CEA Detailed Response to CEIOPS' CP20 on Pillar I issues

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Introduction

The pace of Solvency II is increasing and the industry recognises the valuable work that CEIOPS has been doing in advising the European Commission in the Solvency II project. The CEA looks forward to continuing its constructive dialogue with supervisors and other stakeholders.

CEIOPS has released a series of Consultation Papers (CP 15 to CP 20) covering Pillar I, II and III. The period of Consultation runs from early November to 12 January 2007, which has been extended to 19 January 2007 for CP20 following the subsequent publication of a supplement to CP20.

This paper forms our detailed response to CP 20 and should be read in conjunction with our paper "CEA Response t CEIOPS' Consultation Paper 20" dated xx January 2007, which contained our key messages on CP 20.

In a number of areas, CEIOPS presents alternative views without reaching a conclusion, i.e. there is no draft advice. In order to progress the development of Pillar I we have provided comments on some of these issues.

The relatively short consultation period and the timing of the consultation have restricted the extent to which the industry has been able to provide feedback. As such, these views should not be treated as final. This document represents detailed comments on CP 20 and forms a supplement to our separate publication "CEA Key messages on CP 20". We expect to make further comments when the QIS3 technical specification is issued.

We would emphasise that Pillar I issues cannot be viewed in isolation and need to be considered in the context of the whole Solvency II framework. Also, it is important to note that 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.

It should be noted that the comments in this document should be considered in the context of other publications by the CEA listed in the Appendix and of course our key messages paper. Some of these documents are of direct relevance to CP 20 and in such cases we include explicit references.

Finally, the comments expressed in this document represent the CEA's views at this 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.

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2 Detailed comments on CEIOPS draft advice within CP 20

Section 3: Valuation Standards

Role of technical provisions and capital requirements

CEIOPS Advice (3.114) Reflecting existing market uncertainties the cost of capital must consist of a conservative market value margin that meets the objectives either:

- To transfer the liabilities portfolio to an able, rational and willing third-party (another (re)insurer) with a sufficiently high level of confidence; or
- To recapitalize the company with a sufficiently high level of confidence to ensure a proper run-off scenario by the original undertaking.

These principles should be defined in the Framework Directive,

We regard usage of the cost of capital approach as major step forward in calculating the risk margin which we strongly support. We support the objectives stated on the advice. We would like to emphasize that the market value margin applied needs to be based on sound economic principles rather than to an arbitrary (conservative) prudence margin over the best estimate liabilities.

CEIOPS Advice (3.115) Both technical provisions and capital requirements are part of a consistent overall framework, which aims to ensure an adequate level of protection of policyholders and beneficiaries:

- Technical provisions represent the amount that is required for an insurer to settle all insurance liabilities to policyholders and other beneficiaries arising over the lifetime of the portfolio;
- Capital provides further safeguarding of the policyholders and beneficiaries by 'protecting' the technical provisions and the assets backing them. The level of capital provides a cushion to absorb the impact of adverse conditions occurring over a predefined period (one year), including the need for increasing technical provisions in result of such adversity.

Agreed

CEIOPS Advice (3.116) CEIOPS agrees that the solvency system should be firmly founded on the principles of prudence, optimal use and consistency with information provided by financial markets, and with a strong link to the economic reality of the business.

The CEA does not agree with the prudence principle. A well designed risk based economic approach does not need implicit prudent/conservative margins as the risks are explicitly allowed for. Having such margins will hinder Solvency II's objective of increased insurance sector competitiveness and could result in higher costs for policyholders.

Principles for calculating the technical provisions

CEIOPS Advice (3.117) CEIOPS believes that a first step towards the valuation of technical provisions should be the separation between hedgeable and non-hedgeable risks. A risk is considered hedgeable if it can be reduced by an offsetting measure or transaction. For hedgeable risks market consistent values should be based on deep liquid and transparent markets. At the same time the risk of fluctuation of market prices of hedges is to be reflected in the SCR.

The CEA is concerned that the split between hedgeable and non-hedgeable risks using the "deep liquid and transparent market" definition could result in market-consistent techniques not being used when they should be and a significant lack of harmonisation. We note that it is possible, even when markets are not necessarily deep liquid and transparent to sensibly use market-consistent valuation techniques, for example by interpolating/extrapolating market parameters such as implied volatility. Market-consistent techniques are the most appropriate valuation techniques where the liabilities include optionality, e.g. profit sharing business.

CEIOPS Advice (3.118) CEIOPS has to dedicate more level 3 work on the definition of deep liquid and transparent markets in close cooperation with the other level 3 committees taking into account the evolving nature of capital markets.

We agree that it is very important to define clear definitions to ensure harmonisation and are concerned that the "deep liquid and transparent" definition is capable of significantly different interpretations, which could result in a significant lack of harmonisation across the EU.

CEIOPS Advice (3.119) The value of the hedgeable risk of the liabilities implicitly includes both the best estimate and the risk margin.

Agreed

CEIOPS Advice (3.120) For non-hedgeable risks both the best estimate and the risk margin will need to be separately identified.

Agreed

CEIOPS Advice (3.121) Being a corner stone of technical provisions CEIOPS thinks that the best estimate must be based on a reliable actuarial method. More work should be dedicated to define harmonized criteria in close co-operation with the Groupe Consultatif on level 3. Whenever there is more that one reliable and relevant actuarial method for the portfolio to calculate the best estimate the one with the highest result shall be retained allowing also for non-life discounting together with claims specific inflation figures. In the absence of relevant statistical observations actuarial methods can be completed by a case by case approach as a proxy for the best estimate valuation.

We recognise the importance of level 3 work harmonisation. Where there is more than one reliable and relevant actuarial method we strongly believe that the most appropriate, not the highest, value should be used. Doing otherwise will result in prudence margins being included in the technical provisions, which as described in our response to 3.116 above is not consistent with having a risk based economic approach.

CEIOPS Advice (3.122) As to the calculation of the risk margin, CEIOPS thinks that the cost of capital approach should be used under certain preconditions to be defined in the Framework Directive.

As indicated earlier, we strongly support usage of the cost of capital approach. We do not understand what these preconditions might be or why they might be needed. In order to have a proper discussion and consultation CEIOPS should disclose what preconditions they are thinking of recommending and the rationale behind their thinking.

CEIOPS Advice (3.123) The Framework Directive should clearly set out that the calibration of a conservative market value margin must not be left to the discretion of undertakings but key parameters and assumptions should be

prescribed by supervisors on level 3 using historical volatilities in credit spreads for a BBB rating (corresponding to a 99,5 % confidence level) or applying current credit spreads for BBB but adding a stress scenario to also be developed on level 3.

The underlying reasoning on the CEIOPS approach to calibration of the market value margin is quite unclear and we suggest that Appendix D of the "The Swiss Experience with Market Consistent Technical Provisions - the Cost of Capital Approach" would be a useful reference. Also, we do not agree that the calibration should be conservative as this is inconsistent with a risk based economic approach. Ultimately we would expect the market to dictate the cost of capital.

Discounting

CEIOPS Advice (3.124) In line with the Commission's Amended Framework for Consultation, technical provisions should be discounted both for life assurance and non life insurance business. The discount rates should be taken from the risk free interest rate term structure at the valuation date.

In general we agree but we note that in practice, government bond rates may be distorted by liquidity and supply/demand considerations. In such cases, the swap curve may be a more liquid and readily observable proxy..

Segmentation

CEIOPS Advice (3.125) The valuation of technical provisions should generally be determined on the basis of homogeneous risk groups, which may require the use of a higher level of segmentation than that defined for reporting purposes in the Insurance Directives.

Agreed.

Inflation

CEIOPS Advice (3.126) Appropriate assumptions for future inflation should be built into the cash flow projections. Care should be taken to identify the type of inflation to which particular cash flows are exposed. For some cash flows, the link may be to consumer prices, but there are other links such as salary inflation, which tends to exceed consumer price inflation.

Agreed.

Expenses

CEIOPS Advice (3.127) The present value of contract loadings and the present value of expected expenses should be recognised explicitly in the cash flow projection. Any shortfall would need to be recognised as an additional liability. Expenses that will have to be incurred in the future to service an insurance contract are cash flows for which a provision should be calculated. Undertakings should make assumptions with respect to future expenses arising from commitments made on, or prior to, the valuation date. All future costs, including investment management, commissions, claims expenses and overheads should be considered.

We agree subject to no artificial restrictions of the difference between the present value of expected expenses less the present value of expected contract loadings, i.e. whether this is positive or negative.

CEIOPS Advice (3.128) Expense assumptions should include an allowance for future cost escalation. This should have regard to the types of cost involved. The allowance for inflation should be consistent with the economic assumptions made. For disability income and other similar types of business, claims expenses may be a significant factor. Where future premiums or deposits are taken into the cash flows, valued expenses related to those amounts should also be taken into consideration. In setting expense assumptions undertakings should consider their own analysis of expenses, future business plans and relevant market data. However, economies of scale should not be assumed where these have not yet been realised.

We agree but recognise some difficulties for start-ups if economies of scales cannot be assumed.

Taxation

CEIOPS Advice (3.129) Taxation payments required to meet policyholder liabilities should be allowed for in the calculation of technical provisions.

Agreed.

Model and parameter error

CEIOPS Advice (3.130) Given the uncertainties in the measurement of technical provisions, the supervisory review process on provisions should, as far as possible, take account of the specificity of each undertaking. To ensure that the level of prudence retained in the technical provisions is in line with the Solvency supervisory valuation principles, the supervisor, when appropriate, should review the quality of the data as well as the applicability and the relevance of statistical methods, and examine other actuarial or technical justification. (…)

We would emphasise that prudence has no place in a risk based economic approach. When performing the Supervisory Review Process it is important that supervisors take an overall and holistic approach, i.e. that they do not add margins for parameters they think are weak and ignore parameters they think are strong.

Reinsurance

CEIOPS Advice (3.131) Under certain reinsurance arrangements the timing of recoveries and of direct payments may diverge markedly, and this should be taken into account when valuing the technical provisions (e.g. when discounting cash flows). Nevertheless, in calculating technical provisions net of reinsurance, undertakings should assume that the reinsurer will not default unless the reinsurer is already in default, in which case bad debt provisions should be provided following normal accounting practice.

Agreed.

Creditworthiness of undertaking

CEIOPS Advice (3.132) As set out in CfA 7.39, no reduction in liabilities should be made on account of the creditworthiness of the undertaking itself.

Agreed.

Advice specific to life assurance

Discontinuance rates

CEIOPS Advice (3.133) As advised in CfA 7.54, undertakings may use credible and relevant discontinuance experience. Where a discretionary surrender value is paid on discontinuance, the estimates should allow for the payment the insurer would reasonably make in the scenario under consideration.

Agreed.

Financial guarantees and other embedded options

CEIOPS Advice (3.134) It is important to consider financial guarantees and policyholder options to change the terms of the contract. Cash flow projections should take account of the proportion of policyholders that are expected to take up options. This may depend on financial conditions at the time the option crystallises, which will affect the value

of the option. Non-financial conditions should also be considered – for example, deterioration in health could be expected to have an impact on take-up rates of guaranteed insurability options.

Agreed.

Management actions

CEIOPS Advice (3.135) Future management actions should be reflected in the projected cash flows. The assumptions used should reflect the actions that management would reasonably expect to carry out in the circumstances of each scenario, such as changes in asset allocation, changes in bonus rates or product changes, or the way in which a market value adjustment is applied. Allowance should be made for the time taken to implement actions. In considering the reasonableness of projected management actions, undertakings should consider their obligations to policyholders, whether through policy wordings, marketing literature or other statements that give rise to policyholder expectations of how management will run the business.

Agreed.

Unit-linked and index-linked business

CEIOPS Advice (3.136) The same cash flow projection approach should be used for unit-linked and index-linked business. Undertakings should assume that unit-linked funds perform on a market-consistent basis. All cash flows arising from the product should be considered, including expenses, death benefits and charges receivable by the insurer. Where participants have the right to increase charges, assumptions on increased charging should be consistent with the general principles for management actions.

Agreed.

Valuation of future profit sharing business

CP20 Supplement (S.3) The valuation of technical provisions should generally comprise cash flows arising from future non-guaranteed benefits.

Agreed.

CP20 Supplement (S.4) In line with the current directives, cash flows arising from (realised) profit reserves appearing in the balance sheet where they may be used to cover any losses which may arise and where they have not been made available for distribution to policy holders shall be excluded from the valuation of technical provisions. (Cf. Article 27 (2) d) of the Directive 2002/83/EG on Life Assurance.)

Agreed

CP20 Supplement (S.5) Such profit reserves shall be included (as tier 1 capital) in the available solvency margin.

Agreed

Advice specific to non-life insurance

Harmonisation of reporting tools

CEIOPS Advice (3.137) Harmonisation of prudence in technical provisions will be enhanced by harmonising reporting for provisions. CEIOPS recommends that a reflection should continue on defining common reporting tools, in particular run-off triangles.

