Summary of Comments on CEIOPS-CP-47/09 Consultation Paper on the Draft L2 Advice on SCR Standard Formula - Market risk	CEIOPS-SEC-110-09

CEIOPS would like to thank AAS BALTA, AB Lietuvos draudimas, AFA, AMICE, Association of British Insurers, Association of Danish Mortgage Banks (Realkreditrå, Association of Friendly Societies, Association of Run-Off Companies, Bupa, CEA ECO-SLV-09-442, Codan Forsikring (Branch Norway) (991 502 491) NOR, Codan Forsikring A/S (10529638) DENMARK, CRO FORUM, Danish Insurance Association, DIMA (Dublin International Insurance & Management , ECBC, ECIROA, EPRAL, European Union member firms of Deloitte Touche To, FAIDER (Fédération des Associations Indépendantes , FERMA (Federation of European Risk Management Asso, FFSA, German Insurance Association – Gesamtverband der D, GROUPAMA, Groupe Consultatif, Institut des actuaries (France), Investment & Life Assurance Group (ILAG), Ireland\39s Solvency 2 Group, excluding representa, KPMG ELLP, Legal and General Group, Link4 Towarzystwo Ubezpieczeń SA, Lloyd\39s, Lucida plc, Munich RE, OAC, Pearl Group Limited, PricewaterhouseCoopers LLP, ROAM –

, RSA Insurance Group PLC, RSA Insurance Ireland Ltd, RSA\32\45\32Sun Insurance Office Ltd., SWEDEN: Trygg-Hansa Försäkrings AB (516401-7799), The Equitable Life Assurance Society (UK), UNESPA (Association of Spanish Insurers), uniqa, and XL Capital Ltd

The numbering of the paragraphs refers to Consultation Paper No. 47 (CEIOPS-CP-47/09)

No.	Name	Reference	Comment	Resolution
1.	AAS BALTA	General Comment	The CEIOPS approach is binary and additive i.e. take a standard move up or down (the magnitude of which driven by 'expert opinion') for each risk type and add them together to get the total SCR. In general this Standard Formula modular approach to market risk is sub-optimal to a fully integrated ESG model which encompasses all risk types, potentially more extreme outcomes of these risk types and incorporates the independencies' between them.	Noted. In the standard formula, interdependencies are incorporated by correlations between the sub-modules of the market risk module.
			Section 4.152: The concentration thresholds appear to lack granularity (2% for ratings AAA-A) and could potentially penalise those institutions with conservative portfolios. Institutions which attempt to match their regional liabilities with high quality AAA assets may be forced to take on a higher concentration due to the	Not agreed. CEIOPS considers that a separate calibration for AAA, AA and A ratings would lead to results that are insufficiently distinct to merit separate

			lack of depth in the local market. For example, RSA has a significant operation in Scandinavia which holds invested assets in a limited number of high quality banks and securitised vehicles matched against liabilities. These assets would incur a potentially high capital charge Sections 4.109-4.110 do not give enough scope in terms of threshold limits for operations facing this dilemma of trying to manage duration and currency risk whilst faced with limited high quality investment choices. Section 4.148: In terms of the risk concentration charge per 'name' the factor gi appears to penalise institutions with a high quality portfolio because there is no distinction between its value for AAA and AA ratings.	treatment. Not agreed. CEIOPS considers that a separate calibration for AAA, AA and A ratings would lead to results that are insufficiently distinct to merit separate treatment.
2.	AB Lietuvos draudimas	General Comment	The CEIOPS approach is binary and additive i.e. take a standard move up or down (the magnitude of which driven by 'expert opinion') for each risk type and add them together to get the total SCR. In general this Standard Formula modular approach to market risk is sub-optimal to a fully integrated ESG model which encompasses all risk types, potentially more extreme outcomes of these risk types and incorporates the independencies' between them. Section 4.152: The concentration thresholds appear to lack granularity (2% for ratings AAA-A) and could potentially penalise those institutions with conservative portfolios. Institutions which attempt to match their regional liabilities with high quality AAA assets may be forced to take on a higher concentration due to the	Noted. The design aimed to balance detailed modelling of risks with simplicity needed in a standard formula. Please see comment #1

			lack of depth in the local market. For example, RSA has a significant operation in Scandinavia which holds invested assets in a limited number of high quality banks and securitised vehicles matched against liabilities. These assets would incur a potentially high capital charge Sections 4.109-4.110 do not give enough scope in terms of threshold limits for operations facing this dilemma of trying to manage duration and currency risk whilst faced with limited high quality investment choices. Section 4.148: In terms of the risk concentration charge per 'name' the factor gi appears to penalise institutions with a high quality portfolio because there is no distinction between its value for AAA and AA ratings.	Please see comment #1
3.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	General Comment	- No changes to the structure of the market risk sub-module, except interest rate volatility stress. It should be the same for equity to add a volatility stress - For currency: both upward and downward stress, and capital charge = most onerous result of both for each currency - Currency: Inconsistencies in Group consolidation are not solved yet. The current method adds up the currency exposure of two entities of a group even if the currency exposure is hold in opposite currencies and the capital requirements should actually level out. Furthermore it seems that diversification between entities will be substantially restricted by only considering the losses in the risk aggregation. - Spread Risk: It seems that the same treatment is applied for credit derivatives than in QIS4. In order to get a consistent economic approach, the same charges should be applied for credit derivatives than for corporate bonds (instead of a 300% spread	Please refer to the forthcoming CEIOPS consultation paper on the calibration of the equity risk sub-module. Noted. Currency risk in the Group context is treated in CP60. Disagree. CEIOPS considers the proposed treatment of credit derivatives appropriate for their different risk profile.

			widening stress scenario). - Concentration Risk: The thresholds for concentration risk have been reduced while the correlations between counterparties have been increased. The application of the module behaves like an option with the thresholds as strike, therefore a too conservative calibration might have important impacts on SCR, especially on Solo level. - Calibration of the stresses will be considered in further consultation papers due to be released in October 2009, and until then it is not clear what impact the market risk module will have on capital requirements. The standard formula in the Market Risk Module is not realistic. Strong efforts have to be done to reduce inconsistencies.	Noted. As set out in para 3.23, contagion risks and "domino" effects increase correlations in times of crisis, and the module has been calibrated accordingly. Para 4.123 explains the calibration of the thresholds and relationship with lessons learned from the crisis: please see also the revised advice paper. Noted Not agreed. CEIOPS is working to achieve an appropriately calibrated and structured standard formula approach.
4.	AMICE	General Comment	These are AMICE´s view at the current stage of the project. As our work develops, these views may evolve depending in particular, on the other elements of the framework which are not yet fixed. The comments outlined below constitute AMICE´s primary areas of concern: Interest rate risk: - The interest-rate scenarios will now, compared to QIS4, capture movements in the level, slope and curvature of the term structure of interest rates and will also allow for an increase in the	Disagree: Interest rate volatility was not included either explicitly or implicitly in QIS4. The current

			volatility of interest rates (interest rate volatility shock will be included in interest rate up and down shocks). We believe that volatility shocks were already included in QIS4. At least their inclusion should not lead to a more conservative calibration.	calibration will be detailed in a future consultation paper and will be based on the 99.5% VaR standard set out in the Level 1 text.
			Concentration risk	
			- Lower thresholds (e.g. 5% to 2% for AAA to A counterparties) are not justified in CEIOPS paper. We are not convinced that the new calibration is based on assumptions consistent with the Level 1 text. We suggest keeping the thresholds tested in QIS 3 and QIS 4.	Not agreed. The calibration aims to reflect the 99.5% VaR in line with the Level 1 text.
			- We do not agree with the exclusion of property holdings from the financial concentration risk module as we see property investments as an important element of portfolio diversification.	Not agreed. Properties are not excluded from the sub-module.
			- Further, UCITS should not be considered in the concentration risk module. The look-through approach could prove immensely burdensome.	Not agreed. CEIOPS considers the look-through approach important for effective risk management. Proportionality will apply, as with all aspects of Solvency 2.
			Currency risk:	Noted. Section 4.4 of CP47 explains the rationale for the change in approach.
			- The total capital charge for currency risk is the sum of the capital charges over all foreign currencies. This is an onerous change from QIS4 since the capital charge in QIS4 was derived by testing the impact of all foreign currencies moving up or down together (and taking the most onerous result) rather than taking the most onerous result for each individual currency and then aggregating. We are not in favor of this change.	Please see comment #267
			- We are in favour of recognising diversification benefits for the currency risk. A well-diversified currency portfolio should lead	

			to a lower capital requirement than an undiversified portfolio. Additionally, the grouping of currencies should be allowed.	
5.	Association of British Insurers	General Comment	We believe that the approach in this CP, regarding credit risk for government bonds, is much more acceptable than the approach in CP40. In particular at paragraph 4.73 there is no capital charge on any national debt from OECD or EEA countries. However, instruments issued or guaranteed by supranationals, such as the European Investment bank should also be allowed for within the exclusion. We strongly disagree with the arbitrary changes to concentration thresholds and request for statistical evidence that these changes remain consistent with the SCR standard of 99.5% 1-year VaR. The proposed look-through approach at paragraph 4.177 would also be highly burdensome. Collective investment funds are an extremely important part of life insurance business. In many cases these funds will track a market index. Applying a look-through approach to these index track funds is not appropriate, as the policyholder makes an explicit choice to track this index and bears the investment risk. It would also be highly burdensome to require fund managers to look through to the underlying investments where the index already covers a well-diversified range of investments.	Agreed. CP should be revised to update the treatment of supranational debt. Partially agree. Please see the modifications to the calibration for concentration risk. Not agreed. CEIOPS considers the look-through approach important for effective risk management. Proportionality will apply, as with all aspects of Solvency 2.
6.	Association of Danish Mortgage Banks (Realkreditr	General Comment	We have identified some issues which we would like to draw your attention to as they have serious consequences for the functioning of the Danish mortgage covered bond market. In CP 47, the issue relates to advice 4.163 – concentration risk on mortgage covered bonds (page 33) and in CP 40 to the discount rate curve.	Noted. Please see revised calibration of the concentration risk sub-module. Consideration of the appropriateness of credit ratings is beyond the scope of

	å		It is highly recommendable that the rules and regulations governing concentration risk and the discount rate curve be phrased in such a way that they support financial stability and ensure that it is possible to maintain systems to finance real property with a high degree of reliability of supply. This has been clearly demonstrated by the current financial crisis. We would like to point out that the Danish mortgage banks have weathered the financial storm better than other credit institutions in Europe. The Danish mortgage covered bond market has functioned with a high degree of stability, and loans have been granted on a current basis in proportion to the current demand. This has taken place without government guarantees backing Danish covered bonds. The explanation is to be found in the statutory regulation (For a further description of the Danish mortgage credit model, cf. appendix 1), which offers a high degree of protection to investors in covered bonds, and in the practice of the Danish mortgage banks. We agree with CEIOPS that mortgage covered bonds represent a type of asset that requires particular attention both with regard to quality of the investment and with regard to financial stability. However in our opinion there is no need for a limit for concentration risk for mortgage covered bonds: The definition in the UCITS directive already distinguishes mortgage covered bonds from all others types of assets. At the same time, investments in mortgage covered bonds are already diversified due to the distribution of the collateral. The risk elements from investments in mortgage covered bonds are however more similar to the risk elements of government bonds: interest-rate risk and spread risk. As no limits exist to the concentration risk for government bonds, no limits	this current advice.

			should apply to the concentration risk for covered bonds. Specifically, we find the recommendations in CP 47 inappropriate for three reasons: ☐ Using credit assessments from rating agencies is not appropriate. If CEIOPS intents to maintain the criteria at least a credit rating of AA should be included in line with the quality steps in CRD. ☐ A threshold of 10 or 20 percent for covered bonds by one single issuer can lead to instability in the market for housing finance in Denmark.	
7.	Association of Friendly Societies	General Comment	The Association of Friendly Societies represents the friendly society sector in the UK. We have 46 friendly society members, who are all member-owned mutual organisations. Typically they offer long term savings and protection policies, with generally low minimum premiums. Friendly societies are typically small, though well-capitalised, and have a distinctly different business model to shareholder-owned insurers. We would like to thank CEIOPS for the chance to comment on this paper General layout and structure of this module appears to be broadly as expected from eg QIS4. Much of the impact on insurers, particularly smaller firms, only likely to be understood once more of the parameters for the shocks to apply are known. Expect these to follow with calibration papers	Noted. The calibration of the market risk module will be addressed in a forthcoming consultation paper.

			later this year?	
8.	Association of Friendly Societies	General Comment	The Association of Friendly Societies represents the friendly society sector in the UK. We have 46 friendly society members, who are all member-owned mutual organisations. Typically they offer long term savings and protection policies, with generally low minimum premiums. Friendly societies are typically small, though well-capitalised, and have a distinctly different business model to shareholder-owned insurers. We would like to thank CEIOPS for the chance to comment on this paper General layout and structure of this module appears to be broadly as expected from eg QIS4. Much of the impact on insurers, particularly smaller firms, only likely to be understood once more of the parameters for the shocks to apply are known. Expect these to follow with calibration papers later this year?	Noted The calibration of the market risk module will be addressed in a forthcoming consultation paper.
9.			Confidential comment deleted	
10.	CEA, ECO-SLV-09-442	General Comment	The CEA welcomes the opportunity to comment on the Consultation Paper (CP) No. 47 on SCR Standard Formula – Market Risk. It should be noted that the comments in this document should be considered in the context of other publications by the CEA. Also, the comments in this document should be considered as a whole, i.e. they constitute a coherent package and as such, the rejection of elements of our positions may affect the remainder of our comments. These are CEA's views at the current stage of the project. As our work develops, these views may evolve depending in particular, on other elements of the framework which are not yet fixed.	Noted.

			We appreciate the work of Ceiops in the field of market risk for Solvency II. Ceiops has developed a number of very good rules concerning the treatment of market risk. However, there are a few areas in which we believe further improvements can be made, as follows: When requiring the revaluation of technical provisions to allow for any relevant changes in policyholder option take-up behaviour there are two risks that need to be addressed: ☐ Double-counting of lapse risk The Solvency II framework deals with the issue of dependencies between risks by means of the correlation matrix and therefore the proposed dependency between lapse risk and each market risk stress is not consistent and will result in double counting with the Life lapse risk module. The calibration of the lapse sub-module in the life underwriting risk module will need to be adjusted to remove any double-counting. ☐ Excessive administrative burdens This additional requirement to include policyholder behaviour will increase the administrative burdens for insurers and is likely to be especially difficult for SME's. Application of the principle of proportionality would be very important The new treatment of concentration risk appears overly prudent. The new thresholds appear very low and so overly prudent and the reasoning given by Ceiops for their reduction from the QIS4 levels is not convincing. Furthermore, the QIS4 assumption that entities	Noted. The calibration of the mass lapse risk stress is intended to take this into account. Noted. Proportionality will apply, as with all aspects of Solvency 2. Partially agree. Please see the modifications to the calibration for

			are uncorrelated was in our view most appropriate for Pillar 1, with further treatment under Pillar 2. We do not support the new correlation assumption of 25%. The decrease of the threshold plus the inclusion of a correlation factor will artificially increase the correlation risk charge. We are not convinced that the new calibration is based on assumptions consistent with the framework directive (i.e. 99,5% VaR over one year). We would urge Ceiops to publish a detailed calibration paper plus a calibration comparison to QIS4 parameters in order to be able to understand the differences.	concentration risk. However, CP47 and the experience of the recent crisis highlights the importance of reconsidering the assumption of zero correlation between exposures.
			The look-through approach for investment funds is too burdensome and should be simplified. We believe that such an approach would prohibit (re)insurers from using reasonable models for hedge fund investments and that the proposal does not make sense particularly for passively managed funds where the investment vehicles are following indices. The risk is not best modelled by a look through approach if the (re)insurers have more data to model the risk of the index than to model each entity in the index. For hedge funds, it is the responsibility of the investment manager to pick the right benchmark and the modeller can only look at the risk of this benchmark. (Re) insurers do not have access to each exposure line of the fund.	Not agreed. CEIOPS considers the look-through approach important for effective risk management. Proportionality will apply, as with all aspects of Solvency 2.
			Consideration needs to be given to the use of ratings.	The use of ratings is beyond the scope of this paper.
			References are made to external ratings in various places in the CP. We are concerned about any over reliance of external ratings. We see the need for further investigation to limit to need as far as possible to use external ratings. Ceiops will need to ensure that when allowing for the inclusion of	Noted. Calibration will be treated in a forthcoming CEIOPS consultation paper.

			consideration of interest rate volatility in the interest rate risk sub-module that the total capital requirements for interest rate risk remain appropriate. From the feedback received under QIS4 it appeared that the capital requirements for interest rate risk were in line with the required 1 in 200 yr event. Thus, as the shock levels of the QIS4-approach were considered appropriate, we would be concerned if the explicit consideration of interest rate volatility would result in higher capital requirements. A holistic view, including calibration and equity risk is essential. It is difficult to comment on this consultation paper without knowing the definitive calibration of the various sub risk modules, the correlations and also the treatment of equity risk. We are particularly interested to see how Ceiops proposes to treat the issues of equity risk and the newly introduced symmetric adjustment mechanism as well as the treatment of participations. The key drivers of the capital requirements under the market risk module will be the calibration parameters and it is important for us to have detailed descriptions of the various calibration processes for the risks and their underlying assumptions. We look forward to the 3rd wave of consultation papers, when these areas will be covered.	Noted. Calibration will be treated in a forthcoming CEIOPS consultation paper.
11			Confidential comment deleted	
12.	Codan Forsikring (Branch Norway) (991 502 491) NOR	General Comment	The CEIOPS approach is binary and additive i.e. take a standard move up or down (the magnitude of which driven by 'expert opinion') for each risk type and add them together to get the total SCR. In general this Standard Formula modular approach to market risk is sub-optimal to a fully integrated ESG model which encompasses all risk types, potentially more extreme outcomes of	Please see comment #1

			these risk types and incorporates the independencies' between them. Section 4.152: The concentration thresholds appear to lack granularity (2% for ratings AAA-A) and could potentially penalise those institutions with conservative portfolios. Institutions which attempt to match their regional liabilities with high quality AAA assets may be forced to take on a higher concentration due to the lack of depth in the local market. For example, RSA has a significant operation in Scandinavia which holds invested assets in a limited number of high quality banks and securitised vehicles matched against liabilities. These assets would incur a potentially high capital charge Sections 4.109-4.110 do not give enough scope in terms of threshold limits for operations facing this dilemma of trying to manage duration and currency risk whilst faced with limited high quality investment choices. Section 4.148: In terms of the risk concentration charge per 'name' the factor gi appears to penalise institutions with a high quality portfolio because there is no distinction between its value for AAA and AA ratings.	Please see comment #1. Please see comment #1
13.	Codan Forsikring A/S (10529638) DENMARK	General Comment	The CEIOPS approach is binary and additive i.e. take a standard move up or down (the magnitude of which driven by 'expert opinion') for each risk type and add them together to get the total SCR. In general this Standard Formula modular approach to market risk is sub-optimal to a fully integrated ESG model which encompasses all risk types, potentially more extreme outcomes of these risk types and incorporates the independencies' between them. Section 4.152: The concentration thresholds appear to lack granularity (2% for ratings AAA-A) and could potentially penalise	Please see comment #1 Please see comment #1

			those institutions with conservative portfolios. Institutions which attempt to match their regional liabilities with high quality AAA assets may be forced to take on a higher concentration due to the lack of depth in the local market. For example, RSA has a significant operation in Scandinavia which holds invested assets in a limited number of high quality banks and securitised vehicles matched against liabilities. These assets would incur a potentially high capital charge Sections 4.109-4.110 do not give enough scope in terms of threshold limits for operations facing this dilemma of trying to manage duration and currency risk whilst faced with limited high quality investment choices. Section 4.148: In terms of the risk concentration charge per 'name' the factor gi appears to penalise institutions with a high quality portfolio because there is no distinction between its value for AAA and AA ratings.	Please see comment #1
14.	CRO FORUM	General Comment	47.A Liquidity premium in stressed markets not addressed (priority: very high) The CROF also supports the use of transparent and consistently calculated liquidity premiums for certain highly illiquid insurance liabilities, as expressed in our letter issued in June. The swap curve plus liquidity premium should serve as risk free rate. The CRO Forum, in parallel with the CFO Forum work, is currently working on this topic to provide concrete recommendations (not before October) on ways to measure Liquidity Premium and to apply it to the liabilities. 47.B Further clarification over spread and concentration risk required (priority: high) In the descriptions for the spread and concentration risk modules, the split of credit risk between spread risk, concentration risk and the counterparty default module has resulted in some confusion	Noted. Liquidity premium is not tackled in CP47. Please see CP40 and related papers. Not agreed. CEIOPS' consultation papers on market risk and counterparty default risk explain the distinctions between the spread, concentration and

			over where different risks lie. Further clarification is needed from CEIOPS to understand if there is double counting. The CRO Forum would welcome acceptance of an ability to use internal credit rating rather than mandating external ratings. We also believe that company's employing an internal model should be allowed to base their SCR based on total return modelling and not be forced to split the SCR between risk of default and spread widening as this is likely to be arbitrary and does not improve the accuracy of results.	counterparty default modules. There should be no double-counting based on the proposals in these advices.
			47.C Complexity of market risk to determine model simplicity (priority: medium) The CRO Forum recognises the requirement for a simple model for those firms with simple market risk exposures but advises that a partial internal model is required for entities where market risk exposures are not so simple. Otherwise, some companies may be tempted to concentrate exposures in the extreme corners of simplified definitions.	Noted.
			47.D Clarity on use of static or dynamic approach required (priority: medium) Additionally, it is not clear if the tests will be based on a static approach (e.g. property prices fall 20% in all scenarios) or a dynamic approach (e.g. property prices fall 50% if the market is "high", but only 15% if the market is "low").	Noted. Calibration will be treated in a forthcoming CEIOPS consultation paper.
			47.E Economic links to be considered when calibrating (priority: medium) As a general comment on the market risk module structure, the CRO forum notes that there are some clear economic links which need to be carefully considered when calibrating correlation assumptions between the different sub-modules.	Noted. Calibration of correlations will be treated in a forthcoming CEIOPS consultation paper.
			47.F There should be no double counting of lapse risk in market	

			risk module (priority: medium) The CP assumes that lapse rate assumptions are not being accounted for in the market shock scenarios. The CRO Forum believes this assumption could lead to double counting of risks. 47.G Calibration of remaining tests required to assess impact of market risk module on capital requirements (priority: medium) CEIOPS notes that calibration of the remaining tests will be considered in further consultation papers due to be released in October 2009. Until then it is not clear what impact the market risk module will have on capital requirements. The CRO Forum would like to reference CEIOPS to the CRO Forum paper "Calibration Principles for the Solvency II Standard Formula" published in May 2009 for specific recommendations on this calibration.	Please see comment #10. Noted. Calibration will be treated in a forthcoming CEIOPS consultation paper.
15.	Danish Insurance Association	General Comment	We agree with CEIOPS that mortgage covered bonds represent a type of asset that requires particular attention both with regard to the quality of the investment and with regard to financial stability. But the soundness of these bonds has not been dealt with in a sufficient way in the consultation paper. The definition in UCITS already distinguishes mortgage covered bonds from all others types of assets. At the same time, investments in mortgage covered bonds are already diversified due to the distribution of the collateral. Mortgage covered bonds are dual claims against the issuer and a pool of collateral. According to bullet 4.114 collaterals securitising bonds should be taken into account. In bullet 4.110 this is only accomplished for AAA bonds. Furthermore, the current proposals under which the threshold is set at either 10 per cent or 20 per cent, provided that the mortgage covered bond has a AAA-rated	Please see comment #6.

			credit quality, is not operational due to the fact that the mortgage covered bond issuers have typically originated assets of several credit qualities which do not necessarily have covered bond status. If a threshold for covered bonds is to be kept, the threshold must reflect in the best possible way the underlying risk on covered mortgage bonds. Following this line of reasoning the threshold could be 40 per cent as tested in QIS 4. However, in order to ensure a proportionate and risk based treatment of mortgage covered bonds and unsecured bonds with a similar credit rating, we suggest that mortgage covered bond exposure carry a lower "risk weight" which is not restricted to AAA. If risk weighted exposures are calculated as the product of the market value and a risk weight, a risk weight of 10 per cent corresponds with increasing the threshold from 2 per cent to 20 per cent. The Danish Insurance Association and the organizations representing the Danish mortgage banks may suggest a presentation of the risk-features in the Danish mortgage system and the importance of a system with high stability before CEIOPS undertakes further work on risk concentration for mortgage bonds. It is necessary that the regulation on concentration risk supports financial stability.	
16.	DIMA (Dublin International Insurance & Management	General Comment	DIMA welcomes the opportunity to comment on this paper. Comments on this paper may not necessarily have been made in conjunction with other consultation papers issued by CEIOPS. Consideration needs to be given to the situation where a reinsurer uses the concept of "funds withheld" to cover collateral requirements of ceding companies. This is a concept often	It is unclear the relevance of this comment in the concentration risk. If 'funds withheld' have the legal and substance of deposits with cedents, therefore they fall out of the scope of concentration risk

			employed by Irish reinsurers which conduct business outside Europe, particularly in the US. Under a funds withheld arrangement, a reinsurer assumes insurance risk from a ceding company but the assets associated with the risk are not transferred to the reinsurer but remain as collateral for the ceding company. The reinsurer therefore creates a receivable on its balance sheet for the amount of the funds withheld asset. It should be noted that under the terms of the reinsurance treaty, there is generally a provision which ensures that the reinsurer is not held accountable for the liabilities under the reinsurance treaty, should the funds withheld assets become unavailable (for example, due to insolvency of the ceding company). This greatly reduces the counterparty risk to the reinsurer. As a result of this greatly reduced risk, we consider that it is not appropriate for funds withheld assets with ceding companies to be considered as a single asset for the purpose of determining market risk concentrations. Rather, the reinsurer should look through to the underlying assets (which have been withheld by the ceding company) for the purpose of determining these market risk concentrations. Currency issues needs to be addressed. These include: - if the undertaking reporting currency is different to the local currency, the undertaking should be allowed to report in its functional currency; - the approach to currency stress is too conservative as it is taking the most onerous result for each individual currency and then aggregating; and - Option B (20%) is preferred as concentration threshold for mortgage covered bonds and public sector covered bonds.	submoudle, but within the scope of counterparty default risk module (parrgaph 3.68 of CP28) In other case, the look through approach proposed in the comment seems difficult to apply, unless the winding up regulations of the jurisdiction of the cedent provide a 'ring fence' of the assets withheld in case of winding up, and a set out a priority of the reinsurer on these witheld funds above the policyholders' rights. Agree. The intention of CP47 is that currency risk is relative to the reporting currency. Not agreed. CEIOPS considers this is an improvement on the methodology tested in QIS4. Noted.
17.	ECBC	General	The European Covered Bond Council (ECBC) is the platform for	Noted.

		Comment	covered bond market participants, which brings together covered bond issuers, analysts, investment bankers, rating agencies and a wide range of interested stakeholders in the market. The ECBC was created by the European Mortgage Federation in 2004 and today has over 95 members from 18 different European countries. Together, the ECBC's members represent over 95% of all covered bonds issued.	
18.	ECIROA	General Comment	Due to the size of most captive insurance companies, it is not cost effective for them to spread their investments around a number of Banks. Often, captives will invest with one Bank and in the case of captives owned by Financial Institutions, this can be with their Parent Company. Other captives may lend capital back to the Parent company. Under the current module for concentration risk, this will have a significant impact upon the capital charge and could result in the Parent being required to increase the capital paid to its captive. ECIROA suggests that a look-through approach could be adopted (similar to SICAVs) in circumstances where the funds are invested by the treasury function of the Parent (where the diversification will be handled). Alternatively, concentration risk could be moved to Pillar 2 (following the Basle II approach) thereby allowing this risk to be handled by the local Supervisor. Please note that where a comment has not been made on a particular paragraph, this does not indicate that we agree with the paragraph.	Noted. Please see the forthcoming CEIOPS paper on treatments particular to captives.
19.	EPRAL	General Comment	The European Public Real Estate Association (EPRA) is the voice of the European publicly traded real estate sector. EPRA represents property investment companies, Real Estate Investment Trusts (REITs), investment institutions and the firms and individuals who advise and service those businesses. Between them our 200	Noted.

			members represent over €300bn of real estate investments. Our core membership consists of property investment companies (including REITs) who are in the business of owning and operating portfolios of investment property. These companies create value by actively managing, financing and developing property to provide the environment for modern business to operate from. Investors in publicly listed property companies are able to access the income and capital returns generated by commercial property in a form which is transparent, well governed and liquid. For investors in REITs, which generally include an obligation to distribute the majority of income to investors each year, the close relationship to direct property returns is enhanced further due to the tax transparency of the REIT investment vehicle. The financial leverage in REITs does not modify the dynamic of the property returns transmitted to the shareholders as there is a constant arbitrage between investments in REITs and investments in direct property. The liquidity provided by REITs through stock market quotation does not change the property return profile over the medium to long term. In fact, the REITs market is more quick and efficient in terms of the response to changes in fundamentals affecting property, than the direct property market. We have summarised in this response template, our initial observations on the Draft CEIOPS' Advice for Level 2 Implementing Measures on Solvency II. Treatment of property companies and REITs In summary, it is our strongly held view that the categorisation of listed property companies as equity in the current framework of the SCR Standard Formula, ignores clear evidence showing that listed real estate is more closely related to direct property than to equities. The equity classification in the proposed formula results an	Noted. Not agreed. CEIOPS proposes to retain the approach in CP47, for the reasons explained in paragraph 4.89.

			excessive level of "stress test" for the listed property sector which is not appropriate for this class of asset and could have a significant impact on the ability for insurance companies to own a liquid form of real estate. Our view, which is supported by market evidence from the developed listed property markets, is that listed property companies would be more appropriately treated as direct property in the first instance, combined with the adjustments to the correlation coefficients as detailed below. Property market risk We are also concerned with the proposed correlation coefficients included in QIS 4, which do not reflect the diversification attributes of listed property as evidenced from the market over long periods of time. In particular, (and consistent with our comments above), the proposed correlation between property vs equity is too high. In addition, the correlation between property vs interest is excessively high which overstates the impact of interest rate volatility in the stress test, is not appropriate for this asset class and will have a disproportionate impact on the ability for insurance companies to hold listed property stocks.	Noted. Calibration of correlations will be addressed in a forthcoming consultation paper.
20.	European Union member firms of Deloitte Touche To	General Comment	Overall, we support the delta-NAV approach: all the balance sheet's elements have to been taken into account, including the risk mitigation instruments (options, reinsurance) and the financial guarantees. However, we have made the following comments: - We think this approach raises the following issue, especially for the insurance sector: the insurance undertakings must implement a model which captures the main asset-liability interactions. - We suggest CEIOPS provides additional insights, best-	Noted. Noted. The calculation of assets and liabilities, including simplifications is treated in CEIOPS' advice on technical provisions.

			practice or shortcuts for the treatments of complex financial instruments (e.g. the embedded options of some callable bonds or the CDOs) or some liabilities with special riders. - We think that the calibration of some proxies (e.g. the yield curve used for the actualization of the cash flows) raises some concerns, especially in the context of the financial crisis; for example, how the liquidity premium can be taken into account; what are the CEIOPS hypotheses?	
21.	FERMA (Federation of European Risk Management Asso	General Comment	Ferma welcomes this opportunity to provide comments on this Consultation paper. The main purpose of our comments is to outline specificities of captive insurance and reinsurance undertakings as defined in Art 13-1a of the Directive.	Noted.
22.	FFSA	General Comment	FFSA main comments on this CP relate to the concentration risk module: - FFSA believes that the look-through approach for investment funds is too burdensome for undertakings and should be simplified. When applied to both passively and actively managed funds (§4.181), FFSA understands that CEIOPS wants a look through approach even for passive mandates investment vehicles following indices. FFSA believes that such an approach would prohibit (re)insurers to have reasonable models for hedge fund investments and that the proposal doesn't make sense for ETFs (exchange traded funds) tracking well known and tradable indices. In fact FFSA believes that the risk is not best modelled by a look through approach. Particularly, with ETFs (re)insurers have more data to model the risk of the index than to model each entity in the index. For hedge funds, it is the responsibility of the investment manager to pick the right benchmark and the modeller can only look at the	Disagree. CEIOPS considers the look-through approach important for the proper assessment of an undertaking's risk profile. Proportionality will apply, as with all aspects of Solvency 2.

			risk of this benchmark. (Re)insurers do not have access at each exposure line of the fund	
			- CEIOPS mentions that specific alterations would be made to the interest rate structure, as regards the volatility. FFSA would require some clarifications about the integration of specified alterations to interest rate volatility in the calibration process. Is the approach based on a stochastic volatility model? Is the volatility considered as a risk factor like shift, slope and curvature factors? Is it an implied or an historical volatility?	Noted. This topic will be addressed in CEIOPS' forthcoming consultation paper on calibration of market risk.
			- FFSA does not understand why capital charges increased compared to QIS4 and thinks that any such increase should be duly justified by CEIOPS: The diminution of thresholds (e.g. 5% to 2% for AAA to counterparty) is not justified in the annex, dealing only with calibration of the g parameter. Even if FFSA agrees with the g parameter calibration, we suggest stay to the thresholds tested for QIS 4.	Partially agreed. CEIOPS proposes to revise the calibration, as per the redrafted advice. However, as explained in CP47 it is clear that the calibration of QIS4 was too low.
			- FFSA also proposes to define "group of correlated foreign currencies" rather than having a too low level of granularity that would neglect actual parities between currencies.	Not agreed. CEIOPS considers that allowing for correlations between currencies would result in an overly complex calculation for the standard formula. Where correlations between currencies are important for an undertaking, development of an internal model to capture co-dependencies might be encouraged.
			- FFSA is concerned by the potential implications of clause 4.96 as it seems to imply that a real estate company almost exclusively	Please see comment # 19

			made up of properties could easily be treated as equity. This would not seem logical considering the fact that the correlation of real estate to equity markets does not exceed 0.5. FFSA proposes that a real estate company or a collective investment scheme that is primarily made up of properties should be handled in the property risk module.	
23.			Confidential comment deleted	
24.	German Insurance Association – Gesamtverband der D	General Comment	GDV appreciates CEIOPS' effort regarding the implementing measures and likes to comment on this consultation paper. In general, GDV supports the detailed comment of CEA. Nevertheless, the GDV highlights the most important issues for the German market based on CEIOPS' advice in the blue boxes. It should be noted that our comments might change as our work develops. Our views may evolve depending, in particular, on other elements of the framework which are not yet fixed – e.g. specific issues that will be discussed not until the third wave is disclosed. Overall comment: The interest rate risk and the currency risk submodules should not be splitted any further. Otherwise the calibration has to be adjusted accordingly. Concentration thresholds should not be lowered. To avoid double-counting, lapse risk should not be taken in account in the market risk module. We appreciate the work of CEIOPS in the field of market risk for Solvency II. CEIOPS has developed a number of very good rules concerning the treatment of market risk within the new Solvency II regime. However, there are a few areas in which we believe further improvements can be made, as follows:	Noted. Noted. Noted. Please also refer to the forthcoming CEIOPS consultation papers on calibration. On concentration risk, please see the comments on concentration risk below. On double-counting, please see comment #10. Noted.

			A holistic view, including calibration and equity risk is essential	Agree.
			It is difficult to comment on this consultation paper without knowing the definitive calibration of the various sub risk modules, the correlations and also the treatment of equity risk. We are particularly interested to see how CEIOPS proposes to treat the issues of equity risk and the newly introduced symmetric adjustment mechanism as well as the treatment of participations. The key drivers of the capital requirements under the market risk module will be the calibration parameters and it is important for us to have detailed descriptions of the various calibration processes for the risks and their underlying assumptions. We look forward to the 3rd wave of consultation papers, when these areas will be covered.	Noted. Please see the forthcoming CEIOPS consultation papers on calibration.
			CEIOPS will need to ensure that when allowing for the inclusion of consideration of interest rate volatility in the interest rate risk sub-module that the total capital requirements for interest rate risk remain appropriate	Noted. Please see the forthcoming CEIOPS consultation papers on calibration
			From the feedback received under QIS4 it appeared that the capital requirements for interest rate risk were in line with the required 1 in 200 year event. Thus, as the shock levels of the QIS4-approach were considered appropriate, we would be concerned if the explicit consideration of interest rate volatility would result in higher capital requirements.	Noted. Please see the forthcoming CEIOPS consultation papers on calibration.
			Groups of foreign currencies would be more appropriate than individual currencies in some cases	Please see comment #267.
			A requirement to carry out calculations for all currencies separately may not be appropriate since foreign currencies may be highly correlated with each other.	
			In some cases this correlation is so significant it may make sense to group the currencies when modelling currency risk, rather than	

			splitting out and then combining via a correlation assumption. When requiring the revaluation of technical provisions to allow for any relevant changes in policyholder option take-up behaviour there are two risks that need to be addressed: ☐ Double-counting of lapse risk The Solvency II framework deals with the issue of dependencies between risks by means of the correlation matrix and therefore the proposed dependency between lapse risk and each market risk stress is not consistent and will result in double counting with the Life lapse risk module. The calibration of the lapse sub-module in the life underwriting risk module will need to be adjusted to remove any double-counting. ☐ Excessive administrative burdens This additional requirement to include policyholder behaviour will increase the administrative burdens for insurers and is likely to be especially difficult for SME's. Application of the principle of proportionality would be very important. The new lower 2% concentration threshold appears overly prudent, we request details of how the threshold has been derived The new thresholds appear very low and so overly prudent and the reasoning given by CEIOPS for the reduction in the thresholds is not convincing. The decrease of this threshold plus the inclusion of a correlation factor will artificially increase the correlation risk. We are not convinced that the new calibration is based on assumptions consistent with the framework directive (i.e. 99,5% VaR over one year). We would urge CEIOPS to publish a detailed calibration paper plus a calibration comparison to QIS4 parameters in order to be able to understand the differences.	Please see comment #10 Noted. Proportionality will apply, as with all aspects of Solvency 2. Partially agree. Please see the revised thresholds in the final draft advice. Not agreed. Proportionality will

			The look-through approach for investment funds is too burdensome and should be simplified Particularly to apply to passively managed funds where the investment vehicles are following indices. We believe that such an approach would prohibit (re)insurers to use reasonable models for hedge fund investments and that the proposal doesn't make sense for ETFs (exchange traded funds) tracking well known and tradable indices. The risk is not best modelled by a look through approach, particularly with ETFs where (re)insurers have more data to model the risk of the index than to model each entity in the index. For hedge funds, it is the responsibility of the investment manager to pick the right benchmark and the modeller can only look at the risk of this benchmark. (Re)insurers do not have access to each exposure line of the fund. Consideration needs to be given to the use of ratings References are made to external ratings in various places in the CP. We are concerned about any over reliance of external ratings. We see the need for further investigation to limit to need as far as possible to use external ratings.	apply, as with all aspects of Solvency 2. Please also see comment #10. Please see comment #10.
25.	GROUPAMA	General Comment	Groupama's main comments on this CP deal with the concentration risk module: - The diminution of thresholds (e.g. 5% to 2% for AAA to A rated counterparty) is not justified in the annex, dealing only with calibration of the g parameter. Even if we agree with the g parameter calibration, we suggest adhering to the thresholds tested for QIS 3 and QIS 4. (4.152) - The exclusion of property in the financial concentration risk	Partially agree. Please see the revised thresholds in the final draft advice. Not agreed. Property risk is not

			module is not consistent with an economic approach, and it leads to no recognition being given to the benefit of diversifying property investments. (4.164) - We do not see any reason for increasing the correlation parameter, from 0% in QIS 4 to 25% in this CP, between counterparties that are normally independent, as counterparties of the same group should be treated as one counterparty. (4.159) Furthermore, Groupama questions derecognising diversification benefits for the currency risk. It is logical for a well-diversified currency portfolio to result in a lower capital requirement than a currency-concentrated one. (4.48)	excluded – please see para 4.127, for example. Not agreed. CEIOPS proposes to retain the correlation of 25%: CP47 and the experience of the recent crisis highlights the importance of reconsidering the assumption of zero correlation between exposures.
26.	Groupe Consultatif	General Comment	The Groupe appreciates that market risk is probably the most significant element of risk for typical life insurers. We generally welcome the thoughtful approach of this paper, although we wonder if the additional complexity as compared with QIS4 really is justified. Calibration will be of crucial importance, and should be subject to careful review following QIS5. It is also important that this module does not contribute to procyclicality, and we would like to have seen more consideration of this point. We have specific disagreements with the apparently intended scope of the spread risk module: Any reduction in the value of assets backing illiquid liabilities over and above a real increase in expected credit losses should be substantially offset by a reduction in the value of such liabilities reflecting an increase in illiquidity premium; and We do not understand the justification for including assets backing liabilities to policyholders bearing investment risks in this module. Much more work is now involved for unit linked funds etc now that they are impacted by all of the stresses (apart from concentration);	Noted. Please see also CEIOPS' forthcoming consultation paper on calibration. This is not within the current scope of CP47. Partially agreed. The revised draft clarifies that assets backing liabilities to policyholders bearing

			this will require much more detail than currently held in terms of underlying assets – significant information requirements.	investment risks are excluded to the extent that that there are no other risk borne by the insurer.
27.	Institut des actuaries (France)	General Comment	It's outlined in this CP that different risks (interest rate, currency, property and spread) arise from changes in the level or volatility of corresponding drivers. Particularly, CEOPS proposes to take into account the volatility factor using a conservative calibration of shocks. Firstly the Institut des actuaries, the third European local association, note that it's not clarified if the aforementioned volatility corresponds to implied or historical volatility. Moreover, the Institut think that considering distinct factors (level, volatility) must lead in general to separate shocks. For instance, let's consider the calibration of interest rate risk. We think it's more straightforward to determine stress scenarios for shift, slope, curvature and implied volatility risks and then aggregating each capital charge. If this methodology is not applied, we don't see clearly how to select the combination of such factors which leads to the 0.5% percentile of NAV.	Noted. This topic will be considered in CEIOPS' forthcoming consultation paper on calibration. Noted. This topic will be considered in CEIOPS' forthcoming consultation paper on calibration.
28.	Investment & Life Assurance Group (ILAG)	General Comment	☐ We welcome the continuation of the QIS 4 approach. ☐ Calibrations are not included in the Consultation Paper so it is difficult to respond fully. ☐ It is disappointing that equity risk has also been deferred until later.	Noted. Noted. Please see the forthcoming CP. Noted.
29.	Ireland's Solvency 2 Group, excluding representa	General Comment	Our only comment relates to the "funds withheld" assets of reinsurers. Under such arrangements (which are quite common for Irish reinsurers transacting business in the US), the rinsurer takes on the insurance risk from the ceding company but the associated assets remain with the ceding company as collateral. The reinsurer thus has a receivable on its balance sheet of the amount of the	Please see comment #16.

			funds withheld. Under the terms of the reinsurance treaty, there is generally a provision which ensures that the reinsurer is not held accountable for the liabilities under the reinsurance treaty if the funds withheld assets become unavailable (for example due to insolvency of the ceding company). This reduces the counterparty risk to the reinsurer. As a result of this greatly reduced risk, it is inappropriate for funds withheld assets to be considered as a single asset for the purpose of determining market risk concentrations. Rather, the reinsurer should look through to the underlying assets (which have been withheld by the ceding company) for the purpose of determining these market risk concentrations.	
30.	KPMG ELLP	General Comment	Overall, we agree with the proposal that, with the exception of interest rate volatility, no changes be made to the module/sub-module structure and instead focus effort on refining the design of the sub-modules. There remains a considerable amount of guidance that needs to be received from CEIOPS on the market risk module of the standard formula SCR and we look forward to receiving this. In the absence of this guidance it is difficult to assess the impact on capital requirements.	Noted. Please refer to CEIOPS' forthcoming consultation paper on calibration of market risk module.
31.	Legal and General Group	General Comment	We believe that the approach in this CP regarding credit risk for government bonds is more appropriate than the approach in CP40. In particular at paragraph 4.73 there is no capital charge on any national debt from OECD or EEA countries. We strongly reject the arbitrary changes to concentration thresholds and request for statistical evidence that these changes remain as a 1 in 200 risk framework. Collective investment funds are an extremely important part of life	Noted. Partially agreed. Please see the revisions to thresholds in the final CEIOPS advice. Not agreed. CEIOPS considers the

			insurance business. In many cases these funds will track a market index. Applying a look-through approach is unnecessary, as the customer makes an explicit choice to track this index. It would also be highly burdensome (see also section 4.177 in the CP text).	look-through approach important for effective risk management. Proportionality will apply, as with all aspects of Solvency 2.
32.	Link4 Towarzystwo Ubezpieczeń SA	General Comment	The CEIOPS approach is binary and additive i.e. take a standard move up or down (the magnitude of which driven by 'expert opinion') for each risk type and add them together to get the total SCR. In general this Standard Formula modular approach to market risk is sub-optimal to a fully integrated ESG model which encompasses all risk types, potentially more extreme outcomes of these risk types and incorporates the independencies' between them. Section 4.152: The concentration thresholds appear to lack granularity (2% for ratings AAA-A) and could potentially penalise those institutions with conservative portfolios. Institutions which attempt to match their regional liabilities with high quality AAA assets may be forced to take on a higher concentration due to the lack of depth in the local market. For example, RSA has a significant operation in Scandinavia which holds invested assets in a limited number of high quality banks and securitised vehicles matched against liabilities. These assets would incur a potentially high capital charge Sections 4.109-4.110 do not give enough scope in terms of threshold limits for operations facing this dilemma of trying to manage duration and currency risk whilst faced with limited high quality investment choices. Section 4.148: In terms of the risk concentration charge per 'name' the factor gi appears to penalise institutions with a high quality portfolio because there is no distinction between its value for AAA and AA ratings.	Please see comment #1 Please see comment #1 Please see comment #1

33.	Lloyd's	General Comment	In general we agree with the sentiment and content of the consultation paper. Most of our comments concern areas where we believe clarification would help or rewording is required. However, there are some areas where the proposed parameters look conservative. There are a number of areas where the calibration of factors is yet to happen. In these circumstances it is difficult to draw firm conclusions and we await further details on these points.	Noted. Please also refer to CEIOPS' forthcoming consultation papers on calibration of market and equity risks.
34.	Lucida plc	General Comment	Lucida is a specialist UK insurance company focused on annuity and longevity risk business. We currently insure annuitants in the UK and the Republic of Ireland (the latter through reinsurance). The Republic of Ireland liabilities are denominated in Euro whereas the UK liabilities are sterling.	Noted.
35.	Munich RE	General Comment	We fully support all of the GDV statements and would like to add the following points: Overall, it is quite hard to comment on the consultation paper without knowing the exact calibration parameters. Generally, an extremely prudent calibration that tries to add safety margins above the experiences from the financial crisis is not sustainable. A best estimate calibration over the cycle that of course considers the financial crisis should be the goal. In the calibration for concentration risk the split of credit risk between spread risk, concentration risk and the counterparty default module has resulted in some confusion over where different risks lie. Further clarification is needed from CEIOPS to understand if the current approach avoids double counting. There is a need for a simple model for those firms with simple market risk exposures but a partial internal model should be	Noted. Noted. Please also refer to CEIOPS' forthcoming consultation papers on calibration of market and equity risks. Please see comment #14. Noted. Internal models are not covered by this advice.

			required for entities where market risk exposures are not so simple.	
36.	OAC	General Comment	General layout and structure of this module appears to be broadly as expected from eg QIS4. Much of the impact on insurers, particularly smaller firms, only likely to be understood once more of the parameters for the shocks to apply are known. Expect these to follow with calibration papers later this year?	Noted. Please also refer to CEIOPS' forthcoming consultation papers on calibration of market and equity risks.
37.	Pearl Group Limited	General Comment	We have a concern that this CP like all the other CPs takes a prudent view. While this might feel appropriate in each CP we are worried that this will mean that the overall Solvency II legislation will be overly prudent when summed over all the CPs. In particular until the factors required are issued in later CPs the level of prudence within this CP is difficult to gauge and so we may have further comments on this CP once these figures are known. There is a lack of detail in the derivations of calibrations in this paper. It would be helpful if CEIPOS could publish in full detail the exact data and calculations used to arrive at calibrations. This would inform undertakings of the quality of method and analysis required for their own internal models. We believe that the approach in this CP regarding credit risk for government bonds is much more acceptable than the approach in CP40. In particular at paragraph 4.73 there is no capital charge on any national debt from OECD or EEA countries.	Noted. Please also refer to CEIOPS' forthcoming consultation papers on calibration of market and equity risks. Noted.
38.	PricewaterhouseCoopers LLP	General Comment	We have no significant criticism of the proposals in this paper in relation to certain elements of the market risk module of the SCR standard formula. However, we note that a large amount of the detail of the calculation is still to be developed (e.g. equity risk sub-module, correlations between sub-modules, the majority of the calibration) and that our comments are thus somewhat limited in	Noted. Please also refer to CEIOPS' forthcoming consultation papers on calibration of market and equity risks.

			scope. We note that only the concentration risk sub-module includes the explicit instruction to calculate the capital charge both with and without allowance for management actions in respect of future discretionary benefits. Given that this information is required for the calculation of the loss-absorbing capacity of technical provisions, as described in CP 54, we suggest that such instructions are either included in all sub-modules or outlined as an overall requirement within the market risk module.	The requirements set out in CEIOPS' advice on the loss-absorbing capacity of technical provisions apply throughout the market risk module.
39.	ROAM –	General Comment	ROAM main comments on this CP relate to the concentration risk module: - ROAM believes that the look-through approach for investment funds is too burdensome for undertakings and should be simplified. When applied to both passively and actively managed funds (§4.181), ROAM understands that CEIOPS wants a look through approach even for passive mandates and investment vehicles following indices. ROAM believes that such an approach would prohibit (re)insurers to have reasonable models for hedge fund investments and that the proposal doesn't make sense for ETFs (exchange traded funds) tracking well known and tradable indices. In fact ROAM believes that the risk is not best modelled by a look through approach. Particularly, with ETFs (re)insurers have more data to model the risk of the index than to model each entity in the index. For hedge funds, it is the responsibility of the investment manager to pick the right benchmark and the modeller can only look at the risk of this benchmark. (Re)insurers do not have access at each exposure line of the fund. - CEIOPS mentions that specific alterations would be made to the interest rate structure, as regards the volatility. ROAM would require some clarifications about the integration of specified	Please see comment #10. Noted. Please also refer to CEIOPS' forthcoming consultation papers on calibration of market

			alterations to interest rate volatility in the calibration process. Is the approach based on a stochastic volatility model? Is the volatility considered as a risk factor like shift, slope and curvature factors? Is it an implied or an historical volatility?	and equity risks.
			- ROAM does not understand why capital charges increased compared to QIS4 and thinks that any such increase should be duly justified by CEIOPS.	Noted. Please see the revised advice regarding thresholds.
			- The diminution of thresholds (e.g. 5% to 2% for AAA to counterparty) is not justified in the annex, dealing only with calibration of the g parameter. Even if ROAM agrees with the g parameter calibration, we suggest staying with the thresholds tested for QIS 4.	
			- The exclusion of property in the calculation of the amount of total assets considered in the concentration risk module (i.e. perimeter for assessing concentration) is not consistent with an economic approach, and therefore does not recognise the benefits of diversification correctly.	Not agreed. Properties are included – see section G, paras 4.164 – 4.169.
			- ROAM also proposes to define "group of correlated foreign currencies" rather than having a too low level of granularity that would neglect actual parities between currencies.	Please see comment #4
			- ROAM is concerned by the potential implications of clause 4.96 as it seems to imply that a real estate company almost exclusively made up of properties could easily be treated as equity. This would not seem logical considering the fact that the correlation of real estate to equity markets does not exceed 0.5. ROAM proposes that a real estate company or a collective investment scheme that is primarily made up of properties should be handled in the property risk module.	Please see comment #19
40.	RSA	General	The CEIOPS approach is binary and additive i.e. take a standard	Please see comment #1.

