Summary of Comments on Consultation Paper 72 - CEIOPS-CP-72/09 CP No. 72 – L2 Advice on Calibration of the Health Underwriting Risk	CEIOPS-SEC-174/09 08.04.2010

CEIOPS would like to thank ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU, AMICE, Association of British Insurers, Assuralia, Bupa, CEA, Centre Technique des Institutions de Prévoyance (C, CRO Forum, DIMA (Dublin International Insurance & Management , Dutch Actuarial Association, European Union member firms of Deloitte Touche Toh, FFSA, German Insurance Association – Gesamtverband der D, GROUPAMA, Groupe Consultatif, Institut des actuaires (France), Munich Re, PKV, (German) Association of Private Health Insure, PricewaterhouseCoopers LLP, ROAM, UNESPA- Association of Spanish Insurers and Reinsu, Unum, XL Capital Ltd, and Zorgverzekeraars Nederland

The numbering of the paragraphs refers to Consultation Paper No. 72 (CEIOPS-CP-72/09)

No.	Name	Reference	Comment	Resolution
1.	ACA –	General Comment	The calibration of premium/reserve risk is based on just six Member states data. In view of the different underlying social systems of the Member states (with different extent and organisation of the legal cover) it is arguable whether this calibration is representative of all Member states. Wouldn't it be more correct to group the Member states in two or three categories and adapt the calibration accordingly? The second general remark concerns the continuous reference to life risk calibration. Health risk is different even if the biometric variables are often the same. A health specific analysis should therefore be made. The whole methodology to arrive at the premium and reserve factors or the correlations is not very transparent and the results are therefore questionable. For example the correlations are fixed by arguing that - simply speaking - there are no indications that "they could be others". At the same time 3.88 and 3.97 state clearly that there is a lack of data and further analysis is needed. The special treatments in QIS4 for small and young enterprises were not only necessary. The period of development of a health portfolio until reaching a stable state is even longer and could therefore even be stretched. Instead of doing this, it disappeared completely in this CP.	Noted CEIOPS has developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.

2.	AFA Insurance	General Comment	AFA Insurance would like to comment on the calibration of the Non-SLT Health underwriting risk. Health insurance products exist in different jurisdictions and in many cases depending on the social security system in each country that have been developed very differently from country to country. Therefore it is impossible to do segmentation into three homogenous risk groups (accident, sickness and workers compensation). The analyses that AFA Insurance made on own data for the reserve risk in the sickness segmentation shows that the calibration in the standard model is too high. AFA Insurance thinks that the proposed level of reserve risk will impair the functioning of health insurance industry as a whole. AFA Insurance thinks that the only solution of the lack of homogeneous in health insurances is to allowing undertaking specified parameters within the standard model.	CEIOPS has engaged with the CEA and representatives of these markets to discuss alternatives to segmentation. However, the discussions have not materialised in a concrete European-wide proposal which would allow for a harmonised treatment across the EEA and CEIOPS understands that the industry is continuing work in this area.
3.	AMICE	General Comment	These are AMICE´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. AMICE members would like to reiterate its position already highlighted in CP50; Health is not a homogenous risk; Health insurance covers multiple risks such as life/non life, worker´s compensation, etc. As a consequence, the segmentation proposed in this consultation paper between accident, sickness and worker's compensation line of business is arbitrary and not appropriate to properly carry out health activities. AMICE members argue that replacing the standard formula by a subset of undertaking specific parameters cannot solve the structural deficiencies in the model as it is the case for non-SLT health insurance.	CEIOPS has engaged with the CEA and representatives of these markets to discuss alternatives to segmentation. However, the discussions have not materialised in a concrete European-wide

			The studies available among the AMICE membership show that historical volatilities are from 3 to 5 times lower than the volatility defined in the standard formula. This deviation from the standard formula can only be deluded when 15 years of historical data are available. However, the availability of such long series of data does not ensure its soundness, correctness, and solidity. Given the particular divergences in this area, CEIOPS should develop tables by products and per country as part of the Level 3 supervisory guidance. AMICE members still find it difficult to set in a single module standard stresses and correlations, which appropriately recognise the different types of health insurance products existing in different jurisdictions.	proposal which would allow for a harmonised treatment across the EEA and CEIOPS understands that the industry is continuing work in this area.
4.	Association of British Insurers	General Comment	The ABI welcomes the opportunity to comment on the Consultation Paper (CP) No. 72 on Health Underwriting Risks. ☐ Compared to QIS 4 the proposed calibration would increase the SCR by 34%. This announcement is likely to result in a premium increase for customers is causing some serious uncertainty in particular regarding undertakings decision to enter the internal model pre approval process. ☐ Calibrations: The proposal does not take into account the heterogeneity of the European health market. It is designed to address long tail risk for small to medium firms. More effort should be made to capture the nuance and reflect the risk profiles of various markets. In particular UK PMI insurers would be considered outliers in the analysis. Consumers could therefore suffer from higher premiums as a result of excess capital requirement. There is no health specific analysis (by product) for any of the health SLT calibrations. This should be considered. Some of the health non SLT calibrations used limited data; a wider data set considering a greater range	Noted During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this. CEIOPS is aware of the large varieties in health insurance on the European market. However, CEIOPS has been asked to provide a calibration based on an European average risk profile.

			of countries/companies is highly desirable. Gross data was used for reserving risk which could be overstating the result ☐ Correlations: In general correlations are more prudent than previously illustrated, in particular CAT risk is now assumed to be correlated to other risks. However, separate correlations should still be considered for health (eg separate from the life underwriting risk module). No diversification is assumed between different lines of non-SLT Health and between SLT Health and non-SLT Health, which may be overly prudent for some undertakings. ☐ Health has an unusually low risk profile and economic characteristics quite unlike other insurance classes, so a log normal may not be the best fit. Health also varies by market (as noted in CPs 50, 72 and 75), and this needs to be addressed in designing the SCR.	For the advice on correlations see CEIOPS-DOC-70/10.
5.	Assuralia	General Comment	The actuarial techniques used in the Health Insurance Business, specifically for the calculation of long term provisions (Ageing reserves, Workers compensation) are very specific and cannot be simply described as "Similar to life". The "Similar to life" module described in this is a simple "copy paste" of the life underwriting module, including the risk calibration, and fails to describe properly the risks existing in the health insurance business and to calculate the right amount of SCR for the Health underwriting risk. Health insurance is a specific type of insurance and deserves to have a real dedicated module for the underwriting risk.	Noted
6.				
7.	Bupa	General Comment	It is commendable that CEIOPS has found time and resource to begin digging into the details and analysis that would help make the SCR module for health underwriting risk meaningful. But the surprising changes to parameters from those in QIS-4 only underscore the importance of doing	Noted CEIOPS has developed additional analysis based

			the calibration properly and suggest that there is work yet to be done. We encourage CEIOPS to continue in the direction it has been going and in doing so consider our comments below. Bupa is supportive of this additional work, and since there is no health equivalent to the CRO Forum or CFO Forum recommends that CEIOPS creates the conduit by which health underwriters throughout the EU can help provide data, analysis, and insight in a comprehensive and open manner. This is a lot of work, but after all, Solvency II is in part about understanding the nature and variation among different homogeneous risk groups. The unfortunate reality is that homogeneous health insurance risk groups are correlated with member States and other factors that most life and non-life classes are not. Not addressing this reality will only misallocate risk, unfairly penalise some firms, increase costs to consumers because of a higher cost of capital, and in general slow the development of health insurance products that improve the lives or citizens in Member States.	on further available Member states data.
8.	CEA	General Comment	The CEA welcomes the opportunity to comment on the Consultation Paper (CP) No. 72 on Calibration of the health underwriting risk. It should be noted that the comments in this document should be considered in the context of other publications by the CEA. Also, the comments in this document should be considered as a whole, i.e. they constitute a coherent package and as such, the rejection of elements of our positions may affect the remainder of our comments. These are CEA's views at the current stage of the project. As our work develops, these views may evolve depending in particular, on other elements of the framework which are not yet fixed. 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 subject to further elaboration in the future.	Noted CEIOPS has developed additional analysis based on further available Member states data. During the revision,

			The differences between the existing health systems across Europe need to be recognised. Differences in laws and in the organisation between public and private health systems across Europe have consequences on the variety of the types of products offered in each Member State. These country specificities would be best captured by the allowance of entity specific parameters in the calculation of the health UW risk charge. To this extent we welcome CEIOPS advice in CP 75 on non-SLT health premium and reserve and SLT health revision risks. Especially as there is no health specific analysis for most of the health SLT calibrations, it is even more important to allow for the use of USP for SLT Health mortality risk, SLT Health longevity risk, SLT health disability risk, SLT health revision risk and SLT health lapse risk. An alternative way of capturing more appropriately health product specificities across EU MS may be the development of country specific parameters for health risks. We stand ready to explore further with CEIOPS this possibility. As commented on CP71 for non-SLT we believe that the data and methods used by CEIOPS present major drawbacks. We support the fact that more work has been done on the non-SLT calibrations and that it is suggested that further work is carried out, however, we have the following concerns: ☐ the scope of the study is insufficiently representative of the European industry; ☐ Gross data was used for reserving risk which could be overstating the result.	CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this. CEIOPS is aware of the large varieties in health insurance on the European market. However, CEIOPS has been asked to provide a calibration based on an European average risk profile.