The CEA supports the harmonistion of reporting requirements, but is unclear what is meant by "a reflection should continue on defining common reporting tools, in particular run-off triangles"? Is this simply saying that this needs to be given further thought? Clarification on this would be appreciated.

Section 4: Capital

Categorisation

CEIOPS Advice (4.75) CEIOPS recommends that the supervisory approach to capital should be based on a 'simplified balance sheet' concept. In order to work towards minimizing regulatory arbitrage and creating a level playing field, the particular accounting regime should be neutral insofar as determining the eligible capital. This simplified balance sheet consists of assets, liabilities and available capital (the excess of assets over liabilities).

The CEA agrees with the adoption of a "simplified balance sheet" approach for solvency purposes, subject to the liabilities not including those that would rank below policyholders in the event of the company winding-up as in such circumstances these liabilities effectively act as a buffer protecting policyholders because they would absorb losses in the first instance. The CEA Working Paper on the Total Balance Sheet Approach which will be released shortly is directly relevant here and should be read in conjunction with this paper.

CEIOPS Advice (4.76) To reconcile the simplified balance sheet concept with CEIOPS' aim to ensure a level playing field, a reference standard for assets and liabilities has to be set.

The CEA supports CEIOPS clearing describing and explaining its requirements as this will aid harmonisation.

CEIOPS Advice (4.77) For assets, CEIOPS suggests that this should be market-consistent valuation. For liabilities, a distinction has to be made between technical provisions and any other liabilities that also count as liabilities under the simplified balance sheet. As to technical provisions, CEIOPS proposes to use the solvency valuation in the context of deriving the available capital.

The CEA supports assets being on a market-consistent basis and would advocate this for the liabilities as well. As described in our response to 4.75 above, only other liabilities that rank equal to or above policyholders in the event of a company wind-up should be included in the simplified balance sheet for solvency purposes.

CEIOPS Advice (4.78) CEIOPS recommended that the available elements of capital should be furthermore categorised with respect to their eligibility according to the extent to which they meet the purpose of capital (CfA 19.13-19.16). In addition, CEIOPS suggests that criteria should be developed to ensure consistent treatment in terms of classification of eligible elements into relevant 'tiers' and application of relevant limits.

The purpose of the classification is to apply limits on the extent to which such items can be taken credit for in the simplified balance sheet. In this regard our view is that in general an economic approach should not place artificial limits (e.g. arbitrary percentages) on the form of the capital available to provide policyholders. However, we accept that in certain circumstances it may be necessary to restrict the extent of the gearing, i.e. ratio of debt to equity that a company can have. Any such restriction/limits should be consistent with the Solvency II framework and be economically justified taking into account the characteristics of the underlying instruments. We also recognise that certain items that may be appropriate to meet the SCR may not be necessarily suitable to meet the MCR in case of potential ultimate supervisory action.

CEIOPS Advice (4.79) Basic principles for the classification should be
The better the loss absorbency of an element, the higher the tier it is classified into.
Non-cumulative elements on a going-concern basis are treated more favourably than cumulative elements.
Perpetual elements are treated more favourably than fixed-term elements.

Notwithstanding our comments for 4.78 above (and our Total Balance Sheet Approach working paper), if there is to be a tiering approach then the principles described in 4.79 seem sensible.

CEIOPS Advice (4.80) CEIOPS recommends that the available elements of capital are classified into three tiers with different eligibilities, namely tier 1, tier 2 and insurance tier 3 capital.

Notwithstanding our comments for 4.78 above (and our Total Balance Sheet Approach working paper), if there is to be a tiering approach then the approach described in 4.80 seems not unreasonable.

CEIOPS Advice (4.81) With this in mind, CEIOPS recommends furthermore that this highest class of capital should be fully loss absorbent in both a going-concern and a winding-up situation.

Notwithstanding our comments for 4.78 above (and our Total Balance Sheet Approach working paper), if there is to be a tiering approach then the approach described in 4.81 seems not unreasonable.

CEIOPS Advice (4.82) CEIOPS suggests that tier 1 should consist of core tier 1 and non-core tier 1 capital, whereby the latter is furthermore subdivided into non-innovative tier 1 and innovative tier1 capital (e.g. hybrid capital which provides better loss absorbency than those classified as tier 2). CEIOPS furthermore recommends that a percentage of eligible tier 1 capital should be met by the highest quality core capital (e.g. 50%).

Our response above 4.78 is relevant here. We believe that any limits should be economically justified and note that a tiering approach will necessarily introduce discrete "steps", which could be distorting. CEIOPS should explain the rationale and basis for any limits it introduces.

CEIOPS Advice (4.83) CEIOPS recommends to classify as tier 2 those capital elements which still provide a certain degree of loss absorbency, either during ongoing operations or during insolvency/winding-up only, including subordination to the rights (and reasonable expectations) of policyholders, but which does not meet the requirements for permanence and absence of fixed servicing costs and hence are of lower quality than tier 1 capital.

Our response to 4.82 applies equally here. Furthermore, we recommend that in instances where innovative tier 1 capital exceeds the limit that the excess automatically qualifies as upper tier 2. The current wording would seem to preclude this, although we suspect that this is not CEIOPS' intention.

CEIOPS Advice (4.84) CEIOPS advises further to subdivide tier 2 tier according to the permanence of the capital elements it contains:

- Upper tier 2 capital. which is perpetual,
- and Lower tier 2 capital, which is dated.

Notwithstanding our comments for 4.78 above (and our Total Balance Sheet Approach working paper), if there is to be a tiering approach then having some regard to the term of the debt seems reasonable. However, the key consideration is the term of the debt in relation to the term of the majority of the business, i.e. long dated debt supporting (generally) shorter dated business is a different situation to short dated debt supporting (generally) longer dated business. The distinction between dated and undated seems too arbitrary.

It is not clear what constitutes perpetual debt, e.g. would extendable debt qualify? Having the ability to extend the debt provides policyholders with more protection than would be the case without it.

CEIOPS Advice (4.85) CEIOPS suggests that contingent capital which may only provide a degree of loss absorption in particular circumstances is classified as insurance tier 3 capital. Its loss absorbency needs to be assessed by the relevant supervisory authority, based upon clear and transparent principles.

Notwithstanding our comments to 4.78 above, more detail is needed on the particular circumstances and principles used to classify tier 3 capital before we can provide meaningful comments.

Limitations

CEIOPS Advice (4.86) In the answer to CfA. 19, CEIOPS suggested limiting tier 2 with respect to the maximum of tier 1 capital and a pre-specified percentage of the SCR (CfA 19.54). Furthermore, CEIOPS proposed to limit tier 3 capital with reference to the maximum of the sum of tier 1 and tier 2 capital and a pre-specified percentage of the SCR (CfA 19.57). As a working hypothesis, it was envisaged to choose 50% as pre-specified percentage).

Our comments for 4.78 above (and our Total Balance Sheet Approach working paper) apply here. Notwithstanding these, we do not understand why tier 3 capital should be restricted in this way? We note that under CEIOPS's proposal tier 3 capital can only be used to cover the SCR, which is an important, but not hard target. We believe that there should be no restriction on the capital available to meet this. CEIOPS should explain the rationale and economic basis for any limit they propose.

CEIOPS Advice (4.87) Taking further developments into account, including criticism of the limitation system previously envisaged and the outcome of an internal survey regarding the interplay of limits set in the current directives into account, CEIOPS recommends amending the limitation system proposed in its response to CfA 19. Instead of setting separate limits for tier 2 capital as described in CfA 19.54 (the maximum of tier 1 capital and a pre-specified percentage of the SCR) and for tier 3 capital as described in CfA 19.58 (the maximum of the sum of tier 1 and tier 2 capital and a pre-specified percentage of the SCR), CEIOPS suggests limiting the sum of tier 2 and insurance tier 3 capital with respect to the available tier 1 capital (only).

Our comments for 4.78 above (and our Total Balance Sheet Approach working paper) apply here. Notwithstanding these comments, we do not understand why tier 2 capital should be restricted by the existence of tier 3 capital? CEIOPS should explain the rationale and economic basis for any limit they propose.

CEIOPS Advice (4.88) Since tier 1 capital reflects the highest quality available, its overall recognition is not subject to upper limits. However, to ensure that the quality is not diluted too much by non-core tier 1 capital, and that a sufficient amount of tier 1 capital is available to cover the SCR, minimum levels are suggested for core tier 1 capital and the overall level of tier 1 capital:
CEIOPS suggests that tier 1 core capital should form the predominant part (i.e. at least 50%) of tier 1 capital.
CEIOPS suggests that an upper limit should be set for the percentage of innovative tier 1 capital. This limit should be expressed by a pre-specified percentage of tier 1 capital. CEIOPS recommends that the results from its questionnaire regarding innovative capital should be reviewed before fixing this limit.
By limiting the sum of tier 2 and insurance tier 3 capital with respect to the available capital, it is ensured that at least 50% of the SCR and 50% of the MCR have to be covered with tier 1 capital. Therefore, these amounts deliver the minimum level of tier 1 capital.

Our comments for 4.78 above (and our Total Balance Sheet Approach working paper) apply here. The CEA does not agree with the proposed 50% for tier 2 and 3 capital for the SCR and believes that no limit is needed. The MCR plays a significantly different role to the SCR in Solvency II and here we accept that some limits might be appropriate to restrict the extent of the gearing. However, any such restriction/limits should be consistent with the Solvency II framework and be economically justified taking into account the characteristics of the underlying instruments.

CEIOPS Advice (4.89) CEIOPS suggests limiting the sum of tier 2 and insurance tier 3 capital that is eligible for inclusion in the available solvency margin, since these forms of capital lack some of the quality of tier 1 capital (for e.g. they may not be fully loss absorbent on a going-concern and winding-up basis or fulfil the criterion of permanence). CEIOPS furthermore proposes to set the eligible amount of tier 1 capital as the limit for the sum of tier 2 and tier 3 capital.

See our response to 4.88 above. Also, there should provision that excess higher tier capital (i.e. satisfying the qualitative criteria but exceeding the quantitative limits) should by default qualify as capital in the immediately lower tier (or sub tier).

CEIOPS Advice (4.90) Additionally, under the existing insurance and banking directives, elements of capital that are classified as tier 2 are split into two categories with respect to their permanence, namely upper and lower tier 2 capital.

Please refer to our comments above to 4.84.

CEIOPS Advice (4.91) CEIOPS recommends that, in addition to the limit set for the sum of tier 2 and insurance tier 3 capital, the amount of lower tier 2 capital that is eligible for inclusion in the available solvency margin shall not exceed 50% of the amount of eligible tier 1 capital.

Please refer to our comments above to 4.78 and 4.84.

CEIOPS Advice (4.92) Potentially, CEIOPS recommends installing a second set of supervisory control levels for undertakings which include tier 3 capital in their available solvency margin. However, the precise details of the control level system require further consideration by CEIOPS.

Please refer to our comments above to 4.78 and 4.84. The CEA is concerned about a second set of supervisory control levels significantly complicating proposals that are already themselves complex and somewhat arbitrary. The CEA would reiterate that underlying economic position should be the primary focus.

Conditions for tier 3 capital

CEIOPS Advice (4.93) CEIOPS recommends that the Directive should provide clear principles and its implementation measures should provide detailed rules for approval and for setting the percentage of the contingent capital eligible to count as Tier 3 capital.

Noting our response to 4.78 above, we would endorse the need for clear principles and guidelines for what is potentially a complex area of Solvency II.

CEIOPS Advice (4.94) Budgeted supplementary calls may be payable in two instalments. The situation may, therefore, arise where the deferred part is not payable until after the relevant accounting period and/or for some reason it is not recorded in the accounting books of the mutual. CEIOPS consider that this should nevertheless be treated as premium due at net realisable value and therefore contribute to tier 1 capital. CEIOPS suggests that a prudential filter should normally apply for this purpose.

In principle this sounds not unreasonable and we support such premiums being fully recognised as tier 1 capital, however without knowing what "prudential filters" has in mind and how these might restrict the use of such capital we cannot comment further.

CEIOPS Advice (4.95) The following principles should apply for the approval of supplementary members' calls:

- The procedure for issuing supplementary calls must be clear and ensure timely collection of proceeds. (….).
- Approval should depend on members' willingness to pay. (…).
- Legal incentives are an important factor in members' willingness to pay. (…).
- The threat of cancellation is likely to be particularly effective in securing payment when (…).
- The membership must be readily traceable so that (…).
- Members' ability to pay should also be a factor in the approval process. (…).

These principles seem not unreasonable, although until we have more detail on how they will be applied to determine approval we cannot comment further.

CEIOPS Advice (4.96) CEIOPS recommends that supplementary calls should be eligible up to 2/3 of the difference between the maximum contribution and the contributions already called and paid (including both initial premium and supplementary calls) in the relevant insurance period, this difference being limited to 200% of the contribution already called and paid in the relevant insurance period.

