiquidity premium. Can you provide clarification as to what the above point relates to?	



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		<p>Answer: Investment returns themselves are not included in the BEL calculation as a revenue item. However, other cash flows may depend upon the value of investment returns and hence they need to be calculated and they will also be relevant to the valuation of options and guarantees.</p>	17/09/10
19		<p>Question: This issue relates to funds which have policies which fall into more than one liquidity premium bucket, e.g. a with-profits fund with non-profit business as well as with-profits (and potentially UL/annuities also). Under this scenario one would essentially have at least two "risk-free" reference curves. The liability cash flows would then presumably be discounted with the relevant "risk-free" rate, according to the bucket they fell into. This, however leads to the following difficulties: How does one roll-up the assets returns consistently, given that one has at least two different "risk-free" reference rates for the fund? Does one perform some kind of asset hypothecation to the two LP buckets and roll forward at these rates? If yes, then one must then have to re-hypothecate assets at each projection step, as some liquidity premium buckets will run out of assets to back liabilities throughout the projection in certain scenarios. What then would one do with any inherited estate? Allocate it to the with-profit bucket? How can you perform a hypothecation when there is feedback between the hypothecation and the liabilities? This is likely to be the case if there are any kind of management actions, e.g. with-profit policies could have benefits linked to the free surplus which in turn is linked to the hypothecation. (This situation could be further complicated by the addition of UL to the fund which would essentially bring management actions into two of the LP liability buckets.)</p>	
		<p>Answer: In such cases, the With Profits fund should be notionally segmented into the relevant buckets with each bucket discounted at the appropriate rate. Asset return rates would then differ according to which bucket they were categorised into. Each bucket would then be rolled up and discounted at the</p>	17/09/10



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		rates applicable to that bucket. This will ensure a market consistent valuation in which case the issue of a shortfall of assets should not arise. Regarding the inherited estate, it is not possible to address this issue without a more detailed review of the precise nature of the situation.	
20	TP.2.96.	We note that the QIS5 technical specifications allow the choice of historic or implied volatilities. As the use of historic volatilities will not result in observable market prices at the valuation date, it appears that there may be some flexibility to interpret TP 2.96.	
		Answer: Implied volatilities seem to be more appropriate for the purpose of a market consistent valuation. However there may be circumstances in which it is appropriate to use historical volatilities. For example, in some cases, it may not be possible to calibrate volatility assumptions to market data. In such cases the calibration should be based on historical analysis of the volatility.	17/09/10
21		Question: Should unitised with profit contracts use a 75% illiquidity premium or a 50% illiquidity premium?	
		Answer: 75%. The definition of With Profits is quite wide.	17/09/10
22		Question: Will there still be a Long term business fund/ shareholder separation? This is relevant for the calculation of deferred taxes/current tax for Irish old basis life business which is taxed on the basis of surplus declarations from the Long term business fund to shareholder fund. For with profits business there has to be some kind of LTBF but what about non profits business?	
		Answer: There is no requirement for a split between LTBF and shareholders fund under QIS5. The point is taken about the requirement for such a split under the current tax rules and we have raised this as an issue to be considered in the implementation of Solvency II. In the meantime QIS5 will have to be approached on a best efforts basis. Ring Fenced Funds are the mechanism for a separate with profits	17/09/10



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No Q.	No paragr. (if provided)		Date (answer)
		fund, but this mechanism does not apply to non profit funds.	
23		Question: Some reinsurance treaties (in particular old ones) will be a liability on a best estimates basis; should these be net these against other reinsurance assets?	
		Answer: On the balance sheet these reinsurance liabilities would be included as negative reinsurance assets on the asset side of the balance sheet.	17/09/10
24		Question: Does the definition of the contract boundary require us to exclude all future premiums on unit linked business where companies have the right to change the charges? The right to change charges may not have a limit in the terms and conditions, but is in practice limited by PRE considerations. If the terms and conditions provide that any increase in charges is restricted to the increase required to cover actual cost increases is that considered to be a limit?	
		Answer: The issues that need to be considered include whether the undertaking has an unlimited ability to amend premium or benefits payable, whether the undertaking can unilaterally cancel the contract or unilaterally reject the premium payable. Consideration must be given to legal and regulatory constraints and whether these have any economic relevance. The term unlimited should also be considered in an economic context. We do not consider PRE to be a sufficient limiting legal or regulatory factor.	17/09/10
25		Question: Our understanding for QIS5, is to carry out the valuation assuming all future premiums on regular premium business are received (subject to decrements etc) in our best estimate cash flows. We will then run a separate valuation with everything the same, except with an immediate PUP of all the regular premium business, in order to isolate the EPIFP, for inclusion in Own Funds Tier 1. Are we	