	Insurance Group PLC	Comment	move up or down (the magnitude of which driven by 'expert opinion') for each risk type and add them together to get the total SCR. In general this Standard Formula modular approach to market risk is sub-optimal to a fully integrated ESG model which encompasses all risk types, potentially more extreme outcomes of these risk types and incorporates the independencies' between them. Section 4.152: The concentration thresholds appear to lack granularity (2% for ratings AAA-A) and could potentially penalise those institutions with conservative portfolios. Institutions which attempt to match their regional liabilities with high quality AAA assets may be forced to take on a higher concentration due to the lack of depth in the local market. For example, RSA has a significant operation in Scandinavia which holds invested assets in a limited number of high quality banks and securitised vehicles matched against liabilities. These assets would incur a potentially high capital charge Sections 4.109-4.110 do not give enough scope in terms of threshold limits for operations facing this dilemma of trying to manage duration and currency risk whilst faced with limited high quality investment choices. Section 4.148: In terms of the risk concentration charge per 'name' the factor gi appears to penalise institutions with a high quality portfolio because there is no distinction between its value for AAA and AA ratings.	Please see comment #1 Please see comment #1
41.	RSA Insurance Ireland Ltd	General Comment	The CEIOPS approach is binary and additive i.e. take a standard move up or down (the magnitude of which driven by 'expert opinion') for each risk type and add them together to get the total SCR. In general this Standard Formula modular approach to market risk is sub-optimal to a fully integrated ESG model which encompasses all risk types, potentially more extreme outcomes of these risk types and incorporates the independencies' between	Please see comment #1

			them. Section 4.152: The concentration thresholds appear to lack granularity (2% for ratings AAA-A) and could potentially penalise those institutions with conservative portfolios. Institutions which attempt to match their regional liabilities with high quality AAA assets may be forced to take on a higher concentration due to the lack of depth in the local market. For example, RSA has a significant operation in Scandinavia which holds invested assets in a limited number of high quality banks and securitised vehicles matched against liabilities. These assets would incur a potentially high capital charge Sections 4.109-4.110 do not give enough scope in terms of threshold limits for operations facing this dilemma of trying to manage duration and currency risk whilst faced with limited high quality investment choices. Section 4.148: In terms of the risk concentration charge per 'name' the factor gi appears to penalise institutions with a high quality portfolio because there is no distinction between its value for AAA and AA ratings.	Please see comment #1 Please see comment #1
42.	RSA - Sun Insurance Office Ltd.	General Comment	The CEIOPS approach is binary and additive i.e. take a standard move up or down (the magnitude of which driven by 'expert opinion') for each risk type and add them together to get the total SCR. In general this Standard Formula modular approach to market risk is sub-optimal to a fully integrated ESG model which encompasses all risk types, potentially more extreme outcomes of these risk types and incorporates the independencies' between them. Section 4.152: The concentration thresholds appear to lack granularity (2% for ratings AAA-A) and could potentially penalise those institutions with conservative portfolios. Institutions which attempt to match their regional liabilities with high quality AAA	Please see comment #1 Please see comment #1

			assets may be forced to take on a higher concentration due to the lack of depth in the local market. For example, RSA has a significant operation in Scandinavia which holds invested assets in a limited number of high quality banks and securitised vehicles matched against liabilities. These assets would incur a potentially high capital charge Sections 4.109-4.110 do not give enough scope in terms of threshold limits for operations facing this dilemma of trying to manage duration and currency risk whilst faced with limited high quality investment choices. Section 4.148: In terms of the risk concentration charge per 'name' the factor gi appears to penalise institutions with a high quality portfolio because there is no distinction between its value for AAA and AA ratings.	Please see comment #1
43.			Confidential comment deleted	
44.	SWEDEN: Trygg-Hansa Försäkrings AB (516401-7799)	General Comment	The CEIOPS approach is binary and additive i.e. take a standard move up or down (the magnitude of which driven by 'expert opinion') for each risk type and add them together to get the total SCR. In general this Standard Formula modular approach to market risk is sub-optimal to a fully integrated ESG model which encompasses all risk types, potentially more extreme outcomes of these risk types and incorporates the independencies' between them. Section 4.152: The concentration thresholds appear to lack granularity (2% for ratings AAA-A) and could potentially penalise those institutions with conservative portfolios. Institutions which attempt to match their regional liabilities with high quality AAA assets may be forced to take on a higher concentration due to the lack of depth in the local market. For example, RSA has a significant operation in Scandinavia which holds invested assets in a	Please see comment #1 Please see comment #1

			limited number of high quality banks and securitised vehicles matched against liabilities. These assets would incur a potentially high capital charge Sections 4.109-4.110 do not give enough scope in terms of threshold limits for operations facing this dilemma of trying to manage duration and currency risk whilst faced with limited high quality investment choices. Section 4.148: In terms of the risk concentration charge per 'name' the factor gi appears to penalise institutions with a high quality portfolio because there is no distinction between its value for AAA and AA ratings.	Please see comment #1
45.	UNESPA (Association of Spanish Insurers)	General Comment	UNESPA (Association of Spanish Insurers and Reinsurers) appreciates the opportunity to analyze and comment on Consultation Paper 54 about SCR Standard Formula – Market Risk UNESPA is the representative body of more than 250 private insurers and reinsurers that stand for approximately the 96% of Spanish insurance market. Spanish Insurers and reinsurers generate premium income of more than € 55 bn, directly employ 60.000 people and invest more than € 400 bn in the economy. The comments expresed in this response represent the UNESPA´s views at this stage of the project. As our develops, these views may evolve depending in particular, on other elements of the framework which are not yet fixed. A holistic view, including calibration and equity risk is essential It is difficult to comment on this consultation paper without knowing the definitive calibration of the various sub risk modules,	Noted Noted. Noted. Noted. Please refer also to CEIOPS' forthcoming papers on calibration of market and equity

			the correlations and also the treatment of equity risk. We are particularly interested to see how CEIOPS proposes to treat the treatment of participations. The key drivers of the capital requirements under the market risk module will be the calibration parameters and it is important for us to have detailed descriptions of the various calibration processes for the various risks and their underlying assumptions. We look forward to the 3rd wave of consultation papers, when these areas will be covered.	risk.
			The inclusion of a volatility shock will require CEIOPS to reduce the original shocks for interest rate risk so that the total capital requirement for interest rate risk remains appropriate Although we do recognise that interest rate volatility plays an important role, we hold the view that it was already implicitly included in the QIS4 approach. Furthermore, from the feedback received under QIS4 it appeared that the capital requirement for interest rate risk was in line with the required 1 in 200 event. Thus, as the shock levels of the QIS4-approach are considered appropriate, the explicit consideration of interest rate volatility would need to involve a reduction of the shock levels calibrated in QIS4 so as to prevent double-counting.	Noted. Calibration will be treated in CEIOPS' forthcoming consultation papers. However, QIS4 did not include interest rate volatility either implicitly or explicitly.
			We agree in general that the revaluation of technical provisions should allow for any relevant changes in policyholder option take-up behaviour. However, there are two risks that need to be addressed: ☐ Double-counting of lapse risk The Solvency II framework deals with the issue of dependencies between risks by means of the correlation matrix and therefore the proposed dependency between lapse risk and each market risk stress is not consistent and will result in double counting with the Life lapse risk module.	Please see comment #10

			☐ Excessive administrative burdens Furthermore, this additional requirement to include policyholder behaviour will increase the administrative burdens for insurers and is likely to be especially difficult for SME's. Application of the principle of proportionality would be very important	Please see comment #10
			The new lower 2% concentration threshold appears overly prudent, we request details of how the threshold has been derived The new thresholds appear very low and so overly prudent and the reasoning given by CEIOPS for the reduction in the thresholds is not convincing. The decrease of this threshold plus the inclusion of a correlation factor will artificially increase the correlation risk. We are not convinced that the new calibration is based on assumptions consistent with the framework directive (i.e. 99,5% VaR over one year). We would urge CEIOPS to publish a detailed calibration paper plus a calibration comparison to QIS4 parameters in order to be able to understand the differences.	Please see comment #10
			All bank deposits from financial entities under Basel II (not only those covered by a government guarantee scheme) should be excluded from the concentration risk sub-module, as these financial entities are also subject to anti-concentration regulation. The application of concentration risk sub-module to bank deposits could induce to higher results than the 99.5% solvency requirement (double-counting of concentration risk), especially when the insurance undertaking invests in shareholder bank deposits. In any case, investing in shareholder bank deposits should be excluded from the concentration risk sub-module. Intra-group cash pooling arrangements should also be excluded from the concentration risk	Not agreed. CEIOPS does not consider that bank deposits should be excluded from the concentration risk sub-module unless they are covered by a government guarantee scheme, as set out in CP47.

			sub-module.	
			The look-through approach for investment funds is too burdensome and should be simplified Particularly to apply to passively managed funds where the investment vehicles are following indices. We believe that the proposal doesn't make sense for ETFs (exchange traded funds) tracking well known and tradable indices. The risk is not best modelled by a look through approach, particularly with ETFs where (re)insurers have more data to model the risk of the index than to model each entity in the index. In many cases insurers do not have access at each exposure line of the fund.	Please see comment #10
			The main target of Solvency II is to ensure the protection of policyholder´s interests against potential losses that could arise derived for adverse scenarios. UNESPA considers that the mentioned objective is the Solvency Capital Requirement (SCR) in which entities have guaranteed their compromise with a calibration of 99.5% VaR.	Noted.
			Therefore an overall SCR estimate where the assets to be taken into consideration were limited to those required to back the total of technical provision and SCR, because if not, it could generate a double computation of the capital charge by market risk and the final SCR will be in excess of 99.5% VaR.	Not agreed. The Level 1 text does not provide any such distinction.
			This means that undertakings should be allowed to identify what assets (equity, property and fixed income) are backing own funds	Not agreed. The Level 1 text does not provide any such distinction

			in excess of TP and SCR in order to apply a lower capital charge in all of their correspondent sub-risk and being excluded from the computation of the concentration sub-risk. To apply the same capital charge over these assets would be unduly and will have a negative impact dissuading insurers to hold capital in excess of the capital requirement.	 Not agreed. The Level 1 text does not provide any such distinction
46.	uniqa	General Comment	Firstly we would like to state that we very much appreciate the work of CEIOPS in the field of market risk for insurance companies. CEIOPS by now managed to develop a number of very good rules concerning the treatment of market risk within the new Solvency II regime. However, looking at the currently published Consultation Papers from CEIOPS we are missing a fundamentally important paper for the new Solvency II System, namely the Consultation Paper on Prudent Person Principle. In our view the capital charge for market risk is highly connected with the application of the prudent person principle. The Investment rules laid down in Article 130 of the framework directive are introducing a significant change in the way insurance companies asset management is supervised and will therefore also effect significant changes within the insurance companies. More specific rules on the application of such an important new system is in our view indispensable for a proper and harmonised introduction of the prudent person principle. Furthermore we would like to point out that by leaving out the issues equity risk and the treatment of participations CEIOPS missed a chance of getting feedback to very significant risk drivers (according to QIS 3, 4, and 4.5 in Austria respectively). As these	Noted. Noted. The Prudent Person Principle is not addressed by CP47. Please see other CEIOPS publications. Noted. Please see CEIOPS' forthcoming consultation papers in the third wave.

			topics obviously need to be discussed in further detail the deferral of those topics seems illogical to us. Especially the implementation of the newly introduced symmetric adjustment mechanism would have been worth discussing within the paper. In any case we would appreciate a paper concerning the topic as soon as possible in order to be able to have a sound and fruitful discussion on this complex topic.	
			In addition we regret that, although having been a core parameter for the QIS process, neither the absolute calibration information nor descriptions of the various calibration processes for the various risks and their underlying assumptions are included in the CP.	Noted. Please see CEIOPS' forthcoming consultation papers in the third wave.
			No information is given about the appearance of the various risk types as defined in the sub-modules of particular asset classes. This leads to ambiguity in the assignment of an asset class to its risk type (as commented for mortgage backed securities to fall either under interest rate risk and spread risk or counterparty default risk). From our point of view it is essential to define a sound process which clearly presets a common process for the allocation of assets and liabilities to risk modules. This would not only provide for a better data quality and higher comparability among different insurers but also prevent possibilities for supervisory arbitrage.	Not agreed. Items should be treated wherever there is sensitivity to the inherent risks. The distinctions between spread, concentration and counterparty default risks are set out in the relevant consultation papers.
			It can be observed from the QIS process that risk types as defined in the sub-modules do not have necessary granularity or the assignment of asset classes to sub-modules leads to a too general and suboptimal modelling of risks. This can be observed in particular in the equity risk module where listed equities of both developed and emerging countries, hedge funds and private equity are modelled. This is also expressed in CROF paper "calibration principles for the solvency II standard formula", published May 2009.	Noted. Please refer to CEIOPS' forthcoming consultation paper on equity risk. Please see comment #10. A

			References are made to ratings in various places in the CP. However, taking into consideration the effects ratings and the work of rating agencies have had in the current financial crisis, in our view the necessity to define a framework for the eligibility of ratings and rating agencies in conjunction with Solvency II ("Solvency Rating") is given. The definition of such a framework must include at least the following: - supervision of rating agencies and rating processes by regulators - a strict code of conduct for rating agencies as well as an extensive compliance code - full transparency of methods used by rating agencies - full transparency and public availability of ratings and related data (e.g. historic default and recovery distributions or any other statistical data) for instance as suggested in CESR CP about Central Repository dated 9th of July, 2009 - the possibility to set up an own rating and own rating process by the undertaking	framework of the type suggested here is outside the scope of CP47.
47.	XL Capital Ltd	General Comment	Our main concerns are: ☐ the new (compared to QIS 4) approach to currency risk (see comments at 4.49); and ☐ the reduction of concentration thresholds relative to QIS4 is inappropriate (see comments at 4.152)	Noted. Please see the comments on 4.49 and 4.152 below.
48.	EPRAL	1.3.	Property market risk	Noted. Calibration will be

			As further detailed in the report by the Institut pour L'Épargne Immobilière et Foncière, France (IEIF) and summarised below, we believe that the findings of QIS 4 do not properly reflect the diversification attributes of listed real estate. In particular the correlation figures included in QIS 4 are excessively high for both equity vs property risk and interest vs property risk in light of strong evidence from the French, UK and US markets. In addition, the correlation figure for equity vs interest rate risk could be questioned in light of the evidence from the UK and French markets. Property offers much better diversification benefits to stocks and bonds as suggested in QIS4 8. Extracts from the IEIF Preliminary Report to FSIF - 26 Aug 2009 (Pierre Schoeffler, Senior Advisor IEIF) : TS.IX.A.7 of QIS4 provides the following correlation coefficients: ***Correlation Matrix*** / **Interest rate risk** / **Equity risk** **Interest rate risk** / 1 / 0 **Equity risk** / 0 / 1 **Property risk** / 0.5 / 0.75 Equity vs Property risk QIS4 value of 75% is excessively high in light of the French[1], UK[2], European[3] and US[4] cases: ☐ France from 10 to 40%	addressed in CEIOPS' forthcoming third wave of consultation papers.

			☐ UK 45% ☐ Europe 30% ☐ US 35% 1 SBF 250 vs. IPD Office France, CBRE Prime Office Paris CBD and INSEE Notaires Residential Paris 2 FTSE 100 vs. IPD UK All Property 3 DJ STOXX 600 vs. CBRE Prime Office EU15 4 S&P 500 vs. NCREIF Interest rate vs property risk QIS4 value of 50% is excessively high in light of the French[1], European[2] and US[3] cases ☐ France from 0 to -30% ☐ Europe-40% ☐ US -25% 13. 1 10 years Government Bonds Index vs. IPD Office France, CBRE Prime Office Paris CBD and INSEE Notaires Residential Paris 2 10 years Government Bonds Index vs. Prime Office EU15 3 10 years Government Bonds Index vs. NCREIF Equity vs Interest rate risk	

			QIS4 value of 0% is in line with the US[3] case but may be questioned in light of the French[1] and European[2] cases ☐ France 40% ☐ Europe 15% ☐ US 0% 1 SBF 250 vs. 10 years Government Bonds Index 2 DJ STOXX 600 vs. 10 years Government Bonds Index 3 S&P 500 vs. 10 years Government Bonds Index	
49.	Groupe Consultatif	1.3.	The Equity risk sub-module is not covered in this draft. Will the calibration of equity risk shock take into account volatility risk (like the treatment proposed for interest rate risk)?	Noted. Please refer to CEIOPS' forthcoming third wave of advice.
50.	Institut des actuaries (France)	1.3.	The Equity risk sub-module is not covered in this draft. Will the calibration of equity risk shock take into account volatility risk (like the treatment proposed for interest rate risk)?	Noted. Please refer to CEIOPS' forthcoming third wave of advice.
51.	KPMG ELLP	1.3.	We note that this CP does not deal with the equity risk sub-module and the correlations between the market risk sub-modules and between the market risk module and other modules or with advice on simplifications to the standard formula. We look forward to receiving this guidance in CEIOPS' third set of advice.	Noted. Please refer to CEIOPS' forthcoming third wave of advice.
52.	uniqa	1.3.	The calibration process of the correlation between the market risk sub modules should take into consideration the following: - the definition of the process itself (as how to calculate a correlation matrix in general) - the stability / variation over time of the correlation matrix	Noted. Please refer to CEIOPS' forthcoming third wave of advice which will include the calibration of correlations.

			- the effects of stress scenarios to the correlation matrix	
53.	KPMG ELLP	1.4.	We note that, with the exception of concentration risk, the calibration of the market risk module is not covered in this CP and we look forward to receiving this advice in CEIOPS' third set of advice.	Noted. Please refer to CEIOPS' forthcoming third wave of advice.
54.	Association of Run-Off Companies	2.4.	What constitutes a simplified calculation? Can small/run-off companies benefit from administrative savings eg Standardised future market payment patterns for business classes to reduce specific individual company actuarial input.	Simplifications will be treated in CEIOPS' forthcoming third wave of advice.
55.	KPMG ELLP	2.6.	We note that the treatment of concentration risk in this CP is limited to the solo standard formula SCR, since the treatment of this risk in the context of groups and for internal models is being dealt with in other draft Level 2 CEIOPS advice.	Agreed.
56.	FERMA (Federation of European Risk Management Asso	3.2.	Not really true for captives. Underwriting risks are significantly higher contributors the the SCR than Market risk (except concentration risk)	Noted. Captives will be addressed separately in CEIOPS' forthcoming third wave of advice.
57.	ECIROA	3.3.	The results of QIS4 for captives show different percentages. The largest component was concentration risk contributing 78% of the market risk charge.	Noted. Captives will be addressed separately in CEIOPS' forthcoming third wave of advice
58.	FERMA (Federation of European Risk Management Asso	3.3.	The results of QIS for captives show different percentages	Noted. Captives will be addressed separately in CEIOPS' forthcoming third wave of advice

59.	Groupe Consultatif	3.3.	We note these averages, but also that undertakings will be heterogeneous in their exposures to various forms of market risk (there will be insurers with relatively high interest rate risk and low equity risk and vice versa, reflecting the nature of the policies written).	Agreed.
60.	Association of British Insurers	3.4.	The summary in this paragraph is quite confusing, since there are no clear references for mortgage backed securities for example. It would be helpful to state in which module the risk is captured and where not addressed (e.g. inflation-linked bonds), it should either be a reference or explanation why there is no further consideration.	Noted.
61.	CEA, ECO-SLV-09-442	3.4.	Summing comments from QIS4 without a clear reference on how this is addressed in CP is confusing. For example, Inflation linked bonds still have no specific treatment under this CP. On the last comments dealing with mortgage backed securities, it would be helpful to clearly state in which module(s) the risk is captured.	Noted. Noted. Noted. Para 4.57 explains the treatment of MBSs.
62.	Legal and General Group	3.4.	We request a clear boundary between the spread risk sub-module and the counterparty default risk module. Migration/default should be covered in the counterparty default risk module. In relation to the comments on the spread risk module - we support the suggested distinction between losses due to a general change in the market price of credit risk and those due to migration/default risk. The former should be addressed in the spread risk section of	Noted. CP47, together with the consultation papers on counterparty default risk, explain the boundaries. For comments on the counterparty default risk module, please refer to CP28 and CP51. Noted.

			the market risk module, the latter in the counterparty default risk module. Summarising comments from QIS4 without a clear reference on how these have been addressed in the CP is confusing. For example, inflation linked bonds still have no specific treatment under this CP. Inflation risk should therefore be included in some way. On the last comments dealing with mortgage backed securities, it would be helpful to clearly state in which module(s) the risk is captured.	Noted. Noted. CEIOPS does not plan to suggest the introduction of a new sub-module. Noted. Please refer to para 4.57
63.	Munich RE	3.4.	We support the distinction between losses due to a general change in the market price of credit risk, i.e. spread risk and migration/default risk (s. comment to 4.54.). The former should be addressed in the spread risk section of the market risk module, the latter one in the counterparty default risk module.	Please see comment #62
64.	Pearl Group Limited	3.4.	We request a clear boundary between the spread risk sub-module and the counterparty default risk module. Migration/default should be covered in the counterparty default risk module In relation to the comments on the spread risk module - we support the suggested distinction between losses due to a general change in the market price of credit risk and those due to migration/default risk. The former should be addressed in the spread risk section of the market risk module, the latter in the counterparty default risk module. See comments to Para 4.79. Summing comments from QIS4 without a clear reference on how this is addressed in CP is confusing For example, Inflation linked bonds still have no specific treatment	Please see comment #62

			under this CP. Inflation risk should therefore be included in some way.	
65.	The Equitable Life Assurance Society (UK)	3.4.	It is noted here that QIS4 did not address the treatment of inflation-linked bonds. CP 47 has not provided any further clarity on this point. Please clarify the treatment of inflation-linked bonds and expense inflation in the interest rate stress scenarios. Has consideration been given to adding inflation as an additional market stress?	Noted. Please see comment #60 on inflation-linked bonds. Expense risk is covered in CP49 (life underwriting risk) and in the calibration of the non-life underwriting module.
66.	CEA, ECO-SLV-09-442	3.9.	We would like to stress the importance of the treatment of participations and the need for a sound guidance on this topic. In any case we would support a separate economically sound consideration within the equity and concentration risk sub-modules.	Noted. Please refer to CEIOPS' forthcoming third wave of advice.
67.	KPMG ELLP	3.9.	We note that this paper does not consider the treatment of participations and we look forward to receiving advice on this matter at the end of October.	Noted. Please refer to CEIOPS' forthcoming third wave of advice.
68.	UNESPA (Association of Spanish Insurers)	3.9.	We would like to stress the importance of the treatment of participations and the need for a sound guidance on this topic.	Noted. Please refer to CEIOPS' forthcoming third wave of advice.
69.	uniqa	3.9.	We would like to stress the importance of the treatment of participations and the need for a sound guidance on this topic. In any case we would support a separate economically sound consideration within the equity and concentration risk sub-modules.	Noted. Please refer to CEIOPS' forthcoming third wave of advice.
70.	Groupe Consultatif	3.13.	Not 100% clear. Does that imply that the calibration will already account for an assumed concentration in office premises and non-residential properties?	Noted. Please see section G of the "blue box" on concentration risk for properties, and also CEIOPS' forthcoming third wave of advice.
71.	Groupe	3.14.	Although we would accept that the recent crisis has demonstrated a	Agree. We share the views

	Consultatif		more significant level level of correlation of asset value falls than might have been suggested by prior research, we do believe that global diversification reduces risk in a manner which should not be discouraged. The point that geographic diversification has no significant effect appears questionable from a German perspective: while property prices obviously contracted in those market where they have boomed in recent years (eg UK, Spain, Netherlands), price development has remained quite stable in Germany. Thus, a Dutch insurer would have had a chance to diversify, which would not be recognized under the proposed approach. However, the materiality of this potential shortcoming should be weighed against the additional complexity a refined approach might demand.	expressed by Groupe Consultatif on materiality as against undue complexity, and note that, as per para 3.14, this effect is hard to capture in the standard formula context.
72.	Groupe Consultatif	3.15.	It seems debatable whether concentration in one single property does not rather constitute a liquidity than an additional market risk	Agree. See revised text.
73.	KPMG ELLP	3.16.	We note that the lack of geographical diversification is captured in the calibration of the property risk sub-module and not in the concentration risk sub-module which only contains a specific provision regarding concentration risk in a single property. We look forward to receiving advice on the calibration of the property shocks in the forthcoming consultation paper on the calibration of the market risk module.	Noted. Please refer to CEIOPS' forthcoming third wave of advice.
74.	uniqa	3.16.	Concentration of property risk or rather its mitigation should not only take into consideration geographical aspects but also property type (commercial, residential et al)	Noted. The approach outlined in CP47 is on a per-exposure basis.
75.	AMICE	3.18.	We agree with the CEA that bank deposits should be excluded from financial entities subject to Basel II.	Please see comment #45

76.	Association of British Insurers	3.18.	(EMPTY)	Noted.
77.	Legal and General Group	3.18.	Bank deposits should not be excluded. The possible exclusion of bank deposits in the calculation could have a considerable impact. For example, in Spain it is a common practice for bancassurers to invest a considerable proportion of their assets in bank deposits. Under normal economic circumstances, and from a risk perspective, a bank deposit is not very different to a bond as it is bearing the same market risk, almost the same credit default risk but has the addition of an illiquidity component. Therefore a bank deposit should be treated as a bond in that deposits do have counterparty risk, with some corrections reflecting the illiquidity differences. Clearly there could be some interaction with financial compensation schemes.	Please see comment #45
78.	UNESPA (Association of Spanish Insurers)	3.18.	All bank deposits from financial entities under Basel II (not only those covered by a government guarantee scheme) should be excluded from the concentration risk sub-module, as these financial entities are also subject to anti-concentration regulation. The application of concentration risk sub-module to bank deposits could induce to higher results than the 99.5% solvency requirement (double-counting of concentration risk), especially when the insurance undertaking invests in shareholder bank deposits. In any case, investing in shareholder bank deposits should be excluded from the concentration risk sub-module. Intra-group cash pooling arrangements should also be excluded from the concentration risk sub-module.	Please see comment #45
79.	Association	3.19.	We agree with this sentiment, which suggests that such a blanket	Noted.

	of British Insurers		exemption may not be appropriate, but recognition of government guarantees should be reflected.	
80.	CEA, ECO-SLV-09-442	3.20.	Clarification is requested. How is cash defined? Does this also include deposits / money market instruments with short-tenors?	Noted. CEIOPS will consider this point in more detail at Level 3.
81.	UNESPA (Association of Spanish Insurers)	3.20.	Clarification is requested How is cash defined? Does this also include deposits / money market instruments with short-tenors?	Noted. Please see revised advice.
82.	Association of British Insurers	3.21.	Geographic and sectoral diversification is a key element in the quantification of risk. An exclusion of these factors will not be in line with the economic principles of Solvency II. However, we do agree with the importance of taking account of risks relating to geographic and more importantly sectoral concentration. This is not addressed later on in the concentration risk module.	Partially agreed. We agree that geographical and sectoral diversification are key elements in the quantification of risk. However, in the standard formula context it is necessary to consider materiality as against excessive complexity. CEIOPS notes that, this effect is hard to capture in the standard formula context. We agree also with Groupe Consultatif's comments (#87) that one might argue that matching domestic liabilities with domestic assets has a risk mitigating effect as well (in case liabilities follow/are based on domestics returns), so that a geographical diversification might even increase overall risk exposure.

83.	CEA, ECO-SLV-09-442	3.21.	Although we do agree that risks relating to geographic and sectoral concentration are an important issue, we also support the view of Ceiops to deal with those within the framework of Pillar 2.	Noted.
84.	Pearl Group Limited	3.21.	Geographic and sectoral diversification is a key element in the quantification of risk An exclusion of these factors will not be in line with the economic principles of Solvency II. However, we do agree with the importance of taking account of risks relating to geographic and more importantly sectoral concentration. This is not addressed later on in the concentration risk module.	Please see comment #82
85.	Association of British Insurers	3.22.	See comments to 3.21.	Please see comment #82
86.	CEA, ECO-SLV-09-442	3.22.	See comments to Para 3.21.	Please see comment #82
87.	Groupe Consultatif	3.22.	In addition, one might argue that matching domestic liabilities with domestic assets has a risk mitigating effect as well (in case liabilities follow/are based on domestics returns), so that a geographical diversification might even increase overall risk exposure.	Agreed. Please see also comment #82.
88.	uniqa	3.22.	We agree with the conclusions made in 3.22 and the following paras. However, these statements seem to contradict the things laid down in connection with the new capital charge on property concentration, which in our view represents a kind of geographical concentration for a specific asset class – i.e. real estate.	Noted. However, CEIOPS does not consider that the advice on property risk represents a contradiction.

89.	Association of British Insurers	3.23.	See comments to 3.21.	Please see comment #82
90.	CEA, ECO-SLV-09-442	3.23.	See comments to Para 3.21.	Please see comment #82
91.	Association of British Insurers	3.24.	See comments to 3.21.	Please see comment #82
92.	CEA, ECO-SLV-09-442	3.24.	See comments to Para 3.21.	Please see comment #82
93.	Groupe Consultatif	3.24.	In particular when taking practicability and materiality issues into account, the proposal not to introduce any additional formula to quantify geographical or sectoral concentration shall be accepted.	Noted.
94.	KPMG ELLP	3.24.	We note that the present advice does not contain any formula to quantify capital requirements regarding geographical and sectoral concentrations of financial investments and it is expected that these risks shall be primarily considered as part of Pillar 2 activities and via internal models to ensure that the SCR appropriately reflects the risk profile of each undertaking.	Agreed. Please see comment #82
95.	CEA, ECO-SLV-09-442	4.	It is important that the structure of the market risk module is simple and easy to apply for all companies.	Agreed.
96.	UNESPA (Association of Spanish	4.	(EMPTY)	Noted

	Insurers)			
97.	FERMA (Federation of European Risk Management Asso	4.3.	Interest rate risk: The interest rate risk scenarios do not affect the SCR for captives to a greater extent. For many captives only the liabilities are subject to the interest risk scenario since the assets are mostly short term.	Noted. Please see also CEIOPS' forthcoming draft advice on the treatment of captives.
98.	AMICE	4.4.	We agree with the CEA that the volatility of interest rates should be captured by the standard formula.	Noted.
99.	CEA, ECO-SLV-09-442	4.4.	Ceiops will need to ensure that when allowing for the inclusion of consideration of interest rate volatility in the interest rate risk sub-module that the total capital requirements for interest rate risk remain appropriate. From the feedback received under QIS4 it appeared that the capital requirements for interest rate risk were in line with the required 1 in 200 yr event. Thus, as the shock levels of the QIS4-approach were considered appropriate we would be concerned if the explicit consideration of interest rate volatility would result in higher capital requirements.	Please see comment #45
100.	ECIROA	4.4.	The interest rate risk scenarios do not affect the SCR for captives to a greater extend. For many captives only the liabilities are subject to the interest risk scenario since the assets are mostly short term.	Noted. Please see also CEIOPS' forthcoming draft advice on the treatment of captives.
101.	FERMA (Federation of European Risk Management Asso	4.4.	Currency risk: Only very few captives have any assets sensitive to changes in currency exchange rates. On the liability side, premiums and claims for individual risks are usually denominated in the same currency	Noted. Please see also CEIOPS' forthcoming draft advice on the treatment of captives.
102.	German	4.4.	(EMPTY)	Noted.

	Insurance Association – Gesamtverband der D			
103.	UNESPA (Association of Spanish Insurers)	4.4.	The inclusion of a volatility shock will require CEIOPS to reduce the original shocks for interest rate risk so that the total capital requirement for interest rate risk remains appropriate Although we do recognise that interest rate volatility plays an important role, we hold the view that it was already implicitly included in the QIS4 approach. Furthermore, from the feedback received under QIS4 it appeared that the capital requirement for interest rate risk was in line with the required 1 in 200 event. Thus, as the shock levels of the QIS4-approach are considered appropriate, the explicit consideration of interest rate volatility would need to involve a reduction of the shock levels calibrated in QIS4 so as to prevent double-counting.	Please see comment #45
104.	CEA, ECO-SLV-09-442	4.5.	Ceiops mentions that no changes would be made to the module/sub-module structure and instead effort would be focused on refining the design of the sub-modules. We request clarification from Ceiops as to the difference is between the structure and the design of a sub-module.	Noted. Structure refers to the number, labelling and arrangement of sub-modules within a module. Design refers to the format of the stress (e.g. scenario vs factor, what is included/excluded) within the sub-module.
105.	FFSA	4.5.	CEIOPS mentions that no changes would be made to the module/sub-module structure and instead effort would be focused on refining the design of the sub-modules. FFSA asks what the difference is between the structure and the design of a sub-module.	Please see comment #104.

			Can CEIOPS disclose on this issue?	
106.	Institut des actuaries (France)	4.5.	It's written that no changes will be made to the module/sub-module structure and instead effort will be focused on refining the design of the sub-modules. We would get some adding information about the difference between the structure and the design of a sub-module.	Please see comment #104
107.	KPMG ELLP	4.5.	We agree with the proposal that with the exception of interest rate volatility, no changes be made to the module/sub-module structure and instead focus effort on refining the design of the sub-modules and later re-assessing the calibration of the modules.	Noted.
108.	ROAM –	4.5.	CEIOPS mentions that no changes would be made to the module/sub-module structure and instead effort would be focused on refining the design of the sub-modules. ROAM asks what the difference is between the structure and the design of a sub-module. Can CEIOPS clarify this issue?	Please see comment #104
109.	AAS BALTA	4.6.	Delay in offering proposals for liquidity risk is surprising given that it was at the epicentre of the current financial crisis.	Noted. Liquidity risk is not treated explicitly in the standard formula SCR.
110.	AB Lietuvos draudimas	4.6.	Delay in offering proposals for liquidity risk is surprising given that it was at the epicentre of the current financial crisis.	Please see comment #109
111.	CEA, ECO-SLV-09-442	4.6.	We agree that liquidity risk is most appropriately addressed in Pillars 2 and 3.	Please see comment #109
112.	Codan Forsikring	4.6.	Delay in offering proposals for liquidity risk is surprising given that it was at the epicentre of the current financial crisis.	Please see comment #109

	(Branch Norway) (991 502 491) NOR			
113.	Codan Forsikring A/S (10529638) DENMARK	4.6.	Delay in offering proposals for liquidity risk is surprising given that it was at the epicentre of the current financial crisis.	Please see comment #109
114.	FERMA (Federation of European Risk Management Asso	4.6.	Property risk: Captives usually have a minimal number of assets (offices) susceptible changes in value of property.	Noted. Please see also CEIOPS' forthcoming draft advice on the treatment of captives.
115.	Institut des actuaries (France)	4.6.	CEIOPS has finally decided to not create a sub module dedicated to the liquidity risk as far as this risk should be better captured in Pillars 2 & 3	Please see comment #109
116.	KPMG ELLP	4.6.	We agree that liquidity risk would be difficult to capture through the standard formula approach and is better captured in Pillars 2 and 3.	Please see comment #109
117.	Link4 Towarzystwo Ubezpieczeń SA	4.6.	Delay in offering proposals for liquidity risk is surprising given that it was at the epicentre of the current financial crisis.	Please see comment #109
118.	RSA Insurance Group PLC	4.6.	Delay in offering proposals for liquidity risk is surprising given that it was at the epicentre of the current financial crisis.	Please see comment #109
119.	RSA	4.6.	Delay in offering proposals for liquidity risk is surprising given that	Please see comment #109

	Insurance Ireland Ltd		it was at the epicentre of the current financial crisis.	
120.	RSA - Sun Insurance Office Ltd.	4.6.	Delay in offering proposals for liquidity risk is surprising given that it was at the epicentre of the current financial crisis.	Please see comment #109
121.	SWEDEN: Trygg-Hansa Försäkrings AB (516401-7799)	4.6.	Delay in offering proposals for liquidity risk is surprising given that it was at the epicentre of the current financial crisis.	Please see comment #109
122.	UNESPA (Association of Spanish Insurers)	4.6.	(EMPTY)	Noted.
123.	CEA, ECO-SLV-09-442	4.7.	We support the Delta-NAV approach. It is important to ensure that the effect of asset liability matching is recognised via reduced capital requirements. This is in line with the aim of Solvency II to appropriately reflect good risk management practices.	Noted.
124.	FERMA (Federation of European Risk Management Asso	4.7.	Concentration risk: Substantial loadings apply to assets in the balance sheet. Ferma believes that the captive business model does not require such loading. Captives should be exempted from the market concentration risk module on assets provided that they use custodians or issuers that are at least A rated or equivalent. Captives usually only have 3 to 4 banks. They are therefore penalized by the method of calculation, particularly if the threshold is further reduced. The Concentration becomes the major	Noted. Please see also CEIOPS' forthcoming draft advice on the treatment of captives

			contributor from the Market risk to the overall SCR. Another issue is that most captives use intergroup pooling arrangements managed centrally by the Group treasury department. This department then diversifies investments and counterparties. This should be accounted for globally for evaluation of the concentration risk.	
125.	Groupe Consultatif	4.7.	We believe it important to note at this point that conceptually 'liabilities' in this context is intended to mean the best estimate as made by a third party (i.e. the amount which would be required for a transfer of obligations exclusive of any risk margin element). This is different from accounting liabilities / technical provisions. Thus for example if a third party would allow for an illiquidity premium in pricing, such a premium may be reflected in the delta-NAV calculation.	Agree. Specifically, liabilities mean the technical provisions, excluding the risk margin, under Solvency 2. See also para 4.10
126.	KPMG ELLP	4.7.	We agree with this point.	Noted.
127.	UNESPA (Association of Spanish Insurers)	4.7.	We support the Delta-NAV approach It is important to ensure that the effect of asset liability matching is recognised via reduced capital requirements. This is in line with the aim of Solvency II to appropriately reflect good risk management practices.	Noted.
128.	CEA, ECO-SLV-09-442	4.8.	See comments to Para 4.7.	Please see comment #123
129.	KPMG ELLP	4.8.	We agree with this point.	Noted.
130.	CEA, ECO-SLV-	4.9.	See comments to Para 4.7.	Please see comment #123

	09-442			
131.	KPMG ELLP	4.9.	We agree with this point.	Noted.
132.	Lucida plc	4.9.	It is not clear why only adverse changes should be allowed for – it would be more consistent to allow for any expected changes. This also applies to 4.12	Not agreed. This formulation is designed for consistency with the life underwriting risk module.
133.	PricewaterhouseCoopers LLP	4.9.	It would be helpful to clarify that "option take-up behaviour" includes the option to discontinue a policy. This comment also applies to paragraph 4.12.	Agree. Please see revised text.
134.	Association of British Insurers	4.10.	We agree with CEIOPS that the change in net asset value approach shall be based on a balance sheet that does not include the risk margin (to avoid circularity). Deferred taxes are a fundamental part of a balance sheet. Therefore, when comparing the pre and post stressed balance sheet (or net value asset value), should the impact on deferred taxes be taken into account?	Noted. The treatment of deferred taxes in the standard formula SCR for market risk should be consistent with the assumptions for deferred taxes in calculation of the technical provisions.
135.			Confidential comment deleted	
136.	CEA, ECO-SLV-09-442	4.10.	We support the proposal to calculate the Delta-NAV using a balance sheet that does not include the risk margin. From a practical perspective this is the most appropriate solution. See also comments to Para 4.7.	Noted.
137.	CRO FORUM	4.10.	The CRO forum agrees with an approach based on a balance sheet that does not include a risk margin for technical provisions.	Noted.
138.	FFSA	4.10.		Noted.
139.	German	4.10.	We support the proposal to calculate the Delta-NAV using a balance	Noted.