			Overall, we feel that the factors have increased compared to QIS4 but the analysis to sustain the increase has significant drawbacks. The economic effects of premium adjustments (premium adaption clause) and the constrains which arise from actuarial pricing specifications should be taken into account according to the existing legal regulations. There is no health specific analysis (by product) for any of the health SLT calibrations. This should be considered. For example there may be major differences between life and health contracts with regard to the lapse risk. For example, in some markets everybody must have a health insurance, thus cancelling an insurance contract means getting a new one with another insurance company. Because the policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile. A different calibration from life is needed or, better, undertakings should be allowed to use entity specific data In general correlations are more prudent than previously illustrated, in particular CAT risk is now assumed to be correlated to other risks. However, separate correlations should still be considered for health (eg separate from the life underwriting risk module). No diversification is assumed between different lines of non-SLT Health and between SLT Health and non-SLT Health, which may be overly prudent for some undertakings. As previously commented on CP50, the design of the health UW risk module should stick to point A of the Annex I of framework directive which clearly distinguishing between "Accident" and "Sickness" cover. Furthermore as suggested previously the definition for health insurance should be the following: Health insurance could be understood as a generic term applying to all types of insurance indemnifying or reimbursing losses or expenses caused by medical treatment or short or long term care, providing services (medical assistance) or supplementary insurance underwritten in addition to medical insurance.	Health underwriting risk module is now split into 3 sub-modules. One of them covers Catastrophe risks capital requirements.

9.	Centre Technique des Institutions de Prévoyance (CTIP)	General Comment	Despite of the good work that have been done until the moment in order to capture the health risks of the European insurers, the segmentation proposed presents two major issues: The State mitigation for medical care products can vary a lot between European countries. The state mitigation can be strong or low and applying a unique branch for this type of product does not take this into account. From the definition of "worker's compensation" it appears only work related accident/disease are included. Nevertheless, for some strong Health player, Income protection product with all origin are an important part of the Health module, so it would be appropriate to include them in the segmentation. That is the reason why CTIP is working on this matter in order to purpose a new segmentation which will capture more adequately the current European situation taking into account at least the two following major aspects: ☐ Consideration of strong risk mitigation for medical care products ☐ Recognition of Income protection for all causes We hope to present this proposal at the first quarter of 2010.	Noted The segmentation issued is under the scope of the final advice related to CP50.
10.	CRO Forum	General Comment	72.A CEIOPS agrees in their various advices that health insurance has specific local features based on local circumstances (priority: high) Therefore any treatment for health should cover these local specific circumstances. In this calibration paper CEIOPS ignores this and presents one European calibration based on data derived from only a few Member States. In the opinion of the CRO Forum the calibration should be able to reflect the local circumstances. In the opinion of the CRO Forum no calibration should be such that in a local	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account

			market the insurers are required to implement a partial internal model because the standard data set is deviating too much from the average risk profile. 72.B CROF suggests a careful analysis which business should be included under the health module (priority: high) 72.C Due to the national specificities undertaking specific parameters should be allowed to be used by undertakings (priority: high) We are happy to provide feedback on how to take into account the different risk profile of insurers with health activities due to the social security systems. Examples of national specificities are the UK IP business or the Dutch Health Insurance business.	
11.	DIMA (Dublin International Insurance & Management	General Comment	DIMA welcomes the opportunity to comment on this paper. Comments on this paper may not necessarily have been made in conjunction with other consultation papers issued by CEIOPS. For non-life health risks, there has been a significant increase in the capital requirements. It would be helpful to know the catastrophe scenario adjustments before Q2 2010. Without this information it is difficult to judge the standard capital requirements and hence whether to adopt an internal model.	Noted
12.	Dutch Actuarial Association	General Comment	We are familiar with the draft Comments of Group Consultatif on CP72. The Dutch Actuarial Society also supports most of their comments, but as a member association of the Groupe Consultatif we like to stipulate Dutch originated comments. Exceptionally in relation to health underwriting risk CEIOPS should adopt a liberal approach to allowance of undertaking-specific parameters and/or internal models subject to requiring the minimum of supporting information necessary to assure broad harmonisation. The possibility of measures to assure greater convergence in the future should be kept under review. Dutch data is not used in the calibration in CP72. We think that the current	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account

			parameters are not suitable and too high for the Dutch market. Furthermore we are worried about the extensive change in the parameter values in CP72 in relation to QIS4. We think the calibration of the parameters at this point is not adequate. Furthermore, the lower parameters for the Dutch medical care insurances as used in QIS4 are no longer mentioned in CP72. Our opinion is that the lowering of the parameters should be used. As health insurance is a very heterogenous business and the planned segmentation into different lines of business remains vague in practice it seems necessary to reduce the danger of inherent model errors by using USP. Especially the HealthSLT calculations show that a detailed analysis of differences between life and health for the calibration of the different risks is not available. So we would recommend to offer more flexibility for the usage of USP, especially concerning SLT Health mortality risk, SLT Health longevity risk, SLT health disability risk, SLT health revision risk and SLT health lapse risk (see Question 3.12 in CP 75) We would like to emphasize furthermore, that for many markets, including the Netherlands, accident is a Lob of Non-Life and not of health insurance. Therefore the according risks for accident should be covered in the non-life module. While individual insurers will be able to develop their own internal models the size of the calibrations may mean that their internal model results will be very significantly different than the Standard model outcome. This could make it difficult to get the internal model approved. General comments on the document As stated previously healthcare insurance is very diverse and varies	CEIOPS has engaged with the CEA and representatives of these markets to discuss alternatives to segmentation. However, the discussions have not materialised in a concrete European-wide proposal which would allow for a harmonised treatment across the EEA and CEIOPS understands that the industry is continuing work in this area.

			significantly by Member State. It is important that the standard formula is not biased towards one country. The correlations have been updated since CP50 and are generally more prudent than previously illustrated. However, separate correlations should be considered for health (eg separate from the life underwriting risk module) and between segments within health (eg between SLT and non-SLT). However, we welcome the fact that CEIOPS do suggest at the end of their advice that data is collected in the future to support the revision of correlation factors as appropriate. CP72 does not include details of the calibration of catastrophe risk for health business; however, we understand that this will be provided by the CEIOPS Catastrophe Task Force in June 2010. Comments on SLT Health Further clarification is still required on what is meant by "revision risk" in the healthcare context and to which healthcare products it would apply. Comments on Non-SLT Health The calibration of the premium and reserve risk is based on the data from just six Member States. We are concerned that this is not necessarily representative of the type of business within each LOB across all Member States. How were these six states chosen? Was every Member State asked to participate. Given the average increase is 34% on the premium and reserve risk sub module (as per CP72 3.8) this change is significant. CEIOPS does however comment that there are limitations on the calibrations largely due to lack of data. We welcome their comment that undertakings that consider the parameters to be inappropriate may apply for the approval of a "partial" internal model or make use of "undertaking specific parameters".	
13.	European	General	Just as CP 71, this paper is based on a restricted data set and analysis.	Noted

	Union member firms of Deloitte Touche Toh	Comment	In general we feel that too many different methods are being used to come up with conclusions, and that the selection of the ultimately applied method is not always sound or sufficiently substantiated. Ideally, we would prefer if one method would be applied consistently to all lines of businesses (LOBs), or, if that is not possible, that solid arguments are given as to why a certain method is more appropriate. We feel that a lot of the stated recommendations for the resulting risk factors haven't been sufficiently explained and in some cases feel that the analysis was used to attempt to justify a pre-stated factor, a feeling that can be avoided by giving more insight into how the final factor was arrived at. Given that the recommendations in the consultation paper will lead to a considerable increase in capital due to an increase in premium and reserve factors from QIS 4, we feel that it would be best to paint a clearer picture of how the factors were arrived at, or what judgement was used in arriving at the final factors. Cases in which the number of undertakings that provided data are very few, as well as the limited number of countries that provided data concern us when it comes to the adequacy of the data and the validity of the results obtained from the data. We urge CEIOPS to address the data issues on a short term. In our opinion, the same data requirements should apply to the calculation of standard parameters of the SCR as to calculations by insurance undertakings under Solvency II.	CEIOPS has developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
14.	FFSA	General Comment	FFSA has identified the following issues regarding health underwriting risk as described in the CP: - The scope of the study is insufficiently representative of the European community, - CEIOPS did not let enough time to companies to produce adequate data, therefore, this lead to a partial or truncated vision of the situation, - Calibrations have been increased compared to QIS 4. These calibrations were already too high in QIS 4, FFSA therefore is against this increase	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.

