Summary of Comments on Consultation Paper 73 - CEIOPS-CP-73/09	**CEIOPS-SEC175/09**
CP No. 73 - L2 Advice on Calibration of the MCR	**08.04.2010**

CEIOPS would like to thank ACA , Association of British Insurers, Association of Run-Off Companies, Belgian Coordination Group Solvency II, CEA, Centre Technique des Institutions de Prévoyance (C, CRO Forum, Deloitte , DIMA, FFSA, GDV e.V., GROUPAMA, Groupe Consultatif, IUA, KPMG ELLP, Legal & General Group, Lloyd's, Munich Re, PricewaterhouseCoopers LLP, and ROAM

The numbering of the paragraphs refers to Consultation Paper No. 73 (CEIOPS-CP-73/09)

No.	**Name**	**Reference**	**Comment**	**Resolution**
1.	ACA	General Comment	We have noted a very important increase in MCR. Above all in life. We support CEA view: it will be easier to perform the MCR linear formula calibration after the results of the new calibration of the SCR standard formula become available following QIS5. For specific Unit-Linked contracts without guarantees with very high assets under management, the calibration of 0.8% seems very excessive: Companies for which "dedicated funds" are their main business will always have a maximum MCR equal to 45% of the SCR.	**Noted.** **Agreed.** See revised text. Regarding unit-linked contracts, see or response to comment 91.
2.	Association of British Insurers	General Comment	We suggest that the calibration of the MCR should be postponed until the results of the QIS5 are available. The proposed calibration charges for the non-life formula in paragraph 3.15 do not appear to be backed by evidence. We believe that these factors should be reviewed once the final SCR calibration is known. CEIOPS' proposals in 3.43 do not seem to differentiate between retail and institutional business, which would lead to significant higher capital requirements. We believe that expenses rather than assets should be used as a denominator in order to get more	**Agreed.** See revised text. Regarding 3.15, see our response to comment 42. **Disagreed.** This approach has been considered, and rejected by CEIOPS, during the development

			appropriate results.	of CP55.
3.				
4.	Belgian Coordination Group Solvency II	General Comment	Taking into account the facts that: - under QIS4 already more than 70% of the linear formula results fell outside the corridor (wider than the new proposed corridor) - we are expecting a significant increase of the SCR; it is very likely than most of the results for companies using standard formula will fall outside the corridor. Nevertheless, the use of the linear formula will make more sense for companies using an internal model for their SCR valuation.	**Noted.**
5.	CEA	General Comment	The CEA welcomes the opportunity to comment on the Consultation Paper (CP) No. 73 on Calibration of the MCR. It should be noted that the comments in this document should be considered in the context of other publications by the CEA. Also, the comments in this document should be considered as a whole, i.e. they constitute a coherent package and as such, the rejection of elements of our positions may affect the remainder of our comments. These are CEA's views at the current stage of the project. As our work develops, these views may evolve depending in particular, on other elements of the framework which are not yet fixed. Moreover, it should be noted that this consultation has been carried on an extremely short time frame which has not allowed a complete analysis of all the advice. Therefore, the following comments focus only on the main aspects of Ceiops' advice and are likely to be	**Noted.**

			subject to further elaboration in the future. Regarding the MCR linear formula calibration, the CEA asks Ceiops to re-perform it after the results of the new calibration of the SCR standard formula become available following QIS5. Disregarding the different nature of some risks, for example the significant features of health risks, will lead to the ceiling of 45% being reached very frequently, which is not in line with the declared intention of reaching the 35% target. The MCRs apply at solo level with its effect being magnified in a group structure, because there is no allowance for diversification in the MCRs, summed across all entities of the group. Therefore the cumulative increase of MCR will affect capital requirements as MCR will be wholly or largely covered by tier 1 capital. For a group sum of solo MCRs could easily exceed 50% of SCR. These considerations need to be taken into account when setting the calibration of the MCR and the limits or own funds.	**Agreed.** See revised text. **Disagreed.** Breaches of the corridor are an intended consequence of the Level 1 design: it is the function of the corridor to provide the risk-sensitivity lacking in the linear formula. Furthermore we expect that the 25% floor will also be frequently breached. **Noted.** However, following from the Level 1 text, the calibration of the MCR linear formula is not driven by group level effects.
6.	Centre Technique des Institutions de Prévoyance (C	General Comment	CTIP has no issue regarding the methods used by CEIOPS for calibrating MCR parameters. Of course the MCR parameters should undergo another revision after the SCR standard formula will be finally set; in our opinion this latter still needs work and discussions on major points.	**Noted.** **Agreed.**

7.	CRO Forum	General Comment	A. CP 73 reflects the unjustified increases in the capital charges implied by the new SCR. (priority very high). In this advice, calibrations have been adjusted in order to calculate an average MCR of 35%of SCR calculated with the standard formula, with market wide factors. CEIOPS has explicitly written that the overall SCR for property and casualty undertakings would increase by a factor of 1.65 (§3.15) and for Life undertakings by a factor of 1.75 (§3.38). As already expressed in all our responses to the 'calibration' CPs, we feel that the calibrations proposed are overly prudent (an understatement) and not inline with the spirit of the SII directive. B. Functioning of the MCR corridor is under question (priority: high) In practice for the MCR, the proposed calibrations push the MCR calculation to the top end of the corridor defeating the purpose of having a corridor in the first place, as in many cases the SCR is calculated with increased sophistication (i.e., internal models or USP). The solution achieved by CEIOPS will need careful review when the final SCR calibrations are set and in the results of QIS5 are known. There are some aspects where we can not assess the possible 'error'. CEIOPS fitting of the MCR formula is against the QIS4 data. We can not tell how sensitive this fitting is to the conditions underlying QIS4.	**Noted.** This is an SCR calibration issue. The factors have been further revised to reflect CEIOPS' final advice on the SCR. **Disagreed.** Breaches of the corridor are an intended consequence of the Level 1 design: it is the function of the corridor to provide the risk-sensitivity lacking in the linear formula. Furthermore we expect that the 25% floor will also be frequently breached. **Agreed.**

8.	DIMA	General Comment	DIMA welcomes the opportunity to comment on this paper. Comments on this paper may not necessarily have been made in conjunction with other consultation papers issued by CEIOPS. Although, CEIOPS notes that any change in the SCR standard formula will require a recalibration of the MCR, there is no clear guidance given on whether or not the MCR parameters should be recalibrated for companies which are using full or partial internal models. See comments on Para 3.44 for further information. The MCR factors are derived based on a target of 35% of the standard SCR formula. Due to economies of scale / better diversification, many - generally larger - companies using internal models are expected to have lower SCRs. So the CP73 approach of targeting 35% of the standard formula SCR is akin to targeting a far higher percentage of the (reported) SCR in practice. See comments on Para 3.4/3.5 and Para 3.44 for further information. Not enough information is provided on steps 2 or 3 of the calibration to help an external reviewer make an informed judgement on whether this calibration is fully appropriate. It would be helpful if there was more information (and perhaps specific results) provided to back up the conclusions of these steps. See comments on Para 3.37 and 3.38 for further information. DIMA believes that, for Level 2, CEIOPS should recommend that the methodology for recalibration is agreed at Level 2, but that the factors are not set at this stage. Given the uncertainty with this calibration, it would be very useful to recalibrate based on QIS5 results. It would be useful to base any future recalibration on the actual reported SCRs, which would include a mix of companies	**Noted.** **Noted.** The calibration of the MCR linear formula shall be standardised: all undertakings should use the same MCR factors. There is no recalibration for companies using internal models. **Disagreed.** The lowered SCR of large companies have been taken into account in the calibration exercise, and with heavier weights than the SCR of smaller companies. See our responses to comments 69-74. **Partially agreed.** CEIOPS agrees that the calibration of the MCR should be revised after QIS5. It is however premature to give specific advice regarding future recalibrations. CEIOPS believes