	Insurance Association – Gesamtverband der D		sheet that does not include the risk margin From a practical perspective this is the most appropriate solution. We support the Delta-NAV approach It is important to ensure that the effect of asset liability matching is recognised via reduced capital requirements. This is in line with the aim of Solvency II to appropriately reflect good risk management practices.	
140.	KPMG ELLP	4.10.	We agree with this point.	Noted.
141.	Lloyd's	4.10.	We agree	Noted
142.	Pearl Group Limited	4.10.	We agree with CEIOPS that the change in net asset value approach shall be based on a balance sheet that does not include the risk margin (to avoid circularity). Deferred taxes are a fundamental part of a balance sheet. Therefore, when comparing the pre and post stressed balance sheet (or net value asset value), should the impact on deferred taxes be taken into account?	Please see comment #134
143.	ROAM –	4.10.	(EMPTY)	Noted.
144.	UNESPA (Association of Spanish Insurers)	4.10.	We support the proposal to calculate the "delta-NAV" using a balance sheet that does not include the risk margin From a practical perspective this is the most appropriate solution. See also comments to Para 4.7.	Noted.
145.			Confidential comment deleted	

146.	CEA, ECO-SLV-09-442	4.11.	See comments to Para 4.7 The words "interest rate" should be removed from the first sentence, as the delta-NAV approach should also allow for other hedging instruments. This is then consistent with paragraph 4.8.	Please see comment #145
147.	CRO FORUM	4.11.	The words "interest rate" should be removed from the first sentence, as the delta-NAV approach should also allow for other hedging instruments. This is then consistent with paragraph 4.8.	Please see comment #145
148.	German Insurance Association – Gesamtverband der D	4.11.	See comments to Para 4.10 The words "interest rate" should be removed from the first sentence, as the delta-NAV approach should also allow for other hedging instruments. This is then consistent with paragraph 4.8.	Please see comment #145
149.	KPMG ELLP	4.11.	The delta-NAV approach is also applied to the currency risk stress and therefore we would expect that the impact of currency hedging instruments should also be allowed for as part of the scenarios and in line with the advice in 4.8.	Please see comment #145
150.	Lloyd's	4.11.	We agree	Noted
151.	Munich RE	4.11.	The words "interest rate" should be removed from the first sentence, as the delta-NAV approach should also allow for other hedging instruments. This is then consistent with paragraph 4.8.	Please see comment #145
152.	PricewaterhouseCoopers LLP	4.11.	This paragraph refers specifically to the impact of interest rate hedging instruments. Does it apply equally to other instruments hedging other market risks, for example equity futures or options?	Please see comment #145
153.	AMICE	4.12.	We agree that the revaluation of technical provisions should allow for any relevant adverse changes in option take-up behavior of	Partially agree. Option take-up behaviour is stressed in the life

			policyholders However we believe that this risk is already covered in another module.	underwriting module. Nonetheless, it is important that the revaluation of technical provisions is consistent with the scenario being tested. Please see also comment #10
154.	Association of British Insurers	4.12.	We can understand the purpose of CEIOPS' proposal, as it may capture non-linearity effects, which would otherwise be missed by the correlation matrix approach. However, we believe that there is a significant risk of double counting and in may cause an excessive administrative burden on firms. In particular the proposal appears to be based on assumption of "rational policyholder behaviour", but the statistical data to evidence such behaviour may be scant. Existing data will usually combine both "rational" and "irrational" policyholder behaviour. So for the standard formula it may be necessary to remove this explicit requirement and adjust the other calibrations. For example the life lapse risk module calibration would be lowered to cover only "irrational lapses" while the remaining "rational lapses" in response to market events are the assumptions covered under the market risk module.	Please see comment #10
155.			Confidential comment deleted	
156.	CEA, ECO-SLV-09-442	4.12.	When requiring the revaluation of technical provisions to allow for any relevant changes in policyholder option take-up behaviour there are two risks that need to be addressed: ☐ Double-counting of lapse risk The Solvency II framework deals with the issue of dependencies between risks by means of the correlation matrix and therefore the	Please see comment #10

			proposed dependency between lapse risk and each market risk stress is not consistent and will result in double counting with the Life lapse risk module. The calibration of the lapse sub-module in the life underwriting risk module will need to be adjusted to remove any double-counting. ☐ Excessive administrative burdens Furthermore, this additional requirement to include policyholder behaviour will increase the administrative burdens for insurers and is likely to be especially difficult for SME's. Application of the principle of proportionality would be very important.	
157.	CRO FORUM	4.12.	The CRO forum agrees with stress testing which allows for adverse policyholder behaviour, although it is not clear if the calibration of this should be done by CEIOPS or the undertaking.	Noted. The calibration should be carried out by the undertaking.
158.	German Insurance Association – Gesamtverband der D	4.12.	When requiring the revaluation of technical provisions to allow for any relevant changes in policyholder option take-up behaviour there are two risks that need to be addressed: ☐ Double-counting of lapse risk The Solvency II framework deals with the issue of dependencies between risks by means of the correlation matrix and therefore the proposed dependency between lapse risk and each market risk stress is not consistent and will result in double counting with the Life lapse risk module. The calibration of the lapse sub-module in the life underwriting risk module will need to be adjusted to remove any double-counting. ☐ Excessive administrative burdens Furthermore, this additional requirement to include policyholder behaviour will increase the administrative burdens for	Please see comment #10

			insurers and is likely to be especially difficult for SME's. Application of the principle of proportionality would be very important.	
159.	Groupe Consultatif	4.12.	The advice should acknowledge that the technical provisions are to be reduced by the effect of any illiquidity premium.	Not agreed. The calculation of technical provisions is outside the scope of CP47
160.	KPMG ELLP	4.12.	We agree with this point.	Noted.
161.	Legal and General Group	4.12.	We are concerned that a requirement to allow for adverse changes in policyholder option take-up behaviour in each market risk scenario would lead to: ☐ Double-counting of lapse risk The Solvency II framework deals with the issue of dependencies between risks by means of the correlation matrix and therefore the proposed dependency between lapse risk and each market risk stress is not consistent and will result in double counting with the Life lapse risk module. We would request that either this requirement is removed, or the life lapse risk module calibration is lowered as it covers only "irrational lapses" while the remaining "rational lapses" in response to market events are assumed covered under the market risk module. ☐ Excessive administrative burdens Furthermore, this additional requirement to include policyholder behaviour will increase the administrative burdens for insurers and is likely to be especially difficult for SME's. We would request that if	Please see comment #10

			this requirement is retained then additional text is added: "...subject to the principle of proportionality."	
162.	Lloyd's	4.12.	We agree	Noted.
163.	Pearl Group Limited	4.12.	We can understand the purpose of CEIOPS' proposal, as it may capture non-linearity effects, which would otherwise be missed by the correlation matrix approach. However, we believe that there is a significant risk of double counting and in may cause an excessive administrative burden on firms. In particular the proposal appears to be based on assumption of "rational policyholder behaviour", but the statistical data to evidence such behaviour may be scant. Existing data will usually combine both "rational" and "irrational" policyholder behaviour. So for the standard formula it may be necessary to remove this explicit requirement and adjust the other calibrations. For example the life lapse risk module calibration would be lowered to cover only "irrational lapses" while the remaining "rational lapses" in response to market events are the assumptions covered under the market risk module.	Please see comment #154
164.	UNESPA (Association of Spanish Insurers)	4.12.	We agree in general that the revaluation of technical provisions should allow for any relevant changes in policyholder option take-up behaviour. However, there are two risks that need to be addressed: ☐ Double-counting of lapse risk The Solvency II framework deals with the issue of dependencies between risks by means of the correlation matrix and therefore the	Please see comment #10

			proposed dependency between lapse risk and each market risk stress is not consistent and will result in double counting with the Life lapse risk module. ☐ Excessive administrative burdens Furthermore, this additional requirement to include policyholder behaviour will increase the administrative burdens for insurers and is likely to be especially difficult for SME's. Application of the principle of proportionality would be very important.	
165.	CEA, ECO-SLV-09-442	4.13.	We request clarification as to the treatment of interest rate risk. The shock calculation methodology is not clearly defined and is it difficult to analyse how the slope of the curve, the interest rate volatility and the correlation between the different points of the curves is going to be included in the shock calculation. ☐ We request clarification as to the treatment of interest rate risk.	Noted. Please see CEIOPS' forthcoming third wave of advice, which will include calibration of this module.
166.	Lloyd's	4.13.	There appears to be no distinction between the nominal and the real term structure of interest rates. The paragraph also does not address how any simultaneous changes in nominal and real interest rates can affect implicit expectations of future inflation. Similarly, there appears to be no reference to changes in foreign term structures. Is it intended that an entity would apply the same shocks to domestic interest rates and any foreign interest rates where it has	Agree. The advice now clarifies that the approach applies to both real and nominal term structures.

			exposure?	
167.	UNESPA (Association of Spanish Insurers)	4.13.	We request clarification as to the treatment of interest rate risk The shock calculation methodology is not clearly defined and is it difficult to analyse how the slope of the curve, the interest rate volatility and the correlation between the different points of the curves is going to be included in the shock calculation. - We request clarification as to the treatment of interest rate risk.	Noted. The calculation methodology will be covered in CEIOPS' third wave of advice.
168.			Confidential comment deleted	
169.	CEA, ECO-SLV-09-442	4.14.	We would recommend a clearer clarification of the assets to be included in the module. For example, are other types of derivatives included in addition to interest rate derivatives? Are funds and mortgages included as these are also interest rate sensitive?	Agreed. This paragraph has been clarified in the draft advice. However, the intention is not to provide a complete list of instruments.
170.	CRO FORUM	4.14.	This list of interest rate sensitive instruments is not complete. For example, investment funds and mortgages are also interest rate sensitive. At any rate, this paragraph is unnecessary, as 4.13 give a more generic scope.	Please see comment #169
171.	Lloyd's	4.14.	Why are "insurance liabilities" included in the list of assets sensitive to interest-rate movements? If this relates to the present value of future profits, it should be made clear.	Agreed. Insurance liabilities are not assets. Please also see comment #169
172.	PricewaterhouseCoopers	4.14.	We suggest that this paragraph should read "Assets and liabilities sensitive to interest rate movements…" Otherwise, it would be	Please see comment #171

	LLP		useful to clarify why "insurance liabilities" are included in a list of assets sensitive to interest rate movements.	
173.	UNESPA (Association of Spanish Insurers)	4.14.	We would recommend a clearer clarification of the assets to be included in the module	Please see comment #169
174.	CEA, ECO-SLV-09-442	4.15.	We agree	Noted
175.	Lloyd's	4.15.	The wording of this paragraph can be improved. It is not the cash-flows but their present value that is sensitive to changes in the discount rate.	Agree. This paragraph has been amended in the draft advice.
176.	PricewaterhouseCoopers LLP	4.15.	We suggest that it is the present value of future liability cash flows, rather than the cash flows themselves, that is sensitive to changes in the discount rate.	Please see comment #175
177.	CEA, ECO-SLV-09-442	4.16.	We agree	Noted
178.	CEA, ECO-SLV-09-442	4.17.	See comments to Para 4.7	Please see comment #123
179.	KPMG ELLP	4.17.	We agree that the delta-NAV approach should be retained in order to capture interest rate risk.	Noted
180.	UNESPA (Association of Spanish Insurers)	4.17.	See comments to Para 4.7	Please see comment #127

181.	DIMA (Dublin International Insurance & Management	4.19.	It is noted that the upper and lower level of interest rates to be used are not indicated.	Noted. Please refer to CEIOPS' forthcoming consultation paper on calibration of the market risk module.
182.	XL Capital Ltd	4.19.	The methodology is based on two pre-defined scenarios, one upward shock scenario and one downward shock scenario. It is not clear as to how deep in the tail the pre-defined scenarios are (or should be). In other words, the solvency standard of these scenarios in a full distribution context is not known. The capital output will be directly related to how the scenarios are pre-defined, and hence the underlying solvency standard which relates to the capital number will not be known under this approach. We also note our comments on section 4.78 of potential inconsistency between the interest rate scenarios and the credit spread scenarios. It needs to be recognized that this calculation is for the standard formula which would be applied across the industry and hence should be relatively simple and straightforward. However, the trade-off between simplicity and accuracy needs to be understood.	Noted. Please refer to CEIOPS' forthcoming consultation paper on calibration of the market risk module. The calibration will be carried out at the 99.5% VaR standard required by the Level 1 text. Please see comment #463 Noted
183.	Association of British Insurers	4.20.	The inclusion of a volatility shock will require CEIOPS to reduce the original shocks for interest rate risk, so that the total capital requirement for interest rate risk is appropriate From the feedback received under QIS4 it appeared that the capital requirement for interest rate risk was in line with the required 1 in 200 event. The inclusion of a stress in the interest rate volatility should not lead to a higher capital charge than a 1 in 200 yr event and so should be appropriately factored into the calibrations. ☐ In the consultation paper issued in the 3rd wave on the	Please see comment #24 Noted. Please see the forthcoming CEIOPS consultation papers on calibration

			calibration of the market risk module, we request that CEIOPS adjusts the calibration that was used in QIS4 for interest rate upward and downward shocks to ensure that when combined with a volatility shock, the capital requirement remains in line with the 1 in 200 yr requirement. It is not clear how CEIOPS will cover changes in the curvature and slope As the calibration of the shocks is not yet included in this CP, it is hard to tell whether the up and downward shock are sufficient to cover interest rate risk and, in particular, it is not clear how CEIOPS will cover changes in the curvature and slope (i.e. non-parallel moves). It might make sense to have multiple shocks next to the up and down shocks to cover these aspects. We also believe volatility should be handled in a separate shock.	
184.	CEA, ECO-SLV-09-442	4.20.	Ceiops will need to ensure that when allowing for the inclusion of consideration of interest rate volatility in the interest rate risk sub-module that the total capital requirements for interest rate risk remain appropriate. From the feedback received under QIS4 it appeared that the capital requirements for interest rate risk were in line with the required 1 in 200 yr event. Thus, as the shock levels of the QIS4-approach were considered appropriate we would be concerned if the explicit consideration of interest rate volatility would result in higher capital requirements. ☐ In the consultation paper issued in the 3rd wave on the calibration of the market risk module, we request that Ceiops presents a detailed method for the calibration of the interest rate upward and downward shocks to ensure that when combined with a volatility shock, the capital requirements remains in line with the 1 in 200 yr requirement.	Please see comment #183

			It is not clear how Ceiops will cover changes in the curvature and slope. As the calibration of the shocks is not yet included in this CP, it is hard to tell whether the up and downward shocks are sufficient to cover interest rate risk and, in particular, it is not clear how Ceiops will cover changes in the curvature and slope (i.e. non-parallel moves).We request more information as to how interest rate risk will be calibrated before commenting on this issue.	
185.	Legal and General Group	4.20.	The inclusion of a volatility shock will require CEIOPS to reduce the original shocks for interest rate risk, so that the total capital requirement for interest rate risk is appropriate. From the feedback received under QIS4 it appeared that the capital requirement for interest rate risk was in line with the required 1 in 200 event. The inclusion of a stress in the interest rate volatility should not lead to a higher capital charge than a 1 in 200 yr event and so should be appropriately factored into the calibrations. ☐ In the consultation paper issued in the 3rd wave on the calibration of the market risk module, we request that CEIOPS adjusts the calibration that was used in QIS4 for interest rate upward and downward shocks to ensure that when combined with a volatility shock, the capital requirement remains in line with the 1 in 200 yr requirement. It is not clear how CEIOPS will cover changes in the curvature and slope	Please see comment #183

			As the calibration of the shocks is not yet included in this CP, it is hard to tell whether the up and downward shock are sufficient to cover interest rate risk and, in particular, it is not clear how CEIOPS will cover changes in the curvature and slope (i.e. non-parallel moves). It might make sense to have multiple shocks next to the up and down shocks to cover these aspects. We also believe volatility should be handled in a separate shock.	
186.	Lucida plc	4.20.	We welcome the approach outlined. However, whereas the valuation of assets and liabilities with regard to interest rate term structures is relatively straightforward, there are a number of different approaches that could be taken to value assets and liabilities with regard to interest rate volatilities. In order to maintain consistency, perhaps it would be advisable to provide, say, a closed-form solution approach that would be deemed acceptable. This also applies to 4.28	Noted. Methodologies and simplifications for calculating scenario-based capital requirements are outside the scope of CP47
187.	Pearl Group Limited	4.20.	The inclusion of a volatility shock will require CEIOPS to reduce the original shocks for interest rate risk, so that the total capital requirement for interest rate risk is appropriate From the feedback received under QIS4 it appeared that the capital requirement for interest rate risk was in line with the required 1 in 200 event. The inclusion of a stress in the interest rate volatility should not lead to a higher capital charge than a 1 in 200 yr event and so should be appropriately factored into the calibrations. In the consultation paper issued in the 3rd wave on the calibration of the market risk module, we request that CEIOPS adjusts the	Please see comment #183

			calibration that was used in QIS4 for interest rate upward and downward shocks to ensure that when combined with a volatility shock, the capital requirement remains in line with the 1 in 200 yr requirement and that these calibrations are reviewed after QIS 5 results have been reviewed. It is not clear how CEIOPS will cover changes in the curvature and slope As the calibration of the shocks is not yet included in this CP, it is hard to tell whether the up and downward shock are sufficient to cover interest rate risk and, in particular, it is not clear how CEIOPS will cover changes in the curvature and slope (i.e. non-parallel moves). It might make sense to have multiple shocks next to the up and down shocks to cover these aspects. We also believe volatility should be handled in a separate shock.	
188.	UNESPA (Association of Spanish Insurers)	4.20.	The inclusion of a volatility shock will require CEIOPS to reduce the original shocks for interest rate risk so that the total capital requirement for interest rate risk remains appropriate Although we do recognise that interest rate volatility plays an important role, we hold the view that it was already implicitly included in the QIS4 approach. Furthermore, from the feedback received under QIS4 it appeared that the capital requirement for interest rate risk was in line with the required 1 in 200 event. Thus, as the shock levels of the QIS4-approach are considered appropriate, the explicit consideration of interest rate volatility would need to involve a reduction of the shock levels calibrated in QIS4 so as to prevent double-counting. ☐ In the consultation paper issued in the 3rd wave on the calibration of the market risk module, we request that CEIOPS	Please see comment #183

			presents a detailed method for the calibration of the interest rate upward and downward shocks to ensure that when combined with a volatility shock, the capital requirement remains in line with the 1 in 200 yr requirement. It is not clear how CEIOPS will cover changes in the curvature and slope As the calibration of the shocks is not yet included in this CP, it is hard to tell whether the up and downward shocks are sufficient to cover interest rate risk and, in particular, it is not clear how CEIOPS will cover changes in the curvature and slope (i.e. non-parallel moves).We request more information as to how interest rate risk will be calibrated before commenting on this issue.	
189.	Groupe Consultatif	4.21.	The financial crisis told that mere parallel shifts in the level of interest rates do not capture the entire risk sufficiently, and that the shape of the curve and changes in volatility must be considered as well. However, it remains to be seen whether all these effects can be wrapped in just two shocks to be applied.	Noted. Please refer to the paper on calibration of market risk CEIOPS' third wave of consultation papers.
190.	Institut des actuaries (France)	4.21.	How to determine only two scenarios (upward and downward shock to be applied at each maturity) using a multi-factor approach (shift factor, slope factor and curvature factor) cf. section "general comment" in introduction?	Noted. Please refer to the paper on calibration of market risk CEIOPS' third wave of consultation papers.
191.	Legal and General Group	4.21.	We would request that CEIOPS does not attempt to combine several factors into one upward and one downward stress.	Noted. Please refer to the paper on calibration of market risk CEIOPS' third wave of

			The proposal to combine several factors (shape, slope and curvature) into one shock scenario implicitly assumes that these factors are perfectly correlated. This is unlikely to be a reasonable assumption. Indeed it is difficult to see how all these factors can be included in one scenario unless it is calibrated very prudently, which we would discourage. We request that CEIOPS sets out shocks to the separate factors of the interest rate risk individually, rather than attempting to combine them into one upward and one downward stress.	consultation papers.
192.	Pearl Group Limited	4.21.	We would request that CEIOPS does not attempt to combine several factors into one upward and one downward stress. The proposal to combine several factors (shape, slope and curvature) into one shock scenario implicitly assumes that these factors are perfectly correlated. This is unlikely to be a reasonable assumption. Indeed it is difficult to see how all these factors can be included in one scenario unless it is calibrated very prudently, which we would discourage.	Please see comment #191
193.	Association of British Insurers	4.22.	A decomposition of the shocks to ensure assumptions underlying the calibration are transparent would make sense, but there is no guidance yet on how this will be incorporated. See also comments to Para 4.20.	Noted. Please refer to the paper on calibration of market risk CEIOPS' third wave of consultation papers.
194.	CEA, ECO-SLV-09-442	4.22.	Information on the decomposition of the shocks to ensure assumptions underlying the calibration are transparent would make sense.	Please see comment #193

195.	Groupe Consultatif	4.22.	A decomposition of the effects will be very useful, though again, difficult to see how that can be achieved without having multiple shock factors.	Please see comment #193
196.	KPMG ELLP	4.22.	We look forward to more information on the decomposition of the shocks that will make up the altered term structures which will capture the changes in the level, slope and curvature of the term structure.	Please see comment #193
197.	Legal and General Group	4.22.	A decomposition of the shocks to ensure assumptions underlying the calibration are transparent would make sense, but there is no guidance yet on how this will be incorporated. See also comments in sections 4.20 and 4.21.	Please see comment #193
198.	Pearl Group Limited	4.22.	A decomposition of the shocks to ensure assumptions underlying the calibration are transparent would make sense, but there is no guidance yet on how this will be incorporated. See also comments to Para 4.20 and 4.21.	Please see comment #193
199.	UNESPA (Association of Spanish Insurers)	4.22.	Information on the decomposition of the shocks to ensure assumptions underlying the calibration are transparent would make sense.	Please see comment #193
200.	CEA, ECO-SLV-09-442	4.23.	We would request clarification as to how Ceiops proposes to combine the interest rate volatility stress with the current upward and downward interest rate term structure stresses.	Noted. Please refer to the paper on calibration of market risk CEIOPS' third wave of consultation papers.
201.	FFSA	4.23.	CEIOPS mentions that specific alterations would be made to the structure of the interest rate structure, as regards to the volatility. FFSA requires some clarifications about the integration of specified alterations to interest rate volatility in the calibration process. Is	Noted. Please refer to the paper on calibration of market risk CEIOPS' third wave of consultation papers.

			the approach based on a stochastic volatility model? Is the volatility considered as a risk factor like shift, slope and curvature factors? Is it an implied or an historical volatility?	
202.	Groupe Consultatif	4.23.	We would like to get some clarifications about the integration of specified alterations to interest rate volatility in the calibration process. IS the approach based on a stochastic volatility model? Is the volatility considered as a risk factor like shift, slope and curvature factors? Is it an implied or an historical volatility?	Please see comment #201
203.	Institut des actuaries (France)	4.23.	We would like to get some clarifications about the integration of specified alterations to interest rate volatility in the calibration process. Does the approach is based on a stochastic volatility model? Is the volatility considered as a risk factor like shift, slope and curvature factors? Is it an implied or an historical volatility?	Please see comment #201
204.	ROAM –	4.23.	CEIOPS mentions that specific alterations would be made to the interest rate structure, as regards to the volatility. ROAM requires some clarifications about the integration of specified alterations to interest rate volatility in the calibration process. Is the approach based on a stochastic volatility model? Is the volatility considered as a risk factor like shift, slope and curvature factors? Is it an implied or an historical volatility?	Please see comment #201
205.	UNESPA (Association of Spanish Insurers)	4.23.	We would request clarification as to how CEIOPS proposes to combine the interest rate volatility stress with the current upward and downward interest rate term structure stresses	Please see comment #201
206.	CEA, ECO-SLV-09-442	4.24.	See comments Para 4.20.	Please see comment #184

207.	PricewaterhouseCoopers LLP	4.24.	We query why it is proposed to stress the volatility of interest rates but not of other asset classes. In addition, we note that the intention to stress the volatility of interest rates (or of other asset classes) could have onerous practical implications for firms with a material level of embedded guarantees in their business, due to the resulting requirement to recalibrate their stochastic model. We suggest that volatility stresses are fully tested in QIS5 to investigate whether the resulting capital requirements are significant enough to justify the extra work involved in their calculation.	Noted. The approach proposed in CP47 aims to balance sufficient risk sensitivity against avoiding excessive complexity in the standard formula context. Please also see CEIOPS' consultation paper in the third wave on market risk calibration. Noted
208.	UNESPA (Association of Spanish Insurers)	4.24.	See comments Para 4.20	Please see comment #188
209.	CEA, ECO-SLV-09-442	4.25.	See comments Para 4.20.	Please see comment #184
210.	KPMG ELLP	4.25.	We look forward to receiving advice on the calibration of the upward and downward interest rate stresses in the forthcoming consultation paper on the calibration of the market risk module.	Noted. Please refer to the paper on calibration of market risk CEIOPS' third wave of consultation papers.
211.	PricewaterhouseCoopers LLP	4.25.	While developing the calibration of the interest rate stresses, it would be useful to consider how an insurer should treat exposure to foreign interest rates. We suggest that the appropriate stresses for yield curves in different currencies should be derived consistently but should not necessarily be the same. Consideration should also	Please refer to comment #166

			be given to the materiality of the exposure to foreign interest rates. In addition, we query whether the calibration will make any distinction between the nominal and the real term structures of interest rates.	
212.	UNESPA (Association of Spanish Insurers)	4.25.	See comments Para 4.20	Please see comment #188
213.	Lloyd's	4.26.	We agree	Noted
214.	ROAM –	4.26.	Concerning the valuation of the assets, we consider that further investigation is necessary for the different types of bonds, specially the treatment of floating rate notes: -Inflation linked bonds: future standard index ratios to be used or methodology for calculation -Cms linked bonds: forward curve to be used -Callable bonds should be treated individually, depending on the potential coupon if the call right is not executed. Treatment of these bonds is important in order to add their principal redemption on time. -Equity linked bonds: its treatment should be clarified in order to know if future coupon payments can be considered. -Funds investing in cash market /risk-free market and low-volatility funds should be considered as fixed coupon investments.	Noted. Valuation methods are outside the scope of CP47 – please refer instead to CP35.
215.	ACA – ASSOCIATION DES	4.27.	4.27-4.29 The interest rate risk cannot be reduced to an upward and a	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave.

	COMPAGNIES D'ASSURANCES DU		downward shock. "Curvature shocks" have to be added to analyze in more detail changes in curvature. This would not demand a big effort to companies but would considerably improve risk measurement.	
216.	CEA, ECO-SLV-09-442	4.27.	We request clarification as to how Ceiops proposes to apply the upward and downward shocks to interest rates. It is difficult to comment on this section without knowing the details of how the shocks are expected to apply. For example, will the relative changes of the interest rate curve be independent of the current level of interest rates? Or will an approach along the lines of QIS4 be applied? Presumably the most onerous shocks tend to differ between different insurance group members. We suggest that it would be appropriate to add the upward and the downward shocks of the insurance group members and decide upon the most onerous shock given the sum of upward shocks and downward shocks, rather than adding up the most onerous shocks of individual insurance group members.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave. Noted. Please see CP60 for details on the group SCR treatment
217.	FAIDER (Fédération des Associations Indépendantes	4.27.	It must be determined what is an upwards or downwards shock, since changes in the shape of the yield curve will have to be taken into account. It is possible that a shock will result in lower short term rates and higher long term rates. How will then this scenario be called ? Would it not be better to have several scenarios corresponding to the four main types of evolution of the yield curve?	Noted. This will be covered in more detail in CEIOPS' forthcoming consultation paper on calibration of the market risk module.
218.			Confidential comment deleted	
219.	German	4.27.	We request clarification as to how CEIOPS proposes to apply the	Please see comment #216

	Insurance Association – Gesamtverband der D		upward and downward shocks to interest rates It is difficult to comment on this section without knowing the details of how the shocks are expected to apply. For example, will the relative changes of the interest rate curve be independent of the current level of interest rates? Or will an approach along the lines of QIS4 be applied? Presumably the most onerous shocks tend to differ between different insurance group members. We suggest that it would be appropriate to add the upward and the downward shocks of the insurance group members and decide upon the most onerous shock given the sum of upward shocks and downward shocks, rather than adding up the most onerous shocks of individual insurance group members.	
220.	Lloyd's	4.27.	We agree	Noted
221.	UNESPA (Association of Spanish Insurers)	4.27.	We request clarification as to how CEIOPS proposes to apply the upward and downward shocks to interest rates It is difficult to comment on this section without knowing the details of how the shocks are expected to apply. For example, will the relative changes of the interest rate curve be independent of the current level of interest rates? Or will an approach along the lines of QIS4 be applied? Presumably the most onerous shocks tend to differ between different insurance group members. We suggest that it would be appropriate to add the upward and the downward shocks of the insurance group members and decide upon the most onerous shock given the sum of upward shocks and downward shocks, rather than adding up the most onerous shocks of individual insurance group members.	Please see comment #216

222.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	4.28.	We welcome the inclusion of "specified alterations to interest rate volatility".	Noted
223.	AMICE	4.28.	AMICE members agree with the CEA that is not possible to combine specified alterations to the interest rate term structures combined with specified alterations to interest rate volatilities. We agree that a separate volatility sub-module should be introduced and aggregated using a correlation matrix.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave
224.	Association of Friendly Societies	4.28.	Any correlation between charge from movements due to change in level and change in volatility? Testing 2 separately could lead to onerous capital charge.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave
225.	Association of Friendly Societies	4.28.	Any correlation between charge from movements due to change in level and change in volatility? Testing 2 separately could lead to onerous capital charge.	Please see comment#224
226.			Confidential comment deleted	
227.	CEA, ECO-SLV-09-442	4.28.	The structure of this module is not sufficiently developed at this stage for consideration. It is necessary to have more information particularly how the module will be calibrated before we can comment on the approach.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave
228.	CRO FORUM	4.28.	It is not clear how interest rate volatility can be captured in the same scenario test as changes in interest rates levels. It may be	Noted. Please see CEIOPS' consultation paper on calibration,

			appropriate to test this separately via a different risk category, or a different shock.	to be released in the third wave
229.	European Union member firms of Deloitte Touche To	4.28.	We suggest determining a specific capital charge for an increase in volatility of the interest rate (distinct from the charge related to rate term structures). This approach would be consistent with the fact that the costs of financial options are directly linked to the rate's volatility. The separate shocks for the alterations of the rate term structure and the volatility would be aggregated in second step.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave
230.	FFSA	4.28.	CEIOPS thinks that the upward and downward shocks to the interest rate curve for the purpose of the interest rate module should take account of specified alterations of the interest rate structure and interest rate volatility. FFSA has a mitigated view on this approach and considers that the structure of this module is not sufficiently developed at this stage for receiving a formal approval. Indeed it would be necessary to have more information on the options that could be finally retained.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave
231.			Confidential comment deleted	
232.	German Insurance Association – Gesamtverband der D	4.28.	The structure of this module is not sufficiently developed at this stage for consideration. It is necessary to have more information particularly how the module will be calibrated before we can comment on the approach.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave
233.	Legal and General Group	4.28.	We request that the application of the volatility stress is done separately - Insurance companies may be exposed to any combination of rises or falls in interest rates and interest rate implied volatility. This will be difficult to test using only two stress scenarios.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave

			While it is most common for life insurers to be exposed to increases in interest rate volatility, as this would be expected to increase the value of their options and guarantees, in practice some firms may be vulnerable to falls in interest rate volatility. For example, insurers with deeply in the money interest rate guarantees embedded in their liabilities may hedge against further interest rate falls using at-the-money swaptions, which will leave them exposed to falls in interest rate volatility. Therefore, it is not certain whether an increase or a decrease in interest rate volatility could be the biting stress for insurers and it is hard to see how a shock on interest rate volatility can be combined with the existing 2 scenarios. Furthermore, by including the volatility stress within the yield curve stress there is an implicit assumption that changes in volatility and movements in the yield curve are perfectly correlated. We suggest that a separate volatility sub-module is introduced and aggregated into the overall module result as a standalone capital charge using an expanded correlation matrix. Also relevant to 4.29.	
234.	Lloyd's	4.28.	We agree	Noted
235.	Munich RE	4.28.	It is not clear how interest rate volatility can be captured in the same scenario test as changes in interest rates levels.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave
236.	OAC	4.28.	Any correlation between charge from movements due to change in level and change in volatility? Testing 2 separately could lead to	Noted. Please see CEIOPS' consultation paper on calibration,

			onerous capital charge.	to be released in the third wave
237.	ROAM –	4.28.	CEIOPS thinks that the upward and downward shocks to the interest rate curve for the purpose of the interest rate module should take account of specified alterations of the interest rate structure and interest rate volatility. ROAM has a mitigated view on this approach and considers that the structure of this module is not sufficiently developed at this stage for receiving a formal approval. Indeed it would be necessary to have more information on the options that could be finally retained.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave
238.	UNESPA (Association of Spanish Insurers)	4.28.	The structure of this module is not sufficiently developed at this stage for receiving a formal approval. It is necessary to have more information particularly how the module will be calibrated before we can comment on the approach.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave
239.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	4.29.	Well then the "shock coefficients" have to depend on the curvature of the term structure. Otherwise curvature cannot be taken into account. We have strong doubts about this methodology. It would be simpler to introduce some more shocks (cf comment on 4.27) Interest rate risk cannot be completely assessed by an upward and a downward shock.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave
240.	AFA	4.29.	The calibration of the interest rate shock will capture changes in level, slope and curvature of the term structure consistent with how the liabilities are indexed. Liability cash flows indexed with cpi should be discounted with the term structure of index-linked bonds whereas cash flows not indexed should be discounted with the term structure of nominal	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave. Noted. Calculation of the best estimate is not within the scope of CP47

			bonds.	
241.	Association of British Insurers	4.29.	Capturing changes in level, slope and curvature of the term structure will require CEIOPS to reduce the original shocks for interest rate risk so that the total capital requirement for interest rate risk remains appropriate Although we do recognise that changes in level, slope and curvature of the term structure play important roles, we hold the view these aspects were already implicitly included in the QIS4 approach. Indeed, from the feedback received under QIS4 it appeared that the capital requirement for interest rate risk was in line with the required 1 in 200 event. In any case a limited number of scenarios are appropriate. Although this is just a simplification, only in cases, where it is material should an undertaking be required to do more to explicitly take into account the slope and curvature of the term structure. We acknowledge that fact that these changes can be relevant but need to take account of complexity for insurers. Insurer for which this risk may be specific should be able to use partial internal model. Only by the separation one will get the full richness of management information necessary to truly understand the interest rate exposures. Level and slope are necessary tests. Curvature is probably just about material enough to merit being included. Further dimensions to the test would not be material and would add no real value. A further simplification would be to combine these scenarios into one stress, but it could be very difficult to calibrate this reliably.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave.
242.	Association of Friendly Societies	4.29.	We are concerned that when interest rate volatility is combined with the rate structure change the total capital required could be overstated for some firms.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave

243.	Association of Friendly Societies	4.29.	We are concerned that when interest rate volatility is combined with the rate structure change the total capital required could be overstated for some firms.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave
244.			Confidential comment deleted	
245.	CEA, ECO-SLV-09-442	4.29.	Ceiops will need to ensure that when capturing changes in level, slope and curvature of the term structure the total capital requirements for interest rate risk remain appropriate. The feedback received under QIS4 it appeared that the capital requirement for interest rate risk was in line with the required 1 in 200 yr event. A limited number of scenarios is appropriate in order to keep the requirements simple and not unduly burdensome. Only in exceptional cases should an undertaking be required to more explicitly take into account the slope and curvature of the term structure. Insurers for which this risk is significant should be able to use partial internal models.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave. CEIOPS agrees with the objective of balancing appropriate risk sensitivity against avoiding excessive complexity in the standard formula context. The question of whether or not to use an internal model is outside the scope of CP47
246.	CRO FORUM	4.29.	As the suggested method provides a sensible balance between capturing all the risks inherent in changes to the yield curve and being simple to apply, the CRO forum is in general supportive of the use of two interest rate scenarios. However, the CRO forum suggest that where the standard formula, ORSA or Supervisory review identifies that undertakings are taking significant interest rate risk, they should be encouraged to use a partial internal model. This would enable them to assess this risk in a more sophisticated manner that allows for all possible changes in the level, slope and curvature of the yield curve.	Noted. CEIOPS agrees with the objective of balancing appropriate risk sensitivity against avoiding excessive complexity in the standard formula context. The question of whether or not to use an internal model is outside the scope of CP47
247.	FFSA	4.29.	CEIOPS mentions that the shocks will capture changes in level,	Noted. Please see CEIOPS'

			slope and curvature of the interest rate structure. FFSA would insist on the fact that the interest rate curve could present a significant number of different structures over time and the level, the slope and the curvature do not constitute "natural" features of the interest rate curve, but are calculation artefacts that summarize the dimensions in which it could be represented and move over time. Approximately, the level dimension explains 60%-70% of the structure, the slope dimension explains 20%-30% and the curvature dimension explains 5%-10%. As the level, the slope and the curvature are independent dimensions, the decision to add a shock capturing the change in slope of the interest rate curve should normally lead to have no longer two (up and down shock scenarios) but 4 (up-level up-slope, up-level down slope, down-level up-slope and down-level down slope) and the additional add-on of the curvature dimension would normally lead to have 8 scenarios. If CEIOPS would keep only two scenarios (up and down), it should then choose very carefully how it would calibrate them. FFSA supports this view to have a limited number of shock market scenarios that would embed as many dimensions as possible, but would remind that undertakings should manage risks that are not captured within the scenarios with their internal model or ORSA whereas supervisors would require add-ons. It should be noted that (i) the shocks in the level of the interest rate curve in the QIS4 already capture 60%-70% of the potential changes in the interest rate structure, (ii) addition of the slope and curvature dimension would increase the relevance of the test by no more that one-half and if only two scenarios up and down are considered their effect could be improperly measured and lead to underestimation to the sensitivities to interest rate risk and (iii) the fact that the changes in slope and curvature are not captured in the up and down scenarios would not mean automatically that those risks are not	consultation paper on calibration of the market risk module, to be released in the third wave

			managed within companies. FFSA then recommends to have either only two scenarios for changes in level or four scenarios for changes in level and slope or eight scenarios for changes in level, slope and curvature, but FFSA rejects the view that only two scenarios (up and down) could capture all the effects of changes in the interest curve rates, but on the contrary, a limited number of scenarios with a high number of parameters could lead to underestimate the impact of interest rate risk.	
248.			Confidential comment deleted	
249.	German Insurance Association – Gesamtverband der D	4.29.	CEIOPS will need to ensure that when capturing changes in level, slope and curvature of the term structure the total capital requirements for interest rate risk remain appropriate 10. The feedback received under QIS4 it appeared that the capital requirement for interest rate risk was in line with the required 1 in 200 year event.	Noted. Please see CEIOPS' consultation paper on calibration of the market risk module, to be released in the third wave
250.	Investment & Life Assurance Group (ILAG)	4.29.	Concern that when interest rate volatility is combined with the rate structure change stress, the total capital required could be overstated for some firms.	Noted. Please see CEIOPS' consultation paper on calibration of the market risk module, to be released in the third wave
251.	Legal and General Group	4.29.	We request than CEIOPS does not try to combine all the different scenarios into 2 shocks Entities are affected differently by different types of interest changes. It seems unlikely that the sub module can be calibrated to 99.5% when it is based on the calculation of only 2 predefined	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave

			scenarios. The level, the slope and the curvature are independent dimensions, so the decision to add a shock capturing the change in slope of the interest rate curve should normally not lead to 2 scenarios (up and down) but 4 scenarios (up-level up-slope, up-level down slope, down-level up-slope and down-level down slope) plus the additional add-on of the curvature dimension would normally lead to 8 scenarios. If CEIOPS keeps only two scenarios (up and down), then we believe it would be very difficult for CEIOPS to calibrate these appropriately. Approximately, the level dimension explains 60%-70% of the structure, the slope dimension explains 20%-30% and the curvature dimension explains 5%-10%. Therefore the 2 shocks in the level of the interest rate curve in QIS4 capture 60%-70% of the potential changes in the interest rate structure. A limited number of scenarios with a high number of parameters could lead to underestimate the impact of interest rate risk. We support using more than 2 scenarios, as the current scenarios do not cover the risk of a change in the slope or the curvature. Including other scenarios should also show the effect of a change in slope and curvature of the interest rate curve. See also comments in 4.28.	
252.	Lloyd's	4.29.	We agree	Noted
253.	OAC	4.29.	We are concerned that when interest rate volatility is combined with the rate structure change the total capital required could be overstated for some firms.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave
254.	Pearl Group	4.29.	We request that CEIOPS does not try to combine all the different	Noted. Please see CEIOPS'

	Limited		scenarios into 2 shocks It seems unlikely that the sub module can be calibrated to 99.5% when it is based on the calculation of only 2 predefined scenarios. The level, the slope and the curvature are independent dimensions, so the decision to add a shock capturing the change in slope of the interest rate curve should normally not lead to 2 scenarios (up and down) but 4 scenarios (up-level up-slope, up-level down slope, down-level up-slope and down-level down slope) plus the additional add-on of the curvature dimension would normally lead to 8 scenarios. If CEIOPS keeps only two scenarios (up and down), then we believe it would be very difficult for CEIOPS to calibrate these appropriately. We support using more than 2 scenarios, as the current scenarios do not cover the risk of a change in the slope or the curvature. Including other scenarios should also show the effect of a change in slope and curvature of the interest rate curve.	consultation paper on calibration, to be released in the third wave
255.	ROAM –	4.29.	CEIOPS mentions that the shocks will capture changes in level, slope and curvature of the interest rate structure. We agree with the idea of taking into account the level and slope of the interest rate term structures that will be considered in the forthcoming consultation paper.	Noted. Please see CEIOPS' consultation paper on calibration, to be released in the third wave
256.	AMICE	4.30.	Currency risk	Noted.

257.	CEA, ECO-SLV-09-442	4.30.	We request feedback as to how Ceiops proposes to capture currency volatility risk. Ceiops outlines that currency risk arises from changes in the level or volatility of currency exchange rates, however there is no specific discussion in the document as how the volatility of exchange rates would be captured within the calibration of this sub-module.	Noted. On the grounds of materiality and to avoid introducing undue complexity in the standard formula, CEIOPS does not advise to introduce an explicit FX implied volatility shock in the standard formula.
258.	FFSA	4.30.	CEIOPS outlines that currency risk arises from changes in the level or volatility of currency exchange rates. FFSA would require information on how the volatility risk would be taken into account in the calibration process and on the methodology to capture such a risk, before comment on this aspect.	See comment #257
259.	Institut des actuaries (France)	4.30.	It's outlined that currency risk arises from changes in the level or volatility of currency exchange rates. How the volatility risk is taken into account in the calibration process? Which methodology allows capturing such a risk?	See comment #257.
260.	ROAM –	4.30.	CEIOPS outlines that currency risk arises from changes in the level or volatility of currency exchange rates. ROAM would require information on how the volatility risk would be taken into account in the calibration process and on the methodology to capture such a risk, before commenting on this aspect.	See comment #257.
261.	UNESPA (Association of Spanish Insurers)	4.30.	We request feedback as to how CEIOPS proposes to capture currency volatility risk CEIOPS outlines that currency risk arises from changes in the level	See comment #257.

			or volatility of currency exchange rates, however there is no specific discussion in the document as how the volatility of exchange rates would be captured within the calibration of this sub-module.	
262.	CEA, ECO-SLV-09-442	4.31.	We agree.	Noted.
263.	CEA, ECO-SLV-09-442	4.32.	We agree.	Noted.
264.	CEA, ECO-SLV-09-442	4.33.	We agree.	Noted.
265.	CEA, ECO-SLV-09-442	4.34.	We agree.	Noted.
266.	KPMG ELLP	4.34.	We agree with the proposal to retain a scenario-based approach for the assessment of the currency risk capital charge.	Noted.
267.	AMICE	4.35.	AMICE members do not share CEIOPS opinion to ignore interdependencies between currencies. In our opinion diversification benefits among different currencies should be allowed. A well-diversified currency portfolio should lead to a lower capital requirement than undiversified portfolios. Moreover, grouping some foreign currencies should be allowed. See our comments to paragraph 4.47	Not agreed. CEIOPS considers that to take into account interdependencies between currencies would introduce an overly complex calculation for the standard formula. Where correlations between

				currencies are important for an undertaking, development of an internal model to capture co-dependencies is an alternative.
268.	CEA, ECO-SLV-09-442	4.35.	Although calibration is not covered in this paper, we should note that in our opinion, the application of a 20% movement for the upward and the downward shock could be considered as high and its application could induce to higher results than the 99.5% solvency requirement.	Noted, please see future consultation paper on calibration.
269.	Legal and General Group	4.35.	Although calibration is not covered in this paper, we should note that in our opinion, the application of a 20% movement for the upward and the downward shock could be considered as high. If it is applied without a correlation consideration, it could lead to requirements than exceed the 99.5% solvency test.	See comment #268.
270.	ROAM –	4.35.	ROAM members do not share CEIOPS opinion to ignore interdependencies between currencies. 9. We consider that the QIS4 approach of a rise and a fall in exchange rates can't be applied for all currencies, as not all currencies experience the same rise or fall. We also think that inter-dependencies between currencies (other than the local currency) should be taken into account. 10. We think that a correlation matrix for different currency shocks could be aggregated.	See comment #267.
271.	UNESPA (Association of Spanish Insurers)	4.35.	Although calibration is not covered in this paper, we should note that in our opinion, the application of a 20% movement for the upward and the downward shock could be considered as high and its application without a correlation consideration, could induce to higher results than the 99.5% solvency requirement.	See comment #268.