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16.	German Insurance Association – Gesamtverband der D	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. 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: 1. restricting the consultation period of the 3rd wave to less than 6 six weeks 2. splitting the advice to the EU-commission in two parts ((1) first + second wave and (2) third wave) although both parts are highly interdependent 3. not taking into account many comments from the industry due to the high time pressure (first + second wave) 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. 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. The economic effects of premium adjustments (premium adaption clause)	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.

			and the constraints which arises from actuarial pricing specifications, e.g. in the health insurance in Germany, should be taken into account, according to the existing legal regulations. As health insurance is a very heterogeneous business and the planned segmentation into different lines of business remains vague in practice it seems necessary to reduce the danger of inherent model errors by using USP. Especially the Health calculations show that a detailed analysis of differences between life and health for the calibration of the different risks is not available. So we would recommend to offer more flexibility for the usage of USP, especially concerning SLT Health mortality risk, SLT Health longevity risk, SLT health disability risk, SLT health revision risk and SLT health lapse risk (see Question 3.12 in CP 75) We propose: ☐ To stick to point A of the Annex I of framework directive which clearly distinguishing between "Accident" and "Sickness" cover. ☐ The following definition for health insurance: "Health insurance could be understood as a generic term applying to all types of insurance indemnifying or reimbursing losses or expenses caused by medical treatment or by short or long term care (medical insurance) or by providing services (medical assistance) or supplementary insurance underwritten in addition to medical insurance." The above definition seems flexible enough for all European markets to have a separation of the three different branches (Non Life, Health, Life) with respect to their business written and the principle "substance over form".	

			The branches (Non Life, Health, Life) should be treated in the sub-risk-module according to the business model.	
17.	GROUPAMA	General Comment	Groupama has the following comments on this CP: - The health insurance markets are very different across Europe. The existence of a national healthcare system (such as Securité Sociale in France) or other national specifics have a significant impact on health business volatilities. In this calibration paper, CEIOPS ignores this and presents a single European calibration based on data derived from only a few Member States. Groupama would be in favour of taking into account those national specifics in the standard formula calibration. - Furthermore, we consider the correlation between premium and reserve risks at 50% as very high. For this short-term business, premium and reserve risks should be considered as independent. We recommend having a 0% correlation factor between the two risks.	Noted During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this. CEIOPS is aware of the large varieties in health insurance on the European market. However, CEIOPS has been asked to provide a calibration based on an European average risk profile. For the advice on correlations see CEIOPS-DOC-70/10.
18.	Groupe Consultatif	General Comment	It is clear from the comments relayed to the Groupe Consultatif by its member associations that the specifics of health underwriting risk depend to a large extent on the context in the particular member state. We have therefore exceptionally allowed nationally-originated comments to be included below. The Groupe understands that it is entirely plausible that	Noted

			appropriate SCR calibration depends on potential for variation in claim rates and in cost levels which are likely to be intimately bound up with the national context. For this reason the Groupe believes that exceptionally in relation to health underwriting risk CEIOPS should adopt a liberal approach to allowance of undertaking-specific parameters and/or internal models subject to requiring the minimum of supporting information necessary to assure broad harmonisation. The possibility of measures to assure greater convergence in the future should be kept under review. The economic effects of premium adjustments (premium adaption clause) and the constraints which arises from actuarial pricing specifications, e.g. in the health insurance in Germany, should be taken into account, according to the existing legal regulations. As health insurance is a very heterogenous business and the planned segmentation into different lines of business remains vague in practice it seems necessary to reduce the danger of inherent model errors by using USP. Especially the HealthSLT calculations show that a detailed analysis of differences between life and health for the calibration of the different risks is not available. So we would recommend to offer more flexibility for the usage of USP, especially concerning SLT Health mortality risk, SLT Health longevity risk, SLT health disability risk, SLT health revision risk and SLT health lapse risk (see Question 3.12 in CP 75) We propose: ☐ To stick to point A of the Annex I of framework directive which clearly distinguishing between "Accident" and "Sickness" cover. ☐ The following definition for health insurance: "Health insurance could be understood as a generic term applying to all	During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.

			types of insurance indemnifying or reimbursing losses or expenses caused by medical treatment or by short or long term care (medical insurance) or by providing services (medical assistance) or supplementary insurance underwritten in addition to medical insurance." The definition of health insurance is either possible via the event covered or the causing factor. CEIOPS seems to take favour of differentiating by the causing factors. We would suggest a definition via the covered event which seems to fit better to the complex health insurance market. We would like to emphasize furthermore, that for many markets, including Germany, accident is a Lob of Non-Life and not of health insurance. Therefore the according risks for accident should be covered in the non-life module. Health insurance characteristically covers losses or expenses caused by medical treatment or short or long term care, but it's indifferent to causes of the medical treatment/illness (e.g. disability, accident). So neither disability nor accident risk is covered by health insurance. The obligations for the German disability insurance should only be calculated in the life underwriting module. This applies also for contracts which can be unbundled because based on the nature of the business disability insurance belongs in Germany to the life segment. A different calibration from life is needed or undertakings should be allowed to use entity specific data.	

			Classify "workers compensation insurance" and "annuities related to workers compensation insurance" as life insurance obligations (disability and death part) resp. non-life insurance (P&C) (accident part). Therefore remove LOB Workers compensation from Health Underwriting Risk Module Remove "SLT Longevity risk" because the risk driver "longevity risk" is typically not relevant for health insurance. Remove "Disability" in "SLT Disability – morbidity risk" because disability risk is covered by life insurance.	
			In Ireland private medical insurance would be the primary class of business covered by this consultation paper. This would be covered under the sickness category. The increase in the calibrations for the sickness line of business is a matter of significant concern. Data from within the industry would suggest that the currently proposed calibrations do not reflect the experience of the industry and could call into question the continued sustainability of the industry. While individual insurers will be able to develop their own internal models the size of the calibrations may mean that their internal model results will be very significantly different than the Standard model outcome. This could make it difficult to get the internal model approved. Within the UK our health and protection products/risks are segmented as follows: ☐ long-term: includes critical illness (accelerated and stand alone), income protection (where the duration of the policy is at least 5 years*) and long-term care	

			☐ short-term: includes private medical insurance, income protection (where the duration of the policy is less than 5 years), hospital cash plans, and dental insurance. * this would also include group income protection where the policy/contract is deemed to be long-term but the rates are only guaranteed for 1 or 2 years. Long-term business is written in the life fund and short-term business is written in the non-life fund. General comments on the document As stated previously healthcare insurance is very diverse and varies significantly by Member State. It is important that the standard formula is not biased towards one country. The definition of healthcare does not currently pick up certain healthcare products offered in the UK; for example, hospital cash plans, long-term care (when support services are offered) and critical illness which pays a lump sum benefit upon contracting one of a list of critical illnesses. We note that "loss absorbing capacity of technical provisions" is now included under SLT and non-SLT. Under SLT is this where reviewable premiums are picked up? The treatment of reviewable premium business, including management decisions and any potential restrictions, needs to be clarified. This is a very important issue for the UK healthcare market where long term business can be written on a guaranteed or reviewable premium basis. The correlations have been updated since CP50 and are generally more prudent than previously illustrated. However, separate correlations should be considered for health (eg separate from the life underwriting risk module) and between segments within health (eg between SLT and non-SLT). However, we welcome the fact that CEIOPS do suggest at the end of their advice that data is collected in the future to support the revision of correlation factors as appropriate.	

			CP72 does not include details of the calibration of catastrophe risk for health business; however, we understand that this will be provided by the CEIOPS Catastrophe Task Force in June 2010. Comments on SLT Health Further clarification is still required on what is meant by "revision risk" in the healthcare context and to which healthcare products it would apply. There is still a concern about the mortality-disability stress test in that the same test is applied to both critical illness and income protection which are very different risks and hence should be subject to separate stresses. Also, as stated before the level of these stress tests also needs to be considered in conjunction with the work being carried out by the newly formed CEIOPS Catastrophe Task Force to ensure there is no double counting. Comments on Non-SLT Health Under lines of business ("LOB") it is still unclear as to what level of granularity will be required? For example, can all PMI products be combined or do they have to be separated out? We would view "Option 3" as the bare minimum (ie accident, sickness and workers compensation). The calibration of the premium and reserve risk is based on the data from just six Member States. We are concerned that this is not necessarily representative of the type of business within each LOB across all Member States. How were these six states chosen? Was every Member State asked to participate. Given the average increase is 34% on the premium and reserve risk sub module (as per CP72 3.8) this change is significant. CEIOPS does however comment that there are limitations on the calibrations largely due to lack of data. We welcome their comment that undertakings that consider the parameters to be inappropriate may apply for the approval of a "partial" internal model or make use of "undertaking specific parameters". Given the diversity of products within the UK we believe that	

			the use of a "partial" internal model or making use of "undertaking specific parameters" may be necessary and their use should not be subject to excessive requirements and demonstrating greater relevance than the standard formula should be sufficient.	
19.	Institut des actuaires (France)	General Comment	The global figures for Health Insurance underwriting risk ratios have increased for the by 34 %. The figures provided, which are clear and open can lead to some questions : ☐ the data used for the study and the change in the figures stem from 6 countries only (Portugal, UK, Germany, Poland, Luxemburg,Denmark) and for some classes of risk only one, ☐ this set of data doesn't seem to be very representative of the mean figures of the situation of health insurance sample in the European countries (cf. figures on health non SLT in CP 71 p 111/118). Additionally, there is no in depth information on the sample choice and the data processing. The lack of time and data openly referred to in 3.11 is especially harmful in this context. Using data from a small number of countries and applying them to the whole CEIOPS model is not a good example of risk management practice from CEIOPS. Sometimes (see below), CEIOPS uses only one country for calibration.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
20.	Munich Re	General Comment	We fully support all of the GDV statements and would like to add the following points: In connection with the published comments to the former CP50 received by CEIOPS we would like to stress the importance of undertaking specific parameters (USP) in this specific line of business.	Noted