In line with the comments given to response to 4.78 above, we do not support arbitrary limits and believe that any such limits should only be introduced where they can be economically justified.

CEIOPS Advice (4.97) CEIOPS considers that eligibility limits for unpaid share capital and initial funds should be aligned with the limits proposed for eligibility of supplementary members calls - for example up to 2/3 of the unpaid or initial fund, once the paid up part amounts to 1/3 of that share capital or initial fund.

Our comments made on 4.96 apply equally here.

CEIOPS Advice (4.98) Other contingent elements, such as letters of credit, should be subject to counterparty credit risk assessment which could be based on an appropriate credit rating from a recognised rating agency.

This seems reasonable provided that there is consistent treatment with the treatment of counterparty credit risk elsewhere (e.g. corporate bonds held as assets, reinsurance, etc) and no double counting, e.g. in the market risk assessment.

CEIOPS Advice (4.99) Ensuring transparency is a way of enhancing uniform treatment for tier 3 approval. Accordingly, the Directive or its implementation measures may provide that Member States report to the EC on applications and authorisations of tier 3 capital, at regular interval (for example every two years). Elements of the report should include:

- number and nature of applications received;
- proportion and quantitative information on applications to which full authorisation was granted;
- proportion and quantitative information on applications which were partly rejected;
- proportion and quantitative information on applications which were totally rejected;
- to ensure uniformity of treatment, detailed qualitative information should be provided on reasons for acceptance and refusal.

CEA strongly favours harmonisation, therefore principles for admissibility should be clearly stated in the Directive and measures should be taken to ensure that they are uniformly applied across the EU. The requirements (i.e. elements of the report) should not be overly burdensome and should be proportionate having regard to materiality.

Contingent capital support

CEIOPS Advice (4.100) CEIOPS recommends that group diversification benefits distributed to component group entities in the form of 'contingent capital support' should be categorised as 'tier 3' capital and should only be eligible to contribute to coverage of the solo entity's SCR. The conditions for supervisory approval for 'contingent capital support' should be clearly set out in (level 2 implementing measures) and should not be subject to the discretion of the solo supervisor.

The CEA believes that diversification is a key way in which insurers can protect themselves and their policyholders from risks. As such the CEA does not support any restriction in diversification benefits, including group diversification.

Section 5: Solvency Capital Requirement: standard formula

PART A – STRUCTURAL ISSUES

Modular approach

CEIOPS Advice (5.382) CEIOPS recommends that the standard formula adopts a modular approach to enable a transparent allocation of capital requirements to individual risks and to facilitate the transition to internal models135.

In general, the CEA supports the recommendation that the standard approach should have a modular structure, i.e. having separate modules for each risk, as this will facilitate a more transparent risk management process and help companies transition from the standard approach to partial or full internal models. However, the CEA however recognises that the application of the modular can give rise to certain difficulties, for example, assessing the risk absorption of future profit sharing. We therefore believe that further work is required on this and look forward to collaborating with CEIOPS to overcome these difficulties.

Calculation methods within the standard formula

CEIOPS Advice (5.383) CEIOPS is currently preparing further advice on the calculation methods within the standard formula.

The challenge is to develop an approach that can be applied across European territories, which is as simple as possible and at the same time sufficiently sophisticated to capture the underlying economic risk factors. As a result the emerging consensus is that for certain risks, a flexible approach may be necessary for the Standard Approach so that the SCR could be calculated either via:

- A simple method involving factors. This would be particularly helpful for companies which do not need or are unable to perform cash flow modelling.
- The option to make use of scenarios, company specific information and prospective views in certain circumstances. This would be particularly helpful for companies which perform cash flow modelling.

We would expect that both factors and scenarios would be calibrated consistently, which was not the case under QIS 2.

The advantage of such an approach is that companies would be able to incrementally improve their risk measurement as it would transition from simple factors to scenarios to partial models and then on to full internal models. This would be of particular value to the small and medium sized companies where the risk measurement development is likely to be incremental.

CP20 Supplement S.6 The following advice for harmonized SCR sub-modules is based on their needing to be submitted to regular review in the light of market developments; consequently, this should be addressed in the implementing measures.

The CEA agrees that regularly reviews are appropriate, but would urge that any resulting changes are kept to a minimum and subject to materiality in order to reduce the impact on companies.

CP20 Supplement S.7 For the sub-risks of market risk (equity risk, property risk, currency risk and interest rate risk), as well as for the sub-risks of life underwriting risk except life CAT risk, the standard formula should use a scenario based approach.

The CEA accepts that a scenario approach is a more sophisticated approach than a factor approach, but is concerned that removing the possibility of having a factor based approach could adversely affect the costs incurred by smaller

companies and those for whom market risk is not material. For this reason the CEA advocates having a flexible approach with both scenario and factor approaches.

CP20 Supplement S.8 Scenarios are prescribed. Insurers should be responsible for calculating the impact of these scenarios, including the choice of the most appropriate calculation method. This may be supplemented by guidance on possible calculation methods (including simplified, formula-based treatments) in an effort to establish 'good practice'.

The CEA agrees that insurers should be responsible for this and in line with this the guidance should not be too prescriptive. In order to help companies' development of models it would be appreciated if this guidance could be provided earlier rather than later.

CP20 Supplement S.9 In order to guarantee the harmonisation goal contained in the Framework for Consultation, appropriate principles on the applicability of possible calculation methods should be developed at the necessary level.

The CEA agrees and would urge that level 1 and 2 measures rather than level 3 measures are used to achieve harmonisation.

CP20 Supplement S.10 Supervisory acceptance of such calculation methods need to be governed by the Principle of Proportionality, to avoid subjecting insurers with non-complex risk profiles to unnecessary system costs for compliance with regulatory requirements.

The CEA agrees and notes that this is a strong reason for having both scenario and factor approaches.

CP20 Supplement S.11 For non-life CAT risks, a choice between a market loss approach and a scenario based approach should be allowed on a geographical basis.

It should be specified clearly what is meant by "geographical basis". For the market share approach to work properly, input on market catastrophe losses is needed from the local supervisor. We note that the market share approach has its limitations for insurance companies with concentrated portfolios or with business written abroad. We therefore believe that the primary approach should be the scenario approach.

CP20 Supplement S.12 For concentration risk, credit spread risk, life CAT risk, non-life underwriting risk (except non-life CAT risk), default risk and operational risk, the standard formula should use a factor based approach.

The CEA disagrees with this restriction and advocates companies being able to use a scenario approach if they believe this to be more appropriate. Also, with regard to risks associated with profit sharing business, we note that this business may be able to absorb some of these risks. However, it is not clear to us how such risk absorption would be allowed for in a factor approach given the revised approach for allowing for such risk absorption.

Aggregation

CEIOPS Advice (5.384) CEIOPS recommends that the capital requirements for individual risks should be aggregated such that cross-risk diversification effects are taken into account.

Agreed.

CEIOPS Advice (5.385) Initially, linear correlation techniques should be used to combine the modular requirements of the standard formula into an estimate for the SCR. CEIOPS recommends a two-step approach whereby firstly, risks belonging to the same major risk category are combined using correlation matrices; then secondly, the major risk categories are combined using a further correlation matrix.

We agree that linear correlation techniques are suitable for the standard approach for practicality/harmonisation reasons. However, we believe that the decision as to the number of steps to do this should be left to companies as there are not significant theoretical or practical reasons for supporting a two step process over a single step process.

For internal models we would envisage that companies may use alternative methods if these would prove to be more accurate.

Calibration

CEIOPS Advice (5.386) The factors or scenarios applied to estimate capital requirements for individual risk modules should be calibrated to meet the same objectives as the SCR. In principle, this means they should reflect the same risk measure, confidence level, time horizon, definition of ruin and valuation basis for assets and liabilities as the SCR

The CEA strongly agrees and notes that based on some of the QIS 2 results further work is needed in this area.

CEIOPS Advice (5.387) To address the model error introduced by using linear correlation techniques, and to provide incentives for insurers to improve their assessment of diversification effects between risks, the correlation assumptions used to aggregate risk modules in the standard formula should be set cautiously. But care should be taken to ensure the assumptions are not excessively conservative.

The CEA accepts that in theory the multivariate Normal distribution implicit in a linear correlation aggregate approach might not be appropriate, i.e. that in adverse conditions correlations might be different. However, the CEA believes that the rationale and extent of any adjustments made in respect of this should be clearly communicated and documented. The CEA is extremely concerned that the correlation assumptions used in QIS 2 contained an excessive and arbitrary level of conservatism that could discourage insurers from seeking to diversify risk. We note that diversification is a key way that insurers can protect policyholders against risk, which should be encouraged.

PART B – STANDARD FORMULA RISK MODULES

EN_L expected profit/loss (non-life)

CEIOPS Advice (5.388) CEIOPS is currently considering what allowance, if any, the SCR should make for expected profits or losses on non-life underwriting.

CP20 Supplement S.13 CEIOPS recommends that an allowance for expected profits or losses on non-life underwriting should be made as follows:

- The allowance is restricted to expected underwriting profits or losses and needs to be implemented in a 'mechanical' and non-discretionary way, to ensure comparability of results.
- For profits, the allowance shall be restricted to existing business. Expected future profits from existing business emerging during the solvency time horizon shall be elements of insurance tier 3 capital subject to a limit consistent with the overall limitation system of eligible capital. The assumption of new business must not lead to a reduction of an SCR. In a prudential system, future profits should only be taken into account as far as they cannot easily be cancelled by a new pricing policy.
- For losses, the allowance shall comprise both existing business and new business written during the solvency time horizon. Technical provisions should include expected future losses linked to existing insurance policies (including tacit renewals where the insurer cannot change the premium or cancel the policy). Expected future losses from new business should be taken into account by means of an adjustment included in the SRC standard formula.

The CEA is strongly in favour of allowing expected profits/losses. If the SCR is to include additional capital in respect of premium risk (as well as reserve risk and catastrophe risk) in respect of policies (renewals and new business) then the value creation in respect of this business should also be recognised as it will be available to absorb losses in the first instance.

We believe that a purely "mechanical" implementation is not suitable for non-life business due to the existence of underwriting cycles and also because of changes that could occur over the next year or might have already happened (e.g. changes in reinsurance coverage, pricing). A mechanical approach could cause inappropriate results, e.g. capital requirements increasing when premium rates have increased and vice versa.

A "personalized" approach, which takes prospective changes into account, would be more suitable, as is suggested in 5.84 and 5.85. We agree with the requirement of reliable procedures as suggested in 5.86.

Treatment of profit-sharing business

CEIOPS Advice (5.389) CEIOPS believes that the standard formula should provide adequate recognition for the risk mitigating effect of profit-sharing business. However, the approach finally chosen needs to balance a number of different, potentially competing, concerns:

- **Any reduction to capital requirements needs to be conducted in a clear and objective manner, and must avoid multiple recognition (double-counting) of the same risk mitigation**
- **But to the extent possible, the charges for individual risks should themselves reflect risk mitigation, so as to avoid crude, one-off adjustments, and to allow a transition to (partial) internal models.**
- **It needs to be a mathematically consistent approach, compatible with the overall modular structure of the SCR standard formula**
- **The calculation should not represent an undue operational burden on insurers and must be compatible with both factor-based and scenario-based approaches to modelling SCR risks**

The CEA strongly believes that risk absorption on profit sharing business is a very important risk mitigant that should be fully recognised. In principle we agree the objectives detailed in 5.389. However, we note that the approach outlined in 5.65-5.67 could significantly understate the benefit (which CEIOPS acknowledge in 5.69) because diversification is not properly allowed for. We are strongly against any such understatement, which would introduce arbitrary implicit margins for companies writing profit sharing business (but not others), which are inconsistent with a well designed risk based economic approach. We believe that further work is needed in this area, e.g. identifying the circumstances and extent to which non linear effects might cause distortions when allowing for profit sharing for each individual risk and aggregating using a linear correlation matrix approach.

CEIOPS Advice (5.390) As it develops proposals for QIS3, CEIOPS will consider replacing the QIS2 top-level 'Reduction for Profit Sharing' module with appropriate adjustments at the level of individual SCR risks.

As discussed in our response to 5.389 we agree that further work is required in this area and we look forward to collaborating with CEIOPS on this. We would urge that CEIOPS takes into account proportionality and in particular the needs and resources of smaller and less complex companies.

SCR_{OP} operational risk

CEIOPS Advice (5.391) CEIOPS recommends the inclusion of an explicit requirement for operational risk under the standard formula. SCRop should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain operational risk losses that could occur during the next year. But SCRop should address risks only to the extent that they have not already been recognised in the assessment of other risk modules in the standard formula.

Agreed.

CEIOPS Advice (5.392) Operational risk is defined as the risk of loss arising from inadequate or failed internal process, people, systems or from external events.