272.	German Insurance Association – Gesamtverband der D	4.36.	(EMPTY)	Noted.
273.	Association of Friendly Societies	4.37.	With regard to foreign equities, the CP suggests these should have a currency stress as well as an equity stress. However, we conclude this is not necessary, as the equity is already expressed in currency terms, and is impacted on where earnings are generated.	Disagree with the concept that equities are already expressed in currency terms. However, please see the revised text in para 4.42 which is intended to clarify this point. Note that although the calibration of equity risk is to be carried out by referring to a well-diversified index which already implicitly includes the effect of currency risk, analysis of single-currency equity indices tends to lead to a comparable level of equity stress. As a result CEIOPS concludes that for foreign equity holdings, both currency and equity risks should be included.
274.	Association of Friendly Societies	4.37.	With regard to foreign equities, the CP suggests these should have a currency stress as well as an equity stress. However, we conclude this is not necessary, as the equity is already expressed in currency terms, and is impacted on where earnings are generated.	See comment #273.
275.	Association of Run-Off Companies	4.37.	Currently UK FSA rules state that 80% of liabilities should be matched by assets in the same currency. If this rule is maintained then this should not cause a significant issue to UK run-off	Noted.

			companies. However, it is not clear what impact the Solvency II regulations will have on the current FSA rulebook.	
276.	German Insurance Association – Gesamtverband der D	4.37.	(EMPTY)	Noted.
277.	Lucida plc	4.37.	We agree with this analysis. However the proposed solution is flawed.	Not agreed. Please see responses to other feedback points on currency risk.
278.	KPMG ELLP	4.38.	We agree in principle with the refinement of the QIS4 approach to consider each currency's rise or fall relative to the local currency separately as the previous assumption of the same rise and fall of all currencies relative to the local currency was unrealistic. However, where companies' assets and liabilities are not well matched, this will give rise to larger capital requirements. We would recommend making some allowance for diversification between the shocks on different currencies.	Not agreed. CEIOPS considers that to take into account interdependencies between currencies would introduce an overly complex calculation for the standard formula.
279.	Munich RE	4.38.	Here, only the main currencies should be considered. All other remaining foreign currencies should be mapped to the foreign currency with the highest correlation. Diversification between the main currencies has to be taken into account. A simple matrix approach for the main currencies should be used.	Please see comment #267. As elsewhere in Solvency 2, proportionality applies.
280.	CEA, ECO-SLV-09-442	4.39.	We agree.	Noted.
281.	CRO FORUM	4.39.	The CRO Forum recommends that some level of materiality threshold is defined for which foreign currencies are stressed	Please see comment #279.

			individually. Exposures below this level of materiality should be mapped to the foreign currency with the highest correlation to these minor currencies.	
282.	Association of British Insurers	4.40.	This calculation may be very onerous for firms who have transactions in multiple currencies. Firms should be able to combine minor currencies based on the principle of proportionality.	Please see comment #279.
283.	CEA, ECO-SLV-09-442	4.40.	See comments Para 4.35.	Please see comment #268.
284.	Groupe Consultatif	4.40.	We do not understand the rationale for summation of the individual currency shocks, which implicitly assumes these to be fully correlated. We would prefer that aggregation assumed independence i.e. a 'square root of sum of squares' algorithm. This would obviate the need to consider implausible cross-rates as described in 4.44.	Please see comment #267
285.	UNESPA (Association of Spanish Insurers)	4.40.	See comments Para 4.35	Please see comment #271.
286.	CEA, ECO-SLV-09-442	4.41.	See comments Para 4.35.	Please see comment #268.
287.	UNESPA (Association of Spanish Insurers)	4.41.	See comments Para 4.35	Please see comment #271.
288.	CEA,	4.42.	See comments Para 4.35.	Please see comment #268.

	ECO-SLV-09-442			
289.	European Union member firms of Deloitte Touche To	4.42.	We believe that proportionality should apply in the identification of assets covered by this module: foreign assets tend to be held by undertakings in mutual funds. It could be very time-consuming to get the complete list of such assets (as for the look-through approach). In addition, for example, the bond portfolio bonds to be used in the models no longer have the information regarding the obligator's currency.	Partially agree. CEIOPS considers the look-through principle to be important for undertakings to have a full understanding of the risks that they are exposed to. Nevertheless proportionality applies here, as to all of solvency 2.
290.	Lloyd's	4.42.	This point refers to holding of foreign equities but does not seem to consider foreign bonds or properties. Since the interest-rate risk section does not make any references to foreign interest rates, how should an entity allow for changes in values of foreign bond holdings in a stress scenario?	Agree. Please see revised text, clarified to include coverage for all assets and liabilities denominated in foreign currency which are not currency hedged.
291.	Munich RE	4.42.	In general, all positions leading to a currency mismatch position should be recognized in the Delta NAV stress with regard to currency movements. This includes equities, but also real estate and interest bearing instruments. The notion is that the asset class movements, i.e. equity, property, interest rate, spread are calibrated before CCY movements.	See comment #290.
292.	PricewaterhouseCoopers LLP	4.42.	Foreign equities where the currency risk is not hedged are specifically included in currency risk, with the explanation that this is because the risk is not captured by the equity stress. However, typical equity portfolios invest "overseas" to gain better diversification and exposure to wider industrial sectors. National currency equities often invest broadly overseas so are themselves carriers of "currency risk". This complexity of SCR stress may well drive unintended consequences such as more concentrated equities exposure limited to national currency. This could be avoided by	Please see comment #273. Disagree that exposure to FX risk would always lower risk, even if it did increase the spectrum of equities covered. Additional FX exposure could add more downside potential than is

			either a) introduction of a diversification credit for foreign to local equities, or b) limits on foreign equities up to which no currency risk is required (2.5% of assets if in OECD economies). In addition, we note that it is not clear how other foreign asset classes should be treated. For example, is the currency risk on (unhedged) foreign bond holdings to be included within the interest rate sub-module or the currency sub-module? This comment also applies to paragraph 4.50.	mitigated via diversification of equity risk. See comment #290 on coverage of non-equity FX exposures.
293.	UNESPA (Association of Spanish Insurers)	4.42.	See comments Para 4.35	Please see comment #271
294.	CEA, ECO-SLV-09-442	4.43.	The modification in the example presented implies a USD/GBP shock of 50%, but just for the company with a EUR balance sheet. So here a EUR company has to calculate with a USD/GBP shock of 50%, a GBP company sticks of course to a 20 % shock for USD/GBP. This means that the shock for each insurance company is different.	Partially agree. The example given would produce different results for EUR and GBP reporting companies. However CEIOPS believes this approach is justified, as explained in paras 4.36-4.38.
295.	uniqa	4.43.	The modification in the example presented implies a USD/GBP shock of 50%, but just for the company with an EUR balance sheet. So here a EUR company has to calculate with a USD/GBP shock of 50%, a GBP company sticks of course to a 20 % shock for USD/GBP. This means the triangle EUR/USD/GBP is never closed and for every insurance company different. Thus, this treatment leads to economically wrong results in relation to the behaviour of the currencies among each other.	See comment #294.
296.	Association of British	4.44.	Given the need for simplicity, we support the fact the diversification is ignored for firms using the standard formula	Noted.

	Insurers		We agree that proposed method can result in to strong shocks for some currency pairs, but given the need for simplicity the proposed method is probably the best solution. Companies can apply an internal model if they want to incorporate better diversification. Whilst we agree that there should be a diversification in currency risks, it may be quite difficult to capture it. Accordingly, a full or partial model is needed to capture these effects.	
297.	CEA, ECO-SLV-09-442	4.44.	Given the need for simplicity, we support the fact the diversification is ignored. Whilst we believe that there should be recognition of diversification between currency risks, it may be quite difficult to capture it in the standard formula. Accordingly, a full or partial model is needed to capture these effects. Companies should be encouraged to develop partial Internal Models whenever this a specific risk.	Noted.
298.	FFSA	4.44.	CEIOPS mentions that a scenario-based approach would be used for the calculation of currency risk capital charge. For the sake of simplicity, no diversification between currencies would be considered; the total capital charge would be the sum of all currencies elementary capital charges. FFSA believes that rather than adding capital charges it would be possible to use conservative correlations, and would like to know if CEIOPS has already done some surveys about currencies correlations.	See comment #267.
299.	Groupe Consultatif	4.44.	See comment on 4.40	See comment #284

300.	Institut des actuaries (France)	4.44.	A scenario-based approach shall be used for the calculation of currency risk capital charge. For the sake of simplicity, no diversification between currencies will be considered; the total capital charge will be the sum of all currencies elementary capital charges. We believe that rather than adding capital charges it would be possible to use conservative correlations? Has CEIOPS done some surveys about currencies correlations?	See comment #267.
301.	Lucida plc	4.44.	We do not feel that the drawback has been considered in enough detail here. As an example, an institution based in the UK and preparing local regulatory accounts in Sterling that invested in US$-denominated assets to match €-denominated liabilities would need to hold more capital than an institution based in the Eurozone that prepares local regulatory accounts in Euro and invested in the same US$-denominated assets to match similar €-denominated liabilities	Please see comment #294
302.	Munich RE	4.44.	Diversification should be considered. A simple correlation matrix approach should be used. This does not really increase the complexity as massive foreign exchange exposure is also not the standard. Moreover, we do not see how situations as in the example could be avoided as they simply reflect the core business of some enterprises. The correlation between two currencies is certainly not easy to quantify; however, this is the case for all other correlations as well. Hence, an attempt to calibrate a matrix should be made. To reduce the computational complexity the choice to use the correlation matrix or assume no diversification can be left to the insurance undertaking.	Not agreed. See comment #267.
303.	Pearl Group Limited	4.44.	Given the need for simplicity, we support the fact the diversification is ignored in the standard SCR.	Agree.

			We propose that correlations between currencies can be allowed for when an Internal Model. These correlations would have to be justified in a similar manner to any other assumption.	
304.	ROAM –	4.44.	CEIOPS mentions that a scenario-based approach would be used for the calculation of currency risk capital charge. For the sake of simplicity, no diversification between currencies would be considered; the total capital charge would be the sum of all currencies' elementary capital charges. ROAM believes that it would be possible to use conservative correlations rather than adding capital charges and would like to know if CEIOPS has already done some surveys about currencies correlations.	Not agreed. See comment #267
305.	KPMG ELLP	4.45.	We look forward to receiving advice on the calibration of the upward and downward currency stresses in the forthcoming consultation paper on the calibration of the market risk module.	Noted.
306.			Confidential comment deleted	
307.	CRO FORUM	4.46.	The CRO forum considers a scenario approach reasonable.	Noted.
308.	Lloyd's	4.46.	We agree.	Noted.
309.	AMICE	4.47.	We agree with the CEA that grouping some foreign currencies could be more appropriate than carrying out calculations separately for all individual currencies and then aggregating them via a correlation matrix.	Noted.
310.	Association of British Insurers	4.47.	The principle of proportionality should apply in the application of the currency risk module In line with the principle of proportionality, a possible simplification would be to consider only the main currencies to which the insurer is exposed, with all remaining foreign currencies mapped to the	See comment #267.

			foreign currency with the highest correlation. Where currency risks are material, the firm should be able to capture correlations, if applicable in the internal model.	
311.			Confidential comment deleted	
312.	CEA, ECO-SLV-09-442	4.47.	We request clarification as to what is meant by "local regulatory accounts": the statutory annual accounts or solvency accounts? Also relevant for paragraph 4.39. Groups of foreign currencies would be more appropriate than individual currencies in some cases, the principle of proportionality should apply. A requirement to carry out calculations for all currencies separately may not be appropriate since, as discussed in our comments to paragraph 4.44, foreign currencies may be highly correlated with each other. Only the main currencies to which the insurer is exposed should be considered, with all remaining foreign currencies mapped to the foreign currency with the highest correlation. For example, currencies of European countries who are candidates to join the euro-zone have highly €-correlated currencies, due to their parity to the €. It is similar in some other countries, for example the yuan and the dollar move in similar ways due to the parity, and they could then be part of the same group of foreign currencies. The fact that two currencies at parity could move in different ways due to political decisions is not a "currency risk" but a "country risk" and this country risk should be managed through the ORSA and not in the standard formula. ☐ We therefore, would request the definition of "group of correlated foreign currencies" rather than "foreign currencies". The	Agree. Please see the revised text. Disagree that divergence of currencies at parity is country risk, not FX risk. See comment #294 and comment #267.

			definition of such groups could be provided regularly to insurance undertakings. In the same manner, some foreign currencies should be considered as being part of the same group as the local currency.	
313.	CRO FORUM	4.47.	The definition of a foreign currency appears reasonable although it is important that the treatment of international Group's is properly considered when determining aggregation. One possibility may be that undertakings with significant cross-border business are encouraged to make use of a partial internal model to better assess their exposure to currency risk.	Noted. Please refer to CP60 for the treatment of groups and aggregation.
314.	FFSA	4.47.	CEIOPS proposes to consider that each currency that is not the currency in which the insurance undertaking is reporting its financial statements should be considered as a foreign currency. FFSA does not support completely this view and thinks that detail by foreign currency is not the relevant level of granularity since foreign currencies may be highly correlated the one with the other. For example, currencies of European countries who are candidates to joint the euro-zone have highly €-correlated currencies, due to their parity to the €. It is similar in some other countries, for example the yuan and the dollar move in similar ways due to the parity, and they could then be part of the same group of foreign currencies. FFSA thus supports the view to define "group of correlated foreign currencies" rather tan "foreign currencies". The fact that two currencies at parity could move in different ways due to political decisions is not a "currency risk" but a "country risk" and this country risk should be managed through the ORSA and not in the standard formula.	Please see comments #267, 294 and 312.

			FFSA then supports the proposition of CEIOPS to the extent it is modified and replaces the notions of "local currency' and "foreign currencies" by notions such as what a group of currencies is: the definition of such groups could be provided regularly to insurance undertakings. In the same manner, some foreign currencies should be considered as being part of the same group as the local currency.	
315.	German Insurance Association – Gesamtverband der D	4.47.	We request clarification as to what is meant by "local regulatory accounts": the statutory annual accounts or solvency accounts? Also relevant for paragraph 4.39. Groups of foreign currencies would be more appropriate than individual currencies in some cases, the principle of proportionality should apply A requirement to carry out calculations for all currencies separately may not be appropriate since, as discussed in our comments to paragraph 4.44, foreign currencies may be highly correlated with each other. Only the main currencies to which the insurer is exposed should be considered, with all remaining foreign currencies mapped to the foreign currency with the highest correlation. For example, currencies of European countries who are candidates to join the euro-zone have highly €-correlated currencies, due to their parity to the €. It is similar in some other countries, for example the yuan and the dollar move in similar ways due to the parity, and they could then be part of the same group of foreign currencies. The fact that two currencies at parity could move in different ways due to political decisions is not a "currency risk" but a "country risk" and this country risk should be managed through	Please see comment #314.

			the ORSA and not in the standard formula. ☐ We therefore, would request the definition of "group of correlated foreign currencies" rather than "foreign currencies". The definition of such groups could be provided regularly to insurance undertakings. In the same manner, some foreign currencies should be considered as being part of the same group as the local currency.	
316.	Groupe Consultatif	4.47.	CEIOPS proposes to consider that each currency that is not the currency in which the insurance undertaking is reporting its financial statements should be considered as a foreign currency. We believe that diversification effect would be better captured by using the notion of "group of correlated foreign currencies" rather than "foreign currencies".	Please see comment #314.
317.	Institut des actuaries (France)	4.47.	CEIOPS proposes to consider that each currency that is not the currency in which the insurance undertaking is reporting its financial statements should be considered as a foreign currency. We believe that diversification effect would be better captured by using the notion of "group of correlated foreign currencies" rather than "foreign currencies".	Please see comment #267.
318.	Legal and General Group	4.47.	A. The principle of proportionality should apply in the application of the currency risk module In line with the principle of proportionality, only the main currencies to which the insurer is exposed should be considered, with all remaining foreign currencies mapped to the foreign currency with the highest correlation.	Please see comment #267. Proportionality will apply here as in all aspects of Solvency 2.

			B. Groups of foreign currencies would be more appropriate than individual currencies in some cases A requirement to carry out calculations for all currencies separately is not appropriate since foreign currencies may be highly correlated with each other. In some cases this correlation is so significant that it may make sense to group the currencies when modelling currency risk, rather than splitting out and then combining via a correlation assumption. For example, currencies of European countries who are candidates to join the euro-zone have highly €-correlated currencies, due to their parity to the €. It is similar in some other countries, for example the Yuan and the Dollar move in similar ways due to the parity, and they could then be part of the same group of foreign currencies. The fact that two currencies at parity could move in different ways due to political decisions is not a "currency risk" but a "country risk" and this country risk should be managed through the ORSA and not in the standard formula. We therefore, would request the definition "group of correlated foreign currencies" rather than "foreign currencies". The definition of such groups could be provided regularly to insurance undertakings. In the same manner, some foreign currencies should be considered as being part of the same group as the local currency. This would also go some way to deal with our concern that the methodology neglects diversification between currencies. Proposal B. may be too complex for the standard formula.	
319.	Lloyd's	4.47.	We agree. The principle of proportionality means that only material	Please see comment #279.

			currencies should be considered. There should be an option to pool all immaterial currencies for the purpose of the calculation.	
320.	Pearl Group Limited	4.47.	The principle of proportionality should apply in the application of the currency risk module In line with the principle of proportionality, only the main currencies to which the insurer is exposed should be considered, with all remaining foreign currencies mapped to the foreign currency with the highest correlation. Where currency risks are material, the firm should be able to capture correlations, if applicable in the internal model.	Please see comment #279.
321.	ROAM –	4.47.	CEIOPS proposes to consider that each currency that is not the currency in which the insurance undertaking is reporting its financial statements should be considered as a foreign currency. ROAM does not support completely this view and thinks that detail by foreign currency is not the relevant level of granularity since foreign currencies may be highly correlated. For example, currencies of European countries who are candidates to joint the euro-zone have highly €-correlated currencies, due to their parity to the €. It is similar in some other countries, for example the yuan and the dollar move in similar ways due to the parity, and they could then be part of the same group of foreign currencies. ROAM thus supports the view to define "group of correlated foreign currencies" rather than "foreign currencies". The fact that two currencies at parity could move in different ways due to political decisions is not a "currency risk" but a "country risk" and this country risk should be managed through the ORSA and not in the	Please see comment #314.

			standard formula. ROAM then supports the proposition of CEIOPS to the extent it is modified and replaces the notions of "local currency' and "foreign currencies" by notions such as what a group of currencies is: the definition of such groups could be provided regularly to insurance undertakings. In the same manner, some foreign currencies should be considered as being part of the same group as the local currency.	
322.	XL Capital Ltd	4.47.	"The local currency is the currency in which the undertaking prepares its local regulatory accounts. All other currencies are referred to as foreign currencies. A foreign currency is relevant for the scenario calculations if the amount of basic own funds depends on the exchange rate between the foreign currency and the local currency " In line with the principle of proportionality, only the main currencies to which the insurer is exposed should be considered, with all remaining foreign currencies mapped to the foreign currency with the highest correlation. Where currency risks are material, the firm should be able to capture correlations, if applicable in the internal model.	Please see comment #314.
323.	AAS BALTA	4.48.	For each foreign currency the capital charge is calculated using the most onerous of either a rise or a fall in the foreign currency relative to the local currency. The total capital charge will then be summation of capital charges over all foreign currencies. This is a change from QIS4 since the capital charge in QIS4 was derived by testing the impact of all foreign currencies moving up or down together (and taking the most onerous result) rather than taking the most onerous result for each individual currency and then aggregating. Under the previous approach correlation benefits	Please see comment #267.

			were incorporated which would potentially reduce the capital charge. By stressing each currency independently it assumes that the currencies are +/-100% correlated with the domestic currency. This seems overly conservative as we think it unlikely that the domestic currency will move fully in opposite directions against individual currencies, which is an implicit assumption in this method.	
324.	AB Lietuvos draudimas	4.48.	1. For each foreign currency the capital charge is calculated using the most onerous of either a rise or a fall in the foreign currency relative to the local currency. The total capital charge will then be summation of capital charges over all foreign currencies. This is a change from QIS4 since the capital charge in QIS4 was derived by testing the impact of all foreign currencies moving up or down together (and taking the most onerous result) rather than taking the most onerous result for each individual currency and then aggregating. Under the previous approach correlation benefits were incorporated which would potentially reduce the capital charge. By stressing each currency independently it assumes that the currencies are +/-100% correlated with the domestic currency. This seems overly conservative as we think it unlikely that the domestic currency will move fully in opposite directions against individual currencies, which is an implicit assumption in this method.	Please see comment #267.
325.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	4.48.	Hedging instruments cannot be properly valued in a framework that supposes an instantaneous shock. This leads to inconsistencies; for example some derivatives (like asian options) can provide the same benefits in this framework and are much cheaper than caps and floors. But for Risk Management, using asian options is clearly an aberration. For these reasons, we propose that the inclusion of hedging instruments should be restricted to internal models.	Not agreed. CEIOPS believes that it is important to recognise appropriately the benefit of hedging and risk mitigation strategies in the SCR, whether through the standard formula or internal model approach.
326.	AMICE	4.48.	AMICE is in favour of recognising diversification benefits for the	Please see comment #267

			currency risk. In our view well-diversified currency portfolios lead to lower capital requirement than undiversified portfolios.	
327.			Confidential comment deleted	
328.	CEA, ECO-SLV-09-442	4.48.	The approach of taking the most onerous of the up or down stress for each currency, with no correlation assumption, is likely to be more onerous than the 99.5th percentile. The CEA is concerned that the approach of shocking all currencies one after the other to determine the most adverse outcome (appreciation / depreciation) per currency will imply a different assumed correlation between pairs of currencies dependent on the actual asset and liability holdings and which currency is taken as the domestic currency. This is likely to result in aggregate shock scenarios which are at different quantiles (compared to the true economic situation) from insurer to insurer, which is counter to the principle that all sub-modules are calibrated to the 99.5th percentile. Furthermore we note that a group using the deduction and aggregation method could be stressing the Euro: Sterling rate to 0.8 in one country and simultaneously stressing the same rate to 1.2 in another country. This does not seem reasonable. This is not in line with Solvency II's overriding aim of harmonisation and would be solved in part by grouping foreign currencies, and the use of partial internal models for those insurers with material currency risk. The approach of stressing individual currencies in the more onerous direction will result in a different currency capital charge for a group depending on which calculation method is used. We request clarifications as to how currency risk is to be considered with	Noted. Please refer to CEIOPS' forthcoming consultation paper on calibration. Please refer to comment #267. Aggregation for groups is treated in CP60.

			respect to insurance groups. Ceiops appears to be intending to significantly reduce the diversification at Group level by subjecting the up and down shocks to a minimum of zero. Presumably the most onerous shock tends to differ between different insurance group members and we suggest that it would be appropriate to add the upward and the downward shocks of the insurance group members and decide upon the most onerous shock, subject to a minimum of a capital requirement of zero, given the sum of upward shocks and downward shocks, rather than adding up the most onerous shocks and the resulting capital requirements of individual insurance group members.	
329.	Codan Forsikring (Branch Norway) (991 502 491) NOR	4.48.	For each foreign currency the capital charge is calculated using the most onerous of either a rise or a fall in the foreign currency relative to the local currency. The total capital charge will then be summation of capital charges over all foreign currencies. This is a change from QIS4 since the capital charge in QIS4 was derived by testing the impact of all foreign currencies moving up or down together (and taking the most onerous result) rather than taking the most onerous result for each individual currency and then aggregating. Under the previous approach correlation benefits were incorporated which would potentially reduce the capital charge. By stressing each currency independently it assumes that the currencies are +/-100% correlated with the domestic currency. This seems overly conservative as we think it unlikely that the domestic currency will move fully in opposite directions against individual currencies, which is an implicit assumption in this method.	Please see comment #267.
330.	Codan Forsikring	4.48.	1. For each foreign currency the capital charge is calculated using the most onerous of either a rise or a fall in the foreign	Please see comment #267.

	A/S (10529638) DENMARK		currency relative to the local currency. The total capital charge will then be summation of capital charges over all foreign currencies. This is a change from QIS4 since the capital charge in QIS4 was derived by testing the impact of all foreign currencies moving up or down together (and taking the most onerous result) rather than taking the most onerous result for each individual currency and then aggregating. Under the previous approach correlation benefits were incorporated which would potentially reduce the capital charge. By stressing each currency independently it assumes that the currencies are +/-100% correlated with the domestic currency. This seems overly conservative as we think it unlikely that the domestic currency will move fully in opposite directions against individual currencies, which is an implicit assumption in this method.	
331.	CRO FORUM	4.48.	Although the CRO Forum considers this is a simple, it would also like to point out a few major drawbacks. First one is that diversification, which could be high between various FX movements, is not considered, giving no incentive to diversify currency risk. This could be solved by considering the diversification benefit between currencies in the standard formula through a simple correlation matrix. Secondly the current method adds up the currency exposure of two entities of a group even if the currency exposures are exactly opposite and would therefore offset each other in practice.	Please see comment #267.
332.	FFSA	4.48.	See comment on 4.47 FFSA has concerns regarding the lack of diversification benefits among currencies for the currency risk.	Please see comment #267.
333.			Confidential comment deleted	

334.	German Insurance Association – Gesamtverband der D	4.48.	The approach of taking the most onerous of the up or down stress for each currency, with no correlation assumption, is likely to be more onerous than the 99.5th percentile. The GDV is concerned that the approach of shocking all currencies one after the other to determine the most adverse outcome (appreciation / depreciation) per currency will imply a different assumed correlation between pairs of currencies dependent on the actual asset and liability holdings and which currency is taken as the domestic currency. This is likely to result in aggregate shock scenarios which are at different quantiles (compared to the true economic situation) from insurer to insurer, which is counter to the principle that all sub-modules are calibrated to the 99.5th percentile. Furthermore we note that a group using the deduction and aggregation method could be stressing the Euro: Sterling rate to 0.8 in one country and simultaneously stressing the same rate to 1.2 in another country. This does not seem reasonable. This is not in line with Solvency II's overriding aim of harmonisation and would be solved in part by grouping foreign currencies, and the use of partial internal models for those insurers with material currency risk. The approach of stressing individual currencies in the more onerous direction will result in a different currency capital charge for a group depending on which calculation method is used. We request	Please see comment #267.

			clarifications as to how currency risk is to be considered with respect to insurance groups. CEIOPS appears to be intending to significantly reduce the diversification at Group level by subjecting the up and down shocks to a minimum of zero. Presumably the most onerous shock tends to differ between different insurance group members and we suggest that it would be appropriate to add the upward and the downward shocks of the insurance group members and decide upon the most onerous shock, subject to a minimum of a capital requirement of zero, given the sum of upward shocks and downward shocks, rather than adding up the most onerous shocks and the resulting capital requirements of individual insurance group members.	
335.	GROUPAMA	4.48.	Groupama questions derecognising diversification benefits for the currency risk. It is logical for a well-diversified currency portfolio to result in a lower capital requirement than a currency-concentrated one.	Please see comment #267
336.	Groupe Consultatif	4.48.	See comment on 4.40	Please see comment #284
337.	Link4 Towarzystwo Ubezpieczeń SA	4.48.	For each foreign currency the capital charge is calculated using the most onerous of either a rise or a fall in the foreign currency relative to the local currency. The total capital charge will then be summation of capital charges over all foreign currencies. This is a change from QIS4 since the capital charge in QIS4 was derived by testing the impact of all foreign currencies moving up or down together (and taking the most onerous result) rather than taking the most onerous result for each individual currency and then aggregating. Under the previous approach correlation benefits	Please see comment #267.

			were incorporated which would potentially reduce the capital charge. By stressing each currency independently it assumes that the currencies are +/-100% correlated with the domestic currency. This seems overly conservative as we think it unlikely that the domestic currency will move fully in opposite directions against individual currencies, which is an implicit assumption in this method.	
338.	Lloyd's	4.48.	We agree.	Noted.
339.	Munich RE	4.48.	Diversification should be taken into account. It is a fact that even in times of crisis exchange rate correlations do not nearly increase to the same extent as equity correlations, for instance. Hence, diversification effects due to exposures in different currencies are present and have to be considered.	Please see comment #267.
340.	ROAM –	4.48.	See comment on 4.47 ROAM has concerns regarding the lack of diversification benefits among currencies for the currency risk.	Please see comment #267.
341.	RSA Insurance Group PLC	4.48.	For each foreign currency the capital charge is calculated using the most onerous of either a rise or a fall in the foreign currency relative to the local currency. The total capital charge will then be summation of capital charges over all foreign currencies. This is a change from QIS4 since the capital charge in QIS4 was derived by testing the impact of all foreign currencies moving up or down together (and taking the most onerous result) rather than taking the most onerous result for each individual currency and then aggregating. Under the previous approach correlation benefits were incorporated which would potentially reduce the capital charge. By stressing each currency independently it assumes that the currencies are +/-100% correlated with the domestic currency. This seems overly conservative as we think it unlikely that the domestic currency will move fully in opposite directions against	Please see comment #267.

			individual currencies, which is an implicit assumption in this method.	
342.	RSA Insurance Ireland Ltd	4.48.	For each foreign currency the capital charge is calculated using the most onerous of either a rise or a fall in the foreign currency relative to the local currency. The total capital charge will then be summation of capital charges over all foreign currencies. This is a change from QIS4 since the capital charge in QIS4 was derived by testing the impact of all foreign currencies moving up or down together (and taking the most onerous result) rather than taking the most onerous result for each individual currency and then aggregating. Under the previous approach correlation benefits were incorporated which would potentially reduce the capital charge. By stressing each currency independently it assumes that the currencies are +/-100% correlated with the domestic currency. This seems overly conservative as we think it unlikely that the domestic currency will move fully in opposite directions against individual currencies, which is an implicit assumption in this method.	Please see comment #267.
343.	RSA - Sun Insurance Office Ltd.	4.48.	1. For each foreign currency the capital charge is calculated using the most onerous of either a rise or a fall in the foreign currency relative to the local currency. The total capital charge will then be summation of capital charges over all foreign currencies. This is a change from QIS4 since the capital charge in QIS4 was derived by testing the impact of all foreign currencies moving up or down together (and taking the most onerous result) rather than taking the most onerous result for each individual currency and then aggregating. Under the previous approach correlation benefits were incorporated which would potentially reduce the capital charge. By stressing each currency independently it assumes that the currencies are +/-100% correlated with the domestic currency. This seems overly conservative as we think it unlikely that the	Please see comment #267.

			domestic currency will move fully in opposite directions against individual currencies, which is an implicit assumption in this method.	
344.	SWEDEN: Trygg-Hansa Försäkrings AB (516401-7799)	4.48.	For each foreign currency the capital charge is calculated using the most onerous of either a rise or a fall in the foreign currency relative to the local currency. The total capital charge will then be summation of capital charges over all foreign currencies. This is a change from QIS4 since the capital charge in QIS4 was derived by testing the impact of all foreign currencies moving up or down together (and taking the most onerous result) rather than taking the most onerous result for each individual currency and then aggregating. Under the previous approach correlation benefits were incorporated which would potentially reduce the capital charge. By stressing each currency independently it assumes that the currencies are +/-100% correlated with the domestic currency. This seems overly conservative as we think it unlikely that the domestic currency will move fully in opposite directions against individual currencies, which is an implicit assumption in this method.	Please see comment #267.
345.	UNESPA (Association of Spanish Insurers)	4.48.	The approach of taking the most onerous of the up or down stress for each currency, with no correlation assumption, is likely to be more onerous than the 99.5th percentile.	Noted. Please refer to CEIOPS' forthcoming consultation paper on the calibration of market risk.
346.	FFSA	4.49.	CEIOPS defines the capital charge for each foreign currency as the maximal delta-NAV under the two scenarios. FFSA would like to receive more information on how the capital charge on the currency risk module will be derived from the capital charges determined for each currency, before concluding on this. The CP does not give any guidance about the aggregation to Group level. However, it seems that CEIOPS is intending to significantly	Please see comment #345. Note that the aggregation at Group level is addressed in CP60.

			reduce the diversification on Group level by subjecting the up and down shocks to a minimum of zero. We suggest calculating the up and down shocks as the delta-NAV and the total Market capital charge, as the maximum of the up and down shock, subject to a minimum of zero, same as is also done in the interest rate risk.	
347.	Lloyd's	4.49.	We agree.	Noted.
348.	Lucida plc	4.49.	We strongly feel that this approach is flawed. As an example, an institution based in the UK and preparing local regulatory accounts in Sterling that invested in US$-denominated assets to match €-denominated liabilities would need to hold more capital than an institution based in the Eurozone that prepares local regulatory accounts in Euro and invested in the same US$-denominated assets to match similar €-denominated liabilities	Please see comment #267.
349.	ROAM –	4.49.	CEIOPS defines the capital charge for each foreign currency as the maximal delta-NAV under the two scenarios. ROAM would like to receive more information on how the capital charge on the currency risk module will be derived from the capital charges determined for each currency, before concluding on this. The CP does not give any guidance about the aggregation to Group level. However, it seems that CEIOPS is intending to significantly reduce the diversification on Group level by subjecting the up and down shocks to a minimum of zero. We suggest calculating the up and down shocks as the delta-NAV and the total Market capital charge, as the maximum of the up and down shock, subject to a minimum of zero, same as is also done in the interest rate risk.	Please see comment #347.
350.	UNESPA (Association of Spanish Insurers)	4.49.	(EMPTY)	Noted

351.	XL Capital Ltd	4.49.	For each foreign currency the capital charge is calculated using the most onerous of either a rise or a fall in the foreign currency relative to the local currency. For this module the "local currency" is the currency in which the regulatory accounts are prepared. All other currencies are "foreign currencies". The total capital charge for currency risk is the sum of the capital charges over all foreign currencies. In QIS 4 the capital charge was derived by testing the impact of all foreign currencies moving up or down together and taking the most onerous result, rather than by taking the most onerous resilt for each individual currency and then aggregating. This clearly adds a degree of conservatism. The QIS 4 approach allowed certain instances of currency mismatching to be offset whereas applying separate stresses to different currencies will result in higher capital requirements. By stressing each currency separately and then aggregating the individual results the implicit assumption is that currencies are either +100% or -100% correlated with the domestic currency. The alternative would have been to allow some diversification between the currency stresses.	Please see comment #267
352.			Confidential comment deleted	
353.	CEA, ECO-SLV-09-442	4.50.	See comments to Para 4.42. We request that the wording is added: "where currency risk is not hedged".	Agree. Please see revised advice.
354.	CRO FORUM	4.50.	The CRO forum considers this comment sensible as explicit guidance although we believe that implicitly it should follow from 4.48. It may also be worth adding that the currency module should "look through" into all investment funds.	Agree. Please see revised advice.

355.	German Insurance Association – Gesamtverband der D	4.50.	Although calibration is not covered in this paper, we should note that in our opinion, the application of a 20% movement for the upward and the downward shock could be considered as high and its application could induce to higher results than the 99.5% solvency requirement. We request that the wording is added: "where currency risk is not hedged".	Please see comment #345 Agree. Please see revised advice.
356.	Investment & Life Assurance Group (ILAG)	4.50.	The effects of purchase power parity should be recognised in the calibration, i.e. where an equity is listed on two exchanges in two currencies the value would not change as a result of currency movements due to arbitrage.	Not agreed. The currency risk should be based on the currency in which the undertaking is holding the equity.
357.	Lloyd's	4.50.	This point refers to holding of foreign equities but does not seem to consider foreign bonds or properties. Since the interest-rate risk section does not make any references to foreign interest rates, how should an entity allow for changes in values of foreign bond holdings in a stress scenario?	Please see comment #290
358.	Munich RE	4.50.	In general, all positions leading to a currency mismatch position should be recognized in the Delta NAV stress with regard to currency movements. This includes equities, but also real estate and interest bearing instruments. The notion is that the individual asset risk classes (equity, property, interest rate, spread) are calibrated in their local currency.	Please see comment #290
359.	Association of British Insurers	4.51.	We recognise that there are discrete risks in the spread, changes in the level and changes in the volatility. There is need for an achievable approach, which avoids double counting. Perhaps it	Partially agreed. Changes in volatility will be implicitly included in the calibration.

			could be calibrated as an overall test and then split out in an appropriate manner between credit and market risk.	
360.	Legal and General Group	4.51.	There is need for an achievable approach, which avoids double counting. We are against a split of spread risk and counterparty risk, since this would lead to excess complexity.	Not agreed. CEIOPS considers the split between spread risk and counterparty default risk being necessary and in line with the Framework Directive.
361.	Association of Run-Off Companies	4.52.	The scope of the spread risk sub module is still not clear. Could this risk not be incorporated within counterparty default risk? The lack of clearly defined lines may lead to a double-counting of risks and consequently higher capital requirements.	Not agreed. Double-counting is excluded as the counterparty default risk covers (besides the risk inherent in risk-mitigating contracts) only those credit exposures which are not covered by the spread risk module.
362.	UNESPA (Association of Spanish Insurers)	4.52.	(EMPTY)	
363.	UNESPA (Association of Spanish Insurers)	4.53.	(EMPTY)	
364.	CEA, ECO-SLV-09-442	4.54.	See comments to Para 4.79.	See comment #466.
365.	Lloyd's	4.54.	To the extent that there is certain freedom in allocating risks between spread risk and counterparty risk, there may be opportunities to vary the total SCR depending on where a particular risk is allocated. It is however difficult to judge whether it will be	Not agreed. The scope of the spread risk sub-module is outlined in detail in 4.57. The counterparty default risk would

			possible to achieve a significant reduction in SCR by allocating risks arbitrarily.	only cover the remaining credit risk.
366.	Munich RE	4.54.	Credit risk in its most general form consists of risks due to changing credit spreads, migrations and defaults. We think that the boundary between the spread risk sub-module (within the market risk module) and the counterparty default risk module should be explicitly drawn. We suggest that spread risk (i.e. changes in the market price of credit risk) should be covered in the market risk module and migration/default in the counterparty default module. This also makes the calibration exercise a bit more easy as usually credit spread volatility is measured within one rating class, i.e. whenever a migration of an instrument happens it will be excluded from the index. This is then consistent to the definition of spread risk.	See comment #466.
367.	UNESPA (Association of Spanish Insurers)	4.54.	See comments to Para 4.79	See comment #466.
368.	ROAM –	4.55.	We think that certain financial instruments require further investigations: -Treatment of convertible bonds -Subordination level in a CDO (Collateralized debt obligation) -Asset-backed securities and covered bonds -Duration criteria for the floating rate notes and equity-linked notes should be clarified.	Partially agreed. CDO and ABS will be dealt with in the forthcoming CP on calibration.
369.	Association of British Insurers	4.57.	See comments to 4.72.	See comment #400.

370.	CEA, ECO-SLV-09-442	4.57.	See comments to Para 4.72.	See comment #400.
371.	Groupe Consultatif	4.57.	We do not understand and probably disagree that a capital charge for spread risk should arise in relation to assets in respect of which the investment risk is borne by policyholders. It should be stated here that assets matching illiquid liabilities require special treatment. The amount of liabilities may reasonably be assumed to decrease by a substantial amount (reflecting illiquidity premium) consistently with our comments on 4.7 and 4.12 above. This does depend to some extent on the approach taken to calibration of SCR in respect of both spread variation and credit losses, but in principle the economic capital requirement for spread risk for an investor funded by illiquid liabilities should be limited to requirements in respect of particular asset portfolio characteristics of the investor and in respect of imminent prospective downgrades reflected in higher spreads.	Agreed. For contracts where policyholders bear the investment risk, the investments can be excluded from the market risk module except that any risks not borne by the policyholder are treated in the market risk module or any other module that is relevant (so this captures financial options and guarantees, expenses and other underwriting risks, etc.)
372.	Lucida plc	4.57.	It is not clear why capital needs to be held against risks where the policyholders bear the risk This comment also applies to 4.72	See comment #371.
373.	Munich RE	4.57.	We do not understand why risks that are borne by the policyholder explicitly should be capitalized by the (re)insurance undertaking (first bullet)	See comment #371.
374.	CEA, ECO-SLV-09-442	4.58.	See comments to Para 4.73.	See comment #415.
375.	Groupe	4.58.	Two comments/questions:	

	Consultatif		1) How does this approach deal with different spreads of Euro denominated Government bonds against the common swap curve? At year-end 2008, spreads differed by up to 200bp (Germany vs. Greece or Ireland). Could a German insurer have invested in Irish Government bonds without additional charge for spread risk? Is this exemption (not to account for spread risk) restricted to national governments, or does it also include borrowings offered or guaranteed by lower federal bodies, eg "Bundesländer"?	See comment #377. Noted. Local governments would be included in this exemption if a demonstrable guarantee from the national government exists for the debt of these local governments.
376.	Lucida plc	4.58.	We do not agree with this recommendation as differences in returns on different government backed assets must in part reflect the market's view of credit risk associated with different countries. We note that some institutions have higher credit ratings than some OECD and EEA states. This comment also applies to 4.73, 4.101 and 4.139	
377.	Munich RE	4.58.	Spread risk is also present for instruments issued by national governments. Hence, this risk should be considered here as well.	Not agreed. Including sovereign bonds in the spread risk sub-module could result in unintended market distortions which might also affect the macroeconomic environment.
378.	Lloyd's	4.61.	This seems to suggest that risk in respect of credit derivatives held as part of risk mitigation strategy will be covered in the counterparty risk module. However the value of such a derivative will be affected both by the credit spread risk of the reference entity and the risk of default by the counter-party to the credit derivative. Are both of these risks intended to be considered under	See comment #439.

			the counterparty risk module, as is clearly intended for credit derivatives held not as part of risk mitigation strategy?	
379.	Association of British Insurers	4.62.	(EMPTY)	
380.	CEA, ECO-SLV-09-442	4.62.	This text is not consistent with the definition of the counterparty default risk module. The text in this article might be misleading as it is not consistent with the scope of the counterparty default risk module. Only the counterparty default risk of reinsurance and derivative arrangements are to be assessed in the counterparty default risk module. Default risks (if they are not based on risk mitigation techniques) are covered by the spread risk module.	Agreed. See amended wording.
381.	Legal and General Group	4.62.	This text is not consistent with the definition of the counterparty default risk module The text in this article is not consistent with the scope of the counterparty default risk module. Only the counterparty default risk of reinsurance and derivative arrangements are to be assessed in the counterparty default risk module.	See comment #380.
382.	Pearl Group Limited	4.62.	This text is not consistent with the definition of the counterparty default risk module The text in this article is not consistent with the scope of the counterparty default risk module. The counterparty default risk module should only include the counterparty default risk of reinsurance and derivative arrangements.	See comment #380.
383.	UNESPA (Association	4.62.	This text is not consistent with the definition of the counterparty default risk module	See comment #380.

	of Spanish Insurers)		The text in this article might be misleading as it is not consistent with the scope of the counterparty default risk module. Only the counterparty default risk of reinsurance and derivative arrangements are to be assessed in the counterparty default risk module. Default risks (if they are not based on risk mitigation techniques) are covered by the spread risk module indeed.	
384.	PricewaterhouseCoopers LLP	4.64.	Firms are permitted to take account of credit spread risk hedging programmes when calculating the capital charge. Given the basis risk inherent in many hedging programmes, we suggest that further guidance should be given on "proper treatment" of these risks. This comment also applies to paragraph 4.82.	Noted.
385.	CEA, ECO-SLV-09-442	4.65.	See comments to Para 4.78.	See comment #455.
386.	CEA, ECO-SLV-09-442	4.66.	See comments to Paragraphs 4.77 and 4.79.	See comments #442 and #466.
387.	FFSA	4.66.	CEIOPS mentions that the sensitivity of the underlying portfolio to changes in level of volatility of credit spreads would be also indirectly considered in this sub-module. FFSA would require information on how this phenomenon would be taken into account in the calibration process and which underlying model would allow capturing such a risk. Furthermore, would the mentioned volatility correspond to historical or implied volatility?	Noted. See forthcoming CP on calibration.
388.	Groupe Consultatif	4.66.	It's written that the sensitivity of the underlying portfolio to changes in level of volatility of credit spreads is also indirectly	Noted. See forthcoming CP on calibration.

			considered in this sub-module. How this phenomenon is taken into account in the calibration process? Which underlying model allows capturing such a risk? Does the mentioned volatility correspond to historical or implied volatility?	
389.	Institut des actuaries (France)	4.66.	It's written that the sensitivity of the underlying portfolio to changes in level of volatility of credit spreads is also indirectly considered in this sub-module. How this phenomenon is taken into account in the calibration process? Which underlying model allows capturing such a risk? Does the mentioned volatility correspond to historical or implied volatility?	Noted. See forthcoming CP on calibration.
390.	KPMG ELLP	4.66.	We look forward to receiving advice on the calibration of the factors to be used in the spread risk sub-module. We are particularly keen to understand how migration and default risks will be allowed for in the calibration of the factors and in movements in credit spreads.	Noted. See forthcoming CP on calibration.
391.	Munich RE	4.66.	No implicit recognition of migration and default risk should be made. Those risks should be covered in the counterparty default risk module (see comment to 4.54.).	See comment #472.
392.	ROAM –	4.66.	CEIOPS mentions that the sensitivity of the underlying portfolio to changes in level of volatility of credit spreads would be also indirectly considered in this sub-module. ROAM would require information on how this phenomenon would be taken into account in the calibration process and which underlying model would allow capturing such a risk. Furthermore, would the mentioned volatility correspond to historical or implied volatility?	Noted. See forthcoming CP on calibration.
393.	KPMG ELLP	4.67.	We await an update on this.	Noted. See forthcoming CP on calibration.