			using SCR standard formula and internal models. It would be also desirable to have at least one recalibration based on actual (say 2014) experience. Regular recalibration every 2-5 years should be considered for the Level 2 advice. More specifics should be provided to supplement paragraph 3.44. The QIS4 results showed that 12% of large undertakings and 40% of small undertakings were hit by the 20% floor. On the other hand, 34% of large undertakings and only 8% of small undertakings were hit by the 50% cap. This suggests that under the QIS4 calibration, calculated MCRs for larger undertakings were at the higher end of the corridor in general, while for smaller undertakings, calculated MCRs were at the lower end of the corridor. The revised calibration aims to fit results closer to the 35% mark. Therefore, we would expect that in general, larger undertakings will be moving down the MCR corridor while smaller companies will be moving up the MCR corridor. However, paragraph 3.37 suggests that larger undertakings were given higher weight when carrying out the recalibration than smaller undertakings which would distort this expectation somewhat. See further comments on Para 3.37. As the cap or floor are expected to bite in the majority of circumstances, it is doubtful whether the MCR linear formula (and the factors that are calibrated in CP73) adds much to the alternative of setting the MCR at a fixed percentage of SCR. CEIOPS should consider setting the MCR at a fixed 35% of SCR and, therefore, removing the MCR linear formula.	that the factors should be fixed at Level 2. Frequent recalibrations would result in an unstable regulatory environment. **Noted.** We do not fully understand the comment: we assume that giving higher weight to larger undertakings leads to a formula that is better fitted to larger companies. However, these effects will be better understood when the results of QIS5 become available. **Disagreed.** Calculating the SCR as a fixed percentage of the SCR is not in line with Level 1.
9.	FFSA	General Comment	Regarding the MCR linear formula calibration FFSA disagrees with CEIOPS approach. As stated in the comments related to the following consultation papers: underwriting (life and non life) risk module calibration, market risk module calibration, correlation	**Disagreed.** Consistency with the SCR requires that SCR calibration changes are reflected in the MCR.

			factors…,. FFSA considers that QIS4 calibration should be retained. In addition, as stated in level 1 text, CEIOPS should include taxes in the calibration of the linear formula. FFSA understands that the SCR used for the corridor formula includes FDB.	**Disagreed.** This has already been discussed under CP55. The Level 1 text explicitly allows to use only a sub-set of the variables in the linear formula. **Agreed.** Following the Level 1 text, CEIOPS is of the same understanding.
10.				
11.	GDV e.V.	General Comment	GDV recognises CEIOPS' effort regarding the implementing measures and likes to comment on this consultation paper. In general, GDV supports the detailed comment of CEA. Nevertheless, the GDV highlights the most important issues for the German market based on CEIOPS' advice in the blue boxes. It should be noted that our comments might change as our work develops. Based on our experience during the previous two consultation waves we also want to express our concerns with regard to CEIOPS decisions: - restricting the consultation period of the 3rd wave to less than 6 six weeks - splitting the advice to the EU-commission in two parts ((1) first+second wave and (2) third wave) although both parts are highly interdependent - not taking into account many comments from the industry	**Noted.**

			due to the high time pressure (first+second wave) 1. These decisions could reduce the quality of the outcome of this consultation process. Therefore we might deliver further comments after we fully reviewed the documents.	
			2. From our point of view, it could be foreseen that especially the calibration of the QIS5 will not be appropriate nor finalised when beginning in August 2010. Especially parameters have been strongly increased and do not reflect the economical view.	**Noted.** These general comments are not specifically related to CP73.
			3. Regarding the MCR linear formula calibration, the GDV asks CEIOPS to re-perform it after the results of the new calibration of the SCR standard formula become available following QIS5.	**Agreed.** See revised text.
			The new calibration leeds to factors which are higher than for the existing Solvency I rules and lead to much higher MCR than the capital requirements of Solvency I.	**Noted.** However there is also a major decrease in technical provisions relative to Solvency I, lowering the overall financial requirement.
			We do not believe that it makes sense to first not allow the calculation of the MCR as a percentage of the SCR and afterwards calibrate the linear formula by applying a calibration on 35% of the SCR. CEIOPS arguments in many paragraphs (e. g. 3.4, 3.13, 3.14, 3.22, 3.34, 3.44) are the best proof to come back to the position of the industry: the MCR must be a fixed percentage of the SCR e.g. 33%	**Disagreed.** Calculating the SCR as a fixed percentage of the SCR is not in line with Level 1.
			4. The life underwriting risk can materially depend on the relation between the asset and the liability side of the balance sheet such that the analyses conducted in section 3.3 possibly does not take into account material risk drivers. As the analyses seem to	**Noted.** After QIS5 it will be possible to repeat the calibration exercise on the basis of more

			only be based on data as at year end 2007, there might have occurred materially different results when a different year would have been considered.	recent data.
12.	GROUPAMA	General Comment	We would like to highlight the inconsistency between the Directive and the new calibration suggested by CEIOPS. The Directive states that the MCR should be based on an 85% 1-year VaR, but does not specify that the average MCR (especially based on QIS 4!) should be 35% of the SCR. The CEIOPS' proposal has no link to the Level 1 text. For those reasons, we strongly recommend that CEIOPS suggests parameters based only on an 85% Var, or, by default, stay with the QIS 4 calibration.	**Disagreed.** We see the 35% SCR target as the best reflection of the 85% VaR level within the constraints of the linear formula. We do not regard QIS4 by default as a benchmark for 85% VaR – note e.g. the lessons of the crisis that has occurred since then.
13.	Groupe Consultatif	General Comment	All parameters should not be finally fixed without testing the quantitative assessment in QIS 5. All parameters should therefore be accepted only under reserve of a later adaption (due to QIS5).	**Agreed.**
14.	KPMG ELLP	General Comment	Overly prudent calibration of MCR The Non-Life and Life linear formulae used to calculate the MCR have been re-calibrated to take into account the changes to the SCR calibration made in the second wave of consultation papers. They have both been calibrated to try to ensure that the MCR is around 35% of the SCR (the middle of the 25% - 45% corridor established in the Level 1 text): • -the life linear formula was fitted to a benchmark percentage (35%) of the SCR standard formula; • -the non-life calibration was built on the standard deviation parameters used in the premium and reserve risk sub-module of the SCR standard formula	**Noted.** This is an issue about the SCR calibration. The factors have been further revised to reflect CEIOPS' final advice on the SCR.

			Due to the dependent modelling of the MCR on the SCR, an increased SCR requirement leads to an increased MCR requirement. We believe this results in an overly prudent capital requirement, given the current proposals on the SCR calibration.	
15.	Legal & General Group	General Comment	We are pleased that the refinement of factors remains targeted at the 25%-45% corridor. We are surprised at the size of the changes, but if validated as appropriate we would not object. We would like to repeat a point we made in CP 55 that a deferred tax asset should be allowed provided that there is a realistic probability that it can be realised in say 3 years.	**Noted.** **Disagreed.** The allowance for deferred taxes has been considered, and rejected by CEIOPS, during the development of CP55.
16.	Lloyd's	General Comment	Reflecting the business written in the Lloyd's market, Lloyd's is principally concerned with the non-life linear formula and does not comment on the life linear formula. Lloyd's is concerned that the factors to be applied to technical provisions and premiums in calculating the non-life MCR have increased significantly. This will result in excessively high MCR requirements for non-life insurance undertakings. It is likely that most non-life insurance undertakings using approved internal models will have their MCR set at the top of the corridor (25% to 45% of the internal model SCR). The principal reason for the increase is the excessive recalibration of the SCR, on which we have responded in other papers.	**Noted.** **Noted.** This is an issue about the SCR calibration. The factors have been further revised to reflect CEIOPS' final advice on the SCR.
17.	Munich Re	General Comment	We fully support all of the GDV statements and would like to add	