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		interpreting the spec correctly?	
		Answer: This is correct to the extent that the future premiums are deemed to be within the existing contract boundary.	17/09/10
26		Question: Contract Boundary: It is still very unclear for what products you allow for future premiums and for what products you do not. The contract boundary guidelines are not that clear and there may be scope to change product conditions to allow future premiums for a product vs. an almost identical product. The main requirement here is a consistent approach/interpretation on this throughout the EU. The simplest solution seems to allow for future premiums for all products which currently pay an annual premium and then the lapse stress and lapse assumption then requires a higher SCR lapse and any other risks related to renewal of a particular product are captured in the ORSA?	
		Answer: Contract boundaries have been discussed at length in the QIS 5 workshops. There are also a number of examples in the Annex to the Technical Specifications. If you have a query on a specific product please submit and we will endeavour to respond, or forward to CEIOPS if necessary.  Note that QIS 5 should be completed on the basis of <i>current</i> policy terms and conditions.  Please point out any difficulties in the qualitative questionnaire. Suggestions and suggested improvements are welcome.	17/09/10



## SCR – General

No Q.	No paragr. (if provided)		Date (answer)
27		<p>Question: How should we calculate the adjustment for loss absorbency of Deferred Taxes in the SCR? SCR 2.15 &amp; SCR 2.26 both say "the value of deferred taxes should be calculated as set out in the section on valuation", but what is this referring to? Is it referring to the Table in V.1.4 "IFRS Solvency adjustments for valuation of assets and other liabilities under QIS5"?</p>	
		<p>Answer: Yes</p>	17/09/10
28		<p>Question: Deferred tax Adj allowed in SCR: You are allowed to take into account a deferred tax adj in calc of SCR provided that you can show that it is recoverable within a reasonable timeframe. But how do you assess what is a reasonable timeframe and what scenario do you assume in assessing whether there will be future profits to cover this tax loss i.e. do you use a best estimate scenario or an adverse scenario that equates to the total SCR shock?</p>	
		<p>Answer: The adjustment for the loss absorbency of deferred taxes is the change in the deferred taxes that arises when an instantaneous loss equal to the SCR occurs. The company would then need to justify that it is reasonable to assume that future profits, having suffered the instantaneous loss, will be available within a reasonable timeframe.</p>	17/09/10
29		<p>Question: In QIS4 there was an explicit reference which state that post-employment benefits were not to be taken into account in the assessment of the SCR. There is no such explicit reference in QIS5 and it is not clear whether this means that risks to the post-employment benefits will form part of the SCR. Has any further clarification been provided here?</p>	



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No Q.	No paragr. (if provided)		Date (answer)
		Answer: Referred to CEIOPS. See their response in Q127 of the CEIOPS Q&A	17/09/10
30		Question: Treatment of Pension Surpluses/Deficits in SCR : Assuming you have to bring in current IAS19 surplus or deficit , is it reasonable to assume that no movement can be assumed in the SCR for the Pension Deficits on the basis that management action will be taken and for companies with a Pension Surplus , the Max SCR hit will be equal to the current Pension Surplus.	
		Answer: Referred to CEIOPS. See their response in Q127 of the CEIOPS Q&A	17/09/10
31		Question: Treatment of Deposits : It is not clear whether deposits come under spread risk section or counterparty risk section as it mentions them under spread risk SCR. 5.74 and default risk SCR.6.4. Considering an undertaking which has normal short term deposits but also has medium term zero coupon deposits for matching Tracker guarantees; should these be treated differently – i.e., do they fall into spread risk section or counterparty risk section	
		Answer: SCR.5.74 refers to deposits with “credit” institutions, SCR.6.4 refers to deposits with “ceding” institutions. See also answer to Q4 and Q83 of CEIOPS’ Q&A.	17/09/10
32		Question: In completing the QIS5 exercise, should an undertaking take into account actions on matching that would be taken when Solvency 2 goes into force; e.g. currently we are holding matching long term fixed interest securities to match Term liabilities calculated on a Solvency 1 basis but under a Solvency 2 basis our TPS for term liabilities may be zero or negative! Therefore, we do not need to hold these FI securities anymore and would invest in asset which gives us the lower market risk SCR; currently if we do the QIS5 market risk interest rate move test on the Term book there will be no material move in liability (as either zero or negative) whereas there will be a hit on the asset side in	