394.	CEA, ECO-SLV-09-442	4.68.	(EMPTY)	
395.	German Insurance Association – Gesamtverband der D	4.68.	(EMPTY)	
396.	Association of Friendly Societies	4.69.	We are concerned that the look-through requirement on concentration risk may create additional data issues for a number of firms without necessarily improving the accuracy of the calculation.	Noted. Proportionality applies here as with all aspects of Solvency 2.
397.	Association of Friendly Societies	4.69.	We are concerned that the look-through requirement on concentration risk may create additional data issues for a number of firms without necessarily improving the accuracy of the calculation.	See comment #396.
398.	Investment & Life Assurance Group (ILAG)	4.69.	The look-through requirement on concentration risk may create additional data issues for some firms.	See comment #396.
399.	OAC	4.69.	We are concerned that the look-through requirement on concentration risk may create additional data issues for a number of firms without necessarily improving the accuracy of the calculation.	See comment #396.
400.	Association of British	4.72.	Risks borne by the policyholder should not be capitalised by the insurer	

	Insurers		☐ "Investments for the benefit of life-insurance policyholders who bear the investment risk" - We do not understand why risks that are borne by the policyholder explicitly should be capitalised by the (re)insurance undertaking. ☐ We request that this bullet point is deleted. 1st bullet point. Do the policyholders not bear the spread risk? Do they not mean the residual impact on NAV for this business? It would be helpful if this were clarified. We think that where the policyholder bears the investment risk, then this should not be within the scope of this module.	See comment #371.
			Considerations to take into account in calibrating this sub-module ☐ "Loans guaranteed by mortgages" - This will generate a significant capital charge because normally these loans are not rated, as the counterparties are mostly "natural persons" and not companies. Although, as yet, we do not have information as to how this module will be calibrated, we suggest pre-emptively that the charge for these mortgages is based on a separate exposure measure: Net exposure at default. By this we mean that any loan backed by a mortgage will result in a reduced loss at default. Thus, for example: if the mortgage is above 100% of the loan amount, a risk similar to "AAA" is assumed and as the collateral value is higher than the exposure these loans would be included with a zero amount; For a mortgage value between 75% and 100% of the loan amount, a risk similar to "BBB" could be assumed; and for mortgage value below 75%, a risk similar to "CCC2 could be assumed. As an additional safe guard the mortgage value could also be	Noted. See forthcoming CP on calibration.

			shocked by means of the property shock. ☐ "Deposits with credit institutions" - Although, as yet, we do not have information as to how this module will be calibrated, we suggest pre-emptively that the deposits with credit institutions which are non-rated but are subject to European supervision should not attract the "CCC" charge but "BBB" in line with non-rated reinsures facing Solvency II. ☐ "Participating interests" - We do not agree with the inclusion of participating interests in the spread risk sub-module. We note that participating interest do not have a (modified) duration.	Noted. See forthcoming CP on calibration. Noted.
401.			Confidential comment deleted	
402.	CEA, ECO-SLV-09-442	4.72.	Risks borne by the policyholder should not be capitalised by the insurer: ☐ "Investments for the benefit of life-insurance policyholders who bear the investment risk" - We do not understand why risks that are borne by the policyholder explicitly should be capitalised by the (re)insurance undertaking. Surely if the policyholders bear the spread risk then the insurer should not be required to hold capital against this risk. This should not be within the scope of this module - it would be helpful if this were clarified. - We request that this bullet point is deleted. Considerations to take into account in calibrating this sub-module: ☐ "Loans guaranteed by mortgages" - This will generate a significant capital charge because normally these loans are not rated as the counterparties are mostly "natural persons" and not companies. Although, as yet, we do not have information as to how this module will be calibrated, we suggest pre-emptively that the	See comment #400.

			charge for these mortgages is based on a separate exposure measure: Net exposure at default. By this we mean that any loan backed by a mortgage will result in a reduced loss at default. Thus, for example: if the mortgage is above 100% of the loan amount, a risk similar to AAA is assumed and as the collateral value is higher than the exposure these loans would be included with a zero amount; For a mortgage value between 75% and 100% of the loan amount, a risk similar to BBB could be assumed; and for mortgage value below 75%, a risk similar to CCC could be assumed. As an additional safe guard the mortgage value could also be shocked by means of the property shock. ☐ "Deposits with credit institutions" - Although, as yet, we do not have information as to how this module will be calibrated, we suggest pre-emptively that the deposits with credit institutions which are non-rated but are subject to European supervision should not attract the "CCC" charge but "BBB" in line with non-rated Reinsurers facing Solvency II. ☐ "Participating interests" - We do not agree with the inclusion of participating interests in the spread risk sub-module. We note that participating interest do not have a (modified) duration.	
403.	CRO FORUM	4.72.	The CRO forum notes that the scope includes "investments for the benefit of life-insurance policyholders who bear the investment risk". This seems contrary to paragraph 2.1, point 2, which is an extract from the level 1 text, and to 4.113 and 4.135. The CRO forum believes these investments should be excluded from this sub-module. This module does not appear to consider the impact of changing of liquidity premium (which can offset some spread widening). This is	See comment #371.

			a separate risk to liquidity risk more generally, and should be modelled within the market risk module.	
404.	DIMA (Dublin International Insurance & Management	4.72.	This mentions spread risk covers "deposits with credit institutions", but no further mention is made in clauses 4.51-4.82.	Noted. Deposits with credit institutions fall under the scope of the spread risk sub-module.
405.	FFSA	4.72.	CEIOPS considers the credit risk of investments for the benefits of life-insurance policyholders who bear the investment risk. FFSA does not understand why there should be a capital charge linked to the spread risk sub-module for "investment for the benefit of life insurance policyholder who bear the investment risk" and therefore propose to remove this category from the spread risk sub-module.	See comment #371.
406.	German Insurance Association – Gesamtverband der D	4.72.	Risks borne by the policyholder should not be capitalised by the insurer ☐ "Investments for the benefit of life-insurance policyholders who bear the investment risk" - We do not understand why risks that are borne by the policyholder explicitly should be capitalised by the (re)insurance undertaking. Surely if the policyholders bear the spread risk then the insurer should not be required to hold capital against this risk. This should not be within the scope of this module - it would be helpful if this were clarified. ☐ We request that this bullet point is deleted. Considerations to take into account in calibrating this sub-module ☐ "Loans guaranteed by mortgages" - This will generate a significant capital charge because normally these loans are not	See comment #400.

			rated as the counterparties are mostly "natural persons" and not companies. Although, as yet, we do not have information as to how this module will be calibrated, we suggest pre-emptively that the charge for these mortgages is based on a separate exposure measure: Net exposure at default. By this we mean that any loan backed by a mortgage will result in a reduced loss at default. Thus, for example: if the mortgage is above 100% of the loan amount, a risk similar to AAA is assumed and as the collateral value is higher than the exposure these loans would be included with a zero amount; For a mortgage value between 75% and 100% of the loan amount, a risk similar to BBB could be assumed; and for mortgage value below 75%, a risk similar to CCC could be assumed. As an additional safe guard the mortgage value could also be shocked by means of the property shock. ☐ "Deposits with credit institutions" - Although, as yet, we do not have information as to how this module will be calibrated, we suggest pre-emptively that the deposits with credit institutions which are non-rated but are subject to European supervision should not attract the "CCC" charge but "BBB" in line with non-rated Reinsurers facing Solvency II. ☐ "Participating interests" - We do not agree with the inclusion of participating interests in the spread risk sub-module. We note that participating interest do not have a (modified) duration.	
407.	Groupe Consultatif	4.72.	See comments on 4.57	See comment #371.
408.	Legal and General Group	4.72.	If the investment risk is held by the policyholder, than we do not believe that this should be within the scope of the module.	See comment #371.

409.	Lloyd's	4.72.	We agree.	Noted.
410.	Pearl Group Limited	4.72.	Risks borne by the policyholder should not be capitalised by the insurer "Investments for the benefit of life-insurance policyholders who bear the investment risk" - We do not understand why risks that are borne by the policyholder explicitly should be capitalised by the (re)insurance undertaking. We request that this bullet point is deleted. 1st bullet point. Do the policyholders not bear the spread risk? Do they not mean the residual impact on NAV for this business? It would be helpful if this were clarified. We think that where the policyholder bears the investment risk, then this should not be within the scope of this module.	See comment #371.
411.	UNESPA (Association of Spanish Insurers)	4.72.	Risks borne by the policyholder should not be capitalised by the insurer ☐ "Investments for the benefit of life-insurance policyholders who bear the investment risk" - We do not understand why risks that are borne by the policyholder explicitly should be capitalised by the (re)insurance undertaking. Surely if the policyholders bear the spread risk then the insurer should not be required to hold capital against this risk. This should not be within the scope of this module - it would be helpful if this were clarified. ☐ We request that this bullet point is deleted.	See comment #371.

412.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	4.73.	This leads to wrong incentives: national governments of OCDE or EEA states don't have the same creditworthiness (evidence comes from term structures). In this methodology, companies would prefer borrowings from states with higher returns, because the capital charge would be the same. Assuming the same risk for each state ignores the reality of today's term structures.	See comment #377.
413.	Association of British Insurers	4.73.	Spread risk for instruments issued by governments should also be included in this module Spread risk is also present for instruments issued by national governments. Hence, this risk should be considered here as well. Furthermore, the approach assumed in this article is not in line with the use of "AAA" government bonds as the benchmark for the discount rate. Not assessing government bonds in this module is not fully market consistent. Also it is unclear how this would apply to bonds issued by supranationals (e.g. European Investment Bank, European Bank of Reconstruction and Development). We would argue that they should be subject to the same treatment as instruments issued by national governments.	See comment #377. Multilateral development banks listed in Annex VI, Part 1, Number 4 of the Capital Requirements Directive (2006/48/EC) as well as international organisations listed in Annex VI, Part 1, Number 5 will be treated like EEA-/OECD sovereigns.
414.			Confidential comment deleted	
415.	CEA, ECO-SLV-09-442	4.73.	We request clarification of these requirements. We support the exclusion of borrowings by or guaranteed by national governments of an OECD or EEA state. However, the condition that these borrowings need to be issued in the currency of the government needs clarification. Borrowings issued in other currencies should also not be included in this sub-module as the foreign currency exposures should be covered by the corresponding currency risk sub-module.	Noted. Not agreed. The credit risk inherent in sovereign bonds issued in foreign currency differs significantly from the risk inherent in bonds issued in local currency. These risks are not only

			Also it is unclear how this requirement would apply to bonds issued by supranationals (e.g. European Investment Bank, European Bank of Reconstruction and Development). We request that they should be subject to the same treatment as instruments issued by national governments. We request more information as what is considered as a guarantee. OECD states have actually supported banks and insurance companies worldwide in order to avoid bankruptcies. Would this mean that debt issued by these banks and insurers should be excluded from this sub-module? In other words, what is the definition of "guarantee" and what is the extent to which the "guarantee" should work in order to avoid inclusion in the spread sub-module?	due to FX movements, so cannot be dealt with exclusively in the currency risk sub-module. Noted. See comment #413.. Noted. See comment #424.
416.	CRO FORUM	4.73.	16. The CRO Forum would like to point out that this depends on, and therefore should be consistent with, the risk free rate decision, as discussed in CP40. 17. If the risk free rate will be based on government rates, the CRO Forum would largely agree with this article. However, we believe that this exemption should be limited to undertakings investing in their local government, or at least to investment in government bonds originating from governments whose local currency is the same as that of the undertaking's government (e.g. any Euro zone bonds for undertakings based within the Euro zone). Otherwise, it would be possible to treat investments in foreign government exposure as risk free. The fact that the foreign government could print money rather than defaulting would then need to be picked up through currency and interest rate risk.	Not agreed. Regardless of the risk free rate used, sovereign bonds of EEA and OECD states should not be included in the spread risk sub-modules. Including these could result in unintended market distortions which might also affect the macroeconomic environment.

			18. 19. If the risk free rate will be based on swap rates, the difference in credit worthiness would have the be picked up by the spread risk module, resulting in a captial charge on borrowings by or guaranteed by national government of an OECD or EEA state, issued in the currency of the government.	
417.	FAIDER (Fédération des Associations Indépendantes	4.73.	This seems overly optimistic. Indeed crises have shown, and until recently, that a country could default and one should therefore carefully consider the sovereign credit risk	See comment #377.
418.	FFSA	4.73.	CEIOPS mentions that borrowings guaranteed by national government of an OECD and EEA state are excluded from this sub-module. FFSA would require more information on what is considered as a guarantee, in particular in the context of the financial turmoil. OECD states have actually supported banks and insurance companies all around the work in order to avoid bankruptcies. Would this mean that debt issued by these banks and insurers should be excluded from this sub-module? In other words, what is the definition of "guarantee" and what is the extent to which the "guarantee" should work in order to avoid inclusion in the spread sub-module?	See comment #415.
419.			Confidential comment deleted	
420.	German Insurance Association –	4.73.	We request clarification of these requirements We support the exclusion of borrowings by or guaranteed by national governments of an OECD or EEA state. However, the	See comment #415.

	Gesamtverband der D		condition that these borrowings need to be issued in the currency of the government needs clarification. Borrowings issued in other currencies should also not be included in this sub-module as the foreign currency exposures should be covered by the corresponding currency risk sub-module. Also it is unclear how this requirement would apply to bonds issued by supranationals (e.g. European Investment Bank, European Bank of Reconstruction and Development). We request that they should be subject to the same treatment as instruments issued by national governments. We request more information as what is considered as a guarantee OECD states have actually supported banks and insurance companies worldwide in order to avoid bankruptcies. Would this mean that debt issued by these banks and insurers should be excluded from this sub-module? In other words, what is the definition of "guarantee" and what is the extent to which the "guarantee" should work in order to avoid inclusion in the spread sub-module?	
421.	Legal and General Group	4.73.	Spread risk for instruments issued by governments should also be included in this module Spread risk is also present for instruments issued by national governments. Hence, this risk should be considered here as well. How would this apply to bonds, which are issued by supranationals (i.e. European Investment Bank, European Bank of Reconstruction and Development, African Development Bank etc.)	See comment #377 See comment #413.

			There is inconsistency with CP40 in respect of AAA-rated bonds.	
422.	Lloyd's	4.73.	We agree.	Noted.
423.	Pearl Group Limited	4.73.	The paragraph mentions "guaranteed by national government of an OECD or EEA state" however these are not all AAA rated. This is not consistent with other CPs. Either companies are required to use AAA rated or the governments of an OECD or EEA state should also apply. Also, what about Supranationals? Do these qualify in the above definition? The paragraph, and in other appropriate places, Supranationals should be definitely addressed.	Not agreed. All sovereign bonds issued by EEA or OECD governments should be excluded. See comment #413.
424.	ROAM –	4.73.	CEIOPS mentions that borrowings guaranteed by national government of an OECD and EEA state are excluded from this sub-module. ROAM would require more information on what is considered as a guarantee, in particular in the context of the financial turmoil. OECD states have actually supported banks and insurance companies all around the world in order to avoid bankruptcies. Would this mean that debt issued by these banks and insurers should be excluded from this sub-module? In other words, what is the definition of "guarantee" and what is the extent to which the "guarantee" should work in order to avoid inclusion in the spread sub-module?	Noted. Implicit guarantees (based on pure "too big to fail" assumptions) cannot be considered as guarantees. Demonstrable guarantees by the state for bonds issued by financial institutions would instead be excluded from the module.
425.	UNESPA (Association	4.73.	We request clarification of these requirements We support the exclusion of borrowings by or guaranteed by	See comment #426.

	of Spanish Insurers)		national governments of an OECD or EEA state. However, the condition that these borrowings need to be issued in the currency of the government needs clarification. Borrowings issued in other currencies should also not be included in this sub-module as the foreign currency exposures should be covered by the corresponding currency risk sub-module. Also it is unclear how this requirement would apply to bonds issued by supranationals (e.g. European Investment Bank, European Bank of Reconstruction and Development). We request that they should be subject to the same treatment as instruments issued by national governments.	See comment #413.
426.	uniqa	4.73.	We support the exclusion of borrowings by or guaranteed by national governments of an OECD or EEA state as this seems to be a relevant macroeconomic factor for certain member states. However, the condition that these borrowings need to be issued in the currency of the government needs clarification. In our view any FX exposures should be covered by the corresponding sub-module anyway and because of that the risks should be viewed distinctly.	Noted. Not agreed. The credit risk inherent in sovereign bonds issued in foreign currency differs significantly from the risk inherent in bonds issued in local currency. These risks are not only due to FX movements, so cannot be dealt with exclusively in the currency risk sub-module.
427.	Association of British Insurers	4.74.	Hybrid debt should be unbundled and the different sub-component subject to the corresponding (sub) modules ☐ "Hybrid debt" - We consider that the different components of hybrid debt should be identified and unbundled and that the risk sub-modules should then be applied to the corresponding sub-components of hybrid debt. Rather than a requirement for the full value of the hybrid debt to be subject to this module.	Agreed. If an unbundling is feasible, only the bond component of hybrid debt should be covered under this module (indicated by "the following classes of bonds").

			In any case, we think this classification is confusing as an investment grade bond and a high yield corporate bond could be included in the subordinated debt category. We find also confusing the hybrid debt concept, as it can be identified with hybrids structured products in a debt format, and bank subordinated debt.	See comment #432.
428.			Confidential comment deleted	
429.	CRO FORUM	4.74.	This seems to be incomplete and unnecessary given 4.72	Not agreed. This paragraph is added for clarification is not meant to be an exhaustive list.
430.	Legal and General Group	4.74.	Hybrid debt should be unbundled and the different sub-component subject to the corresponding (sub) modules ☐ "Hybrid debt" - We consider that the different components of hybrid debt should be identified and unbundled and that the risk sub-modules should then be applied to the corresponding sub-components of hybrid debt. Rather than a requirement for the full value of the hybrid debt to be subject to this module. In any case, we think this classification is confusing as an investment grade bond and a high yield corporate bond could be included in the subordinated debt category. We also find the hybrid debt concept confusing, as it can be identified with hybrids structured products in a debt format, and bank subordinated debt.	See comment #427. See comment #432.
431.	Lloyd's	4.74.	We agree.	Noted.
432.	Pearl Group Limited	4.74.	We think this classification is confusing as an investment grade bond and a high yield corporate bond could be included in the subordinated debt category. We find also confusing the hybrid debt concept, as it can be identified with hybrids structured products in a debt format, and bank subordinated debt.	Not agreed. The list is for illustrative purposes only and not intended to contain mutually-exclusive categories.

433.	ROAM –	4.74.	CEIOPS considers that hybrid debt should be considered in this sub-module. ROAM considers that the different component of hybrid debt should preliminarily be identified and unbundled and that the risk sub-modules should then be applied to the corresponding sub-components of an hybrid debt.	See comment #427.
434.			Confidential comment deleted	
435.	CRO FORUM	4.75.	There is a missing "as" before "collateralised debt obligations" in the first sentence. (b) should be removed as asset backed securities are not always tranched. It is not clear if this module is designed to capture the pre-payment and extension risk in some of these contracts.	Noted. The definition follows the Basel II framework.
436.	Lloyd's	4.75.	We agree.	Noted.
437.			Confidential comment deleted	
438.	CRO FORUM	4.76.	It is not clear whether or not the impact of changes in property prices on a mortgage valuation is fully captured in the spread risk module, or whether this is picked up within the property risk module. It should be ensured that there is no overlap in the measurement of this risk. This paragraph has an erroneous full stop after "derivatives" in the first sentence.	Noted. The risk of mortgage loans should be dealt with in the spread risk sub-module. Noted.
439.	Lloyd's	4.76.	This seems to suggest that risk in respect of credit derivatives held as part of risk mitigation strategy will be covered in the counterparty risk module. However the value of such a derivative will be affected both by the credit spread risk of the reference entity and the risk of default by the counter-party to the credit derivative. Are both of these risks intended to be considered under the counterparty risk module, as is clearly intended for credit	Agreed. Credit derivatives held as part of a recognised risk mitigation policy would be covered by the counterparty default risk module.

			derivatives held not as part of risk mitigation strategy?	
440.	Munich RE	4.76.	It is not clear whether or not the impact of changes in property prices on a mortgage valuation is fully captured in the spread risk module, or whether this is picked up within the property risk module. It should be ensured that there is no overlap in the measurement of this risk.	See comment #438.
441.			Confidential comment deleted	
442.	CEA, ECO-SLV-09-442	4.77.	We request more information as to how the volatility of credit spreads is to be taken into account in the calibration. Ceiops mentions that the sensitivity of the underlying portfolio to changes in level of volatility of credit spreads would be indirectly considered in this sub-module. We request information as to how this volatility would be taken into account in the calibration process and which underlying model would allow for the capture of such a risk before we can comment on this issue.	Noted. It would not be proportionate to explicitly test changes in the volatility of credit spreads as part of the standard formula approach. However, these factors will be implicitly taken into account when considering the calibration of the shock scenarios.
443.	CRO FORUM	4.77.	While the CRO forum agrees that sensitivity to credit spread volatility should be considered, it would be useful to provide some details of how best to assess this risk.	See comment #442.
444.	FFSA	4.77.	CEIOPS considers that the volatility in credit spreads should be addressed within this module. FFSA considers that this would be an over-refining of the standard formula, for a benefit that has not been demonstrated.	See comment #442.
445.	German Insurance Association – Gesamtverb	4.77.	We request more information as to how the volatility of credit spreads is to be taken into account in the calibration CEIOPS mentions that the sensitivity of the underlying portfolio to changes in level of volatility of credit spreads would be indirectly	See comment #442.

	and der D		considered in this sub-module. We request information as to how this volatility would be taken into account in the calibration process and which underlying model would allow for the capture of such a risk before we can comment on this issue.	
446.	Lloyd's	4.77.	We agree.	Noted.
447.	ROAM –	4.77.	CEIOPS considers that the volatility in credit spreads should be addressed within this module. ROAM members think that volatility in credit spreads should be considered, but further investigation is required.	See comment #442.
448.	UNESPA (Association of Spanish Insurers)	4.77.	We request more information as to how the volatility of credit spreads is to be taken into account in the calibration CEIOPS mentions that the sensitivity of the underlying portfolio to changes in level of volatility of credit spreads would be indirectly considered in this sub-module. We request information as to how this volatility would be taken into account in the calibration process and which underlying model would allow for the capture of such a risk. Furthermore, we request clarification as to whether the volatility would correspond to historical or implied volatility.	See comment #442.
449.	Association of Friendly Societies	4.78.	4.65 seems to imply that capital charge is only based on result of a rise in credit spreads? 4.78 suggests based on greater of rise and fall in spreads. This needs to be clarified.	Agreed. With the exception of credit derivatives only a rise in credit spreads should be considered.
450.	Association of Friendly	4.78.	4.65 seems to imply that capital charge is only based on result of a rise in credit spreads? 4.78 suggests based on greater of rise and	See comment #449.

	Societies		fall in spreads. This needs to be clarified.	
451.			Confidential comment deleted	
452.	CEA, ECO-SLV-09-442	4.78.	It is difficult to comment on this section without information about the calibration. We require information as to the calibration of this module net of the loss absorbing capacity of TP. Calibration of the spread risk module will need to consider the treatment of non-rated investments. For non-rated investments the charge should be assumed to cover only the probability of default and not the volatility of the spreads as there are no objective spreads. The default risk of these instruments should be based on the relative financial strength of these entities / counterparties. Alternative measures for non-regulated entities (credit institutions or (re-) insurers) could be derived from the "current ratios" or "quick ratios". Both ratios can give evidence regarding the leverage within an entity and its ability to repay its outstanding debt. As for QIS4, for some instruments widening and narrowing of spread scenarios should also be allowed to determine spread risk capital requirements. 8. The paper currently only considers a factor based approach to spread risk where it states that the capital requirement for spread risk is estimated by applying a factor to a volume measure taking into account the duration of instruments and their rating. For some products this approach may not give appropriate results for example for credit derivatives, where the capital charge was more	See comment #455.

			appropriately determined in QIS4 as the change in the value of the derivative following a 1 in 200 year event of the most onerous of a widening or a narrowing of credit spreads.	
453.	CRO FORUM	4.78.	The word "factor" should be replaced by the word "scenario" in the first sentence of this paragraph. This is then consistent with wording elsewhere in the document.	Not agreed. In the spread risk sub-module (with the exception of credit derivatives) a factor-based model should be used.
454.	FFSA	4.78.	CEIOPS mentions that the calculation would be based on the maximum of two scenarios. FFSA would require information on the final option and particularly if the calculation of capital charge net of loss absorbing effect for spread risk is based on a delta-NAV approach. CEIOPS proposes that the Capital Charge is defined on a factor-based calculation. FFSA would prefer a scenario based method to be defined. An increase or decrease on the spread has the same effects on bonds that the interest rates. We therefore don't understand why there are two different approaches.	Noted. The factor-based approach is used only for calculating the capital charge before any loss absorbing effects. See comment #453.
455.	German Insurance Association – Gesamtverband der D	4.78.	It is difficult to comment on this section without information about the calibration. We require information as to the calibration of this module net of the loss absorbing capacity of TP. Calibration of the spread risk module will need to consider the treatment of non-rated investments For non-rated investments the charge should be assumed to cover only the probability of default and not the volatility of the spreads	Noted. The factor-based approach is used only for calculating the capital charge before any loss absorbing effects. Noted. See forthcoming CP on calibration.

			as there are no objective spreads. The default risk of these instruments should be based on the relative financial strength of these entities / counterparties. Alternative measures for non-regulated entities (credit institutions or (re-) insurers) could be derived from the "current ratios" or "quick ratios". Both ratios can give evidence regarding the leverage within an entity and its ability to repay its outstanding debt. As for QIS4, for some instruments widening and narrowing of spread scenarios should also be allowed to determine spread risk capital requirements 11. The paper currently only considers a factor based approach to spread risk where it states that the capital requirement for spread risk is estimated by applying a factor to a volume measure taking into account the duration of instruments and their rating. For some products this approach may not give appropriate results for example for credit derivatives, where the capital charge was more appropriately determined in QIS4 as the change in the value of the derivative following a 1/200 year event of the most onerous of a widening or a narrowing of credit spreads.	Noted. For credit derivatives, the same approach as in QIS4 will be followed.
456.	Groupe Consultatif	4.78.	It should be stated explicitly that this sub module will work on a delta-NAV approach.	Partially agreed. The scenario-based delta-NAV approach is prescribed for credit derivatives; for bonds and structured credit products, it is a factor-based approach.
457.	Institut des actuaries	4.78.	It should précised that this sub module will work on a delta-NAV approach.	See comment #456.

	(France)			
458.	KPMG ELLP	4.78.	This appears to be a contradiction of 4.65 which seems like the reasonable approach.	See comment #449.
459.	Lloyd's	4.78.	We agree.	Noted.
460.	OAC	4.78.	4.65 seems to imply that capital charge is only based on result of a rise in credit spreads? 4.78 suggests based on greater of rise and fall in spreads. This needs to be clarified.	See comment #449.
461.	ROAM –	4.78.	CEIOPS mentions that the calculation would be based on the maximum of two scenarios. ROAM would require information on the final option and particularly if the calculation of capital charge net of loss absorbing effect for spread risk is based on a delta-NAV approach. CEIOPS proposes that the Capital Charge is defined on a factor-based calculation. ROAM would prefer a scenario based method to be defined. An increase or decrease on the spread has the same effects on bonds that the interest rates. We therefore don't understand why there are two different approaches.	See comment #454.
462.	UNESPA (Association of Spanish Insurers)	4.78.	It is difficult to comment on this section without information about the calibration.	Noted. See forthcoming CP on calibration.
463.	XL Capital Ltd	4.78.	The methodology proposes a factor-based calculation for assessing capital charge for spread risk. Such an approach can potentially ignore interactions between interest rates and credit spreads (i.e., where rates might go down as spreads widen). Calculating interest rate risk using an isolated scenario, and then determining spread risk based on a factor approach where factors may potentially be inconsistent with the interest rate scenario, and adding the	Not agreed. All sub-modules are calibrated based on isolated scenarios.

			resulting capital charges may lead to higher capital requirements that ignore diversification benefits.	
464.	Association of British Insurers	4.79.	It is important to address the risk of double counting of default risk. When trying to combine an allowance for default and migration risk along with general market movements in spreads, then there is a risk that the allowance for default and migration risk may be double counted as the market data on changes in spreads will already implicitly allow for defaults and migrations.	Noted. See forthcoming CP on calibration.
465.			Confidential comment deleted	
466.	CEA, ECO-SLV-09-442	4.79.	We request a clear boundary between the spread risk sub-module and the counterparty default risk module. Migration/default should be covered in the counterparty default risk module. Credit risk in its most general form consists of risks due to changing credit spreads, migrations (between ratings) and defaults. We think that the boundary between the spread risk sub-module (within the market risk module) and the counterparty default risk module should be explicitly drawn. ☐ We suggest that spread risk (i.e. changes in the market price of credit risk) should be covered in the market risk module and migration/default in the counterparty default risk module. This also makes the calibration exercise a bit easier as usually credit spread volatility is measured within one rating class, i.e. whenever a migration of an instrument happens it will be excluded from the index. This is then consistent to the definition of spread risk.	See comment #472. Not agreed. CEIOPS considers the implicit modelling of migration within the spread risk module being sufficient.

467.	CRO FORUM	4.79.	If credit spreads, term structure and volatility are to be considered in the calibrations, the CRO forum believes an approach which only captures movements of the credit curve through an up and a down stress might not be sufficient, as exposure to spread movements will be position dependent. In this case a partial internal model may be appropriate. This is analogous to the comment made in section 4.29 on interest rate risk.	Noted.
468.	German Insurance Association – Gesamtverband der D	4.79.	We request a clear boundary between the spread risk sub-module and the counterparty default risk module. Migration/default should be covered in the counterparty default risk module Credit risk in its most general form consists of risks due to changing credit spreads, migrations (between ratings) and defaults. We think that the boundary between the spread risk sub-module (within the market risk module) and the counterparty default risk module should be explicitly drawn. We suggest that spread risk (i.e. changes in the market price of credit risk) should be covered in the market risk module and migration/default in the counterparty default risk module. This also makes the calibration exercise a bit easier as usually credit spread volatility is measured within one rating class, i.e. whenever a migration of an instrument happens it will be excluded from the index. This is then consistent to the definition of spread risk. Although we do recognise that changes in the level of the term structure and the volatility surface are relevant aspects, we want to draw attention to the fact that these risks are implicitly covered by	See comment #472.

			the interest rate module. Therefore one needs to ensure that these elements are excluded from the spread risk module so as to prevent double-counting.	
469.	KPMG ELLP	4.79.	See 4.66	See comment #390.
470.	Legal and General Group	4.79.	It is important to address the risk of double counting of default risk.	Noted.
471.	Lloyd's	4.79.	Modelling migration between rating categories should not be necessary as long as the factors allow for a change in spreads which would be commensurate with migration between categories in an adverse event.	Partially agreed. The calibration of the factors will implicitly take into account any migration risks.
472.	Munich RE	4.79.	No implicit recognition of migration and default risk should be made. Those risks should be covered in the counterparty default risk module (see comment to 4.54.).	Not agreed. The Framework Directive states that the counterparty default risk module shall reflect losses due to the deterioration in credit standing for credit exposures which are not covered in the spread risk sub-module.
473.	UNESPA (Association of Spanish Insurers)	4.79.	We request a clear boundary between the spread risk sub-module and the counterparty default risk module. We think that the boundary between the spread risk sub-module (within the market risk module) and the counterparty default risk module should be explicitly drawn.	See comment #466.
474.	Association of British Insurers	4.80.	A factor-based approach is not sufficiently risk-sensitive A factor-based approach is not sufficiently accurate and particularly for some specific types of subordinated debt like Tier 1, where the spread does not reflect only the default risk, but also the probability	Not agreed. CEIOPS considers the factor-based approach for spread as sufficiently risk-sensitive.

			not to pay coupons (that are generally conditional to the payment of dividends) and not to exercise the call at maturity. Therefore the different natures of risk that are summarised by the spread do not allow for the use of any general factors that would be identical for a specific rating and a specific maturity, whatever the nature of the instrument and the underlying risks.	
475.	Association of Friendly Societies	4.80.	It is difficult to comment on this when there is no indication yet of the likely size of factors to be applied.	Noted. See forthcoming CP on calibration.
476.	Association of Friendly Societies	4.80.	It is difficult to comment on this when there is no indication yet of the likely size of factors to be applied.	Noted. See forthcoming CP on calibration.
477.			Confidential comment deleted	
478.	CEA, ECO-SLV-09-442	4.80.	The proposed approach is not sufficiently risk-sensitive. The single factor-based approach is not sufficiently accurate, in particular for certain specific instruments such as subordinated debt where the spread does not only reflect the default risk, but also the probability that coupons are not paid (that are generally conditional on the payment of dividends) or the debt is not called at maturity. Therefore the different risks that are reflected in the spread are not taken into account by the use of a single factor which is identical for individual ratings or maturities.	See comment #474.
479.	CRO FORUM	4.80.	The CRO forum expects the calibration will take into account a measure of recovery rate when considering default risks within financial investments. Historical data and measures for this are typically expressed on a proportion of the notional exposure, so how will CEIOPS adjust for this to allow factors to be applied to market values?	Not agreed. The calibration of this module will be based on market prices of bonds which usually reflect the expectations of market participants with respect to the recovery rate.

480.	FFSA	4.80.	CEIOPS thinks that the approach that would be retained for this module would be a factor based approach based taking account of the rating and the duration of the instrument. FFSA thinks that this approach is not sufficiently accurate and particularly for some specific types subordinated debt like Tier 1, where the spread does not reflect only the default risk, but also the probability not to pay coupons (that are generally conditional to the payment of dividends) and not to exercise the call at maturity. FFSA thus thinks that the different natures of risk that are summarized by the spread do not allow for the use of any general factors that would be identical for a specific rating and a specific maturity, whatever the nature of the instrument and the underlying risks.	See comment #474.
481.	German Insurance Association – Gesamtverband der D	4.80.	The proposed approach is not sufficiently risk-sensitive The single factor-based approach is not sufficiently accurate, in particular for certain specific instruments such as subordinated debt where the spread does not only reflect the default risk, but also the probability that coupons are not paid (that are generally conditional on the payment of dividends) or the debt is not called at maturity. Therefore the different risks that are reflected in the spread are not taken into account by the use of a single factor which is identical for individual ratings or maturities.	See comment #474.
482.	Lloyd's	4.80.	We agree.	Noted.
483.	OAC	4.80.	It is difficult to comment on this when there is no indication yet of the likely size of factors to be applied.	Noted. See forthcoming CP on calibration.
484.	PricewaterhouseCoopers LLP	4.80.	The spread stress is to be rating agency driven for most of the instruments. Some guidance is needed where different rating agencies rate an asset at different levels, and whether to accept internal "ratings" calculated by the insurance undertaking itself for	Noted. See revised CP on the counterparty default risk (CP 51)

			unrated assets.	
485.	ROAM –	4.80.	CEIOPS thinks that the approach that would be retained for this module would be a factor based approach taking into account the rating and the duration of the instrument. ROAM thinks that this approach is not sufficiently accurate and particularly for some specific types subordinated debt like Tier 1, where the spread does not reflect only the default risk, but also the probability not to pay coupons (that are generally conditional to the payment of dividends) and not to exercise the call at maturity. ROAM thus thinks that the different natures of risk that are summarized by the spread do not allow for the use of any general factors that would be identical for a specific rating and a specific maturity, whatever the nature of the instrument and the underlying risks.	See comment #474.
486.	CEA, ECO-SLV-09-442	4.81.	We would like to highlight that it is important that the scenarios that are applied for credit derivatives are consistent with the factors applied to corporate bonds.	Agreed.
487.	FFSA	4.81.	FFSA considers it is important that the scenarios that are applied for credit derivatives are consistent to the charges for corporate bonds.	See comment #486.
488.	German Insurance Association – Gesamtverband der D	4.81.	We would like to highlight that it is important that the scenarios that are applied for credit derivatives are consistent with the factors applied to corporate bonds.	See comment #486.
489.	Lloyd's	4.81.	We agree.	Noted.

490.	PricewaterhouseCoopers LLP	4.81.	Given that rating agencies are to be relied on for the bulk of the assets, it is not obvious why scenario analysis is needed for the counterparty to credit derivatives.	Noted. The scenario-based approach for credit derivatives is intended to reflect the particular characteristics of credit derivatives, including e.g. potential non-linearities.
491.	ROAM –	4.81.	ROAM considers it is important that the scenarios that are applied for credit derivatives are consistent to the charges for corporate bonds.	See comment #486.
492.	Association of British Insurers	4.82.	We agree that this module should take account of credit risk hedging programmes. However, for a shock stress this would reflect static hedging only.	Agreed.
493.	Legal and General Group	4.82.	We agree that this module should take account of credit risk hedging programmes. However, for a shock stress this would reflect static hedging only.	Agreed.
494.	Lloyd's	4.82.	We agree.	Noted.
495.	AMICE	4.83.	Property risk	
496.	Lloyd's	4.85.	Given the crudeness of approaches in other sub-modules (notably the currency risk sub-module), it is probably spurious to introduce different shocks for different types of property. If such level of granularity is to be introduced, one should also consider the exposure to foreign properties in the currency risk sub-module. Perhaps the latter is envisaged by the CP but it is not clear from the wording (see comments on paragraph 4.42).	Not agreed. Exposure to foreign properties would be included in the currency sub-module if the property is not located in the same currency area.
497.	KPMG ELLP	4.87.	We look forward to receiving advice on the calibration of the property shocks in the forthcoming consultation paper on the calibration of the market risk module.	Noted. See forthcoming CP on calibration.
498.	AMICE	4.88.	CEIOPS writes that it will investigate whether distinctions between	Not agreed. CEIOPS sees

			commercial, retail and other types of property is possible. We are not in favour of introducing more granularity in the calculation.	structural differences in these segments of the property market. The increased risk-sensitivity would outweigh the additional complexity.
499.	KPMG ELLP	4.88.	We are in favour of the approach of creating different shock scenarios to be applied to different types of property.	Noted.
500.	Lloyd's	4.88.	Given the crudeness of approaches in other sub-modules (notably the currency risk sub-module), it is probably spurious to introduce different shocks for different types of property. If such level of granularity is to be introduced, one should also consider the exposure to foreign properties in the currency risk sub-module. Perhaps the latter is envisaged by the CP but it is not clear from the wording (see comments on paragraph 4.42).	See comment #496.
501.	PricewaterhouseCoopers LLP	4.88.	We question whether making distinctions between different types of property is a worthwhile exercise, in terms of the additional complexity it introduces relative to any perceived benefits. This comment also applies to paragraph 4.95.	See comment #498.
502.	ROAM –	4.88.	We think that distinctions must be made between commercial, retail and other types of property, as there are structural market differences. Also direct and indirect holdings in property (through funds explicitly dedicated to real estate investments) should be treated separately, as their exposure to market prices is not the same.	Noted. Not agreed. For indirect holdings in property via investment vehicles, a look-through should be applied.
503.	AMICE	4.89.	Participations in real estate companies should be treated as property if and only if they expose the investor to the property risk. In any other case participations shall be treated as equities and their risks considered accordingly in the equity risk sub-module.	

			More guidance is needed on the required treatment of real estate companies such as OPCI which resort to debt, having financial investment and /or property (land). We propose to treat participations with a denomination of real estate (property) under the property risk module.	Noted. For indirect holdings in property via investment vehicles, a look-through should be applied.
504.	Association of British Insurers	4.89.	In our view there should be a 'look-through' approach, subject to materiality and proportionality considerations. For "pure property" companies this could allow the use of a property risk module rather than of a module based on equity risk. This would not apply in the case of non-participation investments (i.e. less than 20% ownership).	Partially agreed. While for indirect investments via real estate funds a look-through should be applied, CEIOPS considers a look-through within only one property firm as impracticable.
505.	CEA, ECO-SLV-09-442	4.89.	Ceiops' advice is currently too restrictive. In our view, participations in real estate companies should be treated in the following way: ☐ For "pure property" companies or collective investment schemes for which property risk is the predominant risk, it would be most appropriate to treat the participation under the property risk module rather than a module based on equity risk. ☐ If the property risk is not the predominant risk driver the most appropriate treatment would be via look-through approach. However, this should be subject to materiality and proportionality considerations. ☐ Otherwise the participation should be treated under the equity risk module, with a reduced stress, as discussed in the CEA paper on participations: http://www.cea.eu/uploads/DocumentsLibrary/documents/1236094113_cea-paper-on-participations.pdf	Agreed, if "pure property" companies only engage in direct or indirect holding of property as defined in 4.89. Partially agreed. While property firms which are not "pure property" firms as defined in 4.89 should be treated as equity investments, market developments in 2007/08 do not justify a reduced stress.

			On this issue, we should note however, that we will need to reconsider and re-confirm our position when the Consultation Paper on Participations is released in the 3rd wave of consultations. Therefore, at this stage this position is preliminary.	Noted.
506.	EPRAL	4.89.	See comments in 4.96	See comment #558.
507.	Legal and General Group	4.89.	In our view there should be a 'look-through' approach. For "pure property" companies this could allow the use of a property risk module rather than of a module based on equity risk. This would not apply in the case of non-participation investments (i.e. less than 20% ownership).	See comment #504.
508.	ROAM –	4.89.	We don't consider that participations in real state companies shall be treated as equity if they leverage their investments, if they are explicitly dedicated to real estate.	Not agreed. If real estate companies use leverage by taking out loans from institutions outside the scope of the insurance group, the risks of investing in such firms is not only based on the value of the property.
509.	UNESPA (Association of Spanish Insurers)	4.89.	The use of the look-through approach should be the first consideration, subject to the principle of proportionality.	Noted.
510.	CRO FORUM	4.90.	(EMPTY)	
511.	CEA, ECO-SLV-09-442	4.91.	We request more information as to how the volatility of property prices is to be taken into account in the calibration. Ceiops mentions that changes in volatility would be taken into account when considering calibration of the shock scenarios. We request information as to how this calibration will be carried out. It appeared that the capital requirements for property risk in QIS4	Partially agreed. It would not be proportionate to explicitly test changes in the volatility of property prices as part of the standard formula approach. However, these factors will be implicitly taken into account when

			were in line with the required 1 in 200 yr event. Therefore we would emphasise that the explicit inclusion of volatility should not lead to a higher capital charge.	considering the calibration of the shock scenarios.
512.	FFSA	4.91.	CEIOPS mentions that changes in volatility would be taken into account when considering calibration of the shock scenarios. FFSA considers that this approach relies implicitly on a stochastic modelling of level and volatility of market risk prices of property and is wondering what kind of model would be used to do such a calibration (Heston model, Hardy model ...).	See comment #511.
513.	Groupe Consultatif	4.91.	Changes in volatility are taken into account when considering calibration of the shock scenarios. This approach relies implicitly on a stochastic modelling of level and volatility of market risk prices of property. What kind of model is used to do such a calibration (Heston model, Hardy model ...)?	See comment #511.
514.	Institut des actuaries (France)	4.91.	Changes in volatility are taken into account when considering calibration of the shock scenarios. This approach relies implicitly on a stochastic modelling of level and volatility of market risk prices of property. What kind of model is used to do such a calibration (Heston model, Hardy model ...)?	See comment #511.
515.	KPMG ELLP	4.91.	We would like to understand how changes in the volatility of property prices will be implicitly taken into account when considering the calibration of the shock scenarios and will review this in the forthcoming consultation paper on the calibration of the market risk module.	See comment #511.
516.	ROAM –	4.91.	CEIOPS mentions that changes in volatility would be taken into account when considering calibration of the shock scenarios. ROAM considers that this approach relies implicitly on a stochastic modelling of level and volatility of market risk prices of property	See comment #511.

			and is wondering what kind of model would be used to do such a calibration (Heston model, Hardy model ...).	
517.	UNESPA (Association of Spanish Insurers)	4.91.	We request more information as to how the volatility of property prices is to be taken into account in the calibration	See comment #511.
518.	Bupa	4.92.	What does "own use" mean in a mixed activity group context? If properties are owned and used by a group and in no way connected to insurance business operations or participation, why should they be regarded as office properties as this paragraph would suggest? As the largest health insurance and healthcare group in Europe, why should the €2.5 billion worth of properties in our nursing home division be treated as offices and valued as such? This makes no methodological or economic sense.	Agreed. "Own use" only relates to the use for the operation of insurance business or other business usually performed in office buildings.
519.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	4.93.	4.93-4.96 We think that there should be a distinction between direct and indirect properties.	Not agreed. For indirect holdings in property via collective investment vehicles, a look-through should be applied.
520.	Association of British Insurers	4.93.	In stressed economic conditions commercial property becomes an illiquid asset and so stress tests will not work in the same way. It should be considered what stress tests are required in either illiquid markets or where there has already been an "extreme" stress fall.	Noted. While the forthcoming calibration might to some extent also reflect the illiquidity of property, it is however not possible to exactly quantify this effect.
521.	Association of Friendly Societies	4.93.	Depends on size of shocks applied; how will these be allowed to reflect firms' own property portfolio?	Noted. See forthcoming CP on calibration.

522.	Association of Friendly Societies	4.93.	Depends on size of shocks applied; how will these be allowed to reflect firms' own property portfolio?	Noted. See forthcoming CP on calibration.
523.	CEA, ECO-SLV-09-442	4.93.	Ceiops does not provide a sufficient level of detail. It is difficult to comment on the property risk module for that reason and more information is required.	Noted. See forthcoming CP on calibration.
524.	FFSA	4.93.	CEIOPS does not provide a sufficient level of detail, and is uncertain if certain options like considering the difference between types of properties are appropriate. FFSA considers that it is not in a position to comment on the property risk module for that reason and required more information.	Noted. See forthcoming CP on calibration.
525.			Confidential comment deleted	
526.	German Insurance Association – Gesamtverband der D	4.93.	CEIOPS does not provide a sufficient level of detail. It is difficult to comment on the property risk module for that reason and more information is required.	Noted. See forthcoming CP on calibration.
527.	Legal and General Group	4.93.	In the current economic turmoil commercial property has become an illiquid market and so stress tests on this are not "real". CEIOPS should consider what stress tests it requires in either illiquid markets or where there has already been an "extreme" stress fall.	See comment #520.
528.	Lloyd's	4.93.	We agree.	Noted.
529.	OAC	4.93.	Depends on size of shocks applied; how will these be allowed to reflect firms' own property portfolio?	Noted. See forthcoming CP on calibration.
530.	ROAM –	4.93.	CEIOPS does not provide a sufficient level of detail, and is uncertain	Noted. See forthcoming CP on

			if certain options like considering the difference between types of properties are appropriate. ROAM considers that it is not in a position to comment on the property risk module for that reason and requires more information.	calibration.
531.	UNESPA (Association of Spanish Insurers)	4.93.	CEIOPS does not provide a sufficient level of detail. It is difficult to comment on the property risk module for that reason and more information is required.	Noted. See forthcoming CP on calibration.
532.	Association of Friendly Societies	4.94.	There is no information as to whether the shock will include any consideration of changes in level / volatility of rent?	Noted. Changes in level or volatility of rent will not be explicitly modelled.
533.	Association of Friendly Societies	4.94.	There is no information as to whether the shock will include any consideration of changes in level / volatility of rent?	See comment #532.
534.	Bupa	4.94.	Valuation is not discussed as fully as it should in this section, but it is relevant. It would also be sensible to link in section 3.2.3 in CP 35. Keep in mind that there are several methods to value properties that are acceptable under IFRS and CP 35. These can go beyond a 1-dimensional shock to an "index" as had been considered in QIS-4. The scenario/shock needs to be sensibly aligned with the full range of valuation methods and property types that are commonly found in the market. See also the comments on 4.92 and 4.49.	Partially agreed. Though the different valuation methods outlined in CP35 are not disputed, the "index shock" is considered to be a valid method which could be brought in line with other valuation methods under the proposed scenario-based approach.
535.	CEA, ECO-SLV-09-442	4.94.	See comments to Para 4.93.	Noted. See forthcoming CP on calibration.
536.	FFSA	4.94.	See 4.93.	Noted. See forthcoming CP on

				calibration.
537.	German Insurance Association – Gesamtverband der D	4.94.	See comments to Para 4.93	Noted. See forthcoming CP on calibration.
538.	Lloyd's	4.94.	We agree.	Noted.
539.	OAC	4.94.	There is no information as to whether the shock will include any consideration of changes in level / volatility of rent?	Noted. Changes in level or volatility of rent will not be explicitly modelled.
540.	ROAM –	4.94.	See 4.93.	Noted. See forthcoming CP on calibration.
541.	UNESPA (Association of Spanish Insurers)	4.94.	Although calibration is not covered in this paper, we should note that in our opinion, the application of a 20% movement for the upward and the downward shock could be considered as high and its application could induce to higher results than the 99.5% solvency requirement.	Noted. See forthcoming CP on calibration.
542.	AMICE	4.95.	CEIOPS writes that it will investigate whether distinctions between commercial, retail and other types of property is possible. If this is the case it is possible that more than one scenario will be defined for property risk. Applying different shocks as to different types of properties will be very demanding since many combined properties exist. As stated in our comment to paragraph 4.88, we are not in favour of introducing more granularity in the calculation.	Partially agreed. While CEIOPS considers more granularity necessary, the treatment of mixed-used properties will be further dealt with in the forthcoming CP on calibration.
543.	Association of British Insurers	4.95.	We agree that a split into commercial, retail, residential property may be useful, but this could lead to excess complexity – especially by trying to achieve meaningful correlation matrices. Such level of	Noted. Intoducing correlation matrices in the property sub-module is considered being too

			granularity would work for the internal model, but might be too complex for the standard formula. A (partial) model should be therefore allowed.	complex. Where codependencies are important for an undertaking, development of an internal model is an alternative.
544.			Confidential comment deleted	
545.	CEA, ECO-SLV-09-442	4.95.	We are uncertain as to the benefits of introducing more granularity in the property risk sub-module. We agree that a split into commercial, retail, residential property may be useful, but this could lead to excessive complexity – especially by trying to achieve meaningful correlation matrices. Such a level of granularity would work for internal models, but might be too complex for the standard formula. A (partial) internal model should be therefore allowed. Furthermore, while property risk might be material for some (re)insurers, many other risks are likely to be much more significant (for example equity risk, mortality risk, longevity risk...) and might benefit from further investigation before attention is turned to property risk.	See comment #543.
546.	CRO FORUM	4.95.	The CRO forum believes the property risk approach should distinguish between different types of property, though this should include recognition of diversification effects between different types.	Not agreed. CEIOPS considers the recognition of diversification effects between different property types as adding too much complexity to the standard formula.
547.	FFSA	4.95.	See 4.93.	Noted. See forthcoming CP on calibration.
548.	German	4.95.	We are uncertain as to the benefits of introducing more granularity	See comment #543.