			the following points: 1. We believe that the proposed approach to determine the MCR is not risk-sensitive although, we acknowledge that the Level 1 text does require a specific approach for determining the MCR (cf. Framework Directive Article 127). For instance, non-life CAT risk, market risk, operational risk, and counterparty default risk cannot be captured adequately such that rough simplifications have to be used (cf. paragraph 3.13). In paragraph 3.34, CEIOPS even acknowledges that at least for life risk, there is not a linear relationship between the volume measures to be used according to Article 127 1a. and the (net) SCR. But the existence of such a linear relationship should be present in order to justify the linear approach specified by the Level 1 text. Generally, we do not believe that it makes sense to first not allow the calculation of the MCR as a percentage of the SCR and afterwards calibrate the linear formula by applying a calibration on 35% of the SCR. 2. The approach in Step 1 for determining the non-life linear formula is not consistent with the standard approach for determining the SCR. In the latter, the standard deviations (correctly: the coefficients of variation) are aggregated first and then the rho-function is applied while the order is changed in the presented MCR-approach. Mathematically both approaches are not equivalent. The proposed approach satisfies the condition that the MCR calculation should be linear but there would not be obstacles do determine the non-life risk charge consistently with the (non-linear) SCR approach using the same input values. Such a procedure would enable a better interaction between the SCR and the MCR. Given the narrow confines of the Level 1 text, the non-life linear formula seems to be the best possible approach.	 **Noted.** **Disagreed.** Calculating the SCR as a fixed percentage of the SCR is not in line with Level 1. **Noted.** From the comment it is not entirely clear what alternative calibration approach is being proposed. Note also that, because of the use of the max function, the CP55 non-life formula is not strictly linear in a mathematical sense, so we do not see how an aggregate linear fitting approach could work.

			3. The life underwriting risk can materially depend on the relation between the asset and the liability side of the balance sheet such that the analyses conducted in section 3.3 possibly does not take into account material risk drivers. As the analyses seem to only be based on data as at year end 2007, there might have occurred materially different results when a different year would have been considered. All parameters should not be finally fixed without testing the quantitative assessment in QIS 5. All parameters should therefore be accepted only under reserve of a later adaption (due to QIS5). We therefore propose to allow for undertaking specific parameters and to allow for (partial) internal models for calculating the MCR as it is most likely that the standard calibration will be found not to be adequate for the undertaking specific risk profile.	**Agreed.** **Disagreed.** The calibration of the MCR linear formula shall be standardised: all undertakings should use the same MCR factors. USPs and internal models will affect the MCR via the corridor.
18.	PricewaterhouseCoopers LLP	General Comment	The provided background on the derivation of and rationale behind the linear parameters is much appreciated. We would be interested to see the justification of the linear factors that have remained unchanged since QIS4 (unit-linked and non-participating business, capital at risk). Especially since calibration showed an unstable behaviour for these factors in a linear system.	**Noted.** **Noted.** The origin of these factors is a calibration study on a large local market, relying partly on linear fitting and partly on expert judgement (where there were insufficient data for fitting). Now CEIOPS has repeated the fitting study on the whole QIS4 database, but this has not always lead to more conclusive results.
19.	ROAM	General	ROAM has one major comment: The MCR depends on the	**Noted.** This is an issue about the

		Comment	assessment of the SCR because it must be situated between 25 % and 45 % of the SCR. As the SCR calibration in CEIOPS ‘ draft advice is too high and unstable as based on insufficient data and some flawed methodologies, (see our comments to CP71 and CP72 relative to the SCR non-life and health underwriting risk calibration), the MCR calibration is consequently unstable and too high too.	SCR calibration. The factors have been further revised to reflect CEIOPS’ final advice on the SCR.
20.				
21.	Association of Run-Off Companies	2.2.	It is worth reiterating our comment (CP55 2.2) that it is currently unclear what sanctions, if any, will apply to run-off companies who have already had their licence to write business withdrawn.	**Noted.** This is outside the scope of this advice.
22.	ACA	3.1.	The narrowing of the corridor implies that the MCR will increase 25 % for those enterprises that work on the lower limitation value. This seems to be exaggerated.	**Disagreed.** The 25% floor is fixed in the Level 1 text.
23.				
24.	DIMA	3.4.	This comment relates to Para 3.4 and 3.5. CEIOPS has advised setting the MCR calibration such that an MCR of 35% of standard formula SCR is targeted. This 35% factor is based on the relationship between 85% VAR and 99.5% VAR, and is broadly consistent with the range of distribution assumptions used in the SCR standard formula. Due to economies of scale / better diversification, many - generally larger - companies using internal models are expected to have lower SCRs. So the CP73 approach of targeting 35% of the standard formula is akin to targeting a far higher percentage of the (reported) SCR in practice.	**Noted.** We however note the following: if diversification is working as advertised, then the overall loss distribution supposedly approaches a normal distribution, as opposed to the (e.g. lognormal) assumptions behind the 35% ratio. For such a normal distribution, the ratio of 85% to 99.5% VaR is actually close to 45%. Therefore a higher MCR to SCR ratio for well-diversified firms may even correctly reflect 85% VaR.

			DIMA suggests a revised calibration approach which looks at the relationship between 85% VAR and 99.5% VAR based on a weighted average of standard formulae and internal model SCR results as part of QIS5.	**Partially agreed.** CEIOPS agrees to revisit the MCR calibration after QIS5. However the proposal would entail the calculation of 85% VaR for all companies in QIS5, which may not be feasible.
25.	Munich Re	3.4.	We do not believe that it makes sense to first not allow the calculation of the MCR as a percentage of the SCR and afterwards calibrate the linear formula by applying a calibration on 35% of the SCR.	**Disagreed.** Calculating the SCR as a fixed percentage of the SCR is not in line with Level 1.
26.	ROAM	3.6.	As the calibration of the MCR linear formula is closely linked to the calibration of the SCR standard formula, it means that when there is a significant change in the calibration of the SCR standard formula, the MCR linear formula should also be recalibrated. Our general comments to the SCR calibration are therefore also relevant for the MCR. An erroneous SCR calibration will also result in an erroneous MCR.	**Noted.**
27.	IUA	3.7.	We agree that it will be necessary to revise the calibrations of the MCR in line with revised SCR standard formula calibrations. As discussed elsewhere, we hold concerns that the calibrations of the Standard Formula are excessively prudent. It therefore follows that the MCR calibration will also be excessively prudent, if 35% of the SCR under the new calibrations is used as the target.	**Noted.** This is an issue about the SCR calibration. The factors have been further revised to reflect CEIOPS' final advice on the SCR.
28.	CRO Forum	3.8.	CRO Forum welcomes the narrowed corridor as now in the Directive, even though it has expressed the preference for a fixed percentage of SCR. Given the large number of life insurers for which the calibration of MCR falls outside of the corridor, it notes that in effect these would have either a risk sensitive MCR of 25%	**Noted.** The corridor is specified in the Level 1 text.