			As health insurance is a very heterogenous business and the planned segmentation into different lines of business remains vague in practice it seems necessary to reduce the danger of inherent model errors by using USP. Especially the HealthSLT calculations show that a detailed analysis of differences between life and health for the calibration of the different risks is not available. So we would recommend to offer more flexibility for the usage of USP, especially concerning SLT Health mortality risk, SLT Health longevity risk, SLT health disability risk, SLT health revision risk and SLT health lapse risk (see Question 3.12 in CP 75). Otherwise we would transfer inappropriate stresses from the SCR Life calculation into the SCR health calculation. One final remark: Even under the argumentation of CP 74(Correlations) the correlation between life underwriting risks and health underwriting risks CEIOPS suggested a correlation of 0.75 due to the fact that the portfolios are assumed similar. At first the general assumption is questionable as health insurance and life insurance both depend in different ways from the existing social security system. Secondly, even if the same portfolio suffers the same technical stresses, we see differences caused by different calculation models and different insurance cover. So we cannot accept the high correlation between life underwriting risk and health underwriting risk as given in CP 74, 3.59.	
21.	PKV, (German) Association of Private Health Insure	General Comment	The economic effects of premium adjustments (premium adaption clause) and the constrains which arises from actuarial pricing specifications, e.g. in the health insurance in Germany, should be taken into account, according to the existing legal regulations. As health insurance is a very heterogenous business and the planned segmentation into different lines of business remains vague in practice it seems necessary to reduce the danger of inherent model errors by using	Noted

			USP. Especially the HealthSLT calculations show that a detailed analysis of differences between life and health for the calibration of the different risks is not available. So we would recommend to offer more flexibility for the usage of USP, especially concerning SLT Health mortality risk, SLT Health longevity risk, SLT health disability risk, SLT health revision risk and SLT health lapse risk (see Question 3.12 in CP 75) We propose: ☐ To stick to point A of the Annex I of framework directive which clearly distinguishing between "Accident" and "Sickness" cover. ☐ The following definition for health insurance: "Health insurance could be understood as a generic term applying to all types of insurance indemnifying or reimbursing losses or expenses caused by medical treatment or by short or long term care (medical insurance) or by providing services (medical assistance) or supplementary insurance underwritten in addition to medical insurance." The above definition seems flexible enough for all European markets to have a separation of the three different branches (Non Life, Health, Life) with respect to their business written and the principle "substance over form". The branches (Non Life, Health, Life) should be treated in the sub-risk-module according to the business model.	

22.	PricewaterhouseCoopers LLP	General Comment	We have no significant comment on the proposals in this paper in relation to certain elements of the health risk module of the SCR standard formula. We note that clarification is required on whether there are differences in scope between the revision risk sub-modules within the life and health underwriting risk modules. We provide additional comments on the proposed correlations in our response to consultation paper 74.	Noted
23.	ROAM	General Comment	Concerning the Health non-life underwriting risk calibration, ROAM refers CEIOPS to the comments on the CP71 because the premium risk and the reserve risk in Health were calibrated according to the same methodology and the same databases as those used for the non-life underwriting risk. Concerning the data: ☐ ROAM considers that the sample of data used to calibrate this risk is not representative of the European market because only 6 countries on 27 participated in the study. ☐ A part of the calibration seems to be made on gross data and not on net data. Consequently, ROAM in these comments will not make reference to the results because it considers them as being not representative and without any meaning in the sense of the European market. Concerning the methods: ☐ Certain methods used for the calibration are very open to criticism as far as their foundation and chosen hypotheses are concerned. ☐ ROAM supports the methods 1 and 2 for the premium risk, the methods 1 and 4 for the reserve risk. ROAM agrees with the remark of the CEA on the fact that none of the final choices are justified, and that CEIOPS has to supply more elements on the final choice of the calibration.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.

24.	UNESPA-Association of Spanish Insurers and Reinsu	General Comment	The data comes from 6 countries only. This fact may be a problem when trying to generalise the conclusions obtained to the rest of the European insurance market The Spanish market is not part of the sample and has a specific casuistry. Therefore conclusions derived from the calibration could not reflect our risk profile properly. The factors proposed in the consultation paper are very onerous for insurance undertakings We are concerned with the significant increases in the calibration, in particular since in QIS4 many undertakings had already found the parameters to be inappropriately high. The recommendations in the consultation paper will lead to a considerable increase in capital due to an increase in premium and reserve factors from QIS 4. In order to arrive at an appropriate calibration for this very important risk module, UNESPA asks for a significant review and extension of the consultation paper on Undertaking Specific Parameters. The use of USP is the only solution to implementing a real risk sensitive management of non life underwriting risks. Need to consider explicitly the benefits of geographical diversification CEIOPS keeps the restriction in connection with geographical diversification because considers it has been taken into account in the calibration, but no further information has been given. We believe geographical diversification would give a better approach to the calibration therefore we encourage CEIOPS to take this factor into account. If no allowance for geographical	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.

			diversification for non-life business will be applied, this will decrease to incentive to spread risk as well over different geographies. Therefore, it is necessary to include geographical diversification in the calculation of the SCR to see its benefits. The non-proportional reinsurance should be explicitly allowed within the standard formula The non-proportional reinsurance is an important tool used by companies in several areas of its activities, either as an element of risk mitigation, strategic element in the determination of prices, etc, and therefore should be properly calibrated in the standard formula. CEIOPS considers that an average level of risk mitigation through non prop reinsurance has been taken into account, but no further info has been given either. So, if it is not considered in the calculation of the solvency capital requirement, this would not pick the real risk borne by the entity, in addition can influence the decision of insurance entities on the level of reinsurance programs depending on the final figure of required capital. It is necessary to encourage the most risk sensitive calibration as possible Other risk mitigating instruments for CAT risk We believe some risk mitigating must be taken into account to better represent for example the Spanish insurance market as CCS (Consorcio de Compensación de Seguros).. The CCS takes charge of an important amount of the final claim cost for all insurers involved. The Volume parameter (V) is not risk sensitive if profits and losses one year period are not recognized	

			The proposed method (Factor*Volume) does not encourage the risk management and is not risk sensitive since penalizes undertakings with a greater volume of premiums and reserves. For example, 2 undertaking with the same risk profile but with different level of premiums will have different capital charge since the SCR will depend on the Volume parameter. Oddly, the best covered entity with a higher volume of premiums will be penalized with a higher capital charge For this reason it seems necessary to include in the standard formula the relevant mechanisms to collect the benefits and / or losses to one year period and their implications on the final capital requirements.. Data concerns There are some sections where the paper talks about net information and some others where it talks about gross reinsurance information, giving the calibration process information with an additional dose of heterogeneity. National parameters should be allowed when is possible We believe that a more granular approach should be released, in order to "force" the companies to follow a underwriting risk management in a more active way, in a better way than the one derived from the application of a certain factor over which there is not possibility to act. General factors application gives a lower goodness of fit compared to the specific factors approach, so CEIOPS should allow the application of factor based on specific experience of each market. In The Spanish market health insurance has certain specific features In Spain the private health insurance is dominated by the inpatient	

			treatment additional to public (compulsory) health insurance. For the most treatments in hospital payments will take place after the treatment. Furthermore the Spanish health insurance undertaking risks are into the "Health Non SLT" categories, with a short (not more 3 years) reserve tail and a reduce volatility. In Spain there is no significant catastrophe-risk for the basic health insurance.	
25.	Unum	General Comment	☐ Compared to QIS 4 the proposed calibration would increase the SCR by 34%. This announcement is likely to result in a premium increase for customers is causing some serious uncertainty in particular regarding undertakings decision to enter the internal model pre approval process. ☐ Calibrations: The proposal does not take into account the diversity of the European health market. It is designed to address long tail risk for small to medium firms. More effort should be made to capture the differences in the risk profiles of various markets. Critical Illness in the UK is not covered in the definition of healthcare in UK. There is no health specific analysis (by product) for any of the health SLT calibrations. This should be considered. ☐ Correlations: In general correlations are more prudent than previously illustrated, in particular CAT risk is now assumed to be correlated to other risks. However, separate correlations should still be considered for health (eg separate from the life underwriting risk module). ☐ It is not clear where the treatment of reviewable premium policies will fit vs. guaranteed premium ☐ policies.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.