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No Q.	No paragr. (if provided)		Date (answer)
		interest rate rise shock.	
		Answer: QIS5 should be based on the assets and liabilities held at 31st December 2009 (or other valuation date that may be used – cf CEIOPS' Q&A question 41). However you could include any comments about adjustments that would have been made in practice in the qualitative questionnaire.	17/09/10

## SCR - Market Risk – Spread Risk

No Q.	No paragr. (if provided)		Date (answer)
33	SCR.5.9.	Question: What is the advice on deposits with credit institutions that are government guaranteed? For government bonds guaranteed by the Irish government, is there any spread risk element attached to them?	
		Answer: If the deposits are fully backed by an EEA government then no allowance need be made. (SCR.5.88.) Consideration should be given to any expiry of such a guarantee. Likewise, bonds issued by an EEA government are not subjected to spread risk. (SCR.5.88.)	17/09/10
34		Question Spread risk: could you define how the modified duration should be calculated? Is that meant to represent the formula that can be found in paragraph 5.45 on page 27 of the QIS2 Technical Specifications, i.e.	



No Q.	No paragr. (if provided)		Date (answer)
		$D_c^{\text{mod}} = \frac{1}{MV(C)} \cdot \frac{1}{1+r} \cdot \sum_t t \cdot d(t) \cdot C(t)$ <p>(this formula was used in QIS 4 helper tab) or more generally should be using the Macauley duration divided by 1+ yield to maturity</p>	
		<p>Answer: The modified duration is generally defined as the Macauley Duration divided by (1+Yield to maturity)</p>	17/09/10

## SCR - Market Risk – Interest Rate Risk

No Q.	No paragr. (if provided)		Date (answer)
35	SCR.5.15.	<p>Question:</p> <p>This SCR involves applying an interest rate shock to assets and liabilities by revaluing all interest rate sensitive items using term structures upward and downward. Under Solvency I this interest shock on unit linked assets would lead to no capital requirement because unit linked assets and liabilities are perfectly matched. However under Solvency II this is not the case as we can hold negative reserves. Applying the interest rate sensitivity to the unit linked technical provisions involves looking through the unit linked funds and applying the interest rate sensitivity to each bond. Is it acceptable to apply a simplification here based on average duration of the bonds?</p>	
		<p>Answer:</p> <p>In calculating the total unit linked technical provision it is likely that separate calculations would be involved for the "unit" reserve and the "cash" reserve. If the unit assets are perfectly matched with the unit reserve then there should be no capital requirement resulting. The capital requirement would</p>	17/09/10



No Q.	No paragr. (if provided)		Date (answer)
		arise from any change in the cash reserve due to the revised unit fund and discount rates. Simplifications are allowed in certain situations but should be shown to be justifiable.	
36		Interest rate shock calc on Assets: Our understanding is that you first calculate the interest rate reduction based on the liability yield curve and then use this yield reduction to adjust the yield on the assets and hence recalculate the value of the asset e.g. in interest rate up scenario the 15 year yield is increased by 33% so the liability yield for 15 year liability goes from 4.293% to $1.33 \times 4.293 = 5.710\%$ i.e. a yield increase of 1.417% and say asset matching this is a 15 year zero coupon bond yielding 5.0% then you would recalculate the value of this asset using a yield of $5.0\% + 1.417\% = 6.417\%$ vs. increasing the yield by 33% from 5.0% to 6.65% ?	
		Answer: Each cash flow is discounted at the spot rate applicable to that duration. The helper tab will perform all of the cash lows necessary when all of the cash flows are input. See also CEIOPS Q14	17/09/10

## SCR – Counterparty Risk

No Q.	No paragr. (if provided)		Date (answer)
37	SCR.6.6, SCR.6.35	Question: Type 2 Exposures includes policyholder debtors. What happens in the scenario where there are policyholders who pay by monthly direct debit?  We are owed payment of premiums for the remainder of the policy year, but the large majority of these policyholders would not have defaulted on their policies. Also, we would not be exposed to the cost of cover for the entire year as the policy would be cancelled very soon after the policyholder defaults.	