			of SCR or 45% of SCR. These levels are significantly different and should trigger questions around level playing field and an effective ladder of intervention providing policyholder with an adequate level of protection.	
29.	PricewaterhouseCoopers LLP	3.8.	The narrowed down corridor implies that the MCR for many companies will actually be based on the quarterly SCR calculation. Albeit out of scope for this Advice, guidance on how quarterly calculations of the SCR are "sufficiently sophisticated" (mentioned in CP55 paragraph 3.52) will be even more welcomed.	**Noted.** This is outside the scope of this advice.
30.	ACA	3.9.	Apparently there is an editorial error in twice mentioning the technical provisions (line 3).	**Agreed.** Thanks for observing this.
31.				
32.				
33.	ACA	3.10.	It is not all self-evident that an approach which works well for P&C-insurance can successfully be transferred to other branches.	**Partially agreed.** In the QIS4 report's terminology, "property and casualty" had a broader meaning, including effectively all non-life undertakings except reinsurers and captives.
34.				
35.	PricewaterhouseCoopers LLP	3.10.	The satisfactory results for the MCR calibration for property and casualty undertakings do not come as a surprise, as the derivation of both the standard formula for the non-life underwriting SCR and the MCR is alike apart from the chosen quantile of the standard normal distribution. We would be interested to see the results of a linear MCR compared to a SCR determined by an internal model.	**Noted.** For a comparison with internal models, please refer to the QIS4 summary report. We note however that fully validated internal models might give a different comparison than those under QIS4 (or QIS5).
36.	Deloitte	3.11.	We believe that this approach for non-life is straight forward and appears to be readily acceptable. We question what factors will be	**Noted.** The calibration of the MCR linear formula shall be

			applied in the case of an entity that uses Undertaking Specific Parameters (USPs), a partial internal model or a full internal model.	standardised: all undertakings should use the same MCR factors.
37.	CEA	3.12.	In the determination of SCR, the standard deviations are aggregated first and then the rho-function is applied while the order is changed in the presented MCR-approach. Mathematically the two approaches are not equivalent. The proposed approach satisfies the condition that the MCR calculation should be linear but there would be no obstacles to determine the non-life risk charge consistently with the (non-linear) SCR approach using the same input values. Such a procedure would enable a better interaction between the SCR and the MCR. Given the narrow confines of the Level 1 text, the non-life linear formula seems to be the best possible approach.	**Noted.** From the comment it is not entirely clear what alternative calibration approach is being proposed. Note also that, because of the use of the max function, the CP55 non-life formula is not strictly linear in a mathematical sense, so we do not see how an aggregate linear fitting approach could work in this case.
38.	Association of British Insurers	3.14.	We agree that the MCR should reflect all risks and that an appropriate scaling is required to reflect this, hence the 18 %. We would also expect this factor to be further fine tuned going forward when the final SCR calibration is determined: MCR factors should be recalibrated (reiterating the step 1 and 2 process) for the already stated changes when their impact is better understood through future QIS studies as they are now based on the assumed impact on the SCR of the proposed changes.	**Noted.** **Agreed.**
39.	CEA	3.14.	We agree that the MCR should reflect all risks and that an appropriate scaling is required to reflect this, hence the 18 %. We would also expect this factor to be further fine tuned going forward when the final SCR calibration is determined: MCR factors should be recalibrated (reiterating the step 1 and 2 process) for the already stated changes when their impact is better understood through future QIS studies as they are now based on the assumed	**Noted.** **Agreed.**

			impact on the SCR of the proposed changes.	
40.	Groupe Consultatif	3.14.	The strengthening of the MCR is partly based on the assumed impact of the anticipated changes to the SCR. We would expect the strengthening to be refined once the actual impact is known (following QIS5) of these anticipated changes	**Agreed.**
41.	ACA	3.15.	The recalculation of the factor K for all non-life insurers isn't clear at all. Maybe the factors 1,65 and 1,35 were interchanged in the formula determining K.	**Disagreed.** The factors affecting K were taken into account in the correct order. Note however that the factors have been revised to reflect CEIOPS' final advice on the SCR.
42.	Association of British Insurers	3.15.	The factor of 1.65 is not justified by evidence and it would significantly increase the capital charges. QIS5 appears to be a reasonable point for a recalibration of the proposed factors.	**Partially agreed.** Regarding the origin of the adjustment factor, please refer to CEIOPS' Impact Assessment paper. The factor have been revised to reflect CEIOPS' final advice on the SCR. **Agreed.**
43.				
44.	CEA	3.15.	The additional 22 % increase resulting from the factors 1.35 and 1.65 is speculative on the assumption that the SCR will be strengthened. We would like to understand where the factor 1.65 originates as there were different ways to determine the non-life CAT risk. Was the non-life CAT risk left unchanged for determining this factor or was it scaled according to the calibration changes suggested by Ceiops in CP71?	**Noted.** **Agreed.** The factor have been revised to reflect CEIOPS' final advice on the SCR. Regarding the origin of the adjustment factor, please refer to CEIOPS' Impact Assessment paper. We note that

			These factors together with the 18 % in section 3.14 should be re-visited once the impact of the final SCR calibration is fully known. Also refer to 3.14 wrt the recalibration.	CAT risk was assumed to be unchanged. **Agreed.**
45.	CRO Forum	3.15.	The adjustment factor that results from the re-calibration of the SCR for the non-life business (x 1.65) makes clear, also at the MCR level, that the increases in capital charges are very significant and require well-founded explanations of the causes of these changes.	**Noted.** This is an issue about the SCR calibration. The factors have been further revised to reflect CEIOPS' final advice on the SCR.
46.	Deloitte	3.15.	This suggests that the overall result of using the standard formula has increased significantly and we expect many companies to find this level of capital charge so high that they feel compelled to use either a partial or full internal model.	**Noted.** This is an issue about the SCR calibration. The factors have been further revised to reflect CEIOPS' final advice on the SCR.
47.				
48.	Groupe Consultatif	3.15.	Refer to 3.14	See 3.14
49.	Munich Re	3.15.	The strengthening of the MCR is partly based on the assumed impact of the anticipated changes to the SCR. We would expect the strengthening to be refined once the actual impact is known (following QIS5) of these anticipated changes. We would like to understand where the factor 1.65 originates as there were different ways to determine the non-life CAT risk. Was the non-life CAT risk left unchanged for determining this factor or was it scaled according to the calibration changes suggested by	**Agreed.** **Agreed.** Regarding the origin of the adjustment factor, please refer to CEIOPS' Impact Assessment paper. We note that in CP73, CAT risk was left

			CEIOPS in CP71?	unchanged.
50.	ROAM	3.15.	ROAM would like to have precisions on the method and the data from which the factor K was estimated. In particular, which databases were used to determine that, further to the adjustments proposed in the third wave, the non-life underwriting risk will increase 1.35 and the total SCR for non-life insurers by a factor of 1.65.	**Agreed.** Regarding the origin of the adjustment factor, please refer to CEIOPS' Impact Assessment paper.
51.	Deloitte	3.16.	Again, what factors will apply for entities using USPs, partial or full internal models? For example, in the UK non-life market on average, this suggests a ratio of SCR result to ICA of nearly 250% meaning that MCR using standard factors could be at around the level of ICA. Will MCR necessarily be based upon the Standard Factors? If it is then, based upon the above, we would expect the 45% corridor to apply to many entities that are using the partial or full internal model route – meaning that the 35% target could rarely apply to them.	**Noted.** The calibration of the MCR linear formula shall be standardised: all undertakings should use the same MCR factors.
52.	Lloyd's	3.16.	The factors to be applied to technical provisions and premiums in calculating the non-life MCR have been increased significantly, consistent with the increase in the calibration applied to the SCR standard formula. This has resulted in substantial increases, in the case of non-proportional reinsurance more than double the factors applied in QIS4. We consider that the increases are not justified on an economic basis, and will result in an excessively high MCR requirement, and will mean it is likely that most, if not all, non-life insurance undertakings using an approved internal model will have their MCR set at the top of the corridor compared with the internal model	**Noted.** This is an issue about the SCR calibration. The factors have been further revised to reflect CEIOPS' final advice on the SCR.