Agreed.

CEIOPS Advice (5.393) SCRop should be calculated using a simple function that uses technical provisions and earned premiums as proxies for the scale of an insurance undertaking's operations, and therefore the likely scale of operational risk exposure. Given the relative simplicity of this approach, SCRop should be limited so as to avoid dominating the overall SCR.

Given the difficulties in measuring operational risk, the adoption of a relatively simple approach is reasonable for the standard formula. However, it should be based on both earned premiums and technical reserves in order to capture the difference in risks associated with funds that are open and closed to new business.

The CEA suggests that in order to reward and encourage sound risk management, a possible approach might be to apply a factor to the operational risk capital amount with this depending on the quality of the company's risk management processes and procedures. This factor would need to be assessed qualitatively and could be part of the supervisory review process under Pillar II.

BSCR Basic Solvency Capital Requirement

CEIOPS Advice (5.394) The BSCR is defined as the Solvency Capital Requirement before adjustments for the expected profitability of non-life business, the potential risk-mitigating effect of profit sharing liabilities and operational risk.

We agree with the modular structure. However, we are strongly against not fully reflecting the benefits of diversification, which arise because of the treatment of profit sharing (see our response to 5.389) and because the adjustments for Operational risk and adjustment for expected Non Life profits / losses are made after applying the correlation matrix. We do not understand these exclusions, which effectively incorporate arbitrary and implicit margins, which could result in capital requirements in excess of the target level thereby affecting the competitiveness of the Industry.

The CEA believes that diversification is a key way in which insurers can protect themselves and their policyholders from risks. Insurers should be full credit for diversification in order to encourage and reward in respect of this important risk mitigant.

CEIOPS Advice (5.395) BSCR should be calculated using linear correlation techniques which combine the capital requirements for market risk, counterparty risk, life underwriting risk and non-life underwriting risk together with requirements for any special types of business.

Subject to the comments made in 5.385 and 5.394 above, we agree.

SCR_{mkt} market risk

CEIOPS Advice (5.396) The market risk module should reflect the risk arising from the level or volatility of the market prices of financial instruments.

We suggest that the wording is improved along the lines that the market risk module should reflect the risk changes in the values of assets are not matched by changes in the liabilities resulting in a shortfall.

CEIOPS Advice (5.397) SCR_{mkt} should be calculated using linear correlation techniques which combine the capital requirements for interest rate risk, equity risk, property risk, spread risk, risk concentrations and currency risk.

We agree and support the change to separate credit risk into spread risk and counterparty default risk and also the inclusion of concentration risk, which is in line with the CEA's European Standard Approach.

SCRmkt market risk correlations

CEIOPS Advice (5.398) CEIOPS recognises that on market risk the QIS2 approach did not give due recognition for diversification effects and that some of the correlation assumptions will need to be revised downwards. CEIOPS would

welcome evidence from stakeholders that could be used to justify the use lower correlation assumptions (bearing in mind that the SCR should reflect stressed conditions).

The CEA acknowledges and welcomes CEIOPS' recognition that the market risk correlation assumptions used in QIS2 were excessively conservative. In particular, the correlation assumptions for interest rate risk with equity and property risk and between equity risk and property risk were particularly conservative. Furthermore, the same correlation is used for both increases and decreases in interest rates, which is counterintuitive and contradictory. As per our response to 5.387 companies should be encouraged and rewarded for seeking diversification as this is an important way of reducing risk.

Mkt_{int} interest rate risk

CEIOPS Advice (5.399) CEIOPS recommends the inclusion of an explicit requirement for interest rate risk under the standard formula. Mkt_{int} should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses that could occur during the next year because of interest rate risk.

Agreed.

CEIOPS Advice (5.400) Interest rate is defined as the risk arising from the sensitivity of asset and liability values to changes in the term structure of interest rates or interest rate volatility.

Agreed.

CEIOPS Advice (5.401) Mkt_{int} should be calculated by means of an approach that simulates both upward and downward shocks to the yield curve.

Agreed, although we recommend that a flexible approach be adopted that allows companies to use either a scenario approach or a factor based approach. Also, any risk mitigation such as hedging should be fully allowed for.

Mkt_{eq} equity risk

CEIOPS Advice (5.402) CEIOPS138 recommends the inclusion of an explicit requirement for equity rate risk under the standard formula. Mkt_{eq} should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses that could occur during the next year because of equity risk.

Agreed.

CEIOPS Advice (5.403) Equity risk arises from the level or volatility of market price for equities. Exposure to equity risk refers to all assets and liabilities whose value is sensitive to changes in equity prices.

Agreed.

CEIOPS Advice (5.404) Mkt_{eq} should be calculated by simulating a downward shock to the market value of equities, while taking account of the offsetting effect on the value of derivatives and short positions.

We suggest that the shock to be tested is the more onerous of a fall or rise in equity values to cover possibility that companies have exposures to rising markets, e.g. as a result of having (short) equity derivative positions.

We strongly support recognising the protection that instruments such as derivatives can bring and recommend that this be extended to other risk categories such as interest, credit and currency risk as well.

Mkt_{prop} property risk

CEIOPS Advice (5.405) CEIOPS139 recommends the inclusion of an explicit requirement for property risk under the standard formula. Mkt_{prop} should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses that could occur during the next year because of property risk.

Agreed.

CEIOPS Advice (5.406) Property risk arises from the level or volatility of market prices of real estate.

Agreed

CEIOPS Advice (5.407) Mkt_{prop} should be calculated by simulating a downward shock to the market value of property exposures.

We agree, although would stress that any risk mitigation such as hedging should be fully allowed for and suggest that the shock to be tested is the more onerous of a fall or rise in real estate values.

Mkt_{fx} currency risk

CEIOPS Advice (5.408) CEIOPS recommends the inclusion of an explicit requirement for currency risk under the standard formula. Mktfx should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses that could occur during the next year because of currency risk.

Agreed.

CEIOPS Advice (5.409) Currency risk arises from the level or volatility of currency exchange rates.

We suggest that the wording is improved along the lines that currency risk arises from the risk that adverse movements in currency exchange rates cause assets supporting technical provisions to move adversely compared to liability values resulting in a shortfall.

CEIOPS Advice (5.410) Mktfx should be calculated by simulating a shock to exchange rates.

We agree, although would stress that any risk mitigation such as hedging should be fully allowed for.

Mkt_{sp} spread risk

CEIOPS Advice (5. 411) CEIOPS recommends the inclusion of an explicit requirement for spread risk under the standard formula. Mkt_{sp} should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses that could occur during the next year because of movements in spreads.

We agree with the inclusion of an explicit requirement for spread risk, which we note is in line with our proposed standard approach (ESA). This change will make the calibration more transparent and is also better aligned with the possibilities for hedging (5.185).

CEIOPS Advice (5. 412) Spread risk is the part of risk that is explained by the volatility of credit spreads over the risk-free curve.

Agreed.

CEIOPS Advice (5. 413) Mkt_{sp} should be calculated by simulating a widening of credit spreads, using a function that depends on the market value, rating and effective duration of credit exposures.

Agreed.

Mkt_{conc} market risk concentrations

CEIOPS Advice (5.414) CEIOPS recommends the development of an explicit requirement for market risk concentrations under the standard formula, reflecting the additional volatility that arises from the accumulation of exposures with the same counterparty.

We agree and note that considering asset concentration risk within the SCR (i.e. using a risk based economic approach) is far more appropriate than using (arbitrary) asset limits. We also note that this is in line with our proposed ESA approach. Having such a module will encourage companies to diversify within an asset type as well as by asset type.

CEIOPS Advice (5.415) CEIOPS will investigate a formulaic approach where exposures in excess of predefined thresholds would be subject to an additional capital requirement.

We look forward to further details on the formulaic approach and request that regard be had to materiality, i.e. capital should only be held where there is a material risk, which we would expect normally not to be the case. In the ESA we have suggested an approach with special focus on the largest asset positions since concentration risk is mainly driven by a few large positions.

SCR_{def} counterparty default risk

CEIOPS Advice (5.416) CEIOPS recommends the development of an explicit requirement for counterparty default risk under the standard formula.

We agree with this development, which is in line with our proposed standard approach (ESA). This change will make the calibration more transparent.

CEIOPS Advice (5.417) Counterparty default risk is the risk of default of a counterparty to risk mitigating contracts like reinsurance and financial derivatives.

Agreed.

CEIOPS Advice (5.418) CEIOPS will investigate a formulaic approach where the capital requirement depends on the replacement cost of the exposure and an estimated probability of default.

We look forward to further details on the formulaic approach. We would recommend using an approach that is easy to understand. The approaches suggested in 5.211-5.213 seem complicated and difficult to understand.

SCR_{life} life underwriting risk

CEIOPS Advice (5.419) The life underwriting risk module should reflect the risk arising from the underwriting of life insurance contracts, associated with both the perils covered and the processes followed in the conduct of the business.

Agreed.

CEIOPS Advice (5.420) SCR_{life} should be calculated using linear correlation techniques which combine the capital requirements for:

- **Mortality risk**
- **Longevity risk**
- **Disability/morbidity risk**
- **Expense risk**
- **Lapse risk**

- Catastrophe risk

CEA welcomes disability and morbidity risks being combined into a single risk category as the distinction was unclear in QIS2 and caused confusion.

$Life_{mort}$ mortality risk

CEIOPS Advice (5.421) CEIOPS recommends the inclusion of an explicit requirement for mortality risk under the standard formula. $Life_{mort}$ should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses that could occur during the next year because of mortality risk.

Agreed.

CEIOPS Advice (5.422) Mortality risk is defined as the risk arising from a change in mortality rates. The treatment of mortality risk is split into the risk components volatility risk and uncertainty risk.

We agree that with the split of mortality risk into the categories suggested. We suggest that the wording be changed to an "**adverse** change in mortality rates". Also, where the insurer has the ability to review the premium rates, e.g. following adverse experience, then we strongly advocate that this should be fully allowed for as it is an important risk mitigant.

$Life_{mort}$ longevity risk

CEIOPS Advice (5.423) CEIOPS recommends the inclusion of an explicit requirement for longevity risk under the standard formula. $Life_{long}$ should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses that could occur during the next year because of longevity risk.

Agreed.

CEIOPS Advice (5.424) Longevity risk is defined as the risk to contracts contingent on survival arising from a decrease in mortality rates. The treatment of longevity risk is split into the risk components volatility risk and uncertainty risk.

We suggest that the wording in the first sentence is improved along the lines that longevity risk is defined as the risk that future improvements in mortality rates are greater than expected.

$Life_{dis}$ disability and morbidity risk

CEIOPS Advice (5.425) CEIOPS recommends the inclusion of an explicit requirement for disability and morbidity risk under the standard formula. $Life_{dis}$ should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses that could occur during the next year because of disability and morbidity risk.

Agreed, subject to where insurers have the ability to review the premium rates, e.g. following adverse experience that this is fully allowed for as it is an important risk mitigant.

CEIOPS Advice (5.426) Disability/morbidity risk is defined as the risk arising from a change in disability/morbidity rates. The treatment of disability and morbidity risk is split into the risk components volatility risk and uncertainty risk.

Agreed.

$Life_{lapse}$ lapse risk

CEIOPS Advice (5.427) CEIOPS recommends the inclusion of an explicit requirement for lapse risk under the standard formula. $Life_{lapse}$ should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses that could occur during the next year because of lapse risk.

We agree, but note that lapse risk might not necessarily result in losses and that lapse cannot occur on some business (e.g. UK annuity business). The emphasis should be on capturing the loss that might arise and where no such loss could occur there should be no capital requirement. This will not automatically be the case on a factor based approach as was demonstrated in QIS 2.

CEIOPS Advice (5.428) Lapse risk arises from unanticipated (higher or lower) rate of policy lapses, terminations, changes to paid-up status (cessation of premium payment) and surrenders.

Agreed, subject to our comments on 5.427 above.

$Life_{exp}$ expense risk

CEIOPS Advice (5.429) CEIOPS recommends the inclusion of an explicit requirement for expense risk under the standard formula. $Life_{exp}$ should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses that could occur during the next year because of expense risk.

Agreed.

CEIOPS Advice (5.430) Expense risk arises from the level of expenses associated with insurance contracts and with the undertaking as a whole.

We suggest that the wording be improved along the lines that expense risk is the risk that the level of expenses associated with insurance contracts and with the undertaking as a whole increase more than expected, i.e. more than already assumed and anticipated in the technical provisions.

$Life_{CAT}$ catastrophe risk

CEIOPS Advice (5.431) CEIOPS recommends the inclusion of an explicit requirement for life catastrophe risk under the standard formula. $Life_{CAT}$ should produce capital requirements that represent the average effect on the net asset value of the undertaking of the 1% of scenarios, including multiple catastrophes that cause the greatest fall in net assets.