		<p>Answer: Premiums from Policyholders who pay by direct debit should not be classified as policyholder debtors but rather future premiums which should be included in the Technical Provisions premium provisions. There should be a lapse assumption (implicit or explicit) in performing this calculation which should be stressed in the Non-life lapse risk module; profit emanating from this premium should also be included in the Expected Profit from Future Premium calculation.</p>	17/09/10
38	SCR.6.14.	<p>Question: The Technical Spec indicates probabilities of default up to 30%. However, the highest probability of default in column C of the "T1_Exposures" tab of the Counterparty Default Helper tab is 4.175%, which seems low for an unrated entity.</p>	
		<p>Answer: The Technical Specs have since been updated in the errata: <a href="http://www.ceiops.eu/media/files/consultations/QIS/QIS5/technical_specifications_errata_en.pdf">http://www.ceiops.eu/media/files/consultations/QIS/QIS5/technical_specifications_errata_en.pdf</a> Comments on the appropriateness (or otherwise) of parameters should be made in the qualitative questionnaire.</p>	17/09/10
39	SCR.6.26 – 6.30.	<p>Question: In calculating the Risk Mitigating Effect of non-life reinsurance "Default RM Calculation SCR nl hyp" and "Default RM Calculation SCR nl without" can you please clarify: a) NLcat - as at what date - 31 Dec 2009? b) Plob - is it 2009 written, 2010 written, 2010 earned or maximum of the three? c) Recoverables - as at 31 Dec 2009?</p>	
		<p>Answer: a) NLcat as calculated in the cat risk SCR calculation b) Plob as used in the premium risk SCR calculation c) Best estimate of recoverables as calculated in the Technical Provisions calculation (net of the expected default) See SCR.6.26 – 6.30.</p>	17/09/10



40	<p>Question: For unrated counterparties that are undertakings that will be subject to Solvency 2 and that would meet their MCR, the probability of default, depending on the solvency ratio (own funds/SCR), is determined per the table in SCR.6.16. Where the unrated counterparty is still in the process of completing QIS5 should we calculate the SCR based on the QIS4 Solvency ratio if available? Or should we ask for an indicative rating?</p>	
	<p>Answer: See CEIOPS Q&amp;A answer to Question 132 "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"</p>	17/09/10
41	<p>Question: When calculating the counterparty-risk SCR for reinsurers, the present value of future recoverables is used; are the recoverables to use in this calculation those net of any future premiums payable to the reinsurer?</p>	
	<p>Answer: The amount to be used is the best estimate from the technical provisions, so should include future premiums to the extent they have been included there, allowing for contract boundaries and offsetting arrangements. Where the risk mitigating effect of reinsurance is being considered, the risk mitigating effect calculated in the catastrophe risk sub-modules should be net of any reinstatement premium.</p>	17/09/10
42	<p>Question: Some reinsurance treaties (in particular old ones) will be a liability on a best estimates basis. How does one treat such contracts in the Counterparty Default module?</p>	
	<p>Answer: For Counterparty Default risk the risk is calculated separately for each counterparty and should be non-negative.</p>	17/09/10



## SCR – Life Underwriting Risk

No Q.	No paragr. (if provided)		Date (answer)
43		<p>Question: To what extent should the next 12 months New Business be taken into account in the SCR calcs? SCR 1.12 suggests it should be allowed for, but SCR 1.14 appears to be saying that, for life business, future New Business does not affect the SCR.</p>	
		<p>Answer: In the standard formula there is no allowance for new business on life business and no adaptation of the standard formula is expected to allow for new business.</p>	17/09/10

## SCR – Non life underwriting – Premium and Reserve Risk

No Q.	No paragr. (if provided)		Date (answer)
44	SCR.9.33.	<p>Question: How should business without an obvious risk territory be assigned to countries (for the geographical diversification calculations). For example, Worldwide Marine business and Space/satellite insurance.</p>	
		<p>Answer: Allocation by risk territory is to allow for geographic diversification in the Premium and Reserve Risk SCR calculation. In this regard it is not compulsory and undertakings may choose to allocate all of their business in a line of business to the main geographical segment in order to simplify the calculation (SCR.9.33). Geographic diversification exists because diverse markets will experience different market and claims conditions. In the case of Space/satellite insurance, it is difficult to envisage any geographic diversification existing on the basis of where a launch takes place, where a company is headquartered</p>	17/09/10



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No Q.	No paragr. (if provided)		Date (answer)
		or the insurance market through which the business is placed. The same could be said for worldwide shipping, although in this case there could be an argument that conditions in local insurance markets where the business is actually placed may influence the prices charged; however, on balance it is difficult to see how a geographic diversification benefit could exist for either of these classes.	