			SCR. The underlying issue relates to, in our view, the excessive recalibration of the SCR, on which we have responded in other papers.	
53.	ROAM	3.16.	An error appears in the coefficients table of b, the coefficients bA.14 and bA.15 step 2 are equal in 11 % and 14 % respectively instead of 12 % and 16 %.	**Agreed.** Thanks for observing this. The factors have been further revised to reflect CEIOPS' final advice on the SCR.
54.	IUA	3.17.	As noted above these MCR factors are dependant on the SCR standard formula calibrations, if those calibrations are excessively prudent, then the MCR calibrations will also be excessive. If the SCR is excessively calibrated, and firms who use Undertaking Specific Parameters, or partial or full internal models obtain capital requirements lower than the standard formula SCR, we are concerned that such firms will often have an MCR that is 45% of the SCR. Because of the way the MCR has been calibrated we do not believe it was the intention of the "corridor approach" to consistently rely on the 45% boundary, because the SCR standard formula acts as a "bad fit" for some firms, such as those operating in the London Market. We reiterate that we believe the standard formula calibration needs to be revisited, and the MCR calibration may therefore also need to be revisited.	**Noted.** This is an issue about the SCR calibration. The factors have been further revised to reflect CEIOPS' final advice on the SCR.
55.	CEA	3.19.	Under this paragraph we understand that the heterogeneous factors death/savings and survivorship/morbidity are combined into one single factor. The impact of this simplification on the MCR calibration is not known. The CEA suggests Ceiops to evaluate the results of QIS5 prior to a final calibration of the MCR, to assess the	**Partially agreed.** CEIOPS agrees that QIS5 should be evaluated prior to a final calibration. It is however unsure that a more granular segmentation would give

			impact of this simplification.	a significantly better fit.
56.	ACA	3.20.	We support CEA view: Calibration of MCR has to be in line with SCR calibration. The calibration of the MCR is based on the assumption that 35 % of the SCR is a good proxy for the 85% VaR confidence level with the SCR based on QIS4 data. Given anticipated changes to the SCR the calibration is adjusted (refer to 3.38) with 75 %. It is not clear what the ultimate impact of the proposed changes in the calibration of the SCR will have on companies' results. Therefore we advise checking that this calibration, including the 75 % mark-up, is still appropriate based on QIS5 results. Further, we would advise CEIOPS to put in place a mechanism to track the validity of the calibration under changing (economic) circumstances and if necessary to adjust the factors.	**Noted.** **Partially agreed.** CEIOPS agrees that QIS5 should be evaluated prior to a final calibration. It is however premature to give specific advice regarding future recalibrations.
57.	Association of British Insurers	3.20.	We think CEIOPS' linear regression targeting the 35% of SCR is a reasonable approach and we can be supportive of this approach. However, we agree that this calibration is based on assumptions of how the SCR will react compared to QIS4 but it is not clear that this takes into account the revisions to technical provisions and own funds, nor how all these numbers will react under different economic scenarios. Recalibration after QIS5 appears to be the most appropriate way forward.	**Agreed.**
58.	CEA	3.20.	The calibration of the MCR is based on the assumption that 35 % of the SCR is a good proxy for the 85% VaR confidence level with the SCR based on QIS4 data. Given anticipated changes to the SCR the calibration is adjusted (refer to 3.38) with 75 %. It is not clear what the ultimate impact of the proposed changes in the calibration of the SCR will have on companies' results. Therefore we advise checking that this calibration, including the 75 % mark-up, is still	**Partially agreed.** CEIOPS agrees that QIS5 should be evaluated prior to a final calibration. It is however premature to give specific advice regarding future recalibrations.

			appropriate based on QIS5 results. Further, we would advise Ceiops to put in place a mechanism to track the validity of the calibration under changing (economic) circumstances and if necessary to adjust the factors. We believe that conducting the same analyses as in CP75 on year end 2008 data would lead to significantly different results such that the presented calibration should not be considered as adequate independently of the year considered.	
59.	Groupe Consultatif	3.20.	Refer to 3.14	See 3.14
60.	Munich Re	3.20.	Besides our comment on 3.4 that also applies here, we think that the calibration on values that were based on QIS4 data might not be adequate. We believe that conducting the same analyses as in CP75 on year end 2008 data would lead to significantly different results such that the presented calibration should not be considered as adequate independently of the year considered.	**Noted.** On the basis of QIS5, we will be able to take into account more recent data. In the end however the factors will need to be fixed.
61.	PricewaterhouseCoopers LLP	3.30.	We would be interested to see the basis on which the data of the undertakings excluded in the second iteration was deemed unreliable.	**Disagreed.** It was left to the judgement of national QIS analysts to consider individual cases – we cannot include such company-specific detail in CEIOPS' advice. Also, there is a misunderstanding in the comment: this affected both iterations.
62.	CEA	3.32.	We ask Ceiops to explain why the results were unstable and more generally to explain to content of study.	**Partially agreed.** Reformulated this paragraph for more clarity.
63.	Groupe Consultatif	3.32.	It is not possible to consider this paragraph without more transparency of the underlying work.	**Partially agreed.** See above.

64.	CEA	3.34.	As stated in our comments to 3.20, the calibration based on QIS4 data will very likely not fit the 25%-45% corridor, because if the capital market moves so does the SCR and the corridor in the MCR calculation.	**Noted.**
65.	CRO Forum	3.34.	For non-participating policies we have a(c,4)=3.2% and a capital charge a(c,4)=0.14%. From QIS4 results we know that the SCR life is usually (in several countries) lower than the Solvency I margin. Given that the MCR is a fraction of the SCR and that it is capped at 45% of the SCR, it turns out that in most cases we will have an MCR fixed at the cap. Given the current formula for the MCR of the participating contracts we have that (even without considering the 0.14% capital charge), if the Technical Provision of the discretionary benefit component is less than 22% of total Technical Provision (which is usually the case), then the MCR of a participating contract is higher than the one of a non-participating contract. This result seems therefore to discriminate without reasons the participating vis-a-vis the non-participating contracts.	**Partially agreed.** It is not possible, within the constraints of a simple segmentation, to always properly reflect the risks of all classes across all local markets. However, the the non-participatipating factor has been reconsidered to narrow the gap between the two classes.
66.	Groupe Consultatif	3.34.	With such a large proportion of results falling outside the corridor the linear fitting does not make much sense. A pure 35% SCR seems more adequate.	**Disagreed.** Calculating the SCR as a fixed percentage of the SCR is not in line with Level 1.
67.	Munich Re	3.34.	CEIOPS even acknowledges that at least for life risk, there is not a linear relationship between the volume measures to be used according to Article 127 1a. and the (net) SCR. But the existence of such a linear relationship should be present in order to justify the linear approach specified by the Level 1 text. Of course with the new calibration the 2007 QIS4 data now fit in the 25% - 45% corridor, but for all future years this will very likely not be the case, because if the capital market moves so does the SCR and corridor in the MCR calculation (cf. our comment to 3.20).	**Noted.**