	Insurance Association – Gesamtverband der D		in the property risk sub-module We agree that a split into commercial, retail, residential property may be useful, but this could lead to excessive complexity – especially by trying to achieve meaningful correlation matrices. Such a level of granularity would work for internal models, but might be too complex for the standard formula. A (partial) internal model should be therefore allowed. Furthermore, while property risk might be material for some (re)insurers, many other risks are likely to be much more significant (for example equity risk, mortality risk, longevity risk...) and might benefit from further investigation before attention is turned to property risk.	
549.	Lloyd's	4.95.	Given the crudeness of approaches in other sub-modules (notably the currency risk sub-module), it is probably spurious to introduce different shocks for different types of property. If such level of granularity is to be introduced, one should also consider the exposure to foreign properties in the currency risk sub-module. Perhaps the latter is envisaged by the CP but it is not clear from the wording (see comments on paragraph 4.42).	Foreign property (if located in another currency area) would in any case be stressed by a currency stress and a property stress.
550.	Munich RE	4.95.	If different types of property investments are recognized, diversification effects should be explicitly recognized via the use of a correlation matrix or implicitly via lowering the volatilities of the respective property indices. We recommend to differentiate at least between residential and commercial property.	Agreed. See forthcoming CP on calibration.
551.	ROAM –	4.95.	See 4.93.	Noted. See forthcoming CP on calibration.
552.	UNESPA (Association of Spanish	4.95.	We agree that it may be useful to make distinctions depending on the property use, subject to the principle of proportionality.	Agreed.

	Insurers)			
553.	AMICE	4.96.	See our comments to paragraph 4.89	See comment #503.
554.			Confidential comment deleted	
555.	Bupa	4.96.	It is essential that this distinction is made as the property module will be meaningless otherwise. If there is one thing we are learning in midst of one of the greatest property crashes in history, it is that not all properties are alike economically. Furthermore, for health insurance groups that own specialised properties such as hospitals and nursing homes, the economic nature of these is completely unlike that of residential and commercial property. The demand and supply balance for these properties makes their revenue, cost, and cash flows very stable, more like utilities. They do not experience the volatility that commercial and office properties do, so why should they be lumped together with them? The stresses/scenarios ultimately used in this module need to be better nuanced. See also comments on paragraphs 4.92 and 4.94.	Noted. Noted. Where specialised properties are important for an undertaking, development of an internal model to capture the risk profile of these properties is an alternative.
556.	CEA, ECO-SLV-09-442	4.96.	See comments to Para 4.89.	See comment #505.
557.	CRO FORUM	4.96.	It would be helpful to add the whole of 4.89 to this bullet to add clarity.	Agreed.
558.	EPRAL	4.96.	Treatment of property companies	Not agreed. The financial crisis

			The Solvency II Directive, and in particular the market risk module of the SCR standard formula, will have a significant impact on the shares that insurance companies are able to own in real estate companies. In para 4.96 of Consultation Paper No.47, the CEIOPS proposes the following:- "Participations in real estate companies shall be treated as property, if they only give rise to property risk. In any other case participations shall be treated as equities and their risks considered accordingly in the equity risk sub-module." It is clear that according to the above criteria, listed property companies and REITs will be treated as equities and their risks considered according to the equity risk sub module. This is significant because the equity classification in the proposed formula results an excessive level of "stress test" for the listed property sector which is not appropriate for this class of asset. REITs and listed property correlate to direct property Our strong view is that this characterisation is not appropriate for listed property companies, including REITs. As set out below and detailed in the IEIF report commissioned by the FSIF, returns from property investment companies are correlated to direct property over the medium to long term and this is evidenced by a wealth of studies over many years. Examples of these studies are attached with our covering letter and highlighted in the annotated bibliography provided below. This correlation to direct property is particularly evident in the major listed REIT markets in Europe (such as the UK and France) and in the US (the largest and most developed REIT market in the world), where listed property is included as a separate asset class in its own right. This is further illustrated by the fact that the two largest Defined Benefit Pension Plans in the US - CalPERs and the California State Teachers	has shown that listed property companies and REITs inhibit a downside risk very similar to that of other stocks. Hence CEIOPS considers the property shock being too low for these investments.

			Retirement System (CalSTRS), consider REITs as part of their property allocations. For example, CalPERs can invest 25% of its target property allocation in REITs. Allowing wider participation in the direct property market Investors in publicly listed property companies are able to access the income and capital returns generated by commercial property in a form which is transparent, well governed and liquid. For investors in REITs, which generally include an obligation to distribute the majority of income each year, the link to direct property returns is increased further still - due to the tax transparency of the investment vehicle. The continued emergence of REITs around the world as a liquid form of direct investment has opened up the market to a wider range of investors, particularly smaller institutional investors and retail investors, who previously had little option to invest in this relatively illiquid asset class. Furthermore, the financial leverage in REITs does not modify the dynamic of the property returns transmitted to the shareholders as there is a constant arbitrage between investments in REITs and investments in direct property. The liquidity provided by REITs through stock market quotation does not change the property return profile over the medium to long term. In fact, the REITs market is more quick and efficient in terms of the response to changes in fundamentals affecting property, than the direct property market. Conclusion We strongly believe the current classification of listed property as equity does not reflect the true characteristics of actively managed listed real estate companies and could have a significant impact on the ability for insurance companies to own this liquid form of property investment.	

			Even though the REIT regime in Europe is relatively young, listed property is already viewed as a form a direct property. In the more mature REIT market of the US, listed property is already treated as a separate risk factor. Our view, which is supported by strong market evidence from the developed listed property markets, is that listed property companies would be more appropriately treated as direct property and this should be considered in further developing the market risk model. Extracts from the IEIF Preliminary Report to FSIF - 26 Aug 2009 (Pierre Schoeffler, Senior Advisor IEIF) : The French model : listed property is property over the long term with a time lag ☐ Correlation of listed property with direct property[2] increases from 35% for one year rolling total return to 65% for five years rolling total return ☐ Correlation of listed property[1] with stocks[3] decreases from 55% for one year rolling total return to -10% for five years rolling total return ☐ Correlation of one year rolling total return of listed property[1] with direct property[2] increases to 70% with a lead of two to four quarters 1 IEIF Foncière since Dec 73 2 CBRE Prime Office Paris CBD since Dec 75 and IPD Office France since Dec 86 3 SBF 250 The UK model : listed property is liquid property	

			☐ Correlation of listed property[1] with direct property[2] is stable at around 80% for one to five years rolling total return ☐ Correlation of listed property1 with stocks[3] decreases from 60% for one year rolling total return to 15% for five years rolling total return ☐ Correlation of one year rolling total return of listed property1 with direct property2 is maximised at no lead 1 EPRA UK since Jan 91 2 IPD UK All Property since Dec 78 3 FTSE 100 The US model : listed property is a specific asset class ☐ Correlation of listed property[1] with direct property[2] decreases from 60% for one year rolling total return to -20% for five years rolling total return ☐ Correlation of listed property1 with stocks[3] decreases from 55% for one year rolling total return to 25% for five years rolling total return ☐ Correlation of one year rolling total return of listed property[1] with direct property[2] is maximised at no lead 1 EPRA US since Jan 91 2 NCREIF since Dec 78 3 S&P 500 Annotated Bibliography: Real Estate as a Core Asset	

			Ibbotson [2006] In its discussion of the opportunity set for the analysis within its white paper entitled, "Commercial Real Estate: The Role of Global Listed Real Estate Equities in a Strategic Asset Allocation," real estate is considered a distinct asset class. (See "Attachment C -- Global Real Estate White Paper.") Following is excerpted from page 16 of the paper: "...Real estate is treated as a distinct asset class because its high-income yields arguably create a hybrid investment that combines attributes of both stocks and bonds, and its investment returns reflect those hybrid characteristics..." Cohen & Steers Capital Management Inc. [March 2009] "Listed Property Performance as a predictor of direct real estate performance". "Over the firm's 23 years of investing in real estate securities, Cohen & Steers has observed that listed property securities market performance tends to lead that of direct property markets." "We conclude that the listed real estate market provides valuable information about the direct property market cycle, a fact thatcan have meaningful implications for real estate investors. "We found that the listed market generally leads the direct market by about six months, as REIT liquidity allows for greater pricing transparency and quicker information transfer than less-liquid direct markets."	

			JP Morgan Asset Management's "INs and OUTs" [April 6, 2009] "Correlation of REITs to Direct Property Over the Long-term" – see section titled "REITs look and act like real estate-over the long term" (pages 3-4). Lee & Stevenson [2006]. Stephen Lee and Simon Stevenson, "Real Estate in the Mixed-Asset Portfolio: The Question of Consistency," Journal of Property Investment and Finance 24(2):123-135, 2006. "First, the results suggest strongly that real estate has possessed the attribute of consistency in optimized portfolios. Real estate constantly had positive allocations over time periods ranging from 5 to 25 years, and for most levels of portfolio return, irrespective of whether real estate is used to enhance returns or reduce risk. Secondly, the benefits from including real estate in the mixed-asset portfolio tend to increase as the investment horizon is extended." Sa-Aadu, Shilling & Tiwari [2006]. Jarjisu Sa-Aadu, James D. Shilling, and Ashish Tiwari, "Portfolio Performance and Strategic Asset Allocation Across Different Economic Conditions," working paper, 2006. "Our key result is that commodities and precious metals, and equity REITs are the two asset classes that deliver portfolio gains when consumption growth is low and/or volatile, i.e., when investors really care for such benefits. … This analysis suggests that	

			the optimal mean-variance tangency portfolio is heavily weighted in equity REITs, and precious metals in the bad state of the economy, while also including government bonds." Anderson et al. [2005]. Randy Anderson, Jim Clayton, Greg MacKinnon, and Rajneesh Sharma, "REIT Returns and Pricing: The Small Cap Value Stock Factor," Journal of Property Research 22(4):267-286, December 2005. "Our main result is that equity REIT and small capital value stock returns share common drivers. Of all the asset classes examined, small capital value equities are the most highly linked to REIT return volatility. However, there is a significant component of REIT returns unrelated to stock and bond factors. As a result, like Lee & Stevenson [2005b] we conclude that there is a unique element to REITs, which implies it offers significant diversification benefits beyond those of small capital value stocks." Byrne & Lee [2005]. Peter Byrne and Stephen Lee, "The Impact of Real Estate on the Terminal Wealth of the UK Mixed-Asset Portfolio," Journal of Real Estate Portfolio Management 11(2): 133-146, 2005. "Overall, including real estate in the mixed-asset portfolio appears to offer an improvement in terminal wealth and a reduction in terminal wealth standard deviation compared with the base portfolio (without real estate)."	

			Frost, Schioldager & Hammond [2005]. Corin Frost, Amy Schioldager, and Scott Hammond, "Real Estate Investing the REIT Way: A Guide to REIT Benchmarks and Investing," Investment Insights 8(7), September 2005. "REITs offer two major advantages to the institutional investor constructing a portfolio: the diversification that real estate offers as an asset class, along with sufficient liquidity to gain access to that asset class easily." "Investors who rely on broad-cap equity benchmarks for real estate exposure are not achieving meaningful allocations to the asset class. … There is little evidence that the diversification benefit of REITs has declined as a result of being added to the S&P 500. … Perhaps more importantly, results of work by Ibbotson Associates suggest that REITs do, in fact, effectively push out the efficient frontier." "Institutional investors tend to underweight real estate versus their long-run strategic real estate allocation due to the inherent time lag from first identifying direct property opportunities to ultimately funding that opportunity. One of the reasons that real estate investors are drawn to REITs is the immediacy of market exposure that can be achieved via public markets. The maturity and depth of the REIT market is such that significant investment is possible without incurring undue price impact on the underlying securities. For example, a $100 million investment in REITs may be accomplished in a few days via the stock market versus a similar investment in a specific building project, which may take three to	

			nine months or more to complete." Lee & Stevenson [2005a]. Stephen Lee and Simon Stevenson, "The Case for REITs in the Mixed-Asset Portfolio in the Short and Long Run," Journal of Real Estate Portfolio Management 11(1): 55-80, 2005. "REITs are increasingly seen as an attractive addition to the mixed-asset portfolio. … The results highlight that REITs do play a significant role over both different time horizons and holding periods. The findings show that REITs' attractiveness as a diversification asset increases as the holding period increases. In addition, their diversification qualities span the entire efficient frontier, providing return enhancement properties at the lower end, switching to risk reduction qualities at the top end of the frontier." Chen et al. [2005]. Hsuan-Chi Chen, Keng-Yu Ho, Chiuling Lu, and Cheng-Huan Wu, "An Asset Allocation Perspective of Real Estate: The Case of Real Estate Investment Trusts," working paper, June 21, 2005. "REITs from 1986-2002 do augment the mean-variance frontier and enlarge the investment opportunity set. … Equity REITs, such as diversified REITs, health care REITs, hotel REITs, industrial REITs, office REITs, residential REITs, retail REITs, and self-storage REITs, are suitable for diversification. Overall, consistent with Hudson-Wilson, Fabozzi & Gordon [2003], we verify the economic significance of REIT investment from the perspective of asset	

			allocation." Fugazza, Guidolin & Nicodano [2005]. Carolina Fugazza, Massimo Guidolin, and Giovanna Nicodano, "Investing for the Long-Run in European Real Estate," working paper, January 2005. "This paper finds that real estate has a considerable importance for both the size of optimal portfolio weights and welfare: the compensatory variation required by an investor to do without real estate is easily in excess of 100 basis points per year. Our robustness checks suggest that these estimates are probably only a lower bound." Lee & Stevenson [2005b]. Stephen Lee and Simon Stevenson, "The Substitutability of REITs and Value Stocks," working paper, 2005. "This paper has examined the extent to which the frequently observed linkages between REITs and the value sector of the equity market lead to the two assets being substitutable. The findings illustrate that while strong linkages are evident, there remain sufficient differences in both their return behaviour and their driving forces for the two sectors to retain a level of distinctiveness. The variance decomposition results would imply that diversification opportunities are maintained and REITs would provide additional benefits to a portfolio already containing value stocks and that the two can not be viewed as substitutable."	

			Brounen & Eichholtz [2003]. Dirk Brounen and Piet Eichholtz, "Property, Common Stock, and Property Shares," Journal of Portfolio Management special real estate issue: 129-137, September 2003. "We have examined the relationships among private property, the securitized property share market, and the common stock market in the United States and the United Kingdom. We find that the correlations between property share returns and common stock returns show a similar declining trend in both countries, indicating increased mixed-asset diversification potential for property shares. … The results of that analysis are surprisingly similar for the United States and the United Kingdom. For both countries, we find optimal portfolio allocations of around 10%, if we use the maximum Sharpe ratio portfolio. Even under pessimistic assumptions, real estate allocations are substantial." Feldman [2003]. Barry E. Feldman, "Investment Policy for Securitized and Direct Real Estate," Journal of Portfolio Management special real estate issue: 112-121, September 2003. "This retrospective analysis implies that real estate allocations have been well below optimal levels." Hudson-Wilson, Fabozzi & Gordon [2003]. Susan Hudson-Wilson, Frank J. Fabozzi, and Jacques N. Gordon, "Why Real Estate?" Journal of Portfolio Management special real estate issue: 12-27, September 2003.	

			"Real estate's role extends from the lowest-risk end of the efficient frontier to just past the midpoint of the mixed-asset efficient frontier. This makes sense, as real estate is both a low-risk asset itself and an excellent risk reducer in a stock and bond portfolio." Mueller & Mueller [2003]. Andrew G. Mueller and Glenn R. Mueller, "Public and Private Real Estate in a Mixed-Asset Portfolio," Journal of Real Estate Portfolio Management 9(3): 193-203, 2003. "The findings indicate that public and private real estate returns have very low quarterly correlations, and the inclusion of both public and private real estate together in a mixed-asset portfolio produces a more efficient frontier than inclusion of just one or the other or neither. … The unconstrained model here argues for theoretical allocations (to real estate) over 50%.... If the characteristics of real estate in either public or private form are expected to continue in the future, this study shows that they can make a major risk adjusted return contribution to a mixed-asset portfolio." Bley & Olson [2003]. Jorg Bley and Dennis Olson, "An Analysis of Relative Return Behavior: REITs vs. Stocks," working paper, 2003. "REITs compare favorably with stocks. Our findings suggest that equity REITs can enhance the risk-return relationship of an investment portfolio and should be considered as a major asset class just like stocks or bonds."	

			Conover, Friday & Sirmans [2002]. C. Mitchell Conover, H. Swint Friday, and G. Stacy Sirmans, "Diversification Benefits from Foreign Real Estate Investments," Journal of Real Estate Portfolio Management 8(1):17-25, 2002. "For five of the six countries examined, foreign real estate had a lower correlation with U.S. stocks than foreign stocks did. This lower correlation was also shown to be stable through time as foreign real estate had a lower correlation than foreign stocks in 98 of the 102 months examined. These lower correlations provided lower risk and higher return when foreign real estate is added to a portfolio of U.S. assets and foreign stock. Additionally, foreign real estate had a significant, sometimes majority, weight in the efficient international portfolios. Though current investment advice may routinely fail to mention foreign real estate as a portfolio component, the results suggest that the absence of foreign real estate reduces return and increases risk for a U.S. investor." Ling & Naranjo [2002]. David C. Ling and Andy Naranjo, "Commercial Real Estate Return Performance: Cross-Country Analysis," Journal of Real Estate Finance and Economics 24(1/2):119-142, 2002. "The diversification potential associated with investing internationally has received increased attention in recent years from both academics and practitioners. However, the risks and uncertainties of direct real estate investments in foreign countries	

			have generally outweighed the possible reductions in portfolio risk from international diversification. Over the last two decades, a global real estate securities market has slowly developed. Compared to private markets, this growing public market provides a vehicle for investors to construct international commercial real estate portfolios without the significant burden of acquiring, managing, and disposing of direct property investments in far-away countries with unfamiliar legal, political, and market structures. … Our results can be summarized as follows. … [E]ven after controlling for the effects of worldwide systematic risk, an orthogonalized country-specific risk factor is highly significant in the vast majority of the ex post return regressions. This suggests that real estate securities may provide international diversification opportunities. This conclusion is further supported by our analysis of firm level return data." Maurer & Reiner [2002]. Raimond Maurer and Frank Reiner, "International Asset Allocation with Real Estate Securities in a Shortfall Risk Framework: The Viewpoint of German and U.S. Investors," Journal of Real Estate Portfolio Management 8(1):27-43, 2002. "In the ex post perspective, significant diversification benefits appeared for both investors through the consideration of real estate companies, especially for low- to medium-risk portfolios. The source of these diversification gains was mainly to be seen in a risk-reduction. … For the German investor, these gains occurred in low- to medium-risk portfolios. However, for the U.S. investor, the gains occurred for all portfolios. In the ex ante study, the integration of real estate companies in some portfolio strategies	

			both for the German and the U.S. investor led, in the total out-of-sample period, to a risk-reduction relative to the corresponding stock/bond strategies." Lee [2002]. Stephen L. Lee, "Is There a 'Case for Property' All the Time?" working paper, June 2002. "The inclusion of property within the mixed-asset portfolio always leads to reductions in risk…. This large reduction in portfolio risk, at the cost of only a minor loss in average returns, meant that property also offered increases in risk-adjusted (Sharpe) performance a good deal of the time. Indeed, the results here show that adding property into an existing equity/bond portfolio often led to significant increases in risk-adjusted performance. This is especially so for an allocation to property of at least 15% but especially at 20%. … In conclusion, if the decision to include property in the mixed-asset portfolio is based upon its diversification benefits the answer is yes, there is a 'case for property' all the time!" Chandrashekaran [1999]. Vinod Chandrashekaran, "Time-Series Properties and Diversification Benefits of REIT Returns," Journal of Real Estate Research 17(1/2): 91-112, 1999. "The results suggest that dynamic asset allocation strategies…have a role to play in helping investors achieve portfolios that are on the unconditional mean variance frontier. Furthermore, the evidence suggests that…dynamic asset allocation	

			strategies will likely have to make significant investments in REITs in order to be able to attain portfolios that lie on the unconditional frontier. In other words, REITs do appear to offer significant diversification benefits at least during certain time periods (e.g., following up-moves in the REIT Index) so dynamic asset allocation strategies that invest in REITs are likely to achieve superior risk and return profiles." Cheng et al. [1999]. Ping Cheng, Alan J. Ziobrowski, Royce W. Caines, and Brigitte J. Ziobrowski, "Uncertainty and Foreign Real Estate Investment," Journal of Real Estate Research 18(3): 463-479, 1999. "When examining optimum portfolio composition, the results indicate that, under certain circumstances, large amounts of foreign real estate in the portfolio (20% or more) can be optimal. … Our analysis shows there is a reasonable probability that under some economic conditions foreign real estate can be a major component of the optimum portfolio." Gordon & Canter [1999]. Jacques N. Gordon and Todd A. Canter, "International Real Estate Securities: A Test of Capital Markets Integration," Journal of Real Estate Portfolio Management 5(2):161-170, 1999. "Do special vehicles, like investment trusts, reduce the correlation of property stocks with the overall equity markets? … With a two standard deviation confirmation, it appears that in those	

			markets where a REIT structure is introduced, the integration with the general equity market is lower than in other markets." Ziering, Liang & McIntosh [1999]. Barry Ziering, Youguo Liang, and Willard McIntosh, "REIT Correlations with Capital Market Indexes: Separating Signal from Noise," Real Estate Finance 15(4): 61-67, Winter 1999. "Over time, we continue to believe that REIT investment performance will be influenced by both the overall stock market sentiment—after all, REITs are traded in the stock market—and by real estate market fundamentals. However, we also believe that the market dynamics at work will serve to gradually lessen the covariance between REITs and the broader market…." Liu & Mei [1998]. Crocker H. Liu and Jianping Mei, "The Predictability of International Real Estate Markets, Exchange Rate Risks and Diversification Consequences," Real Estate Economics 26(1): 3-39, Spring 1998. "The most distinguishing result is the finding that investing in international real estate related securities provides additional (incremental) diversification benefits over and above that associated with international stocks. These benefits are relatively more pronounced at lower risk-return levels of the optimal portfolio and are present regardless of whether currency risks are hedged. Thus, U.S. investors should consider including international real estate securities in their portfolios."	

			Mull & Soenen [1997]. Stephen R. Mull and Luc A. Soenen, "U.S. REITs as an Asset Class in International Investment Portfolios," Financial Analysts Journal 53(2):55-61, March/April 1997. "Compelling evidence supports giving real estate a significant role in mixed-asset investment portfolios." Ziobrowski & Ziobrowski [1997]. Brigitte J. Ziobrowski & Alan J. Ziobrowski, "Higher Real Estate Risk and Mixed-Asset Portfolio Performance," Journal of Real Estate Portfolio Management 3(2):107-115, 1997. "Consistent with prior research, this study found that nearly all investors, regardless of risk preference, benefit from including real estate in their respective portfolios." Brown & Schuck [1996]. Gerald R. Brown and Edward J. Schuck, "Optimal Portfolio Allocations to Real Estate," Journal of Real Estate Portfolio Management 21(1): 63-73, 1996. "The foregoing discussion has…shown that over a wide range of portfolio sizes it is easy to justify optimal allocations anywhere in the range of 5% to 75%, given that the inputs to a mean-variance analysis cannot be forecasted with complete accuracy. … This result should not, however, discourage investors from holding real estate as an asset class."	

			Literature Reviews Worzala & Sirmans [2003]. Elaine Worzala and C.F. Sirmans, "Investing in International Real Estate Stocks: A Review of the Literature," Urban Studies 40(5-6):1115-1149, 2003. Zietz, Sirmans & Friday [2003]. Emily N. Zietz, G. Stacy Sirmans, and H. Swint Friday, "The Environment and Performance of Real Estate Investment Trusts," Journal of Real Estate Portfolio Management 9(2): 127-165, 2003. Benjamin, Sirmans & Zietz [2001]. John D. Benjamin, G. Stacy Sirmans, and Emily N. Zietz, "Returns and Risk on Real Estate and Other Investments: More Evidence," Journal of Real Estate Portfolio Management 7(3): 183-214, 2001. Prominent Researchers Randy Anderson: President, CNL Real Estate Advisors, Orlando, Florida. Dirk Brounen: Associate Professor of Finance and Real Estate, Department of Financial Management, RSM Erasmus University,	

			Netherlands. Peter Byrne: Professor of Real Estate Dynamics and Director, Centre for Real Estate Research, Department of Real Estate & Planning, University of Reading Business School, England. Hsuan-Chi Chen: Professor, Department of Finance, Yuan-Ze University, Taiwan. Jim Clayton: Associate Professor of Finance and Real Estate, College of Business, University of Cincinnati.	
559.	FFSA	4.96.	FFSA is concerned by the potential implications of clause 4.96 as it seems to imply that a real estate company almost exclusively made up of properties could easily be treated as equity. This would not seem logical considering the fact that the correlation of real estate to equity markets does not exceed 0.5. FFSA proposes that a real estate company or a collective investment scheme that is primarily made up of properties should be handled in the property risk module.	See comment #503.
560.	German Insurance Association – Gesamtverband der D	4.96.	The use of the look-through approach should be the first consideration, subject to the principle of proportionality. Otherwise, real estate participations should be treated under the property risk module if property risk is the material risk. CEIOPS seems to imply that a real estate company almost exclusively made up of property could be treated as equity. This would not seem logical considering the fact that the correlation of real estate to equity markets does not exceed 0.5 as well as considering the over-riding principle under SII of substance over	See comment #505.

			form. In our view, participations in real estate companies should be treated in the following way: 1) If the look-through approach is disproportionate, then for "pure property" companies or collective investment schemes for which property risk is the predominant risk, it would be most appropriate to treat the participation under the property risk module rather than a module based on equity risk. 2) If the property risk is not the predominant risk driver the most appropriate treatment would be via look-through approach. However, this should be subject to materiality and proportionality considerations. 3) Otherwise the participation should be treated under the equity risk module, with a reduced stress.	
561.	GROUPAMA	4.96.	Groupama is concerned by the potential implications of this paragraph, as it could be understood that a real estate company almost exclusively made up of properties could easily be treated as equity. We suggest to state clearly that a real estate company or a collective investment scheme that is primarily made up of properties should be handled in the property risk module.	Agreed, if "pure property" companies only engage in direct or indirect holding of property as defined in 4.89.
562.	Lloyd's	4.96.	We agree.	Noted.
563.	UNESPA (Association of Spanish Insurers)	4.96.	See comments to Para 4.89	See comment #509.
564.	AMICE	4.97.	Concentration risk	Noted.
565.	ECIROA	4.97.	The concentration risk sub-module represents on average 78% of the total market risk module for captives whereas it represents	Noted. Please refer to CEIOPS' forthcoming consultation paper

			9.5% on average for the insurance market (cf. 3.6). This shows clearly the captive specificity and the necessity according to the proportionality principle regarding the nature, scale end complexity of the risk, to define an appropriate simplified method. ECIROA believes that Concentration Risk should be moved to Pillar II (which follows the structure under Basle II) but understands that this change would have to be accepted by the Commission.	covering the treatment of captives.
566.			Confidential comment deleted	
567.	CRO FORUM	4.99.	The explanation of direct investments is not completely clear, especially sub-bullet (b).	Noted. Within an undertaking's direct exposures to the issuer of an investment, there are two possibilities – either the failure or default of the issuer causes an economic loss for the undertaking (case a) or it does not (case b)
568.	Groupe Consultatif	4.99.	It might be worthwhile adding an example for case b), where the default of the issuer does not imply any economic loss under any scenario.	Noted. Example: Special purpose vehicle created to handle the securitization of asset backed securities in which the default of the SPV does not imply a loss for the undertaking.
569.	Association of British Insurers	4.100.	Evidence of diversification via investment guidelines and limits published by the funds should be sufficient to ensure funds are reasonably diversified and so excluded from the concentration risk calculation. It is often impossible in practice to use a look-through approach for investment funds in order to disclose all the counterparties to which the insurer is exposed when investing in these assets (see 4.149).	Not agreed. CEIOPS considers the look-through approach important for effective risk management. Proportionality will apply, as with all aspects of Solvency 2.

570.	CEA, ECO-SLV-09-442	4.100.	Evidence of diversification via investment guidelines and limits published by the funds should be sufficient to ensure funds are reasonably diversified and so excluded from the concentration risk calculation. Given that the assets included in an investment fund are already treated according to their risk exposure within the other sub-modules of the market risk, there is no need to include them in the concentration risk. Furthermore, it may be impossible in practice to use a look-through approach for investment funds in order to disclose all the counterparties to which the insurer is exposed when investing in these assets.	Please see comment #569
571.	Pearl Group Limited	4.100.	Evidence of diversification via investment guidelines and limits published by the funds should be sufficient to ensure funds are reasonably diversified and so excluded from the concentration risk calculation. It is often impossible in practice to use a look-through approach for investment funds in order to disclose all the counterparties to which the insurer is exposed when investing in these assets	Please see comment #569
572.	ROAM –	4.100.	We agree with the idea of applying a look-through approach in order to asses the risks of the assets underlying the investment funds. Undertakings shall verify that interactions are sufficient to ensure that all material market is captured; if this approach is impractical (i.e Hedge Funds), actions could be adopted via internal models or through capital add-on.	Noted. However, whether or not internal models or capital add-ons are appropriate is beyond the scope of CP47.
573.	UNESPA (Association of Spanish Insurers)	4.100.	Evidence of diversification via investment guidelines and limits published by the funds should be sufficient to ensure funds are reasonably diversified and so excluded from the concentration risk calculation.	Please see comment #569

			Given that the assets included in an investment fund are already treated according to their risk exposure within the other sub-modules of the market risk, there is no need to include them in the concentration risk. Furthermore, it may be impossible in practice to use a look-through approach for investment funds in order to disclose all the counterparties to which the insurer is exposed when investing in these assets.	
574.	Association of British Insurers	4.101.	The treatment of supranationals needs to be clarified. Supranationals should also be excluded from the application of this sub-module	Agree. Please see revised draft advice.
575.	Groupe Consultatif	4.101.	There is probably a relation to 4.58, with regards to credit risks of government bonds, as well as to the application for lower federal bodies	Agree. Please see revised draft advice
576.	Pearl Group Limited	4.101.	The treatment of supranationals needs to be clarified. Supranationals should also be excluded from the application of this sub-module	Please see comment #574
577.	Association of British Insurers	4.106.	Similar to other investment funds, UCITS should be excluded from the concentration risk provided that there is sufficient evidence of diversification via investment guidelines and limits published by the funds. Taking into consideration that the assets included in an investment fund are already treated according to their risk exposure within the other sub-modules of the market risk (via the look-through approach), there is no need to include them in the concentration risk. Nevertheless, we request information as to the approach to be used when it is not possible to ascertain the largest exposure in a fund	Partially agreed. CEIOPS considers that the treatment of UCITS proposed in CP47 represents a sufficiently risk-sensitive and proportionate approach. With regard to ascertaining the largest exposure in the fund, CEIOPS considers the look-through approach important for effective risk management. However, proportionality will apply, as with all aspects of Solvency 2.

			It is unclear what approach is proposed if it is impossible to ascertain the largest exposure in a fund, since it is then also impossible to use a look through approach.	
578.	CEA, ECO-SLV-09-442	4.106.	Similar to other investment funds, UCITS should be excluded from the concentration risk provided that there is sufficient evidence of diversification via investment guidelines and limits published by the funds. Taking into consideration that the assets included in an investment fund are already treated according to their risk exposure within the other sub-modules of the market risk (via the look-through approach), there is no need to include them in the concentration risk. Nevertheless, we request information as to the approach to be used when it is not possible to ascertain the largest exposure in a fund. It is unclear what approach is proposed if it is impossible to ascertain the largest exposure in a fund, since it is then also impossible to use a look through approach.	Please see comment #577
579.	UNESPA (Association of Spanish Insurers)	4.106.	UCITS should be excluded from the concentration risk provided that there is sufficient evidence of diversification via investment guidelines and limits published by the funds. Taking into consideration that the assets included in an investment fund are already treated according to their risk exposure within the other sub-modules of the market risk (via the look-through approach), there is no need to include them in the concentration risk.	Please see comment #577

580.			Confidential comment deleted	
581.	CEA, ECO-SLV-09-442	4.107.	The specific treatment of UCITS should be extended to other similar vehicles. We welcome the recognition of the diversification effects expected under certain investment undertakings such as UCITS and so their specific treatment under the concentration risk sub-module. We suggest, however, to enhance the definition of such undertakings from UCITS to any undertaking which, by its legal definition(s) or regular practice has certain controls in place on the level of a certain risk type (like concentration risk). We feel that this approach most appropriately takes account of their economic reality.	Not agreed. Although this approach is appealing for its principles-based nature, CEIOPS considers UCITS to be a special case as it is regulated by the UCITS Directive.
582.	CRO FORUM	4.107.	Whilst the CRO forum notes CEIOPS comments that other approaches could be impractical, it does appear imprudent to ignore the risk of concentrations arising across multiple UCITS holdings or to exclude holdings within UCITS that may be in excess of concentration limits. One requirement could be that for any issuer generating a concentration risk capital charge via the sub-module on non-UCITS investments, that undertakings must identify any additional holdings of this issuer within their UCITS investments and apply a charge.	Please see comment #580
583.	uniqa	4.107.	We welcome the recognition of investment undertakings such as UCITS and their embedded effects to the various risk types, like concentration risk. We suggest, however, to enhance the definition of such undertakings from UCITS to any undertaking which, by its	Please see comment #581

			legal definition(s) or regular practice have an effect to a certain risk type (like concentration risk), whether increasing or mitigating. We feel that this approach refers in a better way to economic reality.	
584.	Association of Danish Mortgage Banks (Realkreditrå	4.108.	See 4.109	Please see comment #586
585.	Association of British Insurers	4.109.	We appreciate CEIOPS' proposal to introduce a preferred option for the concentration thresholds for mortgage covered bonds and public sector covered bonds From our point of view, however, it is not clear why CEIOPS restricts this risk-adjusted consideration only with regard to covered bonds. We suggest to expand the risk-adjusted perspective to all assets. That is, one would have to define concentration threshold according to the inherent risk potential of various asset classes. If this appears to be too demanding within the framework of the standard approach, we suggest to keep the concentration levels at QIS4-levels. After all, concentration risks are to be dealt with under Pillar 2 and additional risks associated with an asset are to be covered by the other market risk modules.	Not agreed. The risk adjusted perspective has been considered in all of the assets.
586.	Association of Danish Mortgage Banks (Realkreditrå	4.109.	The threshold applicable for a treatment according to their specific risk feature must be as high as possible A threshold to concentration risk of 10 or 20 percent will immediately lead to higher capital requirements for the Danish life and pension companies. This may cause a sell-off or at least a higher demand for yield on Danish covered bonds. This will happen because the L&P sector in Denmark possesses large holdings of Danish mortgage bonds. This is a natural consequence of these	CEIOPS proposes to apply a threshold of 15% for items satisfying the criteria in para 4.110

			circumstances: 1) There is a natural match between the L&Ps' obligations and the Danish mortgage bonds (long maturities, same currency and virtually no credit risk). 2) The market for Danish government bonds - as another alternative investment for L&P companies - is rather small: Only one third the size of the market for Danish mortgage bonds. 3) Investments in European covered bonds will cause currency risk because Denmark is not part of the euro. 4) Market concentration is high due to considerable economics of scale; 70-75 per cent of covered bonds are issued by only two mortgage banks. Under the existing rules, there is a limit of 40 per cent for covered bonds issued by one issuer that fulfill the requirements in UCITS 22, 4 criteria. This limit captures the security of the Danish mortgage bonds and takes into consideration the Danish market structure with a few issuers of covered bonds comprising a huge part of the market. Danish covered bonds account for more than three times the volume of Danish government bonds. An L&P company with 60 per cent of its holdings in government and mortgage bonds would thus have 45 per cent of its holdings in Danish covered bonds. As the largest issuers in Denmark have market shares of 30-40 per cent, the company is likely to hold as a minimum 18 per cent of covered bonds issued by one of these institutions.	

			Thus, with a threshold of 20 - or even worse 10 - per cent, it must be assumed that at least some of the Danish L&P companies will hit the threshold, implying higher capital requirements due to these holdings. The result is a sell-off or a higher demand for yield on buying the bonds, not least due to the 'cliff-effect' suggested in the rule. Even if an L&P company should have less than 20 per cent of its holdings invested in covered bonds from one issuer, the recent crisis has shown the importance of the L&P sector having room to manoeuvre to be able to invest in Danish mortgage bonds. If this is not the case, it can create even more instability in times of turmoil on the financial markets. This would e.g. have been the case during the current financial crisis. In the autumn of 2008 there was a sell-off of Danish covered bonds by foreign investors. This was because the Danish market for covered bonds was open and thus provided liquidity to the market. Still, the mortgage banks were able to conduct business as usual: selling bonds on a daily basis thereby granting loans to Danish households and enterprises even when the crisis peaked. This was in deep contrast to most covered bond markets in Europe. And not least, it was due to the fact that Danish L&P companies were still able to buy the domestic covered bonds thereby acting as shock-absorbers for the mortgage market. Without this room for manoeuvre for the L&P companies, the market for housing finance would have suffered during the crisis.	

			We therefore still consider it vital that the threshold applicable for a treatment according to their specific risk feature must be as high as possible as and not lower than 20 per cent. Using credit assessments from rating agencies is not appropriate In order to provide mortgage covered bonds with a treatment in concentration risk sub-module according to their specific risk features, according to CP 47 the bonds must have an AAA credit quality. We disagree with the need for a credit quality criteria. There is no need for a further distinction of covered bonds. The requirements in UCITS 22, 4 already ensure the necessary credit quality of the bonds. The definitions ensure an appropriate delimitation to all other types of bonds. A direct coupling to credit assessments from one or more rating agencies introduces rating sensitivity. In our opinion, it is not appropriate at the moment to rely fully on the judgement of the rating agencies. The rating agencies have been named as having a share in the responsibility for the problems in the financial markets. In the preamble to the proposal for a Regulation on Credit Rating Agencies it is also stated that the users of credit ratings should not rely blindly on credit ratings. Even though rating agencies will undergo changes in the aftermath of the crisis, time needs to prove that private rating agencies deserve such confidence.	

			But even if the rating quality were to be fully trusted, the proposed criteria have disadvantages: The rating criteria give issuers a very strong incentive to maintain or obtain the threshold credit quality. This is not a problem in it self. The problem is that the issuer is not always able to control the quality of the rating. This will e.g. be the case if government debt is downgraded or if rating agencies change their methodologies. Furthermore, the rating criteria are pro-cyclical: In upturns, issuers are more likely to retain higher credit qualities and vice versa. With the rating criteria, a sudden downgrade of a covered bond will urge investors to rapidly move out of their holdings in these bonds. This would create an undesirable instability in the housing finance system and so have an adverse effect on financial stability. To us it is of decisive importance that the statutory regulation supports stability in the property finance systems. If the criteria of credit quality are to be kept, at least we propose the threshold quality to include both AAA and AA. We see no reason why these rules should deviate from the credit quality steps set out in the CRD (Capital Requirements Directive - credit quality step one). Other comments - Specification of counterpart	

			The counterpart to which 4.163 is applied is not specified. In our comments above regards to threshold levels for concentration risk we have assumed that the counterpart is defined as the group to which the issuer of covered bonds belongs as in UCITS 22, 4. Though in our opinion and from a technical and a competition point of view it should be the capital centre from which the covered bonds are issued. Danish covered bonds are issued from capital centres, which in case of issuer insolvency are recognised by legislation as separate legal entities. Cover assets including overcollateralization are assigned to specific capital centres, and in case of issuer insolvency transfer of assets between capital centres is prohibited. Credit ratings are assigned to covered bonds issued from specific capital centres. If the counterpart is not the capital center it may lead to great instability in the system of real estate finance in Denmark. Unlike in the UCITS 22, 4 it would also lead to unequal competition from issuers of mortgage backed securities (MBS) compared to issuers of covered bonds, as covered bonds are on the balance sheet of the issuer of covered bonds in contrast to an MBS, which is decoupled from the issuer and it's group.	
587.	CEA, ECO-SLV-09-442	4.109.	We appreciate the proposal of Ceiops to introduce a preferred option for the concentration thresholds for mortgage covered bonds and public sector covered bonds. From our point of view, however, it is not clear why Ceiops restricts this risk-adjusted consideration only to covered bonds. We suggest the expansion of this risk-adjusted perspective to all assets. That is, one would have to define concentration threshold according to the inherent risk potential of various asset classes. If this appears to be too demanding within	Please see comment #585

			the framework of the standard approach, we suggest that the concentration levels are kept at QIS4-levels. After all, concentration risks are to be dealt with under Pillar 2 and additional risks associated with an asset are to be covered by the other market risk modules. See comment to 4.163.	
588.	CRO FORUM	4.109.	CEIOPS discusses mortgage backed securities. There is no advice on how best to treat mortgages issued by the undertaking with regards to concentration risk. It might make sense to draw a parallel with the treatment of mortgage backed securities, while taking into account the fundamental differences.	Noted. Mortgages issued by the undertaking should be treated according to the concentration to each counterparty.
589.	ECBC	4.109.	While welcoming the principle of a concentration risk approach, we believe that the two proposed concentration thresholds are insufficient: a) to take into account either the specific safety features of the asset class; and b) to take into account both the importance of covered bonds and the market structure in some EU Member States. Therefore, we would support the higher concentration threshold as set out in Option B. However, we request more information as to the analysis undertaken to establish these thresholds and in particular how the safeguard mechanisms in covered bonds were	Please see comment #586

			evaluated, as we believe that these would justify higher concentration thresholds. The robustness of covered bonds, even in the current severe financial crisis, has been proven with no defaults. The criteria laid down in Article 22(4) of the UCITS Directive, rigorous stress testing requirements, special supervision by national supervisors and the investor protection provided by ring fenced assets are amongst the features that have helped ensure the high safety standards of covered bonds. It is clear that a concentration threshold of even 20% will immediately lead to higher capital requirements in some Member States, particularly those where covered bonds accounts for a significant percentage of mortgage funding, or as in the case of Denmark, where covered bonds provide 100% of mortgage funding. This limit appears arbitrary for those countries with significant funding through covered bonds and would reduce liquidity and the ability of credit institutions to grant loans to households and enterprises despite their exemplary track record for both issuers and investors. Concerning the requirements set out in sections 4.110 and 4.163, the requirement to use external credit rating agencies ratings is not appropriate. The requirements in UCITS 22, 4 already ensure the necessary credit quality of the bonds. The definitions ensure an appropriate delimitation to all other types of bonds.	

			A direct coupling to credit assessments from one or more rating agencies introduces rating sensitivity. In our opinion, it is not appropriate at the moment to rely fully on the judgement of the rating agencies.. The imposition of increased regulatory reliance on external credit ratings not only runs counter to the spirit of the recently agreed Regulation on Credit Rating Agencies, but given the pro-cyclical nature of ratings and the migration over time of what particular ratings stand for, for example, through methodology changes, there are strong arguments to avoid increasing their importance. We also request that the requirement to prove that 'there is no evidence of high correlation or connection among the default of one or few borrowers' be deleted as this is not something that can in practice be assessed or demonstrated. Please note: these comments are also relevant for section 4.163	
590.	German Insurance Association – Gesamtverband der D	4.109.	(EMPTY)	Noted
591.	ROAM –	4.109.	Further investigation should be done to calculate the Threshold for mortgage covered bonds and public sector covered bonds	Not agreed. Please see the final advice, which contains the revised

			We don't agree with the proposal of using Thresholds of 2% for AAA-AA-A rated exposures, they should be calibrated.	thresholds.
592.	Association of Danish Mortgage Banks (Realkreditrå	4.110.	See 4.109	Please see comment #586
593.	CEA, ECO-SLV-09-442	4.110.	See comments to Para 4.163.	Please see comment #806
594.	Danish Insurance Association	4.110.	There is no Community definition of mortgage bonds. Some mortgage bonds have only a theoretical concentration risk. In Denmark mortgage bonds are normally issued in units i.e. covering 5000 loans (collaterals). Within each unit losses on one or more collaterals may be compensated by increasing the charge to be paid to the mortgage bank (the principle of solidarity). The soundness of such bonds means that they may not be compared with traditional mortgage bonds where only the mortgage bank is liable for the repayment of the bond. Another important feature in the Danish mortgage bond structure is the balance principle. This principle means that outstanding loans at any moment equal underlying collateral. The bonds are not issued until the collateral is registered and the loan is accepted by the borrower. For that reason there is less credit risk and liquidity risk for such bonds.	Please see comment #586

595.	FFSA	4.110.	CEIOPS requires the participants to comment on two options regarding the concentration level for mortgage covered bonds and public sector covered bonds: 10% or 20%. FFSA considers that this level has to be set based on the studies that CEIOPS has performed and analyzed.	Please see comment #586
596.	Lloyd's	4.110.	We would support option A. It would help if a definition of "highly correlated" was provided.	Noted. CEIOPS does not intend to propose a quantitative definition of "highly correlated"
597.	ROAM –	4.110.	CEIOPS requires the participants to comment on two options regarding the concentration level for mortgage covered bonds and public sector covered bonds: 10% or 20%. ROAM considers that this level has to be set based on the studies that CEIOPS has performed and analyzed.	Noted.
598.	KPMG ELLP	4.112.	We agree with this comment.	Noted
599.	KPMG ELLP	4.113.	We agree with this comment.	Noted
600.	Groupe Consultatif	4.115.	One comment that applies to multiple sections is the one of the "look through" principle: While in principle, this appears absolutely reasonable and any other regulation would open the door for "circumventing the rules", it might be an onerous task in practice, if the information is not readily available to the company. This will need to be considered in the light of CEIOP's advice on simplifications.	Partially agree. CEIOPS considers the look-through approach important for effective risk management. Proportionality will apply, as with all aspects of Solvency 2.
601.	Association of Friendly Societies	4.120.	Concentration risk. Up-to-date data may be an issue for some firms when determining exposures. This will be particularly onerous if it is required quarterly. It will also be particularly difficult if the data is required on a look-through basis.	Not agreed. CEIOPS considers the look-through approach important for effective risk management. Proportionality will apply, as with all aspects of Solvency 2.