## SCR – Non life underwriting – Lapse risk

No Q.	No paragr. (if provided)		Date (answer)
45	SCR.9.3.	Question: Is this relevant for general insurance companies?	
		Answer: QIS 5 will seek to establish if this is the case. Business classes where this may be relevant include motor premium payable monthly, performance bonds or Home Builders' Warranty; wherever undertakings have future premium flows included in the Technical Provision Premium Provisions there may be lapse risk attaching, or if there are (implicit or explicit) termination options in the insurance policy. It is up to undertakings to establish if this is a risk for each class of business written (subject to the materiality threshold in SCR.9.37.). Current market practice in Ireland includes an implicit termination option in motor insurance policies with a pro-rata return of premium – the exercise rate of this option assumed in the technical provision calculation (implicitly or explicitly) should be stressed (again subject to the materiality threshold in SCR.9.37.).	17/09/10



## SCR – Non life underwriting – Cat risk

No Q.	No paragr. (if provided)		Date (answer)
46	SCR.9.75.	<p>Question:</p> <p>Flood Risk has not been included as a material risk for Ireland under Method 1, only windstorm is. The reality is that flood risk is material given the large scale flooding in Western and Southern Ireland last winter.</p> <p>Should insurance companies only allow for Windstorm catastrophe under Method 1 or would they need to allow for flood risk as well under Method 2?</p>	
		<p>Answer:</p> <p>Insurance companies only writing Irish domestic business should only allow for Windstorm catastrophe under Method 1. Non-cat exposures are captured in the premium and reserve risk module, and this is calibrated using data from which catastrophes have been excluded. To the extent that Irish flood risk has not been considered a catastrophe risk it should therefore be captured in the calibration of the premium and reserve risk module, and so there is no requirement to calculate an additional catastrophe exposure using Method 2.</p> <p>However, SCR.9.58. which states that “Undertakings need to assess whether the standardised scenarios appropriately capture the risks to which they are exposed” is noted. Comments as to the materiality of Flood Risk in the Irish insurance market should be made in the Qualitative Questionnaire. Published figures give the total loss from the November 2009 floods at approximately EUR 245M (Source: IIF). All but EUR8M of this loss came from Household and Commercial Property classes. Total property insurance premium in Ireland in 2009 was in the region of EUR 780M (Insurance Statistical Review). Thus the additional loss ratio from the November 2009 floods was c. 30%.</p>	17/09/10
47	SCR.9.77.	<p>Question:</p> <p>Under CAT<sub>windstorm</sub>, undertakings are required to allow for multiple events, A and B on a gross basis</p>	



No Q.	No paragr. (if provided)		Date (answer)
		<p>and to then net down for reinsurance.</p> <p>We have previously calculated <math>CAT_{windstorm\ ctrv}</math> using the Windstorm CRESTA Table for Ireland and are required to calculate <math>CAT_{windstorm(A)\_ctry\_net}</math> and <math>CAT_{windstorm(B)\_ctry\_net}</math> as follows:</p> <p><math>CAT_{windstorm(A)\ ctrv\ net} = \text{loss from EventA1} + \text{subsequent loss from EventA2},</math></p> <p>where,</p> <p>Loss from EventA1 = <math>0.8 * CAT_{windstorm(A)\ ctrv}</math> then net down for reinsurance            Loss from EventA2 = <math>0.4 * CAT_{windstorm(A)\ ctrv}</math> then net down for reinsurance</p> <p><math>CAT_{windstorm(B)\ ctrv\ net} = \text{Loss from EventB1} + \text{subsequent loss from EventB2}</math></p> <p>where,</p> <p>Loss from EventB1 = <math>1 * CAT_{windstorm(B)\ ctrv}</math> then net down for reinsurance            Loss from EventB2 = <math>0.2 * CAT_{windstorm(B)\ ctrv}</math> then net down for reinsurance</p> <p><math>CAT_{windstorm\ ctrv\ net} = \text{Max}(CAT_{windstorm(A)\ ctrv\ net}, CAT_{windstorm(B)\ ctrv\ net})</math></p> <p>There is no mention of how to calculate <math>CAT_{windstorm(A)\ ctrv}</math> and <math>CAT_{windstorm(B)\ ctrv}</math> in the QIS5 Technical Specification. How do you do so?</p>	
		<p>Answer:            This appears to be an error in the TS and <math>CAT_{windstorm(A)\_ctry}</math> and <math>CAT_{windstorm(B)\_ctry}</math> in the definitions of the terms <i>Loss from EventA1/A2/B1/B2</i> should instead read <math>CAT_{windstorm\ ctrv}</math>. We have asked CEIOPS</p>	17/09/10