68.	DIMA	3.36.	The result of step 1 was to give more weight to "participating guaranteed" technical provisions relative to, say, "unit-linked guaranteed" technical provisions in the make-up of the linear MCR. The only justification for this is that the results of the linear regression with respect to the former variable "showed a strong linear relationship", while the results with respect to the later variable did not. Given the QIS4 factors were informed by expert judgement (including the relativity of each factor), it would have been useful if CEIOPS had commented on the justification for giving the higher relative weight to the "participating guaranteed" factor here.	**Noted.** The total risk charge for the participating contracts segment is the combination of the positive weight for guaranteed benefits and the negative weight for discretionary benefits. Therefore a direct comparison between the C.1.1 and the C.2.2 factors (as in the comment) cannot be drawn.
69.	DIMA	3.37.	Step 2 – Removing bias from the weighted average It would be helpful if CEIOPS provided further info on this paragraph. The weighted averages of the linear formula to SCR ratio were calculated for each country. The weighting used here was not specified. The weighted average of the country weighted averages was calculated (where countries were weighted according to the number of relevant undertakings in the QIS4 sample). This suggests that larger undertakings and also countries with the highest number of QIS4 participants had a bigger relative effect on the result. We are told that the result of the averaging was an adjustment of 0.91 to the initial calibration. We would like some more information on how the factor of 0.91 was derived (e.g. how weights within each country were determined).	**Agreed.** Clarification was added. **Noted.** The origin of the factor is explained in the text.
70.	Association	3.38.	The proposed adjustment factor of 1.75 does not appear to be	**Partially agreed.** Regarding the

	of British Insurers		backed by evidence and therefore not appropriate. This factor should be revisited once the QIS5 data is available.	origin of the adjustment factor, please refer to CEIOPS' Impact Assessment paper. Revised factors have been lowered to reflect CEIOPS' final advice.
71.				
72.	CEA	3.38.	The 1.75 adjustment is quite speculative as no data on new calibration effects has been acquired. These parameters should be revisited once the real impact on the SCR is more clearly known. Any change in the final SCR calibration should be reflected in this factor.	**Partially agreed.** CEIOPS suggests to re-examine the calibration after QIS5. Regarding the origin of the adjustment factor, please refer to CEIOPS' Impact Assessment paper.
73.	CRO Forum	3.38.	The adjustment factor that results from the re-calibration of the SCR for the life business (x 1.75) makes clear, also at the MCR level, that the increases in capital charges are very significant and require well-founded explanations of the causes of these changes.	**Noted.** This is an issue about the SCR calibration. Revised factors have been lowered to reflect CEIOPS' final advice.
74.	DIMA	3.38.	Step 3 – Adjusting for changes in SCR calibration The MCR formula was firstly recalibrated in light of QIS4 results (Steps 1 and 2). Following this, a single-factor adjustment of 1.75 was applied to each factor to adjust the revised formula in light of changes made to the SCR standard formula (Step 3). Only two of the factors actually increased by 1.75 exactly. The range of increases was between 1.65 and 1.78 (difference is probably due to rounding to one decimal place). We are told that the factor of 1.75 took into account the following: ☐ the average relative weight (weight not specified) of each sub-module in QIS4 (of SCR presumably); ☐ the estimated average change of each sub-module relative	**Agreed.** We see no problem with rounding. We clarified in the text that rounding was applied. **Partially agreed.** Regarding the origin of the adjustment factor, please refer to CEIOPS' Impact Assessment paper. QIS5 will provide a more complete impact

			to QIS4; ☐ the revised correlation parameters. It would be helpful if there were more numbers provided to back this result up. Clearer justification for the increase of 1.79 to the with profits floor (1.4% to 2.5%) would be welcomed.	assessment e; therefore we prefer not to go into the full detail of this interim exercise. The with-profit floor has been increased by the same adjustment factor as the other parameters.
75.	Groupe Consultatif	3.38.	If the original 1.5% WPfloor is an expert judgement and there evidently is no strong linear relationship between the 99.5 and the 85 confidence level, it is not justified that the adjustment factor of 1.75 should include this parameter.	**Disagreed.** The with-profit floor parameter has been included to keep the with-profit charge in a reasonable range for those countries where, due to the specificities of the profit sharing regime, the gross approach does not work well. The choice of the parameter is close to the net fitting result. Clarification has been added to text.
76.	Munich Re	3.38.	If the original 1.5% WPfloor is an expert judgement and there evidently is no strong linear relationship between the 99.5 and the 85 confidence level, it is not justified that the adjustment factor of 1.75 should include this parameter.	**Disagreed.** See the above comment.
77.	Association of British Insurers	3.39.	The resulting factors do not appear to be fully in line with risks inherent within the product grouping. It may not be reasonable for unit-linked policies with guarantees to have a lower capital requirement than a participating policy. This is especially true in extremes such as rich variable annuity guarantees versus a standard with-profit whole life policy.	**Partially agreed.** It is not possible, within the constraints of a simple segmentation, to always properly reflect the risks of all classes across all local markets. Please note also that the industry did not prefer a more granular

			In addition, participating policies with little chance of receiving future discretionary benefits (e.g in the case of a low interest rate environment) are confronted with a 7.7 % charge whereas policies without participation rights only attract 3.2 %. This may result in counterintuitive MCR requirements for different products depending on the economic environment. We also see similar discrepancies between MCR requirements with regards to unit-linked products with guarantees, such as variable annuities. These policies contain much more risk than standard non-participating policies; however, they have a lower capital requirement. Whilst to some extend the 25%-45% corridor mitigates this effect, we believe further work is needed.	standardised segmentation of life technical provisions than is now used in the linear formula. The comment does not offer an alternative calibration proposal either. However, CEIOPS reconsidered the setting of the non-participatipating factor to narrow the gap between the participating and non-participating charge.
78.	CEA	3.39.	The resulting factors do not appear to be fully in line with risks inherent within the product grouping. It may not be reasonable for unit-linked policies with guarantees to have a lower capital requirement than a participating policy. This is especially true in extremes such as rich variable annuity guarantees versus a standard with-profit whole life policy. In addition, participating policies with little chance of receiving future discretionary benefits (e.g in the case of a low interest rate environment) are confronted with a 7.7 % charge whereas policies without participation rights only attract 3.2 %. This may result in counterintuitive MCR requirements for different products depending on the economic environment. We also see similar discrepancies between MCR requirements with regards to unit-linked products with guarantees, such as variable annuities. These policies contain much more risk than standard non-participating policies; however, they have a lower capital requirement.	**Partially agreed.** See above. **Disagreed.** CEIOPS does not

			There is no class for non-discretionary profit sharing within the policy classes. For example in The Netherlands U-yield formulas are used for profit sharing; however, the formula is stipulated by the regulator. These policies have risk profiles which are completely different than standard profit-sharing policies and are quite common. We would like to query Ceiops whether a separate policy class can be created for policies with non-discretionary profit sharing.	propose a new segment to capture country-specific classes. Please also note that, according to CEIOPS advice on the Best Estimate, "future discretionary benefits" should also include "conditional discretionary benefits" whose definition already extends to the features referred to in the comment.
79.	Groupe Consultatif	3.39.	The resulting factors do not appear to be fully in line with risks inherent within the product grouping. It may not always be reasonable for unit-linked policies with guarantees to have a lower capital requirement than a participating policy. In addition, participating policies with little chance of receiving future discretionary benefits (e.g in the case of a low interest rate environment) are confronted with a 7.7 % charge whereas policies without participation rights only attract 3.2 %. This may result in counterintuitive MCR requirements for different products depending on the economic environment. It is from the set up not clear how one should treat non-discretionary profit sharing (eg PS based to external interest benchmarks): the risk profile and risk mitigating impact will very likely be substantially different from discretionary profit sharing.	**Partially agreed.** See above. **Disagreed.** See above.
80.	Munich Re	3.39.	The resulting factors do not appear to be fully in line with risks inherent within the product grouping. It may not always be reasonable for unit-linked policies with guarantees to have a lower capital requirement than a participating policy. In addition, participating policies with little chance of receiving	**Partially agreed.** See above.