CEA would like to highlight two elements: Firstly, in this approach catastrophe risk is considered as a whole instead of by risk. In principle this treatment is welcomed as it facilitates the evaluation of the overall impact of catastrophic events over the whole portfolio. However, the confidence level used to determine multiple catastrophes should take diversification into account, i.e. use a lower overall confidence level. Secondly, 1% of scenarios seem to indicate TailVar at 99%. It is essential that the Standard Approach is consistently calibrated taking into account the risk measure being used. The CEA strongly favours the use of VaR for practical reasons.

CEIOPS Advice (5.432) CAT risk arises from extreme or irregular events that are not sufficiently captured by the charges for the biometric risks, lapse risk and expense risk.

Before agreeing the CEA would need to understand what kinds of catastrophes CEIOPS envisages and to satisfy itself that these are within the confidence level being used for the SCR. The CEA would welcome further explanation and clarification from CEIOPS on this.

SCR_{nl} non-life underwriting risk

CEIOPS Advice (5.433) CEIOPS recommends the inclusion of an explicit requirement for non-life underwriting risk under the standard formula. SCR_{nl} should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses arising from non-life insurance underwriting risk that could occur during the next year.

Agreed.

CEIOPS Advice (5.434) Non-life insurance underwriting risk is defined is the risk arising from the underwriting of non-life insurance contracts. The underwriting risk relates to the uncertainty about the results of the undertaking's underwriting. This includes uncertainty about:

- The amount and timing of the eventual claim settlements in relation to existing liabilities;
- The volume of business to be written and the premium rates at which it will be written; and
- The premium rates which would be necessary to cover the liabilities created by the business written

We largely agree, although it would be helpful if the definition could be made more specific. For example, does "written business" apply to all of next years' written business? This could imply that a major part of the premiums are not (yet) earned in the next year. Also, the first bullet would typically be reserve risk and the latter two bullets premium risk.

CEIOPS Advice (5.435) The SCR_{nl} component should cover the excess losses that might occur over the twelve months following the date at which it is evaluated on existing provisions and new business. By excess losses is meant the underwriting losses in excess of those expected or the expected profit less the actual outcome at the end of the period.

Agreed.

CEIOPS Advice (5.436) SCR_{nl} should be calculated using linear correlation techniques which combine the capital requirements for:

- Premium and reserve risk
- Catastrophe risk

We agree, although the approach suggested in 5.313 and 5.335 is not clear and seems to be the same as the calculation as prescribed in QIS2?

PART B – STANDARD FORMULA RISK MODULES (Cont.)

NL_{pr} premium & reserve risk

5.437 CEIOPS recommends the inclusion of an explicit and objective requirement produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses arising from premium and reserve risk that could occur during the next year.

Agreed.

5.438 Premium risk is understood to relate to future claims arising during and after the period until the time horizon for the solvency assessment. The risk is that expenses plus the volume of losses (incurred and to be incurred) for these claims (comprising both amounts paid during the period and provisions made at its end) is higher than the premiums received (or if allowance is made elsewhere for the expected profits or losses on the business, that the profitability will be less than expected.

Agreed. We note that a bracket is missing in the final sentence.

5.439 Reserve risk concerns the risk of losses emerging on claims provisions over the solvency time horizon.

Agreed.

5.440 NLpr should be calculated using a factor based approach, which is based on the assessment of both premium and reserve risk per line of business.

For the calculation of the premium risk module, as well as the reserve risk module, we strongly favour a flexible approach where market wide factors could be used, but where companies also had the flexibility to use factors based on their own company data, which would be better aligned with the risks that they are exposed to.

For premium risk, the combined ratio approach is prescribed, but for reserve risk, no approach has been suggested. We believe that for reserve risk, which is a major risk for most non-life companies, that companies should be able to use factors derived using their own experience (where this is credible). This would result in capital amounts that were better aligned and more appropriate for the risks that the company was exposed to.

QIS2 identified that the size factors are a major concern and we agree with the comments of CEIOPS in 5.333 that smaller companies tend to write specialized products (lower risks) and also tend to buy more reinsurance protection. There is a significant concern that the size factors do not capture the underlying risk and as a result may not be appropriate. We believe that this could be potentially addressed via greater use of company specific information. Currently, it seems that these concerns have not been addressed. The specification in 5.334-5.335 is complex and difficult to understand. From these formulas it is not clear how what the impact of the size factors will be for the smaller companies.

To determine a company specific factor for premium risk, we agree with the approach suggested, i.e. looking at historical combined ratios. However, we recommend the following:

- The calculation is based on a personalized approach (5.329) in order to be meaningful and to appropriately allow for changes in business/reinsurance programmes over time. It would be helpful if as part of QIS3 more experience was collected in order to improve the calibration of the non-life risk factors
- Historical profits assessed on a Solvency I basis are not used because they would not be consistent with the (completely different) Solvency II framework. Using such profits will lead to inconsistent results and biased outcomes. It could also require significant additional work. Furthermore, historical changes in reserving bases could distort the results as acknowledged by CEIOPS in section 5.358 of CP20
- One way to obtain historical combined ratios on an economical basis is to use actuarial methods with run-off triangles, which is in line with the approach used to obtain the best estimate of the technical provisions and so should not involve companies performing much additional work
- The time period over which historical data is analysed should not be artificially set at 15 years. It should normally be set having regard to what is most appropriate for the line of business being considered

NL_{CAT} catastrophe risk

5.441 CEIOPS recommends the inclusion of an explicit requirement for non-life catastrophe risk under the standard formula. NL_{CAT} should produce capital requirements that represent the average effect on the net asset value of the undertaking of the 1% of scenarios, including multiple catastrophes that cause the greatest fall in net assets.

In general we agree. In this case, the impact of reinsurance can be made more transparent. We note that 1% of scenarios seem to indicate TailVar at 99%. We would favour the use of Var.

5.442 CAT risk arises from extreme or irregular events that are not sufficiently captured by the charges for premium and reserve risk.

Our comments in 5.431 also apply here. We also recommend that it is clearly defined when events are regarded as catastrophe events in order to avoid double counting between the premium and reserve risks catastrophe risk.

Section 6: Solvency Capital Requirements: full internal models

Internal Models - Conceptual framework

6.499 "CEIOPS recommends that the approval of an internal model for an undertaking's SCR calculation should be subject to a statistical quality test, a calibration test and a use test" (CfA 11.79)

We agree with the suggested approach of having a statistical quality test, a calibration test and a use test.

Internal Models - Statistical quality requirements

6.500 The actuarial model is "the system that transforms risk exposure data (how many contracts of which type are written) and risk driver data (historic information on the likelihood of certain events) to forecasts of profit and loss (P&L) distributions. In practice, an undertaking may use a collection of models that make predictions for the P&L at different levels of aggregation" (CfA 11.14).

In general we agree, but would note that for the purposes of calculating the SCR full loss distributions are not necessarily needed.

6.501 The methods used to calculate the probability distribution forecast should be based on sound actuarial techniques and shall be broadly consistent with the methods used to calculate technical provisions. In particular, the methods used to calculate the probability distribution forecast should be based upon current and credible information and realistic assumptions. An undertaking should be able to justify its model choices to its supervisor.

In principle this sounds reasonable, although we need more clarification as to what is required and at what level of detail.

6.502 No particular method for the calculation of the probability distribution forecast is prescribed so long as the risk-ranking powers of the actuarial model are high enough to be useful for risk management. This requires that the actuarial model captures all of the material risks to which the insurance undertaking is exposed. This means that the very same model may be appropriate for undertaking A and inappropriate for undertaking B.

We welcome the fact that CEIOPS does not prescribe a certain method for calculation of probability distributions or risk classification.

6.503 Insurance undertakings should accurately capture the particular risks associated with financial guarantees and options in their actuarial model if material. Similarly, insurance undertakings should capture the risks associated with policyholder options to change the terms of the contract in their actuarial model. In particular, the impact of future changes in the take-up of options by policyholders shall be captured.

Agreed, although the lack of historic data means that judgement will need to be used when setting assumptions about likely future policyholder actions/take-up rates.

6.504 Insurance undertakings should be permitted to recognise dependencies within broad risk categories as well as across broad risk categories, provided that the supervisory authorities are satisfied that the insurance undertaking's system for measuring diversification effects is sound and implemented with integrity

Agreed. Recognising and measuring diversification benefits is one of the most important elements in the framework.

6.505 Insurance undertakings should be permitted to fully recognise the effect of risk mitigation techniques in their actuarial model as long as counterparty credit, including contingent credit risk, and other risks arising from the use of risk mitigation techniques are properly captured by the actuarial model.

Agreed. The recognition and reward for risk mitigation techniques is crucial.

We suggest that contingent credit risk and other risks should be "adequately captured" rather than "properly captured" to allow for situations where they are immaterial.

6.506 In the context of with-profit life business, insurance undertakings should be permitted to take account of future management actions that they would reasonably expect to carry out under specific circumstances, such as making changes to bonus rates. When taking account of future management actions in their actuarial model, insurance undertakings shall make allowance for the time taken to implement such actions as well as their obligations to policyholders, whether through policy wording, marketing literature or other statements.

Agreed. This should further provide incentives for companies to build and use internal models.

6.507 Proper processes should be in place, which ensure that the data used by the actuarial model is accurate and appropriate. Insurance undertakings shall update the data sets used in the calculation of the probability distribution forecast no less frequently than once a year.

We suggest that companies should be required to "review" rather than necessarily "update" as, for example, having an extra data point in a long time series may not change the appropriate value for a particular parameter. We also believe that the onus should be on the insurance undertaking to determine how frequently they should review their data and assumptions in order to encourage them to take full ownership and responsibility for the model (which should also be used in their risk management processes). The adequacy of the process for reviewing and updating data and assumptions should be covered under the Pillar II risk assessment.

6.508 "Standardisation of contract terms and pooling of risk driver data should help undertakings improve the quality of the input data they use in their actuarial models. But the availability of richer external data should also help facilitate a greater understanding of the risks to which an individual undertaking is exposed and therefore act as a stimulus to the development of internal models" (CfA 11.26).

We do not agree. The desire to generate data with which to calibrate internal models should not dictate what contract terms companies use. In practice other factors such as accurately defining their risk exposures, having innovative products, etc. will drive product terms. We strongly believe that companies should be free to decide what data is most appropriate to calibrate their models. In this regard we note that any benefit in terms of credibility that a larger industry data might bring would have to be balanced against the risk that the data is heterogeneous and therefore not appropriate. For this reason, we would suggest that in the first instance companies should probably seek to use their own experience provided it is sufficiently credible. However, this should be left to the companies to decide.

6.509 The internal risk and capital assessment needs to include a proper analysis and understanding of the undertaking's past loss experience. In this context, a distinction needs to be drawn between the presumed causes or triggers of loss events and the contractual obligations which gave rise to actual monetary losses. The undertaking should attribute the losses incurred by each major business unit to appropriate types of causes and events. This leads to a decomposition of the losses of each business unit, which enables an explanation of the causes and sources of profits and losses

We agree that the past loss experience needs to be understood. If for example the business has changed significantly, extrapolating past data may not be appropriate. It is up to the individual companies to make appropriate decisions. We are not convinced that decomposing losses will automatically provide the best explanation. In some cases this may be the most appropriate way, but in other cases it will not add much value. It should be left to the companies to decide how best to approach this, with supervisors reviewing the adequacy of it.

6.510 No prescribed loss classification appears to be fit for all purposes. The undertaking should demonstrate that the structure and categorisations of its loss databases are adapted to the risk management processes and serve as a basis for the identification, analysis and control of risks in the undertaking.

We agree that companies should use the approach that best suits their needs.

6.511 The insurance undertaking shall have a regular cycle of model validation that includes monitoring the performance of the actuarial model, reviewing the on-going appropriateness of its specification, and testing its forecasts against outcomes ('back-testing').

CEA agrees that there will need to be a process for regular model validation, with companies being responsible for determining this.

Back-testing is only appropriate where there is sufficient historic data, i.e. enough to draw meaningful conclusions. We note that in banking back-testing is often used. However, the VaR time horizon used there is typically very much shorter (days) than the one year time horizon used for the SCR. Thus the (daily) data needed to meaningfully perform back-testing is available. However, we do not believe this to be the case for the 1 year 99.5 percentile VaR being used for insurance undertakings. As such, we do not believe that back-testing is a viable method for testing internal models. We do not believe that this should hinder the approval of internal models. Instead, the review should consider the robustness of the parameterisation for which there is often likely to be a range of acceptable and plausible values.

6.512 As a general rule, the evaluation of forecast performance should be based on the statistical methodology for the evaluation of the quality of distributional forecasts. This means that the model is tested not only against losses that exceed a high threshold, but against all losses. The QQplot is a one of the more powerful tools that compare predicted and realized losses. This kind of back-testing the whole distribution shall be performed up to the highest level of aggregation where it is still practically feasible.