26.				
27.	XL Capital Ltd	General Comment	In the short consultation period and without the data CEIOPS used it is difficult to validate CEIOPS methodology, hence our comments focus on the areas as follows: ☐ The applicability and credibility of data used in this analysis ☐ Simplifying assumptions with regard to geographic diversification and non-proportional reinsurance ☐ Stressing that these factors will be inappropriate for many companies For books of business that represent higher volatility the propensity of an entity to use non-proportional reinsurance increases. We believe that this enforces the reasoning that the standard formula needs to explicitly reflect non-proportional reinsurance.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
28.	Zorgverzekeraars Nederland	General Comment	In paragraph 3.10-3.12 CEIOPS acknowledges that Health is very specific to the various regions (Member States) within the EEA. Especially when considering the health insurance related to social securities local differences exist which result in a different risk profile for insurers aiming to provide these services to their markets. The health insurance related to social securities is in most of the cases related to former public health insurance which are privatised. These changes from public to private are based on the general direction of privatising within Europe which is also advocated by the European Commission. Due to the fact that the basic health insurance is part of the social security system, the government has certain obligations towards its citizens (affordable health care) and remains involved in this market. This government involvement results in a lower risk profile for the basic health insurance products. The standard formula within the health risk	Noted During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this. CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account. Some provisions on

			module can only reflect the risk profile of these local health products appropriately when the various risk adjusted mechanisms are included in the parameters applied (calibration). We acknowledge the quest for a level playing field, even in situation as divergent as within the health insurance across Europe. We are proposing to include an adjustment factor to σ_{LOB} The adjustment factor should be conditional on the following elements: 1. The market on which the health insurance (or other insurance products that are part of the social security system) is sold should be subject to governmental regulations. For example in The Netherlands the basic health insurance market is regulated on various elements such as: prohibition of premium differentiation per policyholder, all potential policyholders are to be accepted by each insurer, every health insurer is subject to risk equalisation system; 2. There should be statistically information available for the specific part of the market which is independent from a specific insurer; There should be statistical evidence that the risks involved are substantial different (in our case lower) as the calibration used in the standard approach. 3. The government should provide a guarantee of last resort for the policyholder e.g. when a health insurer would be in default and would be unable to provide the health services towards the policyholders the government will ensure the provision of services towards the policyholder. These condition will ensure that appropriate parameters are available to determine the adjustment factor towards the σ_{LOB}. Thus the formula to be applied should be: (1-c) x sigma_Europa + c x sigma_region C = If the conditions are fully met the factor c should 1. In the case in which a mixed system is applied or part of	pooling mechanisms have been included.

			the conditions are fulfilled another value could be given reflecting the actual risk profile of the market. C will always be lower or equal than 1; Sigma_Europa = Calibration as used in the Standard formula Sigma_region = Calibration reflecting the risk profile of the region in which the heath insurance is sold This adjustment factor should be reviewed regularly, at least annually, and should apply to the whole of the market and may only reflect the deviation of the risk profile. In our opinion if the adjustment to the factors is not included a whole market within a Member State is required to develop and implement a partial internal model for the specific line of business. This will imply a costly and burdensome process which cannot be met by all participants in the market especially the SME health insurers. This effect is in our opinion in contradiction to the principles underlying the Solvency II project. In The Netherlands we can observe the following: As a form of social insurance, health insurance in the Netherlands is outsourced to commercial insurance companies. In order to achieve a level playing field between these insurance companies, the risk structure over the population of 16 million insured persons is analysed through a linear least squares econometric model. This model makes heterogeneous risks homogeneous as regards the remaining error term and generates fair premiums. Besides this econometric model, this equalisation scheme is extended with mutual claim pools between insurance companies, that from an actuarial point of view has a shrinking effect on the final standard deviation which has direct relevance for Solvency II. The measurement of	

			this standard deviation is done by iBMG, an independent institute on health economics, affiliated with Erasmus University in Rotterdam. Each year this institute analyses the dataset (cross-section) of that year as a linear model and applies parameter estimation for the mean and standard deviation. Given the large size of this dataset (individual and anonimised observations on the population of the Netherlands) the estimation error for these parameters is virtually zero and parameter estimation is actually measurement which is free from any measurement error. As a result the Netherlands produces each year a quantification of the standard deviation. In the QIS 4 technical specifications a special Annex was included to cover the specific treatment of the Dutch Health insurance (TS.XVII.G Annex SCR 5: Dutch health insurance). In this draft advice no mention is given to this annex. Two important features of the Dutch health insurance system are: (a) compulsory health insurance for all Dutch citizens for a standard health insurance policy; and (b) a mandatory equalisation system for health insurance companies offering the standard health insurance policy. Both features cannot be captured in the current SCR module as envisaged in this draft advice. As seen during QIS 3 the results of not amending the parameters will lead to unjustifiable high capital charges for the Dutch health insurers, not reflecting the actual risk profile of the Dutch health insurer. In QIS 4 the parameters were amended and gave a better reflection of the underwriting risk. A requirement to build an internal model to amend this onerous situation for the whole Dutch health industry is not the solution as this measurement should be applied by the supervisors by exception. The requirement to use a partial internal model throughout the health industry will lead to higher costs and to the introduction of market entry barriers and will have serious market distorting and political effects. Description of the compulsory basic health insurance in The Netherlands: 0 Introduction	

			Solvency II is being developed on a risk-based capital approach. A risk-based capital approach should in our view take into account specific (national) systems of risk mitigation. As in other countries in the Netherlands such a system for health insurers has been in place for a decade now (but is applicable for the whole population since the introduction of the new Health Insurance Act in 2006). This system includes a risk equalisation scheme that effectively reduces the risk of health insurers. For the functioning of the Dutch health insurance system it is of eminent importance that this risk reduction is taken into account in the calculation of the SCR and the MCR in Solvency II. 1 The purpose of risk equalisation The basic health insurance is part of the Dutch social security system. Governments have the choice between private or public systems in case of the social security. In the Netherlands for example the disability insurance is still partly in public hands. The health insurance is currently completely in private hands. However the fact that basic health insurance is still a part of the Dutch social security system, this privatized system still has several public safeguards. Taking into account that governments sometimes make changes in their social security system it is important that the Solvency II system is as flexible as Solvency I was. Under the Dutch Health Insurance Act, private insurers are responsible for running the basic health insurance system, within the conditions specified by the government. These conditions are that healthcare should be affordable, accessible and of adequate quality. In order to ensure that everyone has access to care, the health insurance market is subject to certain controls. So, for example, insurers are obliged to accept anyone who applies for cover and are not allowed to charge different premiums to different groups of clients. Consequently, if no additional mechanisms were in place, an insurer with a relatively unhealthy client portfolio would be at a disadvantage	

			compared with a competitor whose clients were relatively healthy; the insurer with the less healthy clients would have little choice but to put up premiums. Such a situation would be inconsistent with the principle of a level playing field. Risk equalisation is necessary to compensate insurers for variations in client portfolio risk profiles. A decision published by the European Commission on 13 May 2003 regarding risk equalisation in the Irish private insurance system confirmed that, where the market was subject to rules such as obligatory acceptance and the prohibition of premium differentiation, risk equalisation was necessary in order to achieve insurance risk uniformity. 2 General description of the model This risk equalisation system neutralises the inter-insurer inequalities arising out of differences in client portfolio risk profile linked to obligatory acceptance and the bar on premium differentiation. At the same time, it provides sufficient incentive for insurers to make efficient use of available resources; insurers will still need to work to secure good quality care at a reasonable price in order to keep their premiums at competitive levels. To retain the incentive for operational efficiency while compensating for health risk disparities, the Health Insurance Act provides for a system of ex ante risk equalisation. The basic principle of this system is that instead of compensating for cost discrepancies, the best possible estimate will be made of an insurer's risk exposure on the basis of the health characteristics of the insurer's client portfolio. The insurer is to receive an allowance from the so-called Health Insurance Fund for each client, the size of which is based upon the client's health characteristics. In addition, insurers are able to charge their clients (nominal) premiums, which the insurers can set independently. An insurer's nominal premium has to be uniform for all clients, however.	

			The risk equalisation model contains parameters that correct for health status differences linked to age, gender and other objectively measurable client health characteristics. Ex post adjustments to ex ante risk equalisation arrangements The design of the risk equalisation system allows for some retrospective adjustment of the allowances made available to health insurers in line with parameter-based forward calculation. First, allowances must be retrospectively corrected for differences between forecast and actual client numbers. Health Insurance Fund money should in principle be made available in advance on the basis of forecast client numbers, grouped on the basis of the various relevant health characteristics. However, it is important that an insurer who in the course of a year acquires a lot of additional clients – because, say, it becomes known that the insurer arranges care quickly and deals with claims efficiently – does not have to wait until the following year to receive any contribution from the state towards the cost of providing care for the new clients. The Health Insurance Act therefore provides for the retrospective recalculation of insurers' allowances on the basis of actual client numbers and client characteristics. Second, the distribution of (macro) funds over the care insurers will be adjusted retrospectively, based on the costs they actually incur in total. Insurers therefore don't suffer from mis-estimating the actual macro costs. It is not possible (immediately after the introduction of the Health Insurance Act in 2006) to guarantee the quality of the correlations of the costs and the characteristics of people (formerly insured under the private and public systems). Some more ex-post compensation mechanisms are therefore	