			future discretionary benefits (e.g in the case of a low interest rate environment) are confronted with a 7.7 % charge whereas policies without participation rights only attract 3.2 %. This may result in counterintuitive MCR requirements for different products depending on the economic environment. It is from the set up not clear how one should treat non-discretionary profit sharing (eg PS based to external interest benchmarks): the risk profile and risk mitigating impact will very likely be substantially different from discretionary profit sharing.	**Disagreed.** See above.
81.	CEA	3.40.	We believe that a recalibration of the MCR due to changes in the calibration of the SCR is in principle meaningful. The present calibration likely significantly depends on the economic environment at year end 2007 that is likely not representative for all other years (especially the results should materially differ if calibrated on year end 2008 results). Thus, recalibration of the MCR due to changes of the calibration of the SCR might be more impacted by the economic environment of the year of the recalibration (as we do not interpret this paragraph in the direction that all future recalibration would be based on QIS4 results). Maybe, a yearly recalibration might be advisable although laborious.	**Noted.**
82.	Munich Re	3.40.	With such a large proportion of results falling outside the corridor the linear fitting does not make much sense. A pure 35% SCR seems more adequate. We believe that a recalibration of the MCR due to changes in the calibration of the SCR is in principle meaningful. The present calibration likely significantly depends on the economic environment at year end 2007 that is likely not representative for all other years (especially the results should be materially differ if calibrated on year end 2008 results). Thus, recalibration of the MCR due to changes of the calibration of the SCR might be more	**Disagreed.** Calculating the SCR as a fixed percentage of the SCR is not in line with Level 1. **Noted.**

			impacted by the economic environment of the year of the recalibration (as we do not interpret this paragraph in the direction that all future recalibration would be based on QIS4 results). Maybe, a yearly recalibration might be advisable although laborious.	
83.	Legal & General Group	3.41.	This section confirms that the CP is intended to further refine that set out in CP 55. This is a reasonable starting point and we would only reference our comments on CP 55 that a deferred tax asset should be allowed provided that there is a realistic view that it can be realised in sensible timeframe (say 3 years)	**Noted.** **Disagreed.** The allowance for deferred taxes has been considered, and rejected by CEIOPS, during the development of CP55.
84.	Association of Run-Off Companies	3.42.	The TP factors are significantly higher than those used in QIS 4. This may put pressure on companies (especially those in run-off) to set reserves at a lower point within an actuarial range.	**Noted.**
85.				
86.	CEA	3.42.	Please see comments 3.9, 3.12, 3.14 and 3.15 The use of the same factors for "C – Life activities practised on a life technical basis" and "B – Non-life activities technically similar to life" is not fully justified. Health insurance STL offers lower guarantees on the technical provisions; for example there is only a short term guarantee on the interest rate on the technical provisions compared to the lifelong guarantee in life insurance. Therefore, the factor should be substantially reduced. However, the technical provisions reflect only the market risk of a Health insurance STL. To capture the underwriting risk a linear term proportional to the premiums or claim expenses could be added.	**Noted.** **Disagreed.** This issue has been considered, and rejected by CEIOPS, during the development of CP55.

87.	Legal & General Group	3.42.	We note that for non life the MCR factors have increased by some 70% for technical provisions and 80% for premiums. These are potentially more than refining.	**Noted.** The MCR factors are highly dependent on SCR calibrations.
88.	Lloyd's	3.42.	The factors to be applied to technical provisions and premiums in calculating the non-life MCR have been increased significantly, consistent with the increase in the calibration applied to the SCR standard formula. This has resulted in substantial increases, in the case of non-proportional reinsurance more than double the factors applied in QIS4. We consider that the increases are not justified on an economic basis, and will result in an excessively high MCR requirement, and will mean that it is likely that most if not all non-life insurance undertakings using an approved internal model, will have their MCR set at the top of the corridor compared with the internal model SCR. The underlying issue relates to, in our view, the excessive recalibration of the SCR, on which we have responded in other papers.	**Noted.** This is an issue about the SCR calibration. Revised factors have been lowered to reflect CEIOPS' final advice.
89.	Munich Re	3.42.	The use of the same factors for "C – Life activities practised on a life technical basis" and "B – Non-life activities technically similar to life" is not justified. Health insurance STL offers less guaranties on the technical provisions, for example there is only a short term guaranty on the interest rate on the technical provisions compared to the life long guaranty in life insurance. Therefore, the factor should be substantially reduced. However, the technical provisions reflect only the market risk of an Health insurance STL. To capture the underwriting risk a linear term proportional to the premiums or claim expenses should be added. The life technical provision factors are increased very strongly.	**Disagreed.** This issue has been considered, and rejected by CEIOPS, during the development of CP55. **Noted.** The MCR factors are

			Especially in adverse capital market situations with few discretionary benefits the MCR will be very high because of the strongly increased factor for participating contracts. Deferred tax liabilities should be considered. By not taking deferred tax liabilities (DTL) into account in the MCR-calculation, there would be an inconsistency between the SCR- and the MCR-calculation, leading to higher MCRs (compared to a MCR-calculation being consistent with the SCR-calculation by taking DTL into account) and therefore a higher chance of the MCR being equal to 45% of the SCR. The volume measure of the WPfloor is missing. It seems to be outside the level 1 text (acc. To art. 127.1.c cf 2.3) to introduce an absolute floor.	highly dependent on SCR calibrations. **Disagreed.** The allowance for deferred taxes has been considered, and rejected by CEIOPS, during the development of CP55. **Partially agreed.** The volume measure has been clarified. The with-profit floor parameter is necessary to keep the with-profit charge in a reasonable range for those countries where, due to the specificities of the profit sharing regime, the gross approach does not work well.
90.	ACA	3.43.	We support CEA view that some class will not be calibrated correctly. In Luxembourg, specific Unit-Linked contracts without guarantees: “dedicated funds” where assets under management are very high compared to the margin and the cost linked will be extremely impacted by the factor 0.8%. As SCR is based on shock based on the Non-Unit Reserve and never on the total asset under management, companies for which “dedicated funds” are their main business will always have a maximum MCR equal to 45% of the SCR	**Noted.** CEIOPS does not propose a new segment to capture country-specific classes.

91.	Association of British Insurers	3.43.	We believe that the factor of 0.8% for unit-linked contracts without guarantees is not appropriate. As an example, for a life company would be as following: Assets under Management £70 bn MCR based on 0.8% formula £560m Current requirement under Solveny I £50m The general case can be seen for Pension Investment Management companies as follows. Under Solvency I, 1 25% of a years admin expenses are to be set aside. These will vary by company but say they were 8 bps of assets under management. Thus under Solvency I 2 bps need to be put aside. Under the new proposals 80 bps need to be put aside, i.e. 40 times as much. The proposals do not seem to differentiate between retail and institutional business. We believe that expenses rather than assets should be used as a denominator for unit-linked contracts in order to get more appropriate results. The 0.14% for capital at risk was derived from SCRs with scaling to the CP49 proposals including 2.5 per mille for life CAT. It is now out of line with the 1.5 per mille finally recommended by CEIOPS and should be revised	**Partially agreed.** It is not possible, within the constraints of a simple segmentation, to always properly reflect the risks of all classes across all local markets. The comment does not offer an alternative calibration proposal. However, revised factors have been lowered to reflect CEIOPS' final advice. **Disagreed.** This issue has been considered, and rejected by CEIOPS, during the development of CP55. **Agreed.** Revised factors have been lowered to reflect CEIOPS' final advice.
92.	CEA	3.43.	See comments 3.19, 3.20, 3.38 and 3.39. The 0.14% for capital at risk was derived from SCRs with scaling to the CP49 proposals including 2.5 per mille for life CAT. It is now out of line with the 1.5 per mille finally recommended by Ceiops to	See above. **Agreed.** Revised factors have been lowered to reflect CEIOPS'