We believe that companies should be free to use whatever methods and processes they think most appropriate to calibrate their model and to assess the appropriateness of this, with supervisors performing a review role. We note that for the reasons given in 6.511 that we doubt whether there is likely to be sufficient historic data to meaningfully perform QQplots on tail value such as the 99.5 percentile VaR values.

6.513 The frequency and type of loss data across the insurance industry is so diverse that no specific back-testing methodology can be optimal in all cases. However, back-testing the 80%-TailVaR or the 90%-VaR of losses occurring over a suitably chosen time interval is likely to be a useful tool across a variety of risk classes and business lines. It requires the comparison of the predicted and the realized average of all losses beyond the 5-year-event in the first case and the comparison of the predicted and realized 10-year-event in the second case.

As in advice 6.511, back-testing will only provide meaningful results, where there is sufficient data. This is unlikely to be the case when testing the higher end of the tail of 1 year probability distributions such as the 80% TailVaR or 90% VaR. Also, as stated in our response to 6.512, we believe that companies should be free to use the methods and approaches that they think are most appropriate for their model.

6.514 The model validation process shall also include analysis of the actuarial model's stability and in particular testing of the sensitivity of the outputs of the actuarial model to changes in key underlying assumptions.

Agreed. Sensitivity testing can be a key component in understanding the results of a model. Companies should be able to assess what level of sensitivity testing is required, but the analysis should at least include the key parameters.

6.515 "A number of possible techniques shall be used for performing the stability analysis, including (CfA 11.34):

- Analysis of the relationship between a full valuation using scenarios and an approximation using sensitivities
- Analysis of the effect of the inclusion or deletion of risk drivers
- Analysis of the effect of different estimation procedures
- Analysis of the effect of the observation period of risk drivers
- Analysis of the effect of alternative model assumptions.

We agree that stability analyses are likely to be important. We would opt for principles based requirements rather then rules based requirements as companies' models and circumstances differ.

6.516 The insurance undertaking should document the design and operational details of its actuarial model. The documentation shall evidence compliance with these quantitative and qualitative standards, […] detailed outline of the theory, assumptions and/or mathematical and empirical basis underlying the actuarial model.

We agree. Documentation is essential.

6.517 Use of a model or data obtained from a third-party vendor that claims proprietary technology is not a justification for exemption from documentation or any other requirements for the actuarial model. The burden is on the insurance undertaking to satisfy the supervisory authorities.

We agree. It should however be done in such a way that the intellectual capital of the company and the vendor is protected.

Internal Models - Calibration requirements

6.518 In parallel to the economic risk capital computed according to the internal calibration objectives, undertakings should compute the regulatory capital requirement calibrated to the Solvency II SCR objectives at the legal entity level for solo supervision and at group level for group supervision. This may be achieved by applying the prescribed SCR risk measure to the probability distribution forecast provided by the actuarial model.

Agreed.

6.519 Not all undertakings will be able to just 'read off' the SCR from a probability distribution, either because they use a different time horizon, or they do not have a probability distribution at the top level of aggregation. In these cases, the burden of this parallel computation is reduced by:

- Requiring the computation of risk capital consistent with the Solvency II calibration objectives only once a year and only at the top level of aggregation […](i.e. legal entity level in solo supervision and group level in group supervision)
- Allowing approximations in the process of deriving the SCR estimate from the internal risk capital, […]

In summary, the undertaking may use risk capital numbers calibrated to its own objectives in day-to-day operations.

The approximations allowed by CEIOPS are welcomed as they are likely to reduce the burden on companies.

6.520 Key parameters, which potentially influence the final capital requirement a lot, or are difficult to estimate are:

- shape parameters of parametric distributions, which determine the relationship between the actually observed losses and those losses beyond the 100-year-event that are the basis of the SCR calibration objectives; and
- parameters that determine probabilities in the far future and which are not liquidly traded (like long-term mortality trends).

Note that parameters that determine probabilities in the far future only affect the value of liabilities, not the SCR directly.

Noted.

6.521 In the case of these key parameters, undertakings should generally use external, pooled data for estimation. Parameter estimation can be outsourced. Examples of such aggregated external data are the life tables and economic scenario generators provided by model vendors and other organisations.

CEA believes that companies should be allowed to use the data sources they think are the most appropriate. We note that with the exception of market risk, companies' own experience is likely in most cases to be the most appropriate data to calibrate to. Only where this is inappropriate (e.g. new product, new underwriting practices, etc) or insufficiently credible (e.g. catastrophe risk, operational risk) is using external data likely to be more appropriate.

6.522 If an undertaking wants to use both external and internal data for estimation it has to provide evidence on the proper weighting in order to balance bias and variance along the lines of credibility theory.

Companies should use the data most appropriate to their circumstances and be able to justify their selection.

6.523 Internal models should make optimal use of and be consistent with information provided by the financial markets and generally available data on insurance technical risks. Consistency should be tested by applying the internal model to a series of pre-defined test cases and requiring a limited deviation from the benchmark results ('constrained calibration').

The CEA does not necessarily agree. Companies should use the most appropriate data. For market risk, for example, we agree that the use of financial markets data is likely to be appropriate and perhaps supervisors could use a constrained calibration approach when reviewing companies' models. However, for insurance risks, companies' own experience is likely to be more relevant provided it is statistically credible. Hence, we would do not agree that testing internal models using pre-defined test cases and benchmark results will lead to appropriate results. There may well be valid reasons why different companies will produce different results. Indeed, this is why companies are likely to develop their own internal models in the first place.

6.524 The supervisor should have the power to apply typical parameters of the industry instead of the undertaking's estimate of the key parameters named above, if the undertaking fails to present convincing evidence for deviation from general industry practice. In the case there is no industry standard, the supervisor should have the power to prescribe the parameter ('supervisory control of key parameters'). However, there is a tension between prescribing parameters and avoiding constraints on modelling methodology, so this should be considered a fall-back solution if 'constrained calibration' does not lead to sufficient comparability.

The CEA strongly believes that companies' should set the parameters in their models and that they should be able to justify these parameters. If when reviewing a model a supervisor disagrees with a particular parameter or parameters sufficiently strongly to either not approve an internal model or require a capital add-on, then we agree that a more sensible alternative is likely to be that the parameters are changed to be in line with the supervisors' requirements. However, we would stress that the criteria for review should be the overall reasonableness of the model / calibration and not individual parameters. A calibration can only be meaningfully assessed in its totality. Supervisors should not be allowed to "cherry pick" and introduce prudent margins as this could affect the competitiveness of the insurance market and the costs incurred by policyholders. Supervisors should not take it upon themselves to set "industry standards" for certain parameters in isolation.

If companies are forced to use parameters set by the Supervisor based on Industry data then is a real risk that companies will not use the model for risk management decisions as it would inadequately reflect their risk exposures. This would work against the use test requirement for internal models and result in companies incurring additional costs, i.e. by having to maintain one calibration for the SCR and another for internal purposes.

6.525 Supervisors should have the power to ask undertakings to subject their models to test problems, which will allow supervisors to perform a 'peer review' of internal models and identify questionable model assumptions ex post.

This should be clearly defined in order to avoid an excessive burden on companies. Also, there is a risk that company specific characteristics are not sufficiently recognised.

Internal Models - Use Test Requirements

6.526 Insurance undertakings should be required to apply the internal model in risk management top-down, alongside the hierarchically broken down strategic goals mentioned in par 6.45. The insurance undertaking shall examine the control loops associated with risk management, particularly those using the output of the model, e.g. risk reporting and decision making based on that reporting. The undertaking has to demonstrate that the actuarial model is genuinely relevant for and used within risk management and is in line with the overall policy on solvency capital.

The term "top down" is open to interpretation and the approach that is appropriate for one organisation might not be appropriate for another. Rather than prescribe rules we suggest a principles based approach / requirements, e.g.

those described in par 6.487 seem not unreasonable to us. We would welcome further clarification on the process for verifying compliance with the 'use test' requirements.

6.527 Insurance undertakings shall examine strengths and weaknesses of the operational and organisational structure and their impact on the functioning of the internal model and their impact on the use of the internal model for risk management purposes. This part of the top-down approach will in its last and major step concern responsibilities, work flows and IT-processes regarding the internal model as well as risk management.

Whilst not disagreeing with the above, further guidance would be welcomed.

6.528 The supervisory authority has on a sovereign basis the full responsibility for the whole approval process. This responsibility cannot be delegated to a third party (e.g. rating agencies).

We agree that the full responsibility for the approval process cannot be outsourced to third party. The supervisor retains the end responsibility, while some part of the work could be delegated to a third party.

We do not agree with sovereign supervisors having the responsibility, because we believe that the group supervisor rather than local supervisors should be responsible for approving internal models.

6.529 Approval shall be given only if the supervisory authorities are satisfied that the insurance undertaking's systems for identifying, quantifying, monitoring and managing risk are sound and implemented with integrity and, in particular, that the internal model meets the standards on the risk management application. If the internal model uses an external technology, the approval process of the internal model could include an assessment of this technology by the supervisor.

This seems reasonable to us. Internal model approval criteria should be harmonised across Europe.

6.530 For risks which are not captured at all by the internal model, the undertaking has to use the standard formula. The conditions for such partial use of internal models are given in section 7. An insurance undertaking which has already submitted an application to the supervisory authority, but which has not yet received the official approval by the supervisory authority (due to the assessment process) should continue to compute the SCR using the standard formula.

It is desirable that the approval process for an internal model should not take a long period. However, we appreciate the work involved and the difficulties that supervisors are likely to face at the outset of Solvency II in having to approve numerous internal models within a short timeframe. We therefore encourage supervisors to start working with the Industry now in order to familiarise themselves with the key aspects of the Solvency II framework such as internal models and risk management processes ahead of the framework's implementation.

6.531 Major changes made to the internal model after the initial supervisory approval has been given shall also be subject to prior supervisory approval.

Further guidance is needed on what is called a 'major change'. Companies are likely to have a continuous improvement process to their internal model and so a pragmatic approach that takes into account materiality is needed. Also, it seems natural to us for supervised companies to keep the appropriate supervisors informed on the internal model on request and this should be encouraged.

6.532 An insurance undertaking shall not revert to calculating the SCR in accordance with the rules set out for the SCR Standard formula except for demonstrated good cause and subject to the approval of the supervisory authorities.

Agreed.

6.533 Supervisors may withdraw approval for the model's use, if the aforementioned requirements and the requirements of CfA 1 and 11 are no longer met; or they may demand substantial changes to the model in order to adapt it to the new risk profile.

In such cases supervisors should provide companies with detailed explanations supporting their decisions. Companies should be given adequate opportunity and time to respond and address supervisors' comments in order to prevent approval being withdrawn.

Section 7: Solvency Capital Requirements: partial use of models

Partial Internal Models - Restrictions

7.24 In principle, partial use of internal modelling is allowed across SCR components (the columns in the above matrix) and across controlling units of an undertaking (the rows in the above matrix).

The CEA strongly supports partial models as it believes that this allows companies to incrementally enhance their actuarial models spreading the cost over time and allowing them to focus on the areas most material to them. However, the CEA is against cherry picking, either by companies or supervisors and the overall adequacy of the partial model when combined with components using the standard approach should be key criteria as to whether an internal model is appropriate.

7.25 The maximal granularity for partial use of internal models with respect to SCR components is

- **the special component 'operational risk;**
- **'the first level risk categories of the standard formula: non-life underwriting risk, credit default risk, life underwriting risk, special treatments; and**
- **the sublevel risk categories of the market risk component of the SCR: equity market risk, interest market risk together with credit spread risk, property risk, FX risk.**

If interest market risk is modelled, then credit spread risk must be modelled as well and vice versa. If any of the first four market risk components is modelled, then risk concentration must be modelled as well.

We expect companies move to internal and partial models to be incremental i.e. first for the major products for the major risk types. The fixed approach described above could be restrictive in some circumstances, for example, where companies have say 3 or 4 large products and several smaller products, for which the risk is less material and the data less reliable. In such cases we believe that it would be reasonable and pragmatic to allow companies use partial models for the larger products (even though not all risks can be modelled) and to use the standard approach for the smaller products. We suggest that CEIOPS adopts a more pragmatic approach in order to encourage companies to improve their risk modelling capability

7.26 The maximal granularity for partial use of internal models with respect to business lines is a 'controlling unit.' The undertaking has to provide evidence that these 'controlling units' have a function in the risk management processes. Specifically, a 'controlling unit' should have a function responsible for the profit and loss of this controlling unit as well as a function responsible for the assessment of the risk capital of this controlling unit.

We disagree and think that the key criteria is whether overall the partial model (i.e. when combined with standard approach modules) better captures the risk profile of the company at least as well as the (full) standard approach, which we note is one of the criteria specified in S.16 of the Supplement to CP20.