No Q.	No paragr. (if provided)		Date (answer)
		to confirm that this is the case.	
48	SCR.9.156	Question: There was reference to an aggregation matrix but it wasn't defined. Where can it be found?	
		Answer: The aggregation matrix in the Helper tab is the same as that in the Report of the Catastrophe Task Force (paragraph 248). Therefore we suggest that this aggregation matrix be used. We have asked CEIOPS to confirm that this is correct.	17/09/10
49	SCR.9.174.	Question: "The premium for a given line of business should be split between different events before applying factors". Does all of the premium have to be allocated to a catastrophe event? (i.e. where the total premium for a LOB equals 100 would the sum of the splits have to equal 100?)	
		Answer: No; the factors should only be applied to that premium which is exposed to a peril.	17/09/10
50	SCR.9.174.	Question: In pricing reinsurance we allocate total premium income is allocated between attritional, large loss and major loss parts. Do the Method 2 risk factors of Catastrophe sub-module apply to the total premium volume or the sum of the large and major loss parts?	
		Answer: The factors should be applied to the total premium that is exposed to the peril. In this case, the premium that is allocated to the attritional losses should be included to the extent that the business to which it relates is exposed to the peril.	17/09/10
51		Question: For exposures for which Method 1 should be used, where the data required for Method 1 is not readily available, can Method 2 be used?	



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No Q.	No paragr. (if provided)		Date (answer)
		Answer: Method 1 should be used whenever possible. Method 1 should give a more accurate result than Method 2. Therefore, we suggest approximating the figures for Method 1 on a best efforts basis if possible in preference to applying Method 2. In any case, you should make clear the approach taken in the qualitative questionnaire.	17/09/10

## SCR – Non-SLT Health – Cat risk

No Q.	No paragr. (if provided)		Date (answer)
52		Question: For the Health catastrophe, the amount of information required seems onerous for a captive writing EL business. Is there a simplification for these circumstances? Can the EL business be captured under the Non-Life Factor Method?	
		Answer: Typically, an Employers' Liability insurance contract only provides an indemnity against claims for damages and/or breach of statutory duty. Worker's compensation schemes typically provide all injured employees with an automatic right to compensation according to statutorily prescribed scales of benefit. Such schemes operate <i>inter alia</i> in many US States, Belgium and Australia. It would appear that Employers' Liability insurance as written in Ireland falls under General liability and the Non-life catastrophe risk module.	17/09/10
53		Question: Health CAT shock: Is there any guidance on how to calculate the 3 elements of this shock i.e. Arena, concentration and epidemic? Will there be any standard Irish statistics available for Arena and concentration calculations?	



No Q.	No paragr. (if provided)		Date (answer)
		<p>Answer: Guidance is provided in Section SCR.8.5 of the QIS 5 Technical Specifications. The standard Irish statistics for the Arena Scenario are given in Annex L.1. Insurance penetrations for the Irish market are given in Annex L.2. A Helper Tab is available on the CEIOPS' website <a href="http://www.ceiops.eu/media/files/consultations/QIS/QIS5/Spreadsheets&amp;IT-Tools/H_CAT_Health_20100827.xls">http://www.ceiops.eu/media/files/consultations/QIS/QIS5/Spreadsheets&amp;IT-Tools/H_CAT_Health_20100827.xls</a> which will calculate the (gross) Health Catastrophe charge if the inputs are provided; however, undertakings should understand the underlying calculations to use the Helper tab correctly, and must apply their own reinsurance programme to the gross figure. For further details on the Health Catastrophe shocks, the report of the Catastrophe Working Party is also available on the CEIOPS' website: <a href="http://www.ceiops.eu/media/files/consultations/QIS/QIS5/Spreadsheets&amp;IT-Tools/H_CAT_Health_20100827.xls">http://www.ceiops.eu/media/files/consultations/QIS/QIS5/Spreadsheets&amp;IT-Tools/H_CAT_Health_20100827.xls</a></p>	17/09/10