			necessary to overcome the shortcoming of ex-ante standardisation. 3 Specific description of the parameters of the model Ex ante parameters - Age and gender because health care costs depends on age and gender - Source of income as an indicator of social economic status. For example people with a disability benefit have high predictable costs - Region: health care costs differ between regions - Pharmaceutical cost groups: the use of certain prescribed drugs as an indication of a serious chronical illness (examples are rheumatism and renal diseases) - Diagnostic cost groups: diagnosis from hospitalisations as an indication of a serious chronical illness (for example haemodialysis) Ex post compensation mechanisms Ex post compensation mechanisms include the following: - Retrospective correction for the client numbers: correction of the contribution for the difference between estimated and actual number of insured persons. - Retrospective correction for the macro costs: the macro budget is set equal to the macro costs. - Compensation for high costs: reimbursement of a percentage of the cost of	

			providing treatment for a client above a given threshold. The aim of compensation for high costs is to offset cost differences between insurers resulting from the non-uniform distribution of very high costs among insurers. If individual cases had to be identified and compensated for in advance, the risk equalisation system would become very complex. It is also the case that random high-cost cases do not necessarily have to be compensated for by risk equalisation (re-insurance within the market is also possible, for example); however, even in a private market, compensation for high costs is also an appropriate temporary solution to the problem of structurally expensive clients who cannot (yet) be adequately identified by the risk equalisation system. - Generic equalisation: inter-insurer settlement of the differences in individual insurers' actual costs and normative allowances. Generic equalisation is used to correct for possible shortcomings in the distributive effect of the model. - Retrospective calculation: settlement with the Health Insurance Fund of the difference between each insurer's actual costs and normative allowance. Retrospective calculation is used to link the size of the financial risk to the scope that insurers have for influencing their costs. The need for ex post compensation mechanisms will decrease as better information becomes available for adjusting ex ante standardisation to the cost pattern of all insured persons for the new-style funding of the care services. The government intents to give priority to dismantling generic equalisation.	
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35.	Centre Technique des Institutions de Prévoyance (C	3.1.	CEIOPS suggests adding to revision risk a new 1% shock to fully take into account the impact on benefits of changes in inflation. For CTIP, the text should make clear that this inflation is not applicable to disability annuities, when these annuities are not automatically reevaluated by reference to an external inflation index, and revaluations are limited by the value of Future Discretionary Benefits.	Noted
36.	CEA	3.2.	Dutch data is available to be included in the underlying data used for calibration purposes; the so called IBMG-study.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account. We would be happy to receive further data.
37.	Zorgverzekeraars Nederland	3.2.	The calibration used for the whole short term health insurance should reflect the major health insurance markets. Omitting one of these markets will lead to a distorted calibration. Therefore we urge CEIOPS to include the data which is available of the Dutch market in their final advice.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data

				from 11 countries was taken into account.
38.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.3.	See first general comment.	
39.	Association of British Insurers	3.3.	With only 6 member states the sample does not reflect the heterogeneity of the Health market across Europe. We believe that presenting the results by member states would highlight some disparity reflecting different business models and reveal the necessity to provide a more granular calibration. Not doing this would distort the market and would lead to risk cross-subsidy, which is not in the public interest.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account. During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.
40.	Assuralia	3.3.	We are convinced that the calibration for the Belgian Workers Compensation can only be done on data from this LoB. Even if Workers Compensation exists in other countries, the products are that different that a calibration on a European Level is not usable.	CEIOPS has engaged with the CEA and representatives of these markets to discuss alternatives to segmentation. However,

				the discussions have not materialised in a concrete European-wide proposal which would allow for a harmonised treatment across the EEA and CEIOPS understands that the industry is continuing work in this area.
41.	CEA	3.3.	The calibration of premium/reserve for non-SLT Health risk is based on just six Member states data. It's very surprising that important markets haven't been chosen in the survey. Further, for certain lines of business the scarcity of data will lead to a partial vision of the situation. This will lead to major inconsistencies in the results provided by CEIOPS. The countries which are used as basis are per risk type and branch very different. In our opinion this can't lead to an appropriate calibration for the whole of the European health market. As CEIOPS said earlier the health insurance is so different amongst the various Member States, therefore it is very hard to understand how CEIOPS have based their calibration on so little data. The result is that most health insurers are almost obliged to use a partial internal model or to use undertaking specific parameters to align with their risk profile. In QIS4 specific (reduced) parameters were given for the Dutch medical care insurers. These reduced parameters are not mentioned in this paper. What is the status of these reductions?	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account. For Health non-SLT business, a revised calibration exercise was undertaken alongside the revision of the non-life calibration.
42.	European Union	3.3.	We note that some of the larger member states have not been included in the analysis – could you please explain the rationale behind choosing the	CEIOPS developed additional analysis based

	member firms of Deloitte Touche Toh		member states whose data was used to determine the new calibrations?	on further available Member states data. In the revised advice, data from 11 countries was taken into account.
43.	FFSA	3.3.	CEIOPS: "For some classes, the data available to carry out the analysis was fairly sparse" FFSA: This analysis seems to have not been prepared enough by CEIOPS and leads to a partial or truncated vision of the situation. It leads also to lack of reliable data for the study. That will lead to major inconsistencies in the results provided by CEIOPS.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
44.				
45.	UNESPA-Association of Spanish Insurers and Reinsu	3.3.	As we see it, premium factors applicability, obtained out of the calibration purpose of this paper, to all entities that operate in the European area, may not be the most suitable, due to either the small volume of information used for this purpose or due to the factors not included that were commented above. The information used for the risk and reserve premium factors calibration comes from just six countries, being only two of them of a substantial volume in terms of premiums. It's therefore deemed necessary, to check for each national market, the reached conclusions goodness-of-fit based on mentioned information.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
46.	Unum	3.3.	With only 6 member states the sample does not reflect the heterogeneity of the Health market across Europe.	Noted CEIOPS developed

			We believe that presenting the results by member states would highlight some disparity reflecting different business models and reveal the necessity to provide a more granular calibration. Not doing this would distort the market and would lead to risk cross-subsidy, which is not in the public interest.	additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account. During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.
47.	Zorgverzekeraars Nederland	3.3.	The calibration of premium/reserve for non-SLT Health risk is based on just six Member states data. It's very surprising that important markets haven't been chosen in the survey. Further, for certain lines of business the scarcity of data will lead to a partial vision of the situation. This will lead to major inconsistencies in the results provided by CEIOPS. The countries which are used as basis are per risk type and branch very different. In our opinion this can't lead to an appropriate calibration for the whole of the European health market. As CEIOPS said earlier the health insurance is so different amongst the various Member States, therefore it is very hard to understand how CEIOPS have based their calibration on so little data. The result is that most health insurers are almost obliged to use a partial internal model or to use undertaking specific parameters to align with their risk profile. In QIS4 specific (reduced) parameters were given for the Dutch medical care insurers. These reduced parameters are not mentioned in this paper.	Noted CEIOPS tried to provide additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account. For Health non-SLT business, a revised calibration exercise was undertaken alongside the revision of the non-life calibration.

			What is the status of these reductions?	
48.	Association of British Insurers	3.4.	The different methods lead to completely different results. This makes the use of company specific parameters for underwriting risk within the standard model even more important.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
49.	CEA	3.4.	The different methods lead to completely different results. This makes the use of company specific parameters for underwriting risk within the standard model even more important.	CEIOPS develoepd additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
50.	UNESPA-Association of Spanish Insurers and Reinsu	3.4.	We observe a certain degree of divergence within the different methods used when looking at the results we obtained out of the risk and reserve premium factor calibration. According to the calibration results (for the premium factor case) obtained for the non-life business and reflected in CP 71, we can observe a relative convergence between the four methods, two by two. This way, methods 1 and 2 show homogeneous results between them; the same way methods 3 and 4 show a similar behavior in terms of tendency. This does not happen when applying the same methods to the available information for two out of the three health insurance (Health Sickness and Workers Comp) sub-lines of business, while the Accidents Health sub-line, shows a similar behavior to the rest of non-life business. We should stress on the fact that for the two sub-lines of business	CEIOPS developed additional analysis based on further available Member states data. For Health non-SLT business, a revised calibration exercise was undertaken alongside the revision of the non-life calibration.

			mentioned, the information used on the calibration, it's especially scarce in terms of the participant entities, representing a 34% and a 17% lower than Quis4 participants, respectively.	
51.	Unum	3.4.	The different methods lead to completely different results. This makes the use of company specific parameters for underwriting risk within the standard model even more important.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
52.	Zorgverzekeraars Nederland	3.4.	The different methods lead to completely different results. This makes the use of company specific parameters for underwriting risk within the standard model even more important. However when considering CP 75 the proposals made will not help the short term health insurance. These type of health insurance are typically frequently changing due to political and governmental adjustments. The n=15 will not be reached due to these changes. As a form of social insurance, health insurance in the Netherlands is outsourced to commercial insurance companies. In order to achieve a level playing field between these insurance companies, the risk structure over the population of 16 million insured persons is analysed through a linear least squares econometric model. This model makes heterogeneous risks homogeneous as regards the remaining error term and generates fair premiums. Besides this econometric model, this equalisation scheme is extended with mutual claim pools between insurance companies, that from an actuarial point of view has a shrinking effect on the final standard deviation which has direct relevance for Solvency II. The measurement of this standard deviation is done by iBMG, an independent institute on health economics, affiliated with Erasmus University in Rotterdam. Each year this institute analyses the dataset (cross-section) of that year as a linear model	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.

			and applies parameter estimation for the mean and standard deviation. Given the large size of this dataset (individual and anonimised observations on the population of the Netherlands) the estimation error for these parameters is virtually zero and parameter estimation is actually measurement which is free from any measurement error. As a result the Netherlands produces each year a quantification of the standard deviation. Although, historically, this results in a time series of standard deviations, only the standard deviation of the most recent year is of importance for the current solvency calculations. Any weight for other sources for the standard deviation will imply a distortion of the risk-based truth. So, there is no need and no room for any other source and the own weight should be 100%. The above should be compared with the approach of a time series of loss ratios, using a weighted mean to determine an average loss ratio and the implied standard deviation which both are viewed representative for the whole time span. Here a credibility mixture might be of value to achieve a more stable result in case the own data of the insurance company is not large. In our nation-wide social health insurance we have a mega dataset (cross-section) that allows year-specific consistent parameter estimation with zero uncertainty to its calculated values.	
53.	CEA	3.6.	Additional exercise based on QIS 4 data suggests that the factors proposed for QIS 4 may have been under-calibrated, at least for some lines of business. There is a reference to an Annex with this analysis which is not available. In the non SLT health module we discuss about three LoB. What does some of these mean? The results given in para 3.7 indicates that CEIOPS means all three.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.