7.27 If an undertaking presents a transition plan to move to a full internal model, or to a state of partial use of internal modelling that is acceptable as non-transitional within 5 years, then the partial use is called 'transitional.' If an undertaking applies for partial use without a transition plan, or the period of the transition plan is completed, then the partial use is called 'non-transitional'. No further restriction than the maximal granularity described above is placed on transitional partial use of internal modelling.

The CEA does not see the need to distinguish between transitional and non-transitional partial internal models. Provided a partial model (when combined with relevant Standard Approach) is at least as good as the Standard Approach we see no reason to restrict its use. Doing otherwise could subsequently result in companies using suboptimal models. Also we note that a lot can change over a 5 year period, which in any case seems arbitrary. As indicated in our responses to 7.25 and S.17, we are not in favour of arbitrary limits on the non-transitional partial internal models. We believe that cherry-picking can be avoided by focusing on how well the partial model (when combined with the Standard Approach) captures the overall risk profile.

7.28 CEIOPS is developing further advice on the partial use of internal models.

We look forward to this advice and hope that the comments we have made above are useful.

Supplement to CP20 – Restrictions on the use of partial models

Supplement to CP20 S.15 Where an undertaking is implementing a full internal model in an incremental or staged manner, it shall draw up a transitional plan for the period until it has implemented the full model agree it with the supervisor.

As per our response to 7.27 we do not see the need for such a distinction and think that the focus should be on whether a partial model is at least as good as the Standard approach in capturing an undertaking's risk profile.

Supplement to CP20 S.16 Non-transitional partial use of an internal model should be allowed if the general requirements for internal models are met and if the undertaking provides evidence that use of the partial model:

- Is in line with better risk management (use test)
- Is not due to cherry picking, namely by explaining the reasons why other risks are not included in the partial model
- Better reflects the undertaking's risk profile than the SCR standard formula

Please refer to our response to 7.27 regarding transitional and non-transitional status.

The requirements set out in S.16 seem reasonable and we would suggest that the third bullet point, i.e. the partial model (when combined with components of the Standard Approach) overall being better at capturing an undertaking's risk profile, should be the primary focus.

Supplement to CP20 S.17 In addition, the risk contribution of the non-modelled part to the total SCR shall be less than 20%. Though, on presentation of a valid reasoned case by the undertaking a supervisor may void this restriction.

In practice this advice, will mean that the cost of implementing a partial model is likely to be little different to that for implementing a full internal model. This will act as a significant disincentive for companies unable to afford such large upfront costs. Given that partial models are likely to better capture a company's risk exposure (otherwise presumably they will not be approved) it is hard to understand why companies are not allowed to adopt a more incremental approach to developing partial models as this is likely to encourage more companies to do so? More generally, the limit of 20 % seems arbitrary and not in line with the intention to strengthen the incentive to recognise and control risks.

In this context, it is worth noting that the standard approach does not properly allow for non proportional reinsurance. Companies with such reinsurance or considering it will therefore need to develop a partial model in order to see an expected capital reduction. This form of reinsurance can be a very important risk mitigant especially for smaller companies. The same point would also apply for some specialist lines of insurance business, such as Trade Credit Insurance and Surety, for which partial models would be more appropriate then the standard approach.

It is therefore vital that the use of partial models is made more attainable and practical in order to appropriately encourage and reward companies to use this important form of risk mitigation.

Supplement to CP20 S.18 Where an undertaking uses a partial internal model at the request of the supervisor (for example where the standard formula does not adequately reflect the firm's risk profile) the restriction on the non-modelled proportion of the SCR shall not apply.

We agree, but note that this implies that there could be circumstances where the restrictions on the non-modelled proportion could prevent companies from having better risk models, i.e. when they rather than the supervisor have instigated the development. As per our response to S.17 we do not understand why improvements in companies' risk models should be restricted in this way?

7.29 In principle, the requirements on partial use of internal modelling apply in the group context as well, unless the balance between group supervision and solo supervision as defined by the CEIOPS' advice on group supervision is affected.

Agreed. Partial models should be allowed for groups as well as solo entities.

Partial Internal models – Statistical quality, calibration and use test requirements

7.30 Statistical quality requirements as defined in the previous section apply to each segment modelled internally.

Agreed.

7.31 Additionally, the undertaking should perform a P&L decomposition for all portfolios that are subject to partial use of internal modelling of SCR components. The undertaking should identify which part of the profits and losses can be attributed to the modelled component. The decomposed P&L is subject to the back-testing requirements defined in the previous section.

As per our responses to 6.511 and 6.513, back-testing will only provide meaningful results, where there is data. Although decomposing the P&L into the portfolios/components that are subject to partial modelling may be helpful, it will not contribute to the back-testing.

7.32 Calibration test requirements apply to the highest level of aggregation under internal modelling, and to all those components that are combined with standard formula components.

We agree, as this facilitates the transition.

7.33 The aggregation method defined by the standard formula is applied to any aggregation step that contains non-modelled parts. Aggregation steps that do not include non-modelled, standard-formula parts have the same flexibility as full internal models. The SCR emanating from those controlling units that contain standard formula components is added to the SCR from those controlling units that are fully internally modelled.

We do not agree. The aggregating approach suggested in 7.33 might be reasonable for some partial models but not necessarily others. We do not see the need to impose such restrictions on partial models as this could result in a suboptimal model. We believe that in this regard the primary focus should be on how well the partial model captures the risk profile of the undertaking.

The final sentence is a concern as by "adding" SCR components it implies that no allowance should be made for diversification between different controlling units. We presume that this unintended.

7.34 Requirements on the 'use test' for full internal models are applicable to all controlling units that are affected by partial use of internal modelling. The undertaking should document how the partial use of internal modelling improves the risk management of the corresponding business unit (the whole 'row' of the matrix)

Agreed.

Section 8: Minimum Capital Requirements

8.82 CEIOPS is currently preparing further advice on the structure of the MCR.
Supplement to CP20 S.19. The MCR is a safety net. The MCR should be an auditable, robust and simple requirement, calculated by means of a factor-based approach.

We agree that the MCR should be auditable, robust and simple. However, these requirements will not necessarily result in a MCR capable of performing its vital role in the Solvency II framework. It is essential that there is sufficient difference between SCR and MCR to allow a proportionate and escalating ladder approach to supervisory intervention. Notwithstanding the inclusion of an allowance for risk absorption from profit sharing, we are very concerned that the simplified factor based approach being proposed is insufficiently risk sensitive to allow an effective ladder of supervisory intervention approach.

Companies using approved internal / partial models will be required incur additional costs in developing, running and maintaining MCR modelling systems, which will produce capital amounts that are, by definition, worse at capturing their risk profile. All companies, but especially those with internal / partial models will have to develop management process to independently monitor the SCR and MCR as they will not necessarily be aligned. As well as incurring significant additional costs this will complicate the management of insurance undertakings.

We strongly support expressing the MCR as a % of the SCR as advocated in the CEA Working Paper on the MCR and Proposed Ladder of Intervention dated 16 October 2006, which would automatically alleviate the problems discussed above.

Supplement to CP20 S.20 There is a trade-off between simplicity and risk-sensitivity and the MCR is to be optimised for simplicity.

This is a source of concern. If the MCR is optimised for simplicity and the SCR is optimised for risk-sensitivity, the relationship between the SCR and the MCR will in many cases be far from optimal. The QIS2 results showed the problems that can arise when the MCR and SCR methodologies are not aligned. Given the importance of the MCR in protecting policyholders we think it is essentially that it is optimised to meet this purpose rather than being optimised for simplicity. Having a MCR that was insufficiently risk sensitive and potentially misaligned with the SCR, thereby not allowing an effective ladder of supervisory intervention approach, would be a major concern and weakness. As described in our response to S.19 we strongly believe that the MCR should be expressed as a % of the SCR, which would achieve the aim of simplicity and also ensure alignment with the SCR.

Supplement to CP20 S.21 In this context, the MCR should address the main risks that the insurer is exposed to. It should therefore be calculated in a modular approach, which will reflect the main risk modules of the SCR in a simplified way, so as to ensure auditability and robustness.

As described in our response to S.19 and S.20 we believe that the MCR should address all risks. Given the diverse nature of European insurers it is impossible to say which risks are necessary the most important to all. For example, credit risk and operational risk are excluded from simplified MCR approach, but could be very material for some companies. For such companies the simplified MCR could provide insufficient protection for their policyholders.

Supplement to CP20 S.22 Conceptually, it should follow the same one-year horizon as the SCR, but with a lower level of confidence, e.g. 90%, to reflect the ultimate supervisory intervention in case of its breach. The calibration should be adjusted through further quantitative impact studies taking into account as a benchmark the current Solvency I capital requirement.

Conceptually we agree that the MCR should be over the same time period as the SCR and be calibrated to a lower level of confidence. We agree that the calibration should be tested in future quantitative impact studies and would also suggest that the interaction between (simplified) MCR and SCR under different conditions should be tested.

Supplement to CP20 S.23 The modular MCR should reflect in a robust manner the risk absorption properties of future non-guaranteed bonuses included in technical provisions as well as any other significant design differences between the MCR and the standard SCR that come to light in QIS testing.

We strongly agree and expect future QIS testing to highlight other significant differences such as the need to include other risk absorbing elements such as expected profits in non-life or diversification should also be captured. We believe that expressing the MCR as a percentage of the SCR is most sensible, accurate and pragmatic approach.

Supplement to CP20 S.24 The MCR should include an absolute minimum floor.

The CEA neither understands the rationale nor the need for such a floor. Having an absolute floor, presumably a fixed Euro amount, is likely to have no impact on larger companies, but could raise the solvency requirements for smaller companies. If so, we do not understand why smaller companies should be subject to more onerous capital requirements than larger companies? If the desire for a minimum floor is in response to perceived deficiencies in the MCR we would urge CEIOPS to resolve these deficiencies directly as they are likely to apply to all companies regardless of size. We note that Solvency I includes an absolute minimum floor, the Minimum Guarantee Fund, which in practice has virtually no effect.

8.83 CEIOPS suggests that the Solvency I requirements could be used to calculate the MCR for a set transitional period to smooth the introduction of Solvency II. A transitional period would enable CEIOPS to verify the stability of the proposed MCR and avoid triggering 'ultimate supervisory action' unnecessarily.

The CEA does not believe that components of the Solvency I framework can be sensibly used within the Solvency II framework as the two are so fundamentally different. However, where Solvency II results in typically higher capital requirements we see the merit in phase this in to give companies time to adapt to the new environment. The only sensible way of achieving this is to have a less onerous calibration of the MCR, which over time is phased in to the desired long term level.

8.84 CEIOPS recommends calibrating the MCR during the transitional period such that, on average, the demand on an insurance undertaking is comparable to 50% of the solvency requirement under the current solvency system.

As per our response to 8.83 above we agree in principle that this might be sensible. However, until the methodology and calibration of the MCR is finalised we cannot comment on whether 50% is a sensible number or not. We would not agree with such a calibration if it resulted in a transitional MCR higher than the long term MCR calibration.

Section 9: Safety measures

General Comments – differences between CP19 and CP20

CEIOPS suggests that for Pillar 1 a "prudent person plus" approach should be used to determine what assets undertakings should be allowed to hold. As per 1.2 of CP19, "this implies that safety, yield and liquidity of the investment must be secured and that it must be diversified and adequately spread".

In CP20 CEIOPS argue that the "prudent person plus" requires assets covering technical provisions, MCR and SCR to be both listed (on a list of eligible asset classes) and meeting certain principles. In contrast, in CP19 CEIOPS advocate having transitional safety measures (asset limits with a revision clause) only where the risks are not sufficiently captured in the SCR.

The approach proposed in CP19 avoids double counting and ensures that a risk based economic approach for assessing the capital requirements for insurance companies, which we support because:

- Assets are not assessed in isolation both also consider the underlying risk exposures of the liabilities supported by the assets. For example long term bonds may be volatile in isolation but are a match for long term fixed liabilities.
- Similarly looking at asset limitations in isolation does not take into account the impact of risk mitigation (e.g. hedging); any risk absorption from liabilities (e.g. profit sharing)
- More risky investment strategies would be captured within the SCR calculation within a risk based economic approach and this should be acceptable provided that the company has sufficient capital to support such risks.

The CEA believes that the approach proposed in CP19, i.e. only having "safety measures" in respect of those risks not captured elsewhere is more in line with the objectives of Solvency II, e.g. using a risk based economic approach and having a competitive insurance industry. In particular, CP19 states that there will be no double counting, which the eligible list of assets approach proposed in CP20 would effectively involve. It is the CEA's belief that together, a well designed standard approach and Pillar II (for liquidity and possible undertaking specific concerns) will sufficiently capture all of the underlying risks such that neither eligible asset lists nor asset limits will be needed or justified. The Industry's preference would be to improve the Standard Approach rather than have arbitrary asset limits/lists. For example, we support the inclusion of concentration risk within the SCR.