			the Commission and should be revised. The increase in life technical provision and capital-at-risk factors is mostly driven by the adjustment of changes in the SCR calibration (see 3.38). We have already commented to CP49 that the proposed changes of the SCR calibration overstate the underlying risks significantly. The same comment applies to the proposed new calibration of the MCR factors.	final advice. **Noted.** This is an issue about the SCR calibration. Revised factors have been lowered to reflect CEIOPS' final advice.
93.	Deloitte	3.43.	We note the overall choice of factors represents a significant increase to those used in QIS4.	**Noted.** The MCR factors are highly dependent on SCR calibrations.
94.	Groupe Consultatif	3.43.	The life technical provision factors are increased very strongly. Especially in adverse capital market situations with few discretionary benefits the MCR will be very high because of the strongly increased factor for participating contracts. Deferred tax liabilities should be considered. By not taking deferred tax liabilities (DTL) into account in the MCR-calculation, there would be an inconsistency between the SCR- and the MCR-calculation, leading to higher MCRs (compared to a MCR-calculation being consistent with the SCR-calculation by taking DTL into account) and therefore a higher chance of the MCR being equal to 45% of the SCR. The volume measure of the WPfloor is missing. It seems to be outside the level 1 text (acc. To art. 127.1.c cf 2.3) to introduce an absolute floor.	**Noted.** The MCR factors are highly dependent on SCR calibrations. **Disagreed.** The allowance for deferred taxes has been considered, and rejected by CEIOPS, during the development of CP55. **Partially agreed.** The volume measure has been clarified. The with-profit floor parameter is necessary to keep the with-profit charge in a reasonable range for those countries where, due to the

				specificities of the profit sharing regime, the gross approach does not work well.
95.	Legal & General Group	3.43.	For Life the increase for unit linked business was 1.6 and for others 2.2. These seem to be more than refining	**Noted.** The MCR factors are highly dependent on SCR calibrations.
96.	Munich Re	3.43.	The increase in life technical provision and capital-at-risk factors is mostly driven by the adjustment of changes in the SCR calibration (see 3.38). We have already commented (see our response to CP49) that the proposed changes of the SCR calibration overstate the underlying risks significantly. The same comment applies to the proposed new calibration of the MCR factors.	**Noted.** This is an issue about the SCR calibration. Revised factors have been lowered to reflect CEIOPS' final advice.
97.				
98.	CEA	3.44.	The CEA attracts attention that disregarding the specifics of some risks, for example the significant differences between health risks, will lead to the ceiling of 45% being hit very often, which is not in line with the declared intention of reaching the 35% target. We would advice to not only reflect a possible change in SCR calibration but iteratively use results from the market to fine tune the MCR to the 85 % target interval, e.g. to set the mark-up for non life to reflect 'other risks'.	**Disagreed.** Breaches of the corridor are an intended consequence of the Level 1 design: it is the function of the corridor to provide the risk-sensitivity lacking in the linear formula. Furthermore we expect that the 25% floor will also be frequently breached. **Partially agreed.** CEIOPS agrees that the calibration of the MCR should be revised after QIS5. It is however premature to give specific advice regarding future recalibrations.

99.	CRO Forum	3.44.	CRO Forum fully agrees with this paragraph and it trusts that the process till adoption of the Level 2 implementing measures will ensure a calibration of SCR and MCR reflecting the 99.5% VaR and 85% VaR level and not a significantly higher level.	**Noted.**
100.	DIMA	3.44.	This paragraph states: "In case a different SCR standard formula calibration is adopted, then the calibration of the MCR linear formula factors should be adjusted accordingly, following the procedure described in the explanatory text". Possibility and frequency of recalibration DIMA agrees with the statement. However, the set of circumstances for recalibration is too narrow and the scope should be extended. Finally, it is not clear if there is scope for CEIOPS to recalibrate the MCR formula 'in isolation' in the future in light of QIS5 results and also initial Solvency 2 results. DIMA believes that future MCR re-calibration that is independent of a change in SCR calibration should be included in the advice at Level 2. Companies using internal models We assume that the text above refers to CEIOPS changing the SCR 'standard formula'. However, that would mean that there is no guidance on recalibration in the context of internal model SCRs. CEIOPS needs to clarify the exact circumstances in which the MCR formula will be recalibrated. The current MCR formula is calibrated to target 35% of the SCR under the standard formula. We would expect that companies which use internal models will in general have a lower SCR than would be calculated under the standard formula. This could be due to economies of scale / better diversification for the companies	**Partially agreed.** CEIOPS agrees that the calibration of the MCR should be revised after QIS5. It is however premature to give specific advice regarding future recalibrations. Frequent recalibrations would result in an unstable regulatory environment. **Disagreed.** The calibration of the MCR shall be standardised: all undertakings should use the same MCR factors. There is no alternative calibration for companies using internal models. Currently, CEIOPS does not consider a calibration basis for the MCR other than the SCR standard formula. Internal models can have an effect on the MCR via the corridor.

			using internal models, or could be due to a higher SCR for smaller companies using the standard SCR formula, for example due to concentration of risk in one niche area. If companies using internal models were required to use the standard MCR formula, then their MCRs would generally be greater than 35% of their internal model SCRs on average. Paragraph 3.6 of Doc-47/09 (formerly CP55) states that if a company is using an internal model, then the 'corridor' used for calculating its MCR is determined by the internal model SCR result (with the supervisory authority having the power to require that the corridor is calculated from the SCR standard formula for the first two years that Solvency II is in force), but there is no clear further guidance on this. If it is the case that a company needs to recalibrate the actual MCR formula in the context of using internal models (rather than adjusting the corridor), then more guidance should be provided on how exactly this should be done. The procedure described in the recalibration of the model is not very detailed. Although it would be expected that recalibrated models should be built to target 35% of the SCR on average, regulators would need to make sure that companies using internal models were not calibrating their models to target 25% of the SCR or less.	
101.	Groupe Consultatif	3.44.	The MCR calculated using the new factors is higher than 45% on the SCR for test calculations on basis of the capital market at yearend 2008. The MCR calculated using the old factors has been in the 25% - 45% corridor base on the SCR for tests on yearend 2008. Hence, the new factors are too high. We would advice to not only reflect a possible change in SCR calibration but iteratively use results from the market to fine tune the MCR to the 45 % target interval, e.g. to set the mark-up for	**Noted.** The test calculations referred to in the comment are not available to CEIOPS. QIS5 will provide a more adequate basis for recalibration. **Partially agreed.** CEIOPS agrees that the calibration of the MCR should be revised after QIS5. It is however premature to give

			non life to reflect 'other risks.	specific advice regarding future recalibrations. Frequent recalibrations would result in an unstable regulatory environment.
102.	Legal & General Group	3.44.	Despite the comments we have made in 3.42 and 3.43 the objective remains to operate within a 25%-45% corridor in line with the level 1 directive and if this is achieved then the factors must be at least reasonable	**Noted.**
103.	Munich Re	3.44.	The MCR calculated using the new factors is higher than 45% on the SCR for test calculations on basis of the capital market at yearend 2008. The MCR calculated using the old factors has been in the 25% - 45% corridor base on the SCR for tests on yearend 2008. Hence, the new factors are too high. We would advice to not only reflect a possible change in SCR calibration but iteratively use results from the market to fine tune the MCR to the 25% - 45 % target interval, e.g. to set the mark-up for non life to reflect 'other risks.	**Noted.** The test calculations referred to in the comment are not available to CEIOPS. QIS5 will provide a more adequate basis for recalibration. **Partially agreed.** CEIOPS agrees that the calibration of the MCR should be revised after QIS5. It is however premature to give specific advice regarding future recalibrations. Frequent recalibrations would result in an unstable regulatory environment.
104.	ROAM	3.44.	We agree that the suggested factors are linked to CEIOPS' draft advice on the calibration of the SCR standard formula. Indeed, in case a different SCR standard formula calibration is adopted, then the calibration of the MCR linear formula factors should be adjusted accordingly, following the procedure described in the explanatory text. Which explanatory text is referred to? Which procedure? How quick thereafter? It is advisable that changes to the calibration of the SCR and MCR are approved jointly.	**Agreed.** See revised text.