602.	Association of Friendly Societies	4.120.	Concentration risk. Up-to-date data may be an issue for some firms when determining exposures. This will be particularly onerous if it is required quarterly. It will also be particularly difficult if the data is required on a look-through basis.	Please see comment #601
603.	Investment & Life Assurance Group (ILAG)	4.120.	Concentration risk. Up-to-date data may be an issue for some firms when determining exposures.	Please see comment #601
604.	OAC	4.120.	Concentration risk. Up-to-date data may be an issue for some firms when determining exposures. This will be particularly onerous if it is required quarterly. It will also be particularly difficult if the data is required on a look-through basis.	Please see comment #601
605.	Association of Friendly Societies	4.123.	We do not agree that the recent financial crisis should lead to a reduction in concentration thresholds. The fact that insurers have not faced the same intensity of problems as banks indicates that they have generally managed their risks, including concentration risk in a more satisfactory manner.	Not agreed. CEIOPS considers the treatment of concentration risk an important aspect of effective risk management under Solvency 2. The recent financial crisis has highlighted the importance of this risk, irrespective of whether it has led to any actual losses for (re)insurance undertakings
606.	Association of Friendly Societies	4.123.	We do not agree that the recent financial crisis should lead to a reduction in concentration thresholds. The fact that insurers have not faced the same intensity of problems as banks indicates that they have generally managed their risks, including concentration risk in a more satisfactory manner.	Please see comment #605
607.	Lloyd's	4.123.	This statement is too strong. Undertakings had exposure to the events in question and may have applied weaker thresholds than	Noted. Please see revised wording.

			suggested in QIS4. The consequences have not been "devastating" for the insurance industry.	
608.	OAC	4.123.	We do not agree that the recent financial crisis should lead to a reduction in concentration thresholds. The fact that insurers have not faced the same intensity of problems as banks indicates that they have generally managed their risks, including concentration risk in a more satisfactory manner.	Please see comment #605
609.	AAS BALTA	4.125.	The proposed concentration limits could potentially lead to overly high capital charges in certain circumstances. The proposed limits are 2% of total assets for AAA/AA/A and 1% of total assets for lower quality instruments. However, within group exposures there may be a variety of ratings some of which may be below A and others above. In such cases it is not clear whether the parent's or subsidiary's investment rating should be used.	Partially agree. Please see revised thresholds. For exposures within a group, the rating of the subsidiary should be used, in general
610.	AB Lietuvos draudimas	4.125.	The proposed concentration limits could potentially lead to overly high capital charges in certain circumstances. The proposed limits are 2% of total assets for AAA/AA/A and 1% of total assets for lower quality instruments. However, within group exposures there may be a variety of ratings some of which may be below A and others above. In such cases it is not clear whether the parent's or subsidiary's investment rating should be used.	Please see comment #610
611.	Association of British Insurers	4.125.	The new thresholds appear very low and so overly prudent and the reasoning given by CEIOPS for the reduction in the thresholds compared to QIS4 is not convincing. The decrease of this threshold plus the inclusion of a correlation factor will artificially increase the correlation risk. We do not believe that the new calibration is based on assumptions consistent with the framework directive (i.e. 99.5% VaR over one year). We would urge CEIOPS to publish a detailed calibration paper plus a calibration comparison to QIS4 parameters in order to be able to	Partially agree. Please see the revised thresholds in the final advice.

			understand the differences. Concerning CEIOPS' remarks about the calibration, we disagree with the reference made to an equity index (MSCI World) as for many insurance undertakings the majority of their assets will be invested in fixed income and other investments. Without a more robust paper proposed by CEIOPS on the calibration, we suggest that the concentration thresholds should be kept at the previous levels (i.e. determined in the framework of QIS4). We suggest that any other type of concentration risk that goes beyond that level is to be treated within Pillar 2.	Noted. The MSCI World index was quoted as an example. However, CEIOPS recognises that undertakings will also invest in other asset classes. Note that CP47 does not address the distinction between Pillar 1 and Pillar 2 treatments; it only considers the quantitative calibration of the concentration risk sub-module
612.	Association of Friendly Societies	4.125.	We do not agree with the reduction in threshold limits. We consider that the current concentration limits in the existing Life Directive remain suitable. We do not believe the case has been made for a reduction and we are concerned at the amount of additional capital such a reduction will require.	Not agreed. However, please see the revised calibration in the final advice.
613.	Association of Friendly Societies	4.125.	We do not agree with the reduction in threshold limits. We consider that the current concentration limits in the existing Life Directive remain suitable. We do not believe the case has been made for a reduction and we are concerned at the amount of additional capital such a reduction will require.	Please see comment #612
614.	CEA, ECO-SLV-09-442	4.125.	The new thresholds appear very low and overly prudent and the reasoning given by Ceiops for the reduction in the thresholds compared to QIS4 is not convincing. The decrease of this threshold plus the inclusion of a correlation factor will artificially increase the correlation risk. We do not believe that the new calibration is based on assumptions consistent with	Please see comment #611

			the framework directive (i.e. 99.5% VaR over one year). We would urge Ceiops to publish a detailed calibration paper plus a calibration comparison to QIS4 parameters in order to be able to understand the differences. Concerning Ceiops' remarks about the calibration, we disagree with the reference made to an equity index (MSCI World) as for many insurance undertakings the majority of their assets will be invested in fixed income and other investments. Without a more robust paper proposed by Ceiops on the calibration, we suggest that the concentration thresholds should be kept at the previous levels (i.e. determined in the framework of QIS4). We suggest that any other type of concentration risk that goes beyond that level is to be treated within Pillar 2.	
615.	Codan Forsikring (Branch Norway) (991 502 491) NOR	4.125.	The proposed concentration limits could potentially lead to overly high capital charges in certain circumstances. The proposed limits are 2% of total assets for AAA/AA/A and 1% of total assets for lower quality instruments. However, within group exposures there may be a variety of ratings some of which may be below A and others above. In such cases it is not clear whether the parent's or subsidiary's investment rating should be used.	Please see comment #609
616.	Codan Forsikring A/S (10529638) DENMARK	4.125.	The proposed concentration limits could potentially lead to overly high capital charges in certain circumstances. The proposed limits are 2% of total assets for AAA/AA/A and 1% of total assets for lower quality instruments. However, within group exposures there may be a variety of ratings some of which may be below A and others above. In such cases it is not clear whether the parent's or subsidiary's investment rating should be used.	Please see comment #609
617.	DIMA (Dublin	4.125.	This section proposes using thresholds of 2% for A-AAA rated exposures, with the unrated threshold set at 1% of total assets.	Please see comment #609

	International Insurance & Management		This is a significant change from the previous level, and may negatively impact certain types of (re)insurance entities.	
618.	Groupe Consultatif	4.125.	The percentages suggested here should be subject to reconsideration following assessment of the results of QIS 5.	Noted
619.	KPMG ELLP	4.125.	We agree with the proposal to reduce the thresholds of this sub-module based on the lessons learnt from the economic crisis.	Noted
620.	Link4 Towarzystwo Ubezpieczeń SA	4.125.	The proposed concentration limits could potentially lead to overly high capital charges in certain circumstances. The proposed limits are 2% of total assets for AAA/AA/A and 1% of total assets for lower quality instruments. However, within group exposures there may be a variety of ratings some of which may be below A and others above. In such cases it is not clear whether the parent's or subsidiary's investment rating should be used.	Please see comment #609
621.	Lloyd's	4.125.	The proposed reductions in limits from QIS4 are too severe. We would propose a more modest decrease (or no decrease at all). A 5% threshold on a single entity remains a reasonable assumption.	Partially agree. Please see revised thresholds in the final advice.
622.	OAC	4.125.	We do not agree with the reduction in threshold limits. We consider that the current concentration limits in the existing Life Directive remain suitable. We do not believe the case has been made for a reduction and we are concerned at the amount of additional capital such a reduction will require.	Please see comment #612
623.	Pearl Group Limited	4.125.	We request details of how the 2% concentration threshold has been derived This limit seems very low, although this depends on the ratio of own funds to total assets. Also, it is not clear how this should operate for an insurance group. Is the exposure of 2% at a group	Please see comment #609. The advice set out in CP47 applies only for the solo level and does not consider groups.

			level or does it have to be applied at an individual entity level as well? The decrease of this the threshold plus the inclusion of a correlation factor will increase in an artificial way the correlation risk. Therefore we would propose to keep the threshold levels as previously stated.	
624.	PricewaterhouseCoopers LLP	4.125.	We note the arguments in this paragraph supporting a reduction in the concentration thresholds relative to QIS4. However, we also note that in order to achieve diversification such as that exhibited by the MSCI World Index, an undertaking would be exposed to significant currency risk and a resulting onerous capital charge. We are thus concerned that the concentration thresholds proposed in this paper are too low and thus unduly burdensome. We urge CEIOPS to test them fully in QIS5. These comments also apply to paragraph 4.152.	Please see comment #611
625.	RSA Insurance Group PLC	4.125.	The proposed concentration limits could potentially lead to overly high capital charges in certain circumstances. The proposed limits are 2% of total assets for AAA/AA/A and 1% of total assets for lower quality instruments. However, within group exposures there may be a variety of ratings some of which may be below A and others above. In such cases it is not clear whether the parent's or subsidiary's investment rating should be used.	Please see comment #609
626.	RSA Insurance Ireland Ltd	4.125.	The proposed concentration limits could potentially lead to overly high capital charges in certain circumstances. The proposed limits are 2% of total assets for AAA/AA/A and 1% of total assets for lower quality instruments. However, within group exposures there may be a variety of ratings some of which may be below A and others above. In such cases it is not clear whether the parent's or	Please see comment #609

			subsidiary's investment rating should be used.	
627.	RSA - Sun Insurance Office Ltd.	4.125.	The proposed concentration limits could potentially lead to overly high capital charges in certain circumstances. The proposed limits are 2% of total assets for AAA/AA/A and 1% of total assets for lower quality instruments. However, within group exposures there may be a variety of ratings some of which may be below A and others above. In such cases it is not clear whether the parent's or subsidiary's investment rating should be used.	Please see comment #609
628.	SWEDEN: Trygg-Hansa Försäkrings AB (516401-7799)	4.125.	The proposed concentration limits could potentially lead to overly high capital charges in certain circumstances. The proposed limits are 2% of total assets for AAA/AA/A and 1% of total assets for lower quality instruments. However, within group exposures there may be a variety of ratings some of which may be below A and others above. In such cases it is not clear whether the parent's or subsidiary's investment rating should be used.	Please see comment #609
629.	UNESPA (Association of Spanish Insurers)	4.125.	The new lower 2% concentration threshold appears overly prudent, we request details of how the threshold has been derived The new thresholds appear very low and so overly prudent and the reasoning given by CEIOPS for the reduction in the thresholds is not convincing. The decrease of this threshold plus the inclusion of a correlation factor will artificially increase the correlation risk. We are not convinced that the new calibration is based on assumptions consistent with the framework directive (i.e. 99,5% VaR over one year). We would urge CEIOPS to publish a detailed calibration paper plus a calibration comparison to QIS4 parameters in order to be able to understand the differences. Concerning CEIOPS' remarks about the calibration, we disagree with the reference made to an equity index (MSCI World) as for many insurance undertakings the majority of their assets will be invested in fixed income and other investments. Without a more	Please see comment #611

			robust paper proposed by CEIOPS on the calibration, we suggest that the concentration thresholds should be kept at the previous levels (i.e. determined in the framework of QIS4).	
630.	uniqa	4.125.	The argumentation concerning the new calibration does not reflect any of the goals set out in the framework directive. Moreover, we are not convinced that the new calibration is based on assumptions consistent with the framework directive (i.e. 99,5% VaR over a one year time horizon). We would urge you to publish a detailed calibration paper plus a calibration comparison to QIS 4 parameters in order to be able to understand the differences. We do not believe that the new thresholds are realistic or economically sound. In fact they seem to be overly prudent. Concerning the remarks about calibration we disagree with the reference made to an equity index (MSCI World) as the major part of assets in insurance undertakings consists of fixed income and other investments.	Please see comment #611
631.	CEA, ECO-SLV-09-442	4.126.	We request details of how the calibration approach and methodology have been adapted.	Noted. Please refer to Appendix A for details of the calibration of this sub-module
632.	UNESPA (Association of Spanish Insurers)	4.126.	We request details of how the calibration approach and methodology have been adapted	Please see comment #631
633.	KPMG ELLP	4.127.	We agree with the proposal of using higher thresholds for properties due to their different features.	Noted
634.			Confidential comment deleted	
635.	CRO FORUM	4.133.	In regards to the scope, it would seem imprudent not to consider the direct connection between potential exposure to the same counterparty in the assets considered here and the assets considered in the counterparty default risk module. For example,	Partially agree. The implicit correlation between concentration risk (via market risk) and counterparty default risk is

			the risk of an investment bank defaulting on collateral obligations underlying derivates at the same time as a default on its debt and equity holdings. It may be that the financial investments alone do not generate a concentration risk charge, but that if other exposures captured in the counterparty default risk module were included then total exposure would exceed the 1% / 2% concentration risk limits. The other class of counterparty that would be affected by this type of connection would be reinsurers. Additionally, where an asset attracts a concentration risk charge, the amount by which that asset is in excess of the concentration risk limit should be excluded from the calculations of the other market risk sub-modules to avoid double counting of the risks inherent in those assets.	captured via the standard formula correlation matrix. Not agreed. Assets in excess of the thresholds should still be treated in the other market risk sub-modules.
636.	Lloyd's	4.133.	We agree.	Noted
637.			Confidential comment deleted	
638.	CRO FORUM	4.134.	Comments as per 4.99.	Please see comment #567
639.	FAIDER (Fédération des Associations Indépendantes	4.134.	We are wondering if the UCITS, subscribed on behalf of the policyholders to their exclusive benefit and at their sole risk, should not be taken into account in this statement.	Partially agree. The advice has been amended to clarify the treatment of UCITS here.
640.	Lloyd's	4.134.	We agree.	Noted.
641.	Association of British Insurers	4.135.	It is not appropriate to include assets allocated to policies where policyholders bear the investment risk in the concentration risk sub-module unless significant material guarantees are provided. In our opinion the inclusion of this risk, which is deemed to be immaterial, will result in an overly complex process for insurers. For	Agree. This is stated in the revised advice.

			investments where policyholders bear the investment risk, separate processes are normally in place compared to those investments in which the insurer bears the investment risk.	
642.			Confidential comment deleted	
643.	CEA, ECO-SLV-09-442	4.135.	It is not appropriate to include assets allocated to policies where policyholders bear the investment risk in the concentration risk sub-module unless significant material guarantees are provided. In our opinion the inclusion of this risk, which is deemed to be immaterial, will result in an overly complex process for insurers. For investments where policyholders bear the investment risk, separate processes are normally in place compared to those investments in which the insurer bears the investment risk. We consider the requirements are unrealistic, burdensome and inappropriate. The proportionality principle should be properly applied. ☐ We disagree with this adjustment and request its removal.	Please see comment #641
644.	CRO FORUM	4.135.	The CRO forum agrees with this comment, and notes the inconsistency with 4.72.	Please see comment #400
645.	FFSA	4.135.	CEIOPS states that assets related to policies where policyholders bear the investment risk should be taken into account when they have embedded options and guarantees. Hence an adjustment is added to the formula - CEIOPS should prove that the adjustment does not imply any double counting as time value of options and guarantees may have been already assessed for the products / policies taken into account	Not agreed. CEIOPS considers it is important to take into account the impact of any embedded options and guarantees, or any other features of the policy that give rise to risks that are not borne by the undertaking. The undertaking has responsibility for carrying this out appropriately. Proportionality will apply here as with all aspects of Solvency 2.

			- FFSA reminds that for many products, the embedded options and guarantees apply to the whole policy and are not specific to a particular fund in a given policy. Hence guarantees and embedded options are usually assessed on a policy by policy basis. - Practically, this statement implies that for all unit linked products with embedded options and guarantees, undertakings should apply a look through approach on every asset included in the products in order to evaluate the exposure per counterparty. FFSA considers this statement unrealistic, burdensome an inappropriate with the proportionality principle as this may not be material at all. Hence FFSA strictly disagrees with this adjustment and requests its removal from the formula	
646.	German Insurance Association – Gesamtverband der D	4.135.	It is not appropriate to include assets allocated to policies where policyholders bear the investment risk in the concentration risk sub-module unless significant material guarantees are provided In our opinion the inclusion of this risk, which is deemed to be immaterial, will result in an overly complex process for insurers. For investments where policyholders bear the investment risk, separate processes are normally in place compared to those investments in which the insurer bears the investment risk. We consider the requirements are unrealistic, burdensome and inappropriate. The proportionality principle should be properly applied. ☐ We disagree with this adjustment and request its removal.	Please see comment #645
647.	Legal and General Group	4.135.	It is not appropriate to include assets allocated to policies where policyholders bear the investment risk in the concentration risk sub-module unless significant material guarantees are provided	Please see comment #645

			In our opinion the inclusion of this risk, which is deemed to be immaterial, will result in an overly complex process for insurers. For investments where policyholders bear the investment risk, separate processes are normally in place compared to those investments in which the insurer bears the investment risk.	
648.	Lloyd's	4.135.	We agree.	Noted.
649.	Pearl Group Limited	4.135.	It is not appropriate to include assets allocated to policies where policyholders bear the investment risk in the concentration risk sub-module unless significant material guarantees are provided. In our opinion the inclusion of this risk, which is deemed to be immaterial, will result in an overly complex process for insurers. For investments where policyholders bear the investment risk, separate processes are normally in place compared to those investments in which the insurer bears the investment risk.	Please see comment #645
650.	ROAM –	4.135.	(EMPTY)	Noted
651.			Confidential comment deleted	
652.	CRO FORUM	4.136.	The simplifications here seem reasonable.	Noted
653.	Lloyd's	4.136.	We agree.	Noted
654.	Lloyd's	4.137.	It is not appropriate to allow for the possibility of an internal model when constructing the standard formula SCR. This should be constructed on the assumption that it will apply to all undertakings.	Partially agree. However, this para is intended only to reflect the general approach set out in the Level 1 text.
655.	Association	4.138.	The treatment of all related parties as one counterparty is not	Partially agree. The relationship

	of British Insurers		supported By this definition CEIOPS acknowledges the fact that the capital within a financial conglomerate is fully fungible and transferable e.g. a default in one legal entity will have a significant effect on the rest of the group. This is not consistent with the views of CEIOPS when considering transferability of funds within a group (see CP 60). In our opinion the treatment of all related parties as one counterparty is only justified if, in an economic sense, this is really the case. Thus the default of one of the related parties will have an effect on the remaining legal entities within the group of related parties.	between entities in a group is complex, and it is difficult within the context of the standard formula to capture the relevant interdependencies. Therefore the approach in this para is proposed as a pragmatic solution, with the aim of capturing risks without introducing excessive complexity.
656.			Confidential comment deleted	
657.	CEA, ECO-SLV-09-442	4.138.	The treatment of all related parties as one counterparty is not supported. By this definition Ceiops acknowledges the fact that the capital within a financial conglomerate is fully fungible and transferable e.g. a default in one legal entity will have a significant onerous effect in the rest of the group. This is not consistent with the views of Ceiops when considering transferability of funds within a group (see CP 60). In our opinion the treatment of all related parties as one counterparty is only justified if, in an economic sense, this is really the case. Thus the default of one of the related parties will have an effect on the remaining legal entities within the group of related parties. We would like to see further Ceiops guidelines for the harmonised definition of the groups.	Please see comment #655
658.	CRO FORUM	4.138.	The CRO forum agrees with this comment as a pragmatic albeit simplified solution to the difficult problem of determining the	Noted

			ultimate counterparty.	
659.	German Insurance Association – Gesamtverband der D	4.138.	The treatment of all related parties as one counterparty is not supported By this definition CEIOPS acknowledges the fact that the capital within a financial conglomerate is fully fungible and transferable e.g. a default in one legal entity will have a significant onerous effect in the rest of the group. This is not consistent with the views of CEIOPS when considering transferability of funds within a group (see CP 60). In our opinion the treatment of all related parties as one counterparty is only justified if, in an economic sense, this is really the case. Thus the default of one of the related parties will have an effect on the remaining legal entities within the group of related parties. We would like to see further CEIOPS guidelines for the harmonised definition of the groups.	Please see comment #655
660.	Lloyd's	4.138.	We agree.	Noted
661.	UNESPA (Association of Spanish Insurers)	4.138.	The treatment of all related parties as one counterparty is not supported By this definition CEIOPS acknowledges the fact that the capital within a financial conglomerate is fully fungible and transferable e.g. a default in one legal entity will have a significant onerous effect in the rest of the group. This is not consistent with the views of CEIOPS when considering transferability of funds within a group (see CP 60). In our opinion the treatment of all related parties as one counterparty is only justified if, in an economic sense, this is really the case. Thus the default of one of the related parties will have an	Please see comment #655

			effect on the remaining legal entities within the group of related parties. We would like to see further CEIOPS guidelines for the harmonised definition of the groups.	
662.	uniqa	4.138.	We agree with the economic approach laid down in this para. However, it could get complicated defining the groups referred to on a standardised basis – f.i. some bigger Austrian banks are organised in rather (and partly decentralised) complex structures where the independence of the single entities is not always clear. Therefore, we would like to see further CEIOPS guidelines for the harmonised definition of the groups.	Noted. Please see also the comments on complexity in #655. The treatment of groups (other than for concentration risk purposes) is outside the scope of CP47
663.	Association of British Insurers	4.139.	The assumption that government bonds are always risk-free is not true. Indeed, most other European countries do not have "AAA" status.	Agreed. However, CEIOPS considers that the exemptions in this para are appropriate and pragmatic. Moreover, as many undertakings invest substantially in the items exempted in this para, to remove these exemptions would have significantly material impact.
664.			Confidential comment deleted	
665.	CEA, ECO-SLV-09-442	4.139.	See also comment to Para 4.73.	Please see comment #415
666.	CRO FORUM	4.139.	Comments as per 4.73	Please see comment #416
667.	FFSA	4.139.	CEIOPS mentions that debt guaranteed by OECD states is excluded from that sub-module. FFSA requires more information concerning the meaning of "guaranteed by". See comment on 4.73.	Noted. CEIOPS does not consider a more explicit definition to be needed for practical purposes.

668.	German Insurance Association – Gesamtverband der D	4.139.	See also comment to Para 4.73.	Please see comment #420
669.	Groupe Consultatif	4.139.	CEIOPS mentions that debt guaranteed by OECD states is excluded from that sub-module. Taking into account that all financial debts issued by financial sector companies (insurance or bank) has been "guaranteed" by the governments, some details are required on the notion of guaranty.	Please see comment #667
670.	Institut des actuaries (France)	4.139.	CEIOPS mentions that debt guaranteed by OECD states is excluded from that sub-module. Taking into account that all financial debts issued by financial sector companies (insurance or bank) has been "guaranteed" by the governments, some details are required on the notion of guaranty.	Please see comment #667
671.	Legal and General Group	4.139.	The assumption that government bonds (gilts) are always risk free is not true. It is apparent that countries can be downgraded. It is arguable that only Germany has AAA status (France may just make it) but all other euro countries probably fail and so if the risk free rate rule applies firms will have to sell their own government paper and buy German and French paper.	Please see comment #663
672.	Lloyd's	4.139.	We agree.	Noted
673.	Pearl Group Limited	4.139.	We think that where the policyholder bears the investment risk, then this should not be within the scope of this module. Where government bonds are exempt how does this apply to bonds issued by supranationals or banks / building societies (e.g. northern Rock and UK government) that are for all extents and purposes owned by a government? This paragraph should be updated to	Agree. This is the intention of paragraph 4.135 Please see updated advice on exemptions.

			cover these areas explicitly.	
674.	ROAM –	4.139.	CEIOPS mentions that debt guaranteed by OECD states is excluded from that sub-module. ROAM requires more information concerning the meaning of "guaranteed by". See comment on 4.73.	Please see comment #667
675.	uniqa	4.139.	We support the exclusion of borrowings by or guaranteed by national governments of an OECD or EEA state as this seems to be a relevant macroeconomic factor for certain member states. However, the condition that these borrowings need to be issued in the currency of the government does not make sense to us. Any FX exposures should be covered by the corresponding sub-module anyways and because of that the risks should not be mixed up.	Partially agree. Please see revised advice.
676.	Association of British Insurers	4.140.	We agree with the no-hole, no-overlap principle. So risks derived from concentration in cash held at a bank are captured in the counterparty default risk module.	Noted.
677.	CEA, ECO-SLV-09-442	4.140.	It is not clear why cash is handled different to other bank assets. We request information as to the rationale behind the different requirements.	Noted. The different treatment of cash is intended to avoid double-counting with the treatment in the counterparty default risk module.
678.	German Insurance Association – Gesamtverband der D	4.140.	It is not clear why cash is handled different to other bank assets. We request information as to the rationale behind the different requirements.	Please see comment #678
679.	Lloyd's	4.140.	We agree.	Noted.
680.	UNESPA	4.140.	It is not clear why cash is handled different to other bank assets.	Please see comment #678

	(Association of Spanish Insurers)		We request information as to the rationale behind the different requirements.	
681.	uniqa	4.140.	It is unclear why cash is handled different to other bank assets.	Please see comment #678
682.			Confidential comment deleted	
683.	CRO FORUM	4.141.	Comments as per 4.73.	Please see comment #416
684.	Lloyd's	4.141.	We agree.	Noted
685.	Pearl Group Limited	4.141.	Government guaranteed bank deposits (4.141) should also be included in 'Assetsxl '	See comment #698.
686.	UNESPA (Association of Spanish Insurers)	4.141.	All bank deposits from financial entities under Basel II (not only those covered by a government guarantee scheme) should be excluded from the concentration risk sub-module, as these financial entities are also subject to anti-concentration regulation. The application of concentration risk sub-module to bank deposits could induce to higher results than the 99.5% solvency requirement (double-counting of concentration risk), especially when the insurance undertaking invests in shareholder bank deposits. In any case, investing in shareholder bank deposits should be excluded from the concentration risk sub-module. Intra-group cash pooling arrangements should also be excluded from the concentration risk sub-module.	Not agreed. CEIOPS considers that the existence of guarantees represents a special case. Anti-concentration regulation on banks does not necessarily imply a reduction in risk for (re)insurance undertakings.
687.	Association of British Insurers	4.142.	There should be a consistent treatment of participations between concentration and equity risk modules i.e. the particular nature of participations should also be taken into account in the concentration risk module We would need more information before commenting in detail on the treatment of participations (due in the 3rd consultation wave). We would also like to stress the importance of the treatment of	Noted. Please see CEIOPS' forthcoming advice on participations.

			participations and the need for sound guidance on this topic.	
688.	CEA, ECO-SLV-09-442	4.142.	There should be a consistent treatment of participations between concentration and equity risk modules i.e. the particular nature of participations should also be taken into account in the concentration risk module. We require more information before commenting in detail on the treatment of participations (due in the 3rd consultation wave). We would like to stress the importance of the treatment of participations and the need for sound guidance on this topic.	Please see comment #687
689.	FFSA	4.142.	CEIOPS mentions that the treatment of participations should be decided at the end of October. FFSA would then require more information before commenting on that particular aspect, and would insist that it is difficult to comment on a CP with only a partial view of its future content.	Please see comment #687
690.	German Insurance Association – Gesamtverband der D	4.142.	There should be a consistent treatment of participations between concentration and equity risk modules i.e. the particular nature of participations should also be taken into account in the concentration risk module We require more information before commenting in detail on the treatment of participations (due in the 3rd consultation wave). We would like to stress the importance of the treatment of participations and the need for sound guidance on this topic.	Please see comment #687
691.	KPMG ELLP	4.142.	We note that this paper does not consider the treatment of participations and we look forward to receiving advice on this matter at the end of October.	Please see comment #687
692.	Lloyd's	4.142.	We agree.	Noted
693.	ROAM –	4.142.	CEIOPS mentions that the treatment of participations should be	Please see comment #687

			decided at the end of October. ROAM would then require more information before commenting on that particular aspect, and would insist that it is difficult to comment on a CP with only a partial view of its future content.	
694.	UNESPA (Association of Spanish Insurers)	4.142.	There should be a consistent treatment of participations between concentration and equity risk modules i.e. the particular nature of participations should also be taken into account in the concentration risk module We require more information before commenting in detail on the treatment of participations (due in the 3rd consultation wave). We would like to stress the importance of the treatment of participations and the need for sound guidance on this topic.	Please see comment #687
695.	uniqa	4.142.	We would like to stress the importance of the treatment of participations and the need for a sound guidance on this topic. In any case we would support a separate economically sound consideration within the equity and concentration risk sub-modules.	Please see comment #687
696.	Lloyd's	4.143.	It is not appropriate to allow for the possibility of an internal model when constructing the standard formula SCR. This should be constructed on the assumption that it will apply to all undertakings.	Please see comment #654
697.			Confidential comment deleted	
698.	CEA, ECO-SLV-09-442	4.144.	Government guaranteed bank deposits (4.141) should also be included in 'Assetsxl '.	Agreed. Bank deposits meeting the requirements of 4.146 and therefore exclude from the concentration risk module should be included in the Assetsxl if they are subject to the market risk module.

			We suggest that in order to clarify the scope of the total assets, the definition of Assetxl should be amended as follows: replace "total assets considered in this sub-module according to the paragraphs contain … 4.139" by "total assets held by the insurers."	Not agreed. The total assets are are not an appropriate volume measure as they include items, for example reinsurance recoverables that do not relate to market risk concentrations.
699.	CRO FORUM	4.144.	As a general comment, the notation in sections B-H is unclear in a number of areas and the clarity of the calculations could be improved. The CRO forum notes the specific reference to the use of external ratings. It would be useful to clarify what approaches may be appropriate when considering exposure to instruments that are not rated. For example, whether or not the use of internally derived ratings will be permitted.	Noted. Noted. The use and application of ratings will be considered at Level 3.
700.	FFSA	4.144.	FFSA suggests that in order to clarify the scope of the total assets the definition of Asset should be amended as follows: replace "total assets considered in this sub-module according to the paragraphs contained … 4.139"by "total assets a part from those which are allocated to policies (4.135)."	Please see comment #698
701.	German Insurance Association – Gesamtverband der D	4.144.	Government guaranteed bank deposits (4.141) should also be included in 'Assetsxl ' We suggest that in order to clarify the scope of the total assets, the definition of Assetxl should be amended as follows: replace "total assets considered in this sub-module according to the paragraphs contain … 4.139" by "total assets held by the insurers."	Please see comment #698
702.	Lloyd's	4.144.	Greater clarity is required on how to treat asset exposures where there is no external credit rating.	Please see comment #699

703.	PricewaterhouseCoopers LLP	4.144.	Greater clarity is required on how to treat asset exposures where there is no external credit rating.	Please see comment #699
704.	ROAM –	4.144.	ROAM suggests that in order to clarify the scope of the total assets the definition of Asset should be amended as follows: replace "total assets considered in this sub-module according to the paragraphs contained … 4.139"by "total assets a part from those which are allocated to policies (4.135)."	Please see comment #698
705.	Lloyd's	4.145.	We agree.	Noted
706.	Lloyd's	4.146.	We agree.	Noted
707.	Lloyd's	4.147.	We agree.	Noted
708.	Association of British Insurers	4.148.	It is not clear how index based options would work here. Would the exposure be reduced only on stocks (in the index)?	If the underlying is held a look through needs to be applied.
709.			Confidential comment deleted	
710.	CEA, ECO-SLV-09-442	4.148.	There appears to be a line missing in the CP. We assume that the meaning of this paragraph should be as per TS.IX.G.8 of the QIS4 technical specifications, i.e. the sentence: "The exposure to the default of the counterparty of the option or the CDS is not collaterals securitising bonds should be taken into account." should be replaced by: "The exposure to the default of the counterparty of the option or the CDS is not treated in this module, but in the counterparty default risk module. Also, collaterals securitising bonds should be taken into account." We request that the look-through approach is applied on a proportionate manner.	Agree. See revised text. Agree. Proportionality applies

				here as with all aspects of Solvency 2.
711.	CRO FORUM	4.148.	This approach seems reasonable.	Noted
712.	FFSA	4.148.	FFSA suggests that the look-through approach is applied on a proportionate manner.	Agree. Proportionality applies here as with all aspects of Solvency 2.
713.	German Insurance Association – Gesamtverband der D	4.148.	There appears to be a line missing in the CP We assume that the meaning of this paragraph should be as per TS.IX.G.8 of the QIS4 technical specifications, i.e. the sentence: "The exposure to the default of the counterparty of the option or the CDS is not collaterals securitising bonds should be taken into account." should be replaced by: "The exposure to the default of the counterparty of the option or the CDS is not treated in this module, but in the counterparty default risk module. Also, collaterals securitising bonds should be taken into account." We request that the look-through approach is applied on a proportionate manner.	Please see comment #710
714.	Lloyd's	4.148.	We agree.	Noted
715.	ROAM –	4.148.	ROAM suggests that the look-through approach is applied on a proportionate manner.	Agree. Proportionality applies here as with all aspects of Solvency 2.
716.	Association of British Insurers	4.149.	It could be very burdensome to keep track of investment fund strategy changes. Materiality needs to be taken into account (i.e. differentiate between CDOs and plain vanilla investment funds).	Partially agree. CEIOPS considers a look-through approach important for the proper assessment of risk.

				Proportionality applies here as with all aspects of Solvency 2, however.
717.	CEA, ECO-SLV-09-442	4.149.	Investment funds should be excluded from the concentration risk provided that there is sufficient evidence of diversification via investment guidelines and limits published by the funds. Taking into consideration that the assets included in an investment fund are already treated according to their risk exposure within the other sub-modules of the market risk (via the look-through approach), there is no need to include them in the concentration risk sub-module. Furthermore, it could be particularly burdensome to require a look-through approach and it is also questionable whether the information per title is available. Statements of investment funds are typically produced much later than would be needed for the calculation of the SCR. Materiality should be considered here (i.e. differentiation between CDOs and plain vanilla investment funds).	Not agreed. CEIOPS considers a look-through approach important for the proper assessment of risk. Proportionality applies here as with all aspects of Solvency 2, however.
718.	German Insurance Association – Gesamtverband der D	4.149.	Investment funds should be excluded from the concentration risk provided that there is sufficient evidence of diversification via investment guidelines and limits published by the funds. Taking into consideration that the assets included in an investment fund are already treated according to their risk exposure within the other sub-modules of the market risk (via the look-through approach), there is no need to include them in the concentration risk sub-module. Furthermore, it could be particularly burdensome to require a look-through approach and it is also questionable whether the	Please see comment #717

			information per title is available. Statements of investment funds are typically produced much later than would be needed for the calculation of the SCR. Materiality should be considered here (i.e. differentiation between CDOs and plain vanilla investment funds).	
719.	Legal and General Group	4.149.	It could be very burdensome to keep track of investment fund strategy changes. Materiality needs to be taken into account (e.g. differentiate between CDO's and plain vanilla investment funds).	Please see comment #716
720.	Lloyd's	4.149.	We agree.	Noted
721.	Pearl Group Limited	4.149.	It could be very burdensome to keep track of investment fund strategy changes. Materiality needs to be taken into account (i.e. differentiate between CDO's and plain vanilla investment funds).	Please see comment #716
722.	UNESPA (Association of Spanish Insurers)	4.149.	3. Investment funds should be excluded from the concentration risk provided that there is sufficient evidence of diversification via investment guidelines and limits published by the funds. 4. Taking into consideration that the assets included in an investment fund are already treated according to their risk exposure within the other sub-modules of the market risk (via the look-through approach), there is no need to include them in the concentration risk sub-module. Furthermore, it could be particularly burdensome to require a look-through approach and it is also questionable whether the information per title is available. Statements of investment funds are typically produced much later than would be needed for the calculation of the SCR. Materiality should be considered here (i.e. differentiation between CDOs and plain vanilla investment funds).	Please see comment #717
723.	Association of British Insurers	4.150.	Concentration risk is dealt with in a disproportionately complex manner for a risk that is typically relatively immaterial. We strongly urge CEIOPS to develop a simplified method as	CEIOPS considers concentration risk an important part of market risk and as such the approach should be sufficiently sensitive to

			standard.	the underlying risks. Proportionality applies here as in all Solvency 2.
724.	CEA, ECO-SLV-09-442	4.150.	Concentration risk is dealt with in a disproportionately complex manner for a risk that is typically relatively immaterial. We strongly urge Ceiops to develop a simplified method as standard.	Please see comment #723
725.	German Insurance Association – Gesamtverband der D	4.150.	Concentration risk is dealt with in a disproportionately complex manner for a risk that is typically relatively immaterial. We strongly urge CEIOPS to develop a simplified method as standard.	Please see comment #723
726.	UNESPA (Association of Spanish Insurers)	4.150.	Concentration risk is dealt with in a disproportionately complex manner for a risk that is typically relatively immaterial. We strongly urge CEIOPS to develop a simplified method as standard.	Please see comment #723
727.	AMICE	4.152.	The new thresholds appear very low and the reasoning given by CEIOPS for the reduction in the thresholds is not convincing. We suggest the following concentration thresholds CT, depending on the rating of the counterparty i: AAA: 5% AA: 5% A: 5%	Noted. Please see revised thresholds in the final advice.

			BBB: 3% BB: 2% B: 2%	
728.	Association of British Insurers	4.152.	See also comments to 4.125. It is unclear to us how to deal with ratings, which are inconsistent from one Credit Rating Agency to another. We request clarification on this issue.	Noted. The treatment of ratings from different rating agencies will be considered at Level 3.
729.	Association of Friendly Societies	4.152.	See comments on 4.125. We note that there is no concentration limit mentioned for equities. This is clearly a concern given how low the limits are for Bonds. We would stress that we consider the limits in the current Life Directive to be satisfactory and that only concentrations in excess of those should incur a capital charge.	Not agreed. The calculation in section D is not restricted to bonds.
730.	Association of Friendly Societies	4.152.	See comments on 4.125. We note that there is no concentration limit mentioned for equities. This is clearly a concern given how low the limits are for Bonds. We would stress that we consider the limits in the current Life Directive to be satisfactory and that only concentrations in excess of those should incur a capital charge.	Please see comment #729
731.			Confidential comment deleted	
732.	CEA, ECO-SLV-09-442	4.152.	Please see comments to Para 4.125. Also: It is unclear to us how to deal with ratings which are inconsistent from one Credit Rating Agency to another. We request clarification on this issue.	Please see comment #726 The use of ratings is beyond the scope of this paper
733.	CRO FORUM	4.152.	More justification on the calibration of these figures would be useful. For example, the use of a 1% instead of 2% concentration	Noted. The final text includes revised thresholds.

			threshold for BBB seems arbitrary, especially given that the default rates used (as per 4.153) for BBB are much closer to A than to <BBB. 24. As the thresholds have reduced (relative to QIS4) and the correlations between counterparties have been increased, there is a risk that this calibration is too conservative.	
734.	FFSA	4.152.	CEIOPS provides some concentration thresholds. FFSA considers that the thresholds are very low in this CP, regarding the previous figures in QIS4, and is wondering what is the rational for such a decrease. Therefore, FFSA would prefer to retain the QIS4 figures. Furthermore, FFSA requires some clarification about the calculation of Loss Absorbing Effect on this concentration shock.	Please see comment #733. Please refer to CEIOPS' advice on loss absorbency of technical provisions. Further detail will be considered at Level 3.
735.	German Insurance Association – Gesamtverband der D	4.152.	The new thresholds appear very low and overly prudent and the reasoning given by CEIOPS for the reduction in the thresholds compared to QIS4 is not convincing. The decrease of this threshold plus the inclusion of a correlation factor will artificially increase the correlation risk. We do not believe that the new calibration is based on assumptions consistent with the framework directive (i.e. 99.5% VaR over one year). We would urge CEIOPS to publish a detailed calibration paper plus a calibration comparison to QIS4 parameters in order to be able to understand the differences. Concerning CEIOPS' remarks about the calibration, we disagree with the reference made to an equity index (MSCI World) as for	Please see comment #611

			many insurance undertakings the majority of their assets will be invested in fixed income and other investments. Without a more robust paper proposed by CEIOPS on the calibration, we suggest that the concentration thresholds should be kept at the previous levels (i.e. determined in the framework of QIS4). We suggest that any other type of concentration risk that goes beyond that level is to be treated within Pillar 2. Furthermore, it is unclear to us how to deal with ratings which are inconsistent from one Credit Rating Agency to another. We request clarification on this issue.	
736.	GROUPAMA	4.152.	The diminution of thresholds (e.g. 5% to 2% for AAA to A rated counterparty) is not justified in the annex, dealing only with calibration of the g parameter. Even if we agree with the g parameter calibration, we suggest adhering to the thresholds tested for QIS 3 and QIS 4.	Not agreed. CEIOPS considers the thresholds tested in QIS3 and QIS4 to be too high, based on the rationale presented in section 4.7 of CP47
737.	Investment & Life Assurance Group (ILAG)	4.152.	The large reduction in concentration risk thresh-holds compared to QIS 4 is significant and will increase capital.	Noted. Please see comment #736
738.	KPMG ELLP	4.152.	We agree with the proposal to reduce the thresholds of this sub-module based on the lessons learnt from the economic crisis.	Noted
739.	Legal and General Group	4.152.	The reduction of concentration thresholds relative to QIS4 is inappropriate The thresholds have been significantly reduced compared to the previous figures in QIS4. This is particularly concerning for assets	Please see comment #611 and comment #736

			of investment grade. (We request information as to the rationale for such a decrease.) In our opinion, the concentration thresholds are too low, especially for high rated counterparties. We believe the thresholds proposed in QIS4 were more appropriate. The level of concentration thresholds of QIS4 is considered to be suitable. It is not very clear what should be the treatment of the exposures with no rating such as equities. According the definitions in TS.IX.G.7 of the QIS4 technical specifications and 4.146, all the exposures of the same counterparty should be added, taking as a rating an average rating. We would ask for some clarifications about the treatment of these cases. It is unclear to us what would happen in the event of a downgrade or when ratings are inconsistent from one CRA to another. This could be a concern.	Please see comment #729. The rating requested is of the counterparty, not of the equity. The methodology set out in section 4.7.2 applies accordingly. Please see comment #726
740.	Lloyd's	4.152.	The proposed reductions in limits from QIS4 are too severe. We would propose a more modest decrease (or no decrease at all). A 5% threshold on a single entity remains a reasonable assumption.	Please see comment #733
741.	OAC	4.152.	See comments on 4.125. We note that there is no concentration limit mentioned for equities. This is clearly a concern given how low the limits are for Bonds. We would stress that we consider the limits in the current Life Directive to be satisfactory and that only concentrations in excess of those should incur a capital charge.	Please see comment #729

742.	Pearl Group Limited	4.152.	These concentration risks seem to be excessively low. We recommend that CEIOPS reverts to the percentages used in QIS 4.	Please see comment #733
743.	PricewaterhouseCoopers LLP	4.152.	See comments at paragraph 4.125.	Please see comment #624
744.	ROAM –	4.152.	CEIOPS provides some concentration thresholds. We suggest the following concentration thresholds CT, depending on the rating of the counterparty. (According to the French regulation: it is 5% for all ratings with some exceptions to 10%): AAA: 5% AA: 5% A: 5% BBB: 3% BB: 2% B: 2%	Please see comment #727
745.			Confidential comment deleted	
746.	uniqa	4.152.	The argumentation concerning the new calibration does not reflect any of the goals set out in the framework directive. Moreover, we are not convinced that the new calibration is based on assumptions consistent with the framework directive (i.e. 99,5% VaR over one year). We would urge you to publish a detailed calibration paper plus a calibration comparison to QIS 4 parameters in order to be	Please see comment #611

			able to understand the differences. We do not believe that the new thresholds are realistic or economically sound. In fact they seem to be overly prudent. Concerning the remarks about calibration we disagree with the reference made to an equity index (MSCI World) as the major part of assets in insurance undertakings consists of fixed income and other investments.	
747.	XL Capital Ltd	4.152.	The reduction of concentration thresholds relative to QIS4 is inappropriate The thresholds have been significantly reduced compared to the previous figures in QIS4. This is particularly concerning for assets of investment grade. (We request information as to the rational for such a decrease.) In our opinion, the concentration thresholds are too low, especially for high rated counterparties. However it may ultimately depend on the ratio of own funds to total assets (excluding policyholder assets). Also, it is not clear whether these apply to total assets for an insurance group or whether they have to be applied at each individual entity? If it is the latter, then this would cause concern for a small subsidiary, which may have just sufficient capital to cover the capital requirement, however, it would have substantial potential parent support. We would argue that it is most appropriate to apply these percentages at the group level as it is the ability of the group as a whole to absorb any losses arising from concentrations of risk The level of concentration thresholds of QIS4 is considered to be more suitable. It is not very clear what should be the treatment of the exposures with no rating as equities, and how should be treated the exposures with a correlation component as n-to default swaps. According the	Please see comment #733 Not agreed. The advice in this paper addresses the solo SCR. The group context is addressed in CP60. Please see comment #729

			definitions in TS.IX.G.7 of the QIS4 technical specifications and 4.146, all the exposures at the same counterparty should be added, taking as a rating an average rating. We would ask for some clarifications about the treatment of these cases. It is unclear to us what would happen in the event of a downgrade or when ratings are inconsistent from CRA to another. This could be a concern.	Please see comment #728
748.			Confidential comment deleted	
749.	CEA, ECO-SLV-09-442	4.153.	See also comments to Para 4.78 regarding the treatment of non-rated investments.	Please see comment #452
750.	CRO FORUM	4.153.	While reasonable, these figures seem spuriously accurate when considered relative to the limits set in 4.152.	Noted. Please refer to the annex, setting out the calibration.
751.	German Insurance Association – Gesamtverband der D	4.153.	See also comments to Para 4.78 regarding the treatment of non-rated investments.	Please see comment #452
752.	KPMG ELLP	4.153.	We note that the calibration of parameter g has changed from that used in the QIS4 exercise and this is backed by the calculation carried out in Annex A, the results of which are shown in A.14. We concur with this approach towards the calibration.	Noted
753.	PricewaterhouseCoopers LLP	4.153.	The evaluation of the impact on the value of options and guarantees of each excess exposure will be computationally intensive. Some companies may be willing to adopt approximations instead of re-running their valuation models for each excess exposure in isolation. Would approximate computation of ☐Liabul	Please see comment #723

			be permitted?	
754.			Confidential comment deleted	
755.	CRO FORUM	4.154.	The intention appears to be that undertakings should allow for the impact on their liabilities of a change in the value of the assets of the issuer attracting a concentration risk charge by XSi * gi (subject to a minimum of nil), but the wording is not clear.	Agree. Please see revised text.
756.			Confidential comment deleted	
757.	CEA, ECO-SLV-09-442	4.155.	Para 4.155 to 4.158 are not fully clear. In Para 4.150 financial concentration risk is defined as MKTconc_financial, but this is not used in Para 4.155 or beyond. We ask Ceiops to provide clear formulas as to how the concentration is risk is to be computed. We suggest that the formula is most likely intended to read: Mktconc_financial = Mktconc – ΔLiabfuture profits.	Noted. Please see revised text.
758.	CRO FORUM	4.155.	4.155 and 4.156 are not clear, and are not referred to in the explanatory text.	Agree. Please see revised text.
759.	FFSA	4.155.	Regarding 4.150, FFSA thinks that the formula is Mktconc_financial = Mktconc – Δliabfuture profits	Noted. Please see revised text.
760.	German Insurance Association – Gesamtverband der D	4.155.	Para 4.155 to 4.158 are not fully clear. In Para 4.150 financial concentration risk is defined as MKTconc_financial, but this is not used in Para 4.155 or beyond. We ask CEIOPS to provide clear formulas as to how the concentration is risk is to be computed. We suggest that the formula is most likely intended to read: Mktconc_financial = Mktconc – ΔLiabfuture profits.	Please see comment #757

761.	Lloyd's	4.155.	We agree.	Noted
762.	PricewaterhouseCoopers LLP	4.155.	Part of the calculation would appear to have been omitted, as the previous two paragraphs described the calculation of Conci, i.e. the capital charge at the level of each excess exposure. Should paragraph 4.159 be positioned before this paragraph? Should it refer to Mktconc_financial rather than to Mktconc? The formula currently presented at paragraph 4.155 is not easily understood. Is it the intention to say that the calculation has so far been carried out ignoring any management actions in respect of future discretionary benefits ("gross", in the terminology of CP 54) and that an adjustment for these actions is now required to give the "net" amount for the purposes of CP 54?	Noted. Please see revised text.
763.	CEA, ECO-SLV-09-442	4.156.	It is not appropriate to require a calculation under the standard formula "provided the undertaking is able to assess such impact". This requirement would appear to penalise those companies better able to assess the impact on the NAV of the concentration risk shock.	Not agreed. This is not the intention of this paragraph. Please see revised wording.
764.	German Insurance Association – Gesamtverband der D	4.156.	It is not appropriate to require a calculation under the standard formula "provided the undertaking is able to assess such impact". This requirement would appear to penalise those companies better able to assess the impact on the NAV of the concentration risk shock.	Please see comment #763
765.	PricewaterhouseCoopers LLP	4.156.	The description of the adjustment for future profits is unclear. This comment also applies to paragraphs 4.157 and 4.158.	Noted. Please see revised wording.