Safety Measures – Role of safety measures

9.49 To be eligible, an asset must be both listed as eligible and meet the principles. Principles should be permanent, whereas the list of eligible asset classes should be capable of timely update.

For the reasons given in our general comments, the CEA is strongly against the concept of eligible lists of assets, which would effectively introduce double counting and could cause inefficiencies and distortions.

9.50 CEIOPS advises reducing the relative emphasis on safety measures where the SCR standard formula, as it is developed after QIS2, is improved and refined to capture more adequately risks corresponding to different asset classes. Possible enhancements include: increased granularity; a charge for concentration risk; and the incorporation of scenario tests.

Such enhancements would not address all risks and reliance on safety measures would still be necessary. There would also still be a role for Pillar 2 and Pillar 3 measures.

As described above in our general comments, the CEA would urge CEIOPS to adopt the "no double counting" approach proposed in CP19 and to improve the Standard Approach where necessary so as to remove the need for "safety measures".

Safety Measures – Eligible assets covering technical provisions, the MCR and the SCR

9.51 The same eligibility criteria and the same classes of eligible assets should be applied for the coverage of technical provisions, the MCR and the SCR.

As described in our general comments we neither see the need nor justification for eligible lists of assets.

9.52 The eligibility criteria outlined in this section applies for assets covering technical provisions, the MCR and the SCR. At any time, a sufficient amount of eligible assets should be available to cover all these liability components. CEIOPS considers that these eligibility criteria should also apply to other liabilities that, in case of insolvency, rank ahead of policyholder obligations.

As described in our general comments we neither see the need nor justification for eligible lists of assets.

9.53 Assets backing unit-linked liabilities should not be restricted - they should be invested in accordance with contractual obligations.

Agreed

9.54 The risks of assets that might become liabilities need to be addressed through the supervisory system. This can be done through a combination of: monitoring the use of such assets (whether or not they are eligible assets) with supervisory intervention when necessary; and scenario tests included within the SCR.

We do not agree. These risks (i.e. certain derivative positions) should be adequately captured in the SCR.

Safety Measures – Criteria or principles for eligible assets

9.55 Further to the advice in CfA 9.128, liquidity needs to be considered in stressed conditions and to take account of losses that might arise through the forced sale of volatile or illiquid assets.

We believe that liquidity risk is best addressed in Pillar II. In this regard we note that liquidity risk is usually far less significant for insurance undertakings than banking undertakings and is best assessed taking into account the whole picture rather than having minimum liquidity criteria for individual assets (other more liquid assets can often alleviate concerns over illiquid assets).

9.56 CEIOPS also suggests the following additional criteria or principles for asset eligibility:

- Assets should be suitable to cover liabilities and capital resources, such that covering assets are matched to the nature of the liabilities
- The economic nature of an asset is more relevant than its legal form in terms of its suitability to back liabilities and capital resources. Assets with the economic characteristics of an eligible asset class should be eligible regardless of their legal form;
- Assets that contribute to a reduction of risk or facilitate efficient portfolio management should be permitted;
- Assets used in the insurance business should be eligible
- The insurer needs to know enough about its investments to understand the risks associated with them. Transparency applies especially but not only to collective investment schemes. To the extent that the underlying assets are eligible, then the collective holding should be eligible.

We agree that the economic nature of an asset is most relevant and would note that therefore a risk based economic approach is needed, i.e. the SCR, rather than eligible asset lists and / or asset limits. As described in our general comments above we are very strongly against having eligible list of assets and / or asset limits.

9.57 Further to its advice in CfA 9.130 and 9.132, CEIOPS favours extending the current list of eligible assets to include derivative instruments where these reduce risk other than investment risk - but has concerns that, without further consideration, this extension may be premature.

We are surprised that recognition of derivative instruments is described as a possible extension given that in 5.404 CEIOPS state that (equity) derivative positions should be fully allowed for? Provided the full underlying economic exposure of all derivatives (including quasi-derivatives) is allowed for in the SCR, as we recommend, we see no reason to exclude these instruments, which can be very important risk mitigants.

9.58 On balance, CEIOPS does not consider that sufficient reason has been given to amend the existing restrictions on loans, transferable securities and debts.

We see no reason to exclude these assets given that a risk based economic approach is being used, which will fully capture their underlying economic exposure and any counterparty credit risk.

9.59 At this stage CEIOPS has not discussed the merits of commodities as part of the cover of liabilities and capital requirements in line with a diversified investment policy.

We see no reason to exclude these assets given that a risk based economic approach is being used, which will fully capture their underlying economic exposure. Furthermore, we note that commodities potentially bring diversification benefits not necessarily available elsewhere and that diversification is one of the key ways that companies can seek to reduce risk.

Section 10: Special Treatments

Supplement to CP20 S.28 CEIOPS proposes that, at this stage, harmonisation and simplicity of the standard formula should be given priority. As a consequence, cases that are specific to one single market should be dealt with via a Pillar II add-on or the use of a partial or full internal model rather than in the standard formula.

Agreed

Supplement to CP20 S.29 If CEIOPS identifies cases which influence more than one market across Europe, it will recommend an appropriate integration into the formula, by using a Level 2 procedure.

Agreed

10.7 CEIOPS recognises that supervisory benefits of internal model recognition are likely to be significant in the case of reinsurance undertakings […] the standard formula remains the default approach to the SCR for all undertakings.

The Industry agrees to this and would welcome harmonisation and convergence within the insurance and reinsurance industry.

10.8 CEIOPS continues to believe that […] simplified treatments will be of particular interest to smaller undertakings

The Industry agrees and appreciates CEIOPS recognition of the difficulties that smaller undertakings might face.

Special Treatments – SCR_{health} health underwriting risk

10.38 CEIOPS recommends the inclusion of an explicit requirement for health underwriting risk under the standard formula. This should refer to health insurance that is practised on a similar technical basis to that of life assurance. SCR_{health} should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses arising from health insurance underwriting risk that could occur during the next year.

We agree.

10.39 Health insurance underwriting risk is defined is the risk arising from the underwriting of health insurance contracts, associated with both the perils covered and the processes followed in the conduct of the business.

We agree.

10.40 SCR_{health} should be calculated using linear correlation techniques which combine the capital requirements for: expense risk; excessive loss/mortality/cancellation risk; epidemic/accumulation risk.

Given the statement in 10.38 about this business being practised on a similar technical basis to that of life assurance, we find it surprising that a different method is advocated in 10.41 to 10.51. The CEA recommends that a consistent approach is used and suggests that the one advocated for life assurance is superior. Also, where insurers have the ability to review the premium rates, e.g. following adverse experience, we recommend that this is fully allowed for as it is an important risk mitigant.
We would provide further comments after we are able to see the implementation of this advice in the QIS3 specifications.

$Health_{exp}$ expense risk

10.41 CEIOPS recommends the inclusion of an explicit requirement for expense risk under the standard formula. $Health_{exp}$ should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses that could occur during the next year because of expense risk.

Subject to our response to 10.40 we agree.

10.42 Expense risk is defined as the risk that expenses anticipated in the pricing of a product are insufficient to cover the actual costs accruing in the accounting year. All cost items of private health insurers have to be taken into account.

Our response to 10.40 is relevant here. Also, expense risk should be defined as the risk that the future expenses allowed for in the technical provisions are lower than those incurred in the future. The expenses priced into the contract will have automatically been taken into account when determining the technical provisions.

10.43 $Health_{exp}$ should be calculated by means of a factor-based approach that is based on an estimation of the standard deviation of the undertaking's expense result. (-) Factor based approach with estimation of standard dev of undertakings expense results only works if personalized is used. There have been many changes in markets (e.g. in Netherlands equalization system).

In line with our comments on the need for flexibility we would advocate that companies have the option to either use a factor approach or use a scenario approach. We note that a scenario approach is likely to result in more accurate results but that for some companies the cost of developing such systems may be unjustifiable.

10.44 The expected result concerning expense risk should be used as a 'top-level' adjustment to the SCR.

The term "top level" adjustment is not clear. The CEA would be against not fully reflecting diversification benefits.

$Health_{xs}$ excessive loss/mortality/cancellation risk

10.45 CEIOPS recommends the inclusion of an explicit requirement for excessive loss/mortality/cancellation risk under the standard formula. $Health_{xs}$ should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses that could occur during the next year because of excessive loss/mortality/cancellation risk.

Our response to 10.40 is relevant here.

The CEA notes that in combining these risks potential diversification benefits will be excluded, which needs to be reflected in the calibration of the factors.

10.46 This risk covers:

- excessive loss risk or per capita loss risk arising when actual per capita loss is greater than the loss assumed in the pricing of the product;
- mortality risk arising when the actual funds from provisions for increasing age becoming available due to death are lower than those assumed in the pricing of the product; and
- cancellation risk arising when the actual funds from provisions for increasing age becoming available due to cancellations are lower than those assumed in the pricing of the product.

The comments made in respect of 10.45 above also apply here. Also, the mortality and cancellation risks should be defined in terms of how the assumptions made in the technical provisions compare to those actually experienced. The assumptions made in the pricing will have automatically been allowed for when determining the technical provisions.

10.47 $Health_{xs}$ should be calculated by means of a factor-based approach that is based on an estimation of the standard deviation of the undertaking's $Health_{xs}$ result.

The comments made in our response to 10.45 apply here. The CEA supports the use of undertaking's own experience as this will allow the effect of reinsurance and mix of business to be taken into account.

10.48 The expected result concerning excessive loss/mortality/cancellation risk should be used as a 'top-level' adjustment to the SCR.

The term "top level" adjustment is not clear. The CEA would be against not fully reflecting diversification benefits.

$Health_{ac}$ epidemic/accumulation risk

10.49 CEIOPS recommends the inclusion of an explicit requirement for epidemic/accumulation risk under the standard formula. $Health_{ac}$ should produce capital requirements sufficient (consistent with the objectives of the SCR) to sustain losses that could occur during the next year because of epidemic/accumulation risk.

Agreed, subject to our comments in 10.40.

10.50 Epidemic/accumulation risk concerns the risks arising from the outbreaks of major epidemics (e.g., a severe outbreak of influenza). Such events typically also lead to accumulation risks, since the usual assumption of independence among persons would be nullified.

We note that health claims usually only become payable after a period of time if the person is still sufficiently ill and that influenza is unlikely to result in this and that an pandemic such as that experienced in 1918-19 resulted in high number of deaths rather than long term illness.

10.51 $Health_{ac}$ should be calculated by means of a factor-based 'market share' approach.
The same approach as used for life assurance disability should be used.

Annex A: Alternative proposal for an integrated approach to life insurance activities under the standard SCR

In general the CEA supports the modular approach; however, we recognise that it gives rise to certain difficulties, for example assessing the risk absorption of future profit sharing. The alternative integrated approach may alleviate some of these difficulties, but may introduce other difficulties. Further work is required in assessing what the advantages and disadvantages of the integrated approach are, before a final opinion can be made on the usefulness of including the integrated approach in QIS3.

In particular, there should be an assessment of the benefits that could be achieved by supplementing the modular approach with elements of the so-called integrated approach, particularly in assessing the risk absorption of future profit sharing i.e. the two approaches should not necessarily be viewed as pure alternatives.

Appendix

It is important to note that the comments in this document should be considered in the context of other publications by the CEA. These can be found under the Solvency II section of the CEA website (www.cea.assur.org) and include:

- Solvency II: Structural Issues (1 March 2005)
- Solvency II - Building Blocks for the Solvency II Project CEA Working Document in Progress (18 May 2005)
- CEA's comments on the CEIOPS' Draft Answers to the 'Second Wave' of Calls for Advice (30 September 2005)
- CEA's comments on the CEIOPS' Draft Answers to the 'Third Wave' of Calls for Advice (9 Feb 2006)
- Solutions to Major Issues for Solvency II – Joint submission by the CRO Forum and the CEA (17 February 2006)
- CEA working document on the standard approach for calculating the solvency capital requirement (22 March 2006)
- CEA document on Cost of Capital (21 April 2006)
- CEA guidance on Quantitative Impact Study 2 (15 May 2006)
- CEA's Pillar II Principles and Comments on Consultation Paper no. 13 (15 September 2006)
- Feedback on CEIOPS Consultation Paper 14 – Joint submission by the CRO Forum and CEA (22 September 2006)
- Assessing the Impact of Solvency II on the Average Level of Capital (16 October 2006)
- CEA Preliminary Feedback from QIS2 (16 October 2006)
- CEA Working Paper on the MCR and Proposed Ladder of Intervention (16 October 2006)
- CEA Working Paper on the risk measures VaR and TailVaR (7 November 2006)
- CEA Elaboration of the Total Balance Sheet Approach (January 2007)
- CEA Response to CEIOPS' CP 20 on Pillar I issues (January 2007)
- CEA Response to CEIOPS CP 15 to 19 inclusive (January 2007)

These documents together constitute a coherent package.