		Summary of Comments on Consultation Paper 72 - CEIOPS-CP-72/09 CP No. 72 – L2 Advice on Calibration of the Health Underwriting Risk		CEIOPS-SEC-174/09 08.04.2010
54.	UNESPA-Association of Spanish Insurers and Reinsu	3.6.	As we see it, the annex to which CEIOPS refers is equivalent to CP # 71 annex; so we will make the appropriate comments in this template in regard to the information contained on the latter.	Noted
55.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.7.	The premium factor for sickness has more than doubled. This seems really exaggerated.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
56.	Assuralia	3.7.	We approve the segmentation into three LoB, but the provided factors seem to high. The factors should take into account certain specificities of the insurance portfolios, such as the size.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
57.	CEA	3.7.	In the legally compulsory basic health-insurance and the supplementary health-insurance splitting costs of cure in 'accident' and 'sickness' is arbitrary and not in line with Dutch legislation. For the accident insurance a separate treatment would be correct. In the QIS 4 technical specifications a special Annex was included to cover the specific treatment of the Dutch Health insurance (TS.XVII.G Annex SCR	CEIOPS has engaged with the CEA and representatives of these markets to discuss alternatives to segmentation. However,

			5: Dutch health insurance). In this draft advice no mention is given to this annex and the treatment of the different risk profile which exists within the Netherlands.	the discussions have not materialised in a concrete European-wide proposal which would allow for a harmonised treatment across the EEA and CEIOPS understands that the industry is continuing work in this area.
58.	CRO Forum	3.7.	In the legally compulsory basic health-insurance and the supplementary health-insurance splitting costs of cure in 'accident' and 'sickness' is arbitrary (is pregnancy an accident or a sickness) and not in line with Dutch legislation. For the accident insurance a separate treatment would be correct. In the QIS 4 technical specifications a special Annex was included to cover the specific treatment of the Dutch Health insurance (TS.XVII.G Annex SCR 5: Dutch health insurance). In this draft advice no mention is given to this annex.	CEIOPS has engaged with the CEA and representatives of these markets to discuss alternatives to segmentation. However, the discussions have not materialised in a concrete European-wide proposal which would allow for a harmonised treatment across the EEA and CEIOPS understands that the industry is continuing work in this area.
59.	DIMA (Dublin International Insurance & Management	3.7.	The figures for sickness differ from those in 3.106; consistency within the paper is required.	Noted
60.	Dutch	3.7.	The calibrations proposed for sickness business under the non-life category	CEIOPS has engaged

	Actuarial Association		do not appear to be consistent with the underlying data within the Dutch market for sickness insurance.	with the CEA and representatives of these markets to discuss alternatives to segmentation. However, the discussions have not materialised in a concrete European-wide proposal which would allow for a harmonised treatment across the EEA and CEIOPS understands that the industry is continuing work in this area.
61.				
62.	Groupe Consultatif	3.7.	Health insurance characteristically covers losses or expenses caused by medical or short or long term care, but it's indifferent to causes of the medical treatment/illness (e.g. disability, accident). So neither disability nor accident risk is covered by health insurance: ☐ Remove LOB Accident from Health Underwriting Risk Module because accident risk is covered by non-life insurance (P&C). The approach for premium and reserve risk which is the same as for other non-life LOBs already implies that LOB Accident has the same characteristics as other non-life LOBs and can be treated as non-life insurance. Apart from this point, the calibration of the premium and reserve risk factors seems to be reasonable and comprehensible. ☐ Classify "workers compensation insurance" and "annuities related to workers compensation insurance" as life insurance obligations (disability and death part) resp. non-life insurance (P&C) (accident part). Therefore remove LOB Workers compensation from Health Underwriting Risk Module	CEIOPS has engaged with the CEA and representatives of these markets to discuss alternatives to segmentation. However, the discussions have not materialised in a concrete European-wide proposal which would allow for a harmonised treatment across the EEA and CEIOPS understands that the industry is continuing work in this area.

			The calibrations proposed for sickness business under the non-life category do not appear to be consistent with the underlying data within the Irish market for sickness insurance. Domestic health insurance business in Ireland is treated as a non-life insurance class. The characteristics of the business mean that it is a very short-tailed business with quite a predicable profile of risk. Expatriate insurance is sold by Irish insurers and the experience in this line of business is similar to that of the domestic business though geographical diversification risk is different given the nature of the markets in which insurers operate.	
63.				
64.	Zorgverzekeraars Nederland	3.7.	In the legally compulsory basic health-insurance and the supplementary health-insurance splitting costs of cure in 'accident' and 'sickness' is arbitrary and not in line with Dutch legislation. For the accident insurance a separate treatment would be correct. In the QIS 4 technical specifications a special Annex was included to cover the specific treatment of the Dutch Health insurance (TS.XVII.G Annex SCR 5: Dutch health insurance). In this draft advice no mention is given to this annex and the treatment of the different risk profile which exists within the Netherlands.	CEIOPS has engaged with the CEA and representatives of these markets to discuss alternatives to segmentation. However, the discussions have not materialised in a concrete European-wide proposal which would allow for a harmonised treatment across the EEA and CEIOPS understands that the industry is continuing work in this area.

65.	Association of British Insurers	3.8.	The ABI is concerned that the proposed increases for non-SLT Health underwriting risk would result on average in an increase of 34% on the premium and reserve risk sub module relative to QIS4, according to CEIOPS calculations.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
66.	Bupa	3.8.	The large change is very alarming as it makes it difficult for health insurers to, for example, finalise strategic plans on internal models (or possibly USP). Furthermore, if the results have changed so significantly since the previous analysis, how would we know the current calibration is "right"? This highlights the need to conduct a thorough analysis for the health module that addresses all the key issues for health underwriting openly and systematically across all types of underwriters and Member States. Keep in mind that the point about varieties of health insurance across Member States applies to groups that underwrite health risks around the world. Health care systems and therefore health underwriting risk profiles vary even more on a global basis. If we see this, it makes group solvency assessment that much more questionable for health insurers. Finally, this large increase is happening in the context of significant increases in parameters across many SCR models (as well as their correlations). It is therefore essentially that CEIOPS create means to ensure that calibration is sensible to firms in light of the great variation of health risks.	Noted During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.
67.	CEA	3.8.	The CEA is very concerned that the proposed increases for non-SLT Health underwriting risk would result on average in an increase of 34% on the premium and reserve risk sub module relative to QIS4, according to CEIOPS calculations.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data

				from 11 countries was taken into account.
68.	Dutch Actuarial Association	3.8.	While there increase in 34% overall the increase for sickness business is significantly higher being a 66% increase for the reserving risk and a 150% increase for the premium factor. Compared to our experience from previous analysis of data within the industry these factors are too high by multiples. Based on this it no longer makes sense for an insurer to use the standard capital requirement model.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
69.	Groupe Consultatif	3.8.	While there increase in 34% overall the increase for sickness business is significantly higher being a 66% increase for the reserving risk and a 150% increase for the premium factor. Compared to our experience from previous analysis of data within the industry these factors are too high by multiples. Based on this it no longer makes no sense for an insurer to use the standard capital requirement model.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
70.				
71.	Zorgverzekeraars Nederland	3.8.	The Association is very much concerned that the proposed increases for non-SLT Health underwriting risk would result on average in an increase of at least 1000% on the premium and reserve risk sub module relative to actual risk profile based on the calculations done by CEIOPS.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.