766.	Association of British Insurers	4.157.	Only net capital charges (of changes in future bonus rates) should be required As stated in our comments to CP54, this "gross calculation" is meaningless and burdensome to calculate. Furthermore, we do not understand why it is only in the concentration risk sub-module that the issue of changes in future bonus rates is mentioned?	Noted. Please see revised text.
767.			Confidential comment deleted	
768.	CEA, ECO-SLV-09-442	4.157.	Only net capital charges (of changes in future bonus rates) should be required. As stated in our comments to CP54, this "gross calculation" is meaningless and burdensome to calculate. Furthermore, we don't understand why it is only in the concentration risk sub-module that the issue of changes in future bonus rates is mentioned?	Please see comment #766
769.	CRO FORUM	4.157.	4.157 and 4.158 seem reasonable but are not referred to in the explanatory text.	Noted.
770.	FFSA	4.157.	CEIOPS considers that the calculations of the concentration charge should be determined by considering that assumptions of future bonus rates would remain identical before and after the shock. As stated in its comments of CP54, FFSA considers that this "gross calculation" is meaningless.	Please see comment #766
771.	German Insurance	4.157.	Only net capital charges (of changes in future bonus rates) should be required	Please see comment #766

	Association – Gesamtverband der D		As stated in our comments to CP54, this "gross calculation" is meaningless and burdensome to calculate. Furthermore, we don't understand why it is only in the concentration risk sub-module that the issue of changes in future bonus rates is mentioned?	
772.	Lloyd's	4.157.	We agree.	Noted
773.	CEA, ECO-SLV-09-442	4.158.	See comment to Para 4.157	Please see comment #766
774.	FFSA	4.158.	See comment on 4.157	Please see comment #766
775.	German Insurance Association – Gesamtverband der D	4.158.	See comment to Para 4.157	Please see comment #766
776.	Lloyd's	4.158.	We agree.	Noted
777.	AMICE	4.159.	We do not see any reason to increase the correlation parameter from 0% in QIS 4 to 25% between counterparties that are normally independent, as counterparties of the same group should be treated as one counterparty.	Not agreed. CEIOPS considers this parameter is important to take account of the systemic nature of counterparties.
778.	Association of British Insurers	4.159.	We do not support the correlation assumption of 25%. The assumption used in QIS4, namely that counterparties are uncorrelated, was more appropriate.	Not agreed. CEIOPS considers this parameter is important to take account of the systemic

			Take for example an insurer, which has a large concentration exposure to say a food retailer and a pharmaceutical company. In this case the correlation will probably be zero. However, if you have a large exposure to an airline and a car manufacturer, then the correlation may be quite high. The key point here is that this is going to be very specific to the insurer's individual situation and general best practice will be to not build up large exposures to sectors, which may have some linkage. Therefore, we would argue that the original uncorrelated assumption is most appropriate for Pillar 1, and it is up to the insurer and supervisor to review whether this assumption is appropriate in Pillar 2. If not appropriate – i.e. if some linkage is deemed to exist between the large exposures, then this should be dealt with by capital add-on or an internal model. Furthermore, CEIOPS has not given any justification for the change in the correlation assumption.	nature of counterparties. A standardised approach to calibration is necessary in the standard formula context. However, the Pillar 2 assessment is important nonetheless.
779.	CEA, ECO-SLV-09-442	4.159.	We do not support the correlation assumption of 25%. The assumption used in QIS4, namely that counterparties are uncorrelated, was appropriate. Take for example an insurer which has a large concentration exposure to say a food retailer and a pharmaceutical company. In this case the correlation will probably be zero. However, if you have a large exposure to an airline and a car manufacturer, then the correlation may be quite high. The key point here is that this is going to be very specific to the insurer's individual situation and general best practice will be to not build up large exposures to sectors which may have some linkage. Therefore, we would argue that the original uncorrelated assumption is most appropriate for Pillar 1, and it is up to the insurer and supervisor to review whether this assumption is appropriate in Pillar 2. If not appropriate – i.e. if some linkage is deemed to exist between the large exposures, then	Please see comment #778

			this should be dealt with by capital add-on or an internal model. Furthermore, Ceiops has not given any justification for the change in the correlation assumption.	
780.	FFSA	4.159.	CEIOPS provides the correlations to be used for the concentration risk. FFSA would get some further explanations on the level of correlation (25%) between counterparties to determine the concentration capital charge. FFSA does not see any evident reason to increase the correlation parameter from 0% in QIS 4 to 25% in this CP. Therefore, FFSA would prefer to retain the QIS4 figures.	Please see comment #778
781.	German Insurance Association – Gesamtverband der D	4.159.	We do not support the correlation assumption of 25%. The assumption used in QIS4, namely that counterparties are uncorrelated, was appropriate. Take for example an insurer which has a large concentration exposure to say a food retailer and a pharmaceutical company. In this case the correlation will probably be zero. However, if you have a large exposure to an airline and a car manufacturer, then the correlation may be quite high. The key point here is that this is going to be very specific to the insurer's individual situation and general best practice will be to not build up large exposures to sectors which may have some linkage. Therefore, we would argue that the original uncorrelated assumption is most appropriate for Pillar 1, and it is up to the insurer and supervisor to review whether this assumption is appropriate in Pillar 2. If not appropriate – i.e. if some linkage is deemed to exist between the large exposures, then this should be dealt with by capital add-on or an internal model. Furthermore, CEIOPS has not given any justification for the change in the correlation assumption.	Please see comment #778
782.	GROUPAMA	4.159.	We do not see any reason for increasing the correlation parameter,	Please see comment #778

			from 0% in QIS 4 to 25% in this CP, between counterparties that are normally independent, as counterparties of the same group should be treated as one counterparty.	
783.	Groupe Consultatif	4.159.	We would get some further explanations on the level of correlation (0.25%) among the requirements for each counterparty to determine aggregated financial concentration capital.	Please see comment #778
784.	Institut des actuaries (France)	4.159.	We would get some further explanations on the level of correlation (0.25%) among the requirements for each counterparty to determine aggregated financial concentration capital.	Please see comment #778
785.	KPMG ELLP	4.159.	We note that the capital requirement for financial concentration risk is determined assuming a correlation of 0.25 among the requirements for each counterparty i. This has changed from the assumption of independence among the requirements for each counterparty i used in the QIS4 exercise and will increase the risk charge for this sub-module. We would like to understand how this assumption has been arrived at.	Please see comment #778
786.	Legal and General Group	4.159.	We request further detail. We see no reason to increase the correlation assumption. We request some further explanations on the level of correlation (25%) between counterparties to determine the concentration capital charge. We see no evident reason to increase the correlation parameter from 0% in QIS4 to 25% in this CP.	Please see comment #778
787.	Lloyd's	4.159.	The correlation factor of 25% appears high. This selection should be justified or supported by analysis.	Please see comment #778
788.	Pearl Group Limited	4.159.	It would be very helpful if CEIOPS set out precisely how they arrived at a correlation factor of 0.25. The quality of analysis and methodology used would greatly assist in informing us as to the standards required to arrive at their own internal model assumptions.	Please see comment #778

789.	PricewaterhouseCoopers LLP	4.159.	See comment at paragraph 4.155 re the positioning of this paragraph.	See comment #762
790.	ROAM –	4.159.	CEIOPS provides the correlations to be used for the concentration risk. We do not see any reason to increase the correlation parameter, from 0% in QIS 4 to 25% in the implementing measures, between counterparties that are normally independent, as counterparties of the same group should be treated as one counterparty.	Please see comment #778
791.	UNESPA (Association of Spanish Insurers)	4.159.	We request further detail. We see no reason to increase the correlation assumption We request some further explanations on the level of correlation (25%) between counterparties to determine the concentration capital charge. We see no evident reason to increase the correlation parameter from 0% in QIS4 to 25% in this CP. The assumption of 0.25 as a correlation factor is very simplistic and will clearly increase the concentration risk. Take for example a large concentration exposure to say a food retailer and a pharmaceutical company. In this case the correlation will probably be zero. However, if you have a large exposure to an airline and a car manufacturer, then the correlation may be quite high. The key point here is that this is going to be very specific to the insurer's individual situation and general best practice will be to not build up large exposures to sectors which may have some linkage. Therefore, we would argue that the original uncorrelated assumption is most appropriate for Pillar 1, and it is up to the insurer and supervisor to review whether this assumption is appropriate in Pillar 2. If not appropriate – i.e. if some linkage is deemed to exist between the large exposures, then this should be	Please see comment #778

			dealt with by capital add-on or an internal model.	
792.	AMICE	4.160.	It is unclear whether CEIOPS wants to exclude UCITS of the total assets used for concentration risk. UCITS should be excluded from the concentration risk provided that there is sufficient evidence of diversification.	Not agreed. UCITS are excluded in the concentration risk module only if they satisfy the criteria in 4.160
793.			Confidential comment deleted	
794.	CRO FORUM	4.160.	Notwithstanding the comments in 4.107, this approach seems reasonable.	Noted
795.	GROUPAMA	4.160.	It is unclear if CEIOPS wants to exclude UCITS of the total Asset use for concentration risk. If yes, this statement avoid taking into account the diversification benefit of this kind of investments. We suggest that look-through methodology should always be allowed, even the UCITS does not have a concentration risk itself.	Please see comment #792
796.	PricewaterhouseCoopers LLP	4.160.	What is the meaning of "concentration threshold of the sub-module" as the definition of CT? CT has only previously been defined (paragraph 4.152) at the level of an individual counterparty, depending on its credit rating.	Noted. CT is defined in para 4.152. The notation will be clarified.
797.	FFSA	4.161.	CEIOPS requires the use of a look-through approach for the collective investment funds. FFSA thinks that the look-through approach may be very difficult to apply in the reality. In most cases (fund of fund) the only feasible thing will be to consider the benchmark.	Please see comment #569
798.	ROAM –	4.161.	CEIOPS requires the use of a look-through approach for the collective investment funds. ROAM thinks that the look-through approach may be very difficult to apply in the reality.	Please see comment #569 and comment #572

			In most cases (fund of fund) the only feasible thing will be to consider the benchmark.	
799.	CEA, ECO-SLV-09-442	4.162.	A look-through approach may be very difficult to apply in reality. In many cases the only reasonable option will be to consider the benchmark. See also comment to 4.149.	Please see comment #569
800.	German Insurance Association – Gesamtverband der D	4.162.	A look-through approach may be very difficult to apply in reality In many cases the only reasonable option will be to consider the benchmark. See also comment to Para 4.149	Please see comment #569
801.	UNESPA (Association of Spanish Insurers)	4.162.	A look-through approach may be very difficult to apply in reality In many cases the only reasonable option will be to consider the benchmark.	Please see comment #569
802.	AMICE	4.163.	CEIOPS allows to apply a threshold to the treatment of public mortgage covered bonds and public sector covered bonds when all the following requirements are met: • the portfolio of mortgages backing the asset is diversified into a sufficiently high number of borrowers • there is no evidence of high correlation or connection among the default of one or few borrowers In our opinion these requirements are not clear and need to be specified otherwise it would be difficult to apply .	Not agreed. CEIOPS considers there is no benefit in specifying these requirements further at this stage.
803.	Association of British Insurers	4.163.	In principle, we support the inclusion of a specific higher concentration threshold for mortgage-covered bonds and public sector covered bonds. Due to the special safeguard mechanisms	Please see comment #585 and comment #802

			that exist for these investments, a higher concentration threshold is appropriated and welcomed. 2. From our point of view, however, it is not clear why CEIOPS restricts this risk-adjusted consideration only to covered bonds. We suggest that CEIOPS expands the risk-adjusted perspective to all asset classes. That is, one would have to define the concentration risk threshold according to the inherent risk potential of each asset class. If this appears to be too demanding within the framework of the standard approach, then we would suggest to keep the concentration risk levels at least at QIS4-levels. After all, concentration risks are to be dealt with under Pillar 2 and additional risks associated with an asset are to be covered by the other market risk modules. We request details of the rationale behind the two proposed thresholds for covered bonds (10% or 20%, yet to be decided by CEIOPS). We support the 20% proposal, which should be set at a higher level if it reflects the underlying risks in specific markets. At this stage we should state that a higher threshold, that is 20% rather than 10%, would appear more appropriate to us due to the safeguard mechanisms that exist for these investments. However, this level has to be set based on the studies that CEIOPS has performed and analysed and so we request details to explain how the final threshold will be determined before we can give our final opinion. This holds for additional asset thresholds, too. We request details of how "no evidence of high correlation or connection among the default of one or few borrowers" might be	

			assessed and demonstrated. The reference to "AAA" credit quality should be replaced by a LGD notion and should be widened In our opinion the reference to "AAA" quality should be fully replaced by a LGD notion including the effect of the received collateral. That is, there should be no criterion that is based on the rating. Instead "a bond for which the full exposure is backed by a mortgage" could replace "AAA". The bandwidth in terms of ratings should be extended to also cover "AA" or "A"-rated assets in terms of their equivalent in a LGD notation.	
804.	Association of Danish Mortgage Banks (Realkreditrå	4.163.	See 4.109	Please see comment #586
805.			Confidential comment deleted	
806.	CEA, ECO-SLV-09-442	4.163.	In principle, we support the inclusion of a specific higher concentration threshold for mortgage covered bonds and public sector covered bonds. Due to the special safeguard mechanisms that exist for these investments, a higher concentration threshold is appropriate and welcomed. 9. From our point of view, however, it is not clear why Ceiops restricts this risk-adjusted consideration only to covered bonds. We suggest that Ceiops expands the risk-adjusted perspective to all asset classes. That is, one would have to define the concentration	Please see comment #585 and comment #802

			risk threshold according to the inherent risk potential of each asset class. If this appears to be too demanding within the framework of the standard approach, then we would suggest to keep the concentration risk levels at least at QIS4-levels. After all, concentration risks are to be dealt with under Pillar 2 and additional risks associated with an asset are to be covered by the other market risk modules. We request details of the rationale behind the two proposed thresholds for covered bonds (10% or 20%, yet to be decided by Ceiops). We support the 20% proposal, which should be set at a higher level if it reflects the underlying risks in specific markets. At this stage we should state that a higher threshold, that is 20% rather than 10%, would appear more appropriate to us due to the safeguard mechanisms that exist for these investments. However, this level has to be set based on the studies that Ceiops has performed and analysed and so we request details to explain how the final threshold will be determined before we can give our final opinion. This holds for additional asset thresholds, too. We request the requirement for "no evidence of high correlation or connection among the default of one or few borrowers" be deleted. We do not see how this would be assessed and demonstrated. The reference to AAA credit quality should be replaced by a LGD notion and should be widened. In our opinion the reference to AAA quality should be fully replaced by a LGD notion including the effect of the received collateral. That	

			is, there should be no criterion that is based on the rating. Instead AAA could be replaced by "a bond for which the full exposure is backed by a mortgage". The bandwidth in terms of ratings should be extended to also cover AA and A-rated assets in terms of their equivalent in a LGD notation.	
807.	CRO FORUM	4.163.	The CRO forum believes this section is particularly unclear, and requests further clarity of the following issues: It is not clear what approach should be taken where the requirements outlined are not met. There appears to be no requirement to consider the underlying type of mortgage covered bonds, e.g. are they RMBS or CMBS, are they agency-backed / Prime / Sub-Prime etc. It should be made clear whether the 10% or 20% threshold refers to an individual holding in a specific mortgage covered bond, or to the aggregate exposure to mortgage covered bonds across all holdings. Without this clarity it is hard to comment on which option is most appropriate. There is no reference to other asset-backed bonds such as credit card backed assets. The requirement for an asset to be AAA rated seems arbitrary, why not apply similar relative thresholds to 4.152? It is not clear how undertakings should test that the portfolio is sufficiently well diversified. It may be possible to use a similar method as outlined in section 4.160 for UCITS.	Noted. If the requirements are not met, then the same methodology shall apply as for other assets considered in the concentration risk module. Please also see comment #585 and comment #802
808.	Danish Insurance Association	4.163.	Concentration risk on mortgage covered bonds.	Please see comment #586

			CEIOPS is considering two options for the concentration risk threshold, 10 and 20 per cent respectively. In QIS 4 the threshold tested was 40 per cent. The threshold applied could have severe negative effects in our market because mortgage bond financing of houses is very widespread and there are relatively few mortgage institutions. However, the institutions are highly regulated in order to reduce risk, and this is reflected in very low mortgage interest rates compared to, for example, interest rates on bank lending. The concentration risk suggested would increase the required return on mortgage bonds. Potentially the threshold could lead to life and non-life insurance companies selling mortgage bonds to the detriment of the housing market. Mortgage bonds play a very significant role in the Danish market also for insurance companies as investors. Moreover the Danish market for mortgage bonds is very efficient and the risk of default is hardly existing. The market is structured in such a way that investors have not registered default losses in more than 200 years. We see no reason not apply a threshold of 40 per cent. However, we propose a different method to calculate the threshold (see General Comments).	
809.	ECBC	4.163.	Please see our comments in section 4.109	Please see comment #589

810.	FFSA	4.163.	CEIOPS proposed two thresholds of 10% and 20% respectively. FFSA notes that no rationale for those thresholds is provided and that no global picture emerges from the market-risk module that should be self-explanatory. FFSA is not in a position to comment on this risk.	Noted.
811.	German Insurance Association – Gesamtverband der D	4.163.	In principle, we support the inclusion of a specific higher concentration threshold for mortgage covered bonds and public sector covered bonds. Due to the special safeguard mechanisms that exist for these investments, a higher concentration threshold is appropriate and welcomed. 13. From our point of view, however, it is not clear why CEIOPS restricts this risk-adjusted consideration only to covered bonds. We suggest that CEIOPS expands the risk-adjusted perspective to all asset classes. That is, one would have to define the concentration risk threshold according to the inherent risk potential of each asset class. If this appears to be too demanding within the framework of the standard approach, then we would suggest to keep the concentration risk levels at least at QIS4-levels. After all, concentration risks are to be dealt with under Pillar 2 and additional risks associated with an asset are to be covered by the other market risk modules. We request details of the rationale behind the two proposed thresholds for covered bonds (10% or 20%, yet to be decided by CEIOPS). We support the 20% proposal, which should be set at a higher level if it reflects the underlying risks in specific markets. At this stage we should state that a higher threshold, that is 20%	Please also see comment #585 and comment #802

			rather than 10%, would appear more appropriate to us due to the safeguard mechanisms that exist for these investments. However, this level has to be set based on the studies that CEIOPS has performed and analysed and so we request details to explain how the final threshold will be determined before we can give our final opinion. This holds for additional asset thresholds, too. We request the requirement for "no evidence of high correlation or connection among the default of one or few borrowers" be deleted. We do not see how this would be assessed and demonstrated. The reference to AAA credit quality should be replaced by a LGD notion and should be widened In our opinion the reference to AAA quality should be fully replaced by a LGD notion including the effect of the received collateral. That is, there should be no criterion that is based on the rating. Instead AAA could be replaced by "a bond for which the full exposure is backed by a mortgage". The bandwidth in terms of ratings should be extended to also cover AA and A-rated assets in terms of their equivalent in a LGD notation.	
812.	Legal and General Group	4.163.	We support the inclusion of a specific higher concentration threshold for mortgage covered bonds and public sector covered bonds Due to the special safeguard mechanisms that exist for these investments, a higher concentration threshold is appropriate and welcomed.	Please also see comment #585 and comment #802

			We request details of the rationale behind the two proposed thresholds for covered bonds (10% or 20%, yet to be decided by CEIOPS). We support the 20% proposal, which should be set at a higher level if it reflects the underlying risks in specific markets. At this stage we should state that a higher threshold, so 20% rather than 10%, would appear more appropriate to us due to the safeguard mechanisms that exist for these investments. However, this level has to be set based on the studies that CEIOPS has performed and analysed and so we request details to explain how the final threshold will be determined before we can give our final opinion. We request details of how "no evidence of high correlation or connection among the default of one or few borrowers" might be assessed and demonstrated. In our opinion the reference to AAA quality should be replaced by a LGD notion including the effect of the received collateral. Thus AAA could equivalent to "a bond for which the full exposure is backed by a mortgage". Furthermore, the bandwidth in terms of ratings should be extended to also cover AA rated assets or equivalent in a LGD notation.	
813.	Lloyd's	4.163.	We would support option A. It would help if some definition of "highly correlated" was made.	Noted. However, CEIOPS considers there is no benefit in specifying these requirements

				further at this stage
814.	PricewaterhouseCoopers LLP	4.163.	Is there any criterion specifying what is meant by "high correlation"?	Not agreed. CEIOPS considers there is no benefit in specifying these requirements further at this stage
815.	ROAM –	4.163.	CEIOPS proposed two thresholds of 10% and 20% respectively. ROAM notes that no rationale for those thresholds is provided and that no global picture emerges from the market-risk module that should be self-explanatory. ROAM is not in a position to comment on this risk.	Noted.
816.			Confidential comment deleted	
817.	CRO FORUM	4.164.	The approach for property concentration risks seems reasonable.	Noted
818.	GROUPAMA	4.164.	The exclusion of property in the financial concentration risk module is not consistent with an economic approach, and it leads to no recognition being given to the benefit of diversifying property investments.	Not agreed. Property is not excluded – it is treated in accordance with 4.164-4.169
819.	Lloyd's	4.164.	We agree.	Noted
820.			Confidential comment deleted	
821.	UNESPA (Association of Spanish Insurers)	4.164.	The introduction of concentration risk capital in case of properties was surprising to us as this has never been tested in the previous QIS or discussed in previous papers, so UNESPA disagrees with the introduction of such a capital charge, since we consider that its implicit risk is already included in the property risk sub-module, besides this type of investments improve the diversification effects among undertakings. On the other hand, we disagree with the CEIOPS proposal to equal the property penalization to AA since the volatility prices of property (at least in the Spanish market) is more similar to AAA. Finally, the 10% threshold is not seems reasonable	Not agreed. CEIOPS considers it important to take into account all relevant concentration risks and sees no reason to exclude properties. The calibration is intended to represent an appropriate standardised approach.

			considering market prices of the highest quality properties.	
822.	uniqa	4.164.	The introduction of a concentration risk capital charge in case of properties was surprising to us as this has never been tested in the previous QIS or further discussed in previous papers. Even though in principle we do not oppose the introduction of such a capital charge (which for us equals a concentration charge for geographical concentration for one certain asset class – f.i. real estate), we think an introduction of a capital charge for property concentration risks should come along with an allowance for diversification benefits from well diversified real estate portfolios. Moreover the introduction of this new capital charge seems to contradict the statement made in para. 3.22 concerning geographical diversification.	Please see comment #821
823.	Lloyd's	4.165.	We agree.	Noted
824.	AMICE	4.166.	AMICE members believe that the wording of this paragraph is very vague and is confusing. We propose to delete the paragraph.	Please see comment #825
825.	Association of British Insurers	4.166.	A more rigorous definition of when properties are treated as a single property is required The advice that "properties located in the same building or sufficiently nearby shall be considered a single property" is vague and further advice is required on what constitutes "sufficiently nearby". This adjustment to property exposures could be onerous to calculate and should be carefully justified by CEIOPS. We also believe that, from a concentration risk perspective, only properties subject to the same use (office, retail etc) in the same building should be considered the same property. An alternative definition could be properties, which are "operationally and financially managed together as a single property".	Not agreed. CEIOPS does not consider a further clarification beneficial at this stage.

826.	CEA, ECO-SLV-09-442	4.166.	A more rigorous definition of when properties are treated as a single property is required. The "or sufficiently nearby" should be removed as this is confusing and could lead to various interpretations. We request information as to how such a risk charge will be calibrated.	Please see comment #825
827.	FFSA	4.166.	FFSA believes that the "or sufficiently nearby" should be removed as this is confusing and could lead to various interpretation.	Please see comment #825
828.	German Insurance Association – Gesamtverband der D	4.166.	A more rigorous definition of when properties are treated as a single property is required The "or sufficiently nearby" should be removed as this is confusing and could lead to various interpretations. We request information as to how such a risk charge will be calibrated.	Please see comment #825
829.	GROUPAMA	4.166.	The CP states that properties located nearby should be considered as one asset. This statement, unclear on the definition of nearby, could leave to burdensome calculations. Groupama suggests remove this comment, which is confusing and could lead to various interpretations.	Please see comment #825
830.	Lloyd's	4.166.	We agree.	Noted
831.	ROAM –	4.166.	ROAM believes that the "or sufficiently nearby" should be removed as this is confusing and could lead to various interpretation.	Please see comment #825
832.	UNESPA (Association of Spanish Insurers)	4.166.	A more rigorous definition of when properties are treated as a single property is required The "or sufficiently nearby" should be removed as this is confusing and could lead to various interpretations.	Please see comment #825

			We request information as to how such a risk charge will be calibrated.	
833.	uniqa	4.166.	This definition is overly vague in order to reasonably consider a capital charge for concentrations. What is meant by "nearby" or "same building"? How should a calibration of such a risk charge look like?	Please see comment #825
834.	Association of British Insurers	4.167.	Only net capital charges (of changes in future bonus rates) should be required As stated in our comments to CP54, we do not support a requirement for the concentration charge to be determined by considering that assumptions of future bonus rates would remain identical before and after the shock the with this. This "gross calculation" is meaningless and burdensome to calculate.	Please see comment #766
835.	CEA, ECO-SLV-09-442	4.167.	See comment to Para 4.157.	Please see comment #766
836.	FFSA	4.167.	See comment on 4.157: FFSA considers that this "gross calculation" is meaningless.	Please see comment #766
837.	German Insurance Association – Gesamtverband der D	4.167.	See comment to Para 4.157	Please see comment #766
838.	Lloyd's	4.167.	We agree.	Noted
839.	CEA, ECO-SLV-	4.168.	See comment to Para 4.157.	Please see comment #766

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840.	German Insurance Association – Gesamtverband der D	4.168.	See comment to Para 4.157	Please see comment #766
841.	Lloyd's	4.168.	We agree.	Noted
842.	Institut des actuaries (France)	4.169.	Why the correlation factor is supposed to be 0 for the requirements aggregation of property risk?	Property risk submodule covers the systemic risk and concentration risk submodule the diversifiable risk. We have no evidence of a strong correlation among different properties when referred to risks other than systemic.
843.	KPMG ELLP	4.169.	We would like to obtain a better understanding of the rationale behind the application of the formula for financial investments rated AA in the calculation of the concentration risk capital for properties. Also see 3.16.	The lower charge is justified due to the inexistence of a possibility of default of the isuser
844.	Lloyd's	4.169.	We agree.	Noted
845.	PricewaterhouseCoopers LLP	4.169.	Should the formula refer to Mktconc_properties rather than to Mktconc?	Agree. Please see revised text.
846.	Association of British Insurers	4.170.	More information is required on the correlation risk factors CEIOPS states that the correlation factor for concentration charges related to property and investment shall be the same as the correlation factor for equity and property risk modules. However we	Noted. The calibration of correlations will be addressed in CEIOPS' third wave of consultation papers.

			have no information as to the correlation factor between equity and property risk and so we cannot comment on this proposal.	
847.			Confidential comment deleted	
848.	CEA, ECO-SLV-09-442	4.170.	More information is required on the correlation risk factors. Ceiops states that the correlation factor for concentration charges related to property and investment shall be the same as the correlation factor for equity and property risk modules. However so far we have no information concerning the correlation factor between equity and property risk since Ceiops intends to consult on this during the 3rd consultation wave. Hence we cannot comment on this proposal at this stage.	Noted. The calibration of correlations will be addressed in CEIOPS' third wave of consultation papers.
849.	CRO FORUM	4.170.	The approach is reasonable, but should be explicitly set out in a formula for clarity.	Noted. This is likely to be clarified by referring to the material on calibration of correlations which will be addressed in CEIOPS' third wave of consultation papers.
850.	FFSA	4.170.	CEIOPS states the correlation factor for concentration charges related to property and investment shall be the same as the correlation factor for equity and property risk modules. FFSA notes that no information on the correlation factor between equity and property risk has been provided.	Noted. The calibration of correlations will be addressed in CEIOPS' third wave of consultation papers.
851.	German Insurance Association – Gesamtverband der D	4.170.	More information is required on the correlation risk factors CEIOPS states that the correlation factor for concentration charges related to property and investment shall be the same as the correlation factor for equity and property risk modules. However so far we have no information concerning the correlation factor between equity and property risk since CEIOPS intends to consult on this during the 3rd consultation wave. Hence we cannot	Noted. The calibration of correlations will be addressed in CEIOPS' third wave of consultation papers.

			comment on this proposal at this stage.	
852.	KPMG ELLP	4.170.	We concur with this approach.	Noted
853.	Lloyd's	4.170.	We agree.	Noted
854.	PricewaterhouseCoopers LLP	4.170.	We suggest that reference is made to Mktconc in this paragraph.	Agree. Please see revised text.
855.	AMICE	4.171.	Investment funds	Noted.
856.	AMICE	4.172.	Concerning collective investment vehicles, the look-through approach seems to be very burdensome. It will be better to consider a threshold, especially when an investment fund is invested in other investment funds (a threshold of 5 or 10% seems appropriate).	Not agreed. CEIOPS considers the look-through approach important for effective risk management. Proportionality will apply, as with all aspects of Solvency 2.
857.	Groupe Consultatif	4.172.	One comment that applies to multiple sections is the one of the "look through" principle: While in principle, this appears absolutely reasonable and any other regulation would open the door for "circumventing the rules", it might be an onerous task in practice, if the information is not readily available to the company. This will need to be considered in the light of CEIPOP' advice on simplifications (see 4.175)	Please see comment #858
858.	KPMG ELLP	4.172.	We agree with this approach.	Noted.
859.	ROAM –	4.172.	Concerning collective investment vehicles, the look-through approach seems to be very burdensome. It will be better to consider a threshold, especially when an investment fund is invested in other investment funds (a threshold of 5 or 10% seems appropriate).	Please see comment #858
860.	KPMG ELLP	4.173.	We agree with this approach.	Noted
861.	CEA,	4.174.	See comment to Para 4.179.	Please see comment #878

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862.	KPMG ELLP	4.174.	We agree with this approach.	Noted
863.	Pearl Group Limited	4.174.	Theoretically this makes sense, but in practice it would be very difficult and probably disproportionate effort to the actual capital requirement.	Partially agree. CEIOPS considers the look-through approach important for effective risk management. Proportionality will apply, as with all aspects of Solvency 2.
864.	Association of British Insurers	4.177.	We are concerned that the requirement could be unduly burdensome. We are also concerned that a scope is correctly defined and meaningful in practice.	Partially agree. CEIOPS considers the look-through approach important for effective risk management. Proportionality will apply, as with all aspects of Solvency 2.
865.			Confidential comment deleted	
866.	CEA, ECO-SLV-09-442	4.177.	The look-through approach for investment funds is too burdensome and should be simplified. Particularly to apply to passively managed funds where the investment vehicles are following indices. We believe that such an approach would prohibit (re)insurers to use reasonable models for hedge fund investments and that the proposal doesn't make sense for ETFs (exchange traded funds) tracking well known and tradable indices. The risk is not best modelled by a look through approach, particularly with ETFs where (re)insurers have more data to model the risk of the index than to model each entity in the index. For	Not agreed. CEIOPS considers the look-through approach important for effective risk management. Proportionality will apply, as with all aspects of Solvency 2.

			hedge funds, it is the responsibility of the investment manager to pick the right benchmark and the modeller can only look at the risk of this benchmark. (Re)insurers do not have access at each exposure line of the fund. ☐ The look-through approach should not apply for passive managed investment funds. ☐ For actively managed investment funds, it would depend on the nature of investment, i.e. investment in a well-known index fund should not require a look-through approach (see paragraph 4.100 b). See also comment to 4.149.	
867.	CRO FORUM	4.177.	The CRO forum agrees that there should be a general desire to achieve look through when analysing the risks within investment funds and other indirect exposures.	Noted.
868.	FFSA	4.177.	CEIOPS proposes to identify the sub-components of investment funds and investment packages. FFSA believes that the look-through approach for investment funds is too burdensome for undertakings and should be simplified. When applied to both passively and actively managed funds (§4.181), FFSA understands that CEIOPS wants a look through approach even for passive mandates investment vehicles following indices. FFSA believes that such an approach would prohibit (re)insurers to have reasonable models for hedge fund investments and that the proposal doesn't make sense for ETFs (exchange traded funds) tracking well known and tradable indices. In fact FFSA believes that	Please see comment #866

			the risk is not best modelled by a look through approach. Particularly, with ETFs (re)insurers have more data to model the risk of the index than to model each entity in the index. For hedge funds, it is the responsibility of the investment manager to pick the right benchmark and the modeller can only look at the risk of this benchmark. (Re)insurers do not have access at each exposure line of the fund	
869.	German Insurance Association – Gesamtverband der D	4.177.	The look-through approach for investment funds is too burdensome and should be simplified Particularly to apply to passively managed funds where the investment vehicles are following indices. We believe that such an approach would prohibit (re)insurers to use reasonable models for hedge fund investments and that the proposal doesn't make sense for ETFs (exchange traded funds) tracking well known and tradable indices. The risk is not best modelled by a look through approach, particularly with ETFs where (re)insurers have more data to model the risk of the index than to model each entity in the index. For hedge funds, it is the responsibility of the investment manager to pick the right benchmark and the modeller can only look at the risk of this benchmark. (Re)insurers do not have access at each exposure line of the fund. ☐ The look-through approach should not apply for passive managed investment funds. ☐ For actively managed investment funds, it would depend on the nature of investment, i.e. investment in a well-known index fund should not require a look-through approach (see paragraph 4.100 b). See also comment to 4.149	Please see comment #866
870.	KPMG ELLP	4.177.	We agree with this approach.	Noted

871.	Lloyd's	4.177.	We agree.	Noted
872.	Pearl Group Limited	4.177.	The look-through approach needs to be applied practically as it is possible that a collective that we invest in will in itself invest in a collective and so on. We recommend that when this methodology is applied we consider the materiality of the investment, i.e. for non-material amounts we don't have to do this.	Noted. Proportionality will apply, as with all aspects of Solvency 2.
873.	ROAM –	4.177.	CEIOPS proposes to identify the sub-components of investment funds and investment packages. ROAM believes that the look-through approach for investment funds is too burdensome for undertakings and should be simplified. When applied to both passively and actively managed funds (§4.181), ROAM understands that CEIOPS wants a look through approach even for passive mandates and investment vehicles following indices. ROAM believes that such an approach would prohibit (re)insurers to have reasonable models for hedge fund investments and that the proposal doesn't make sense for ETFs (exchange traded funds) tracking well known and tradable indices. In fact ROAM believes that the risk is not best modelled by a look through approach. Particularly, with ETFs (re)insurers have more data to model the risk of the index than to model each entity in the index. For hedge funds, it is the responsibility of the investment manager to pick the right benchmark and the modeller can only look at the risk of this benchmark. (Re)insurers do not have access at each exposure line of the fund	Please see comment #868
874.	UNESPA (Association of Spanish Insurers)	4.177.	The look-through approach for investment funds is too burdensome and should be simplified Particularly to apply to passively managed funds where the investment vehicles are following indices. We believe that such an	Please see comment #866

			approach would prohibit (re)insurers to use reasonable models for hedge fund investments and that the proposal doesn't make sense for ETFs (exchange traded funds) tracking well known and tradable indices. The risk is not best modelled by a look through approach, particularly with ETFs where (re)insurers have more data to model the risk of the index than to model each entity in the index. For hedge funds, it is the responsibility of the investment manager to pick the right benchmark and the modeller can only look at the risk of this benchmark. (Re)insurers do not have access at each exposure line of the fund. ☐ The look-through approach should not apply for passive managed investment funds. ☐ For actively managed investment funds, it would depend on the nature of investment, i.e. investment in a well-known index fund should not require a look-through approach (see paragraph 4.100 b).	
875.	KPMG ELLP	4.178.	We agree with this approach.	Noted
876.	Lloyd's	4.178.	We agree.	Noted
877.	ROAM –	4.178.	We agree with the idea of applying a look-through approach in order to asses the risks of the assets underlying the investment funds. Undertakings shall verify interactions are sufficient to ensure that all material market is captured; if this approach is impractical (i.e. Hedge Funds), actions could be adopted via internal models or through capital add-on.	Noted. However, whether or not an internal model would be used is outside the scope of this paper.
878.	CEA, ECO-SLV-09-442	4.179.	We request more information as to what a "sufficient" number of iterations of the look through approach for investment funds means. We consider it necessary for Ceiops to define what "sufficient" means in this context. Theoretically this makes sense, but in	Not agreed. CEIOPS considers that in determining what constitutes "sufficient", proportionality (applicable here as with all other aspects of Solvency

			practice it would be very difficult and probably disproportionate compared to the actual capital requirement. There must be a reasonable interpretation of "the number of iterations sufficient to ensure all material risk is captured".	2) should be applied in a principles-based way.
879.	FFSA	4.179.	CEIOPS states that the number of iterations should be sufficient. FFSA considers it necessary to define what "sufficient" means in this context.	Please see comment #878
880.	German Insurance Association – Gesamtverband der D	4.179.	We request more information as to what a "sufficient" number of iterations of the look through approach for investment funds means We consider it necessary for CEIOPS to define what "sufficient" means in this context. Theoretically this makes sense, but in practice it would be very difficult and probably disproportionate compared to the actual capital requirement. There must be a reasonable interpretation of "the number of iterations sufficient to ensure all material risk is captured".	Please see comment #878
881.	KPMG ELLP	4.179.	We agree with this approach.	Noted
882.	Lloyd's	4.179.	We agree.	Noted
883.	ROAM –	4.179.	CEIOPS states that the number of iterations should be sufficient. ROAM considers it necessary to define what "sufficient" means in this context.	Please see comment #878
884.	UNESPA (Association of Spanish Insurers)	4.179.	We request more information as to what a "sufficient" number of iterations of the look through approach for investment funds means We consider it necessary for CEIOPS to define what "sufficient" means in this context. Theoretically this makes sense, but in practice it would be very difficult and probably disproportionate compared to the actual capital requirement. There must be a reasonable interpretation of "the number of iterations sufficient to	Please see comment #878

			ensure all material risk is captured".	
885.			Confidential comment deleted	
886.	CEA, ECO-SLV-09-442	4.180.	We cannot comment on the use of simplifications for the look-through approach without further information on these.	Please see revised text
887.	CRO FORUM	4.180.	The CRO forum feels that more clarity on this area would be useful.	Please see comment #886
888.	FFSA	4.180.	CEIOPS proposes to study simplifications. FFSA would require knowing more about these simplifications before commenting.	Please see comment #886
889.	German Insurance Association – Gesamtverband der D	4.180.	We cannot comment on the use of simplifications for the look-through approach without further information on these.	Please see comment #886
890.	Lloyd's	4.180.	We agree.	Noted
891.	ROAM –	4.180.	CEIOPS proposes to study simplifications. ROAM would require knowing more about these simplifications before commenting.	Please see comment #886
892.	Association of British Insurers	4.181.	The look-through approach should not apply for passive managed investment funds. For actively managed investment funds, it would depend on the nature of investment, i.e. investment in a well-known index fund should not require a look-through approach (see paragraph 4.100 b).	Please see comment #868
893.	CEA, ECO-SLV-	4.181.	See comments to Para 4.177.	Please see comment #866

	09-442			
894.	FFSA	4.181.	FFSA believes that the look-through approach for investment funds is too burdensome for undertakings and should be simplified. When applied to both passively and actively managed funds, FFSA understands that CEIOPS wants a look through approach even for passive mandates investment vehicles following indices. FFSA believes that such an approach would prohibit (re)insurers to have reasonable models for hedge fund investments and that the proposal doesn't make sense for ETFs (exchange traded funds) tracking well known and tradable indices. In fact FFSA believes that the risk is not best modelled by a look through approach. Particularly, with ETFs (re)insurers have more data to model the risk of the index than to model each entity in the index. For hedge funds, it is the responsibility of the investment manager to pick the right benchmark and the modeller can only look at the risk of this benchmark. (Re)insurers do not have access at each exposure line of the fund	Please see comment #868
895.	German Insurance Association – Gesamtverband der D	4.181.	See comments to Para 4.177	Please see comment #869
896.	Legal and General Group	4.181.	The look-through approach should not apply for passive managed investment funds. For actively managed investment funds, it would depend on the nature of investment, i.e. investment in a well-known index fund should not require a look-through approach (see paragraph 4.100 b in the CP text).	Please see comment #868
897.	Lloyd's	4.181.	We agree.	Noted
898.	Pearl Group	4.181.	The look-through approach should not apply for passive managed	Please see comment #868

	Limited		investment funds. For actively managed investment funds, it would depend on the nature of investment, i.e. investment in a well-known index fund should not require a look-through approach (see paragraph 4.100 b).	
899.			Confidential comment deleted	
900.	CEA, ECO-SLV-09-442	A.3.	100 – 20 -25 = 55, and not 45 as stated Therefore in the analysis, 45% in corporate bonds should be changed to 55%. This feeds through to the conclusions in A.5. Does this change the conclusions?	Partially agree. Please see revised text. The conclusions remain unchanged.
901.	CRO FORUM	A.3.	The CRO forum questions the use of such a relatively short time period (16 years) to determine a 1 in 200 scenario for the equity component of the concentration risk module. Further, we note that the numbers do not match. It states that 45=100-20-25, which is not correct.	Please see comments #899 and 900
902.	KPMG ELLP	A.3.	Investment in corporate bonds is 55% and not 45%.	Please see comment #900
903.	CEA, ECO-SLV-09-442	A.5.	See comments to A.3.	Please see comment #900
904.	Pearl Group Limited	Annex	There is a lack of detail in the derivation of the concentration risk calibration. It would be helpful if CEIPOS could publish in full detail the exact data and calculations used to arrive at the calibration. This would again inform undertakings of the quality of method and analysis required for their own internal models.	Noted. However CEIOPS considers that the annex provides sufficient justification for the calibration.