## SCR – Financial Risk Mitigation

No Q.	No paragr. (if provided)		Date (answer)
54	SCR.12.18-19	<p>Question: What is a "rolling hedge program" (SCR .12.18) and how does it differ from "Dynamic hedging" (SCR.12.19)? Neither is defined or further explained in the spec.</p>	
		<p>Answer: A rolling hedge program refers to the rolling over of existing hedges whereas dynamic hedging is a process of changing hedges in response to change market conditions. The latter requires management actions and decisions. One of the key reasons for not permitting dynamic hedging is that companies must use internal models where they wish to reduce the level of required capital through the use of</p>	17/09/10



No Q.	No paragr. (if provided)		Date (answer)
		future management actions.	
55	SCR.12.14.	Question: What level of Basis Risk is "not material"? Presumably the only way that Basis Risk could be "appropriately reflected in the SCR" is through an Internal Model, as there is nothing else in the Standard Formula? Also, this paragraph implies that you can either fully allow for the risk mitigation or if there is material basis risk, you cannot allow for it at all. Is there any scope for taking partial allowance for risk mitigation when some basis risk exists?	
		Answer: Materiality of Basis Risk is given in SCR 12.15. If the basis risk is material then the instrument is not considered as risk mitigating.	17/09/10

## Own Funds

No Q.	No paragr. (if provided)		Date (answer)
56	OF.17.	Question: We would query the fact that no allowance for expected value of future profits is permitted for general insurance business, yet there is for life business? (i.e. only allows for expected profits included in future premiums on existing in-force business.) The reality is that, even in extremis, a proportion of business would be expected to renew (e.g. 50%) and would be expected to be profitable.	
		Answer: OF.17. states that the definition of Expected Profits in Future Premium (EPIFP) applies equally to Life and Non-life business. However, anticipated renewal business does not fall under the contract boundaries – this is no different to life business where anticipated premium from new business is not	17/09/10



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No Q.	No paragr. (if provided)		Date (answer)
		included in the definition of EPIFP. Premium contractually due on existing in-force business where the policy falls under the contract boundaries should be included in this calculation.	
57	OF.17.	Question: Where renewal notices have been issued in the 4 – 6 weeks up to the year end, is it acceptable to take account of future profits expected to emerge on this tranche of “pipeline” business (using an appropriate expectation of renewal proportions)?	
		Answer: Such premium is not contractually due and therefore does not fall under the contract boundaries. Per TP.2.13., tacit renewals which have already taken place at the renewal date should lead to recognition of the renewed contract – this does not cover the situation described above where a renewal notice has been sent out. See Question 73 in the Q&A on the CEIOPS’ website also.  This also applies to quotes issued on aggregator sites, where the insurer is legally obliged to honour the quote if accepted. This is not the same as a tacit renewal, and even though a conversion rate can be assumed the premium is not contractually due and therefore does not fall under the contract boundaries.	17/09/10
58	OF.30.-34.	Question: At present, we have some off balance sheet supports which we use for our business but, as there is no provision for their recognition under the Solvency I regime, we have neither relied upon them from a Regulatory Capital perspective nor received Regulatory Approval. Can these assets be included in the QIS5 submission and, if so, what the terms/conditions applicable to such assets for them to be considered approved and are there any limitations on the potential use of such approved assets as part of the QIS5 / SCR determination process?	
		Answer: Items or arrangements which currently exist but which do not count towards the available solvency margin may in the future be approved as ancillary own funds. These should <u>not</u> be included in own	17/09/10



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No Q.	No paragr. (if provided)		Date (answer)
		funds for QIS5 purposes but information should be supplied in response to the relevant questions in the questionnaire. (OF.33.)	
59		Question: Calculation of EPIFP: It is suggested in working this out that all policies should be assumed to PUP and not surrender. For Term assurance policies where there is no facility to pup what approach should be taken? It would be impractical to change the model to try and work out a notional pup value.	
		Answer: For a term portfolio Technical Provisions could be negative. In the second part of the EPIFP calculation, Technical Provisions would be zero where cessation of premium payment takes place. The value assigned to EPIFP would then be the change in the value of technical provisions, i.e. the amount of the negative Technical provisions first calculated. This is analogous to Non-life contracts where future premium is payable.	17/09/10