72.	CEA	3.9.	The explanations in 3.9 and 3.10 may imply that the increase in factors came before the analysis. We suggest CEIOPS to change the wording in order to show the correct sequence of steps.	Noted
73.	European Union member firms of Deloitte Touche Toh	3.9.	We note that this comprehensive analysis is for a large part based on seemingly arbitrary application of different methods for analysis as well as unexplained adjustments to reach the final parameter.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
74.	UNESPA-Association of Spanish Insurers and Reinsu	3.9.	Refer to 3.3	
75.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.10.	If one wants to stay on a pan-European standard formula (which is quite reasonable), and if it is not possible to select a pan-European factor, one has to apply multiple factors. Once again we propose a regrouping of the different Member states in order to respect the different social systems.	Noted During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this. In the revised advice, data from 11 countries was taken into account.
76.	Bupa	3.10.	This is true, but this should not mean that CEIOPS can avoid ensuring that	Noted

			systemic bias against certain markets and classes of homogeneous risks does not creep into the module design and calibration.	
77.	CEA	3.10.	In order to arrive at a more appropriate calibration CEIOPS could consider a more granular approach to the calibration; this granularity could be based on regional view or a view based on buckets of products.	Noted During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.
78.	Dutch Actuarial Association	3.10.	While we recognise that it is not possible to select factors suitable for all undertakings the factors appear to significantly different to that relevant for all Dutch health insurers.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
79.	European Union member firms of Deloitte Touche Toh	3.10.	Has there been analysis to justify a pan-European approach for health given the huge difference in healthcare systems in the different countries (e.g. the Netherlands)? It might well be that allowing for geographical diversification will lead to a better reflection of the specific risks within the standard formula.	During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.
80.				
81.	Groupe Consultatif	3.10.	While we recognise that it is not possible to select factors suitable for all undertakings the factors appear to significantly different to that relevant for all Irish health insurers.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was

				taken into account.
82.	UNESPA-Association of Spanish Insurers and Reinsu	3.10.	Refer to 3.3	
83.				
84.	Zorgverzekeraars Nederland	3.10.	In order to arrive at a more appropriate calibration CEIOPS could consider a more granular approach to the calibration; this granularity should be based on regional view. We are proposing to include an adjustment factor to The adjustment factor should be conditional on the following elements: 4. The market on which the health insurance is sold should be subject to governmental regulations. For example in The Netherlands the basic health insurance market is regulated on various elements such as: prohibition of premium differentiation per policyholder, all potential policyholders are to be accepted by each insurer, every health insurer is subject to risk equalisation system; 5. There should be statistically information available for the specific part of the market which is independent from a specific insurer; 6. The government should provide a guarantee of last resort for the policyholder e.g. when a health insurer would be in default and would be unable to provide the health services towards the policyholders the government will ensure the provision of services towards the policyholder. These condition will ensure that appropriate parameters are available to determine the adjustment factor towards the . Thus the formula to be applied should be: (1-c) x sigma_Europa + c x sigma_region	Noted During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.

			C = If the conditions are fully met the factor c should 1. In the case in which a mixed system is applied or part of the conditions are fulfilled another value could be given reflecting the actual risk profile of the market. C will always be lower or equal than 1; Sigma_Europa = Calibration as used in the Standard formula Sigma_region = Calibration reflecting the risk profile of the region in which the heath insurance is sold This adjustment factor should be reviewed regularly, at least annually, and should apply to the whole of the market and may only reflect the deviation of the risk profile.	
85.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.11.	See remark above. We welcome CEIOPS's intention to revise the factors as a result of a thorough analysis.	Noted
86.	Association of British Insurers	3.11.	We believe that with only 6 member states the sample does not reflect the heterogeneity of the Health market across Europe.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.

87.	Bupa	3.11.	Please see the comments on paragraph 3.10 and the general comments above on creating an open and all-inclusive approach to data collection and analysis across the EU. In respect of the point specifically referred to in 3.11, this only underscores the need for sensitivity testing of the estimates (i.e., dependent variable sensitivity by market, size, etc), plus to the extent possible an examination of how the data from markets and types of health underwriting that was included in the calibration differs from those not included. It would be helpful to know the how representative the sampling was within each sub-module. Were there some sub-modules, such as sickness, that had data from fewer firms, and even if so, was the data still representative by sub-module?	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
88.	CEA	3.11.	It is questionable whether the six States are representative for the industry, considering the kind of risks they represent, the volume and the risk mitigation techniques implemented. We welcome the suggestion that CEIOPS would like to consider the incorporation of further data during the consultation period and revise the factors if necessary and we would like to find more information from CEIOPS on how this will be done. We understand that already some markets were asked for further data. We encourage CEIOPS to use more data to arrive at a proper calibration in which the various risk profiles are more appropriately reflected.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
89.	CRO Forum	3.11.	In The Netherlands there is no lack of data. It is questionable whether the six States are representative for the industry, considering the kind of risks they represent, the volume and the risk mitigation techniques implemented.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was

				taken into account.
90.	Dutch Actuarial Association	3.11.	We strongly advise to consider the incorporation of further data during the consultation period and revise the factors if necessary. The Health Insurance products vary from state to state.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
91.				
92.	Groupe Consultatif	3.11.	The States chosen, in general, do not appear to be relevant to the Irish experience.	CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
93.	Institut des actuaires (France)	3.11.	Data used don't seem to be very representative of the global market (for the average) (figures cf. CP 71 pp 111/118) Market specific patterns are more meaningful for health insurance than for other lines of business (motor third party liability), national calibration might be useful. At least and from an actuarial point of view, an adaptation to the different Social Security Systems(Cf. former CP 50) should be allowed as a means of dealing with the figures used in QIS 4 and 5 without necessarily referring to the undertaking specific parameters.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.

94.	Unum	3.11.	We believe that with only 6 member states the sample does not reflect the diversity of the Health market across Europe.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
95.				
96.	Zorgverzekeraars Nederland	3.11.	The calibration used for the whole short term health insurance should reflect the major health insurance markets. Omitting one of these markets will lead to a distorted calibration. Therefore we urge CEIOPS to include the data which is available of the Dutch market in their final advice.	Noted CEIOPS developed additional analysis based on further available Member states data.
97.	Association of British Insurers	3.12.	We do not believe that allowing for implicit non proportional reinsurance, geographical diversification and inflation is the right response. This will result in advantaging undertakings with no diversification and disadvantaging diversified undertakings. We are in favour of a solution where the factors would be different according to the degree of diversification. We would also like some clarity whether any changes in the calibration can be expected following QIS5.	Noted CEIOPS developed additional analysis based on further available Member states data.
98.	CEA	3.12.	We believe CEIOPS has reflected only a moderate diversification effect due to the limited data used in calibration. An appropriate diversification effect would be based on a much larger Member States sample.	Noted CEIOPS developed

				additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
99.	Dutch Actuarial Association	3.12.	It is important to note that medical inflation is quite different than general inflation and this has been ignored in the calibration process. In the current economic climate we estimate medical inflation will be lower than previously.	Noted
100.	Groupe Consultatif	3.12.	Geographic spread is an important issue for expatriate insurance and for the consideration of catastrophe modelling. Health costs and the drivers of health costs vary significantly by country. Domestic and expatriate insurers would have significantly different risk profiles. It is important to note that medical inflation is quite different than general inflation and this has been ignored in the calibration process. In the current economic climate we estimate medical inflation will be lower than previously.	Noted During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.
101.	UNESPA-Association of Spanish Insurers and Reinsu	3.12.	It is not specified how a diversified geographic level or risk mitigation through non-proportional reinsurance has been taken into account implicitly.	Noted
102.	Unum	3.12.	We do not believe that allowing for implicit non proportional reinsurance, geographical diversification and inflation is the right response. This will result in advantaging undertakings with no diversification and disadvantaging diversified undertakings. We are in favour of a solution where the factors would be different according to the degree of diversification.	Noted

103.				
104.	XL Capital Ltd	3.12.	We disagree with having an average level of geographic diversification and an average level of risk mitigation effect of non-proportional reinsurance. It is not possible to apply an average level for the insurance industry due to such a large diversity between companies. It would be better to explicitly introduce factors to evaluate the impact of these. For books of business that represent higher volatility the propensity of an entity to use non-proportional reinsurance increases. We believe that this enforces the reasoning that the standard formula needs to explicitly reflect non-proportional reinsurance.	Noted
105.	Association of British Insurers	3.13.	The appropriateness of the sample as well as the result of the calculation should be taken into consideration prior to increase the calibration.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
106.	CEA	3.13.	The reduced amount of data should be considered before significantly increasing the factors.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.

107.	CRO Forum	3.13.	In 3.11 there is a lack of data, in 3.13 there is enough data to justify a doubling of parameters. This feels more like a jumping-to-the-conclusion instead of a quantitative substantiated parameterisation.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
108.	Dutch Actuarial Association	3.13.	As indicated this is not consistent with the Dutch experience. We would suggest that a more detailed analysis be undertaken of the experience of insurers throughout Europe as the countries chosen may not be representative.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.
109.	Groupe Consultatif	3.13.	As indicated this is not consistent with the Irish experience. We would suggest that a more detailed analysis be undertaken of the experience of insurers throughout Europe as the countries chosen may not be representative.	Noted CEIOPS developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account.

110.				
111.	Zorgverzekeraars Nederland	3.13.	See general comments.	
112.	European Union member firms of Deloitte Touche Toh	3.14.	Given smaller undertakings are more likely to use the standard formula (as they will find it difficult to afford the costs of using internal models), is there not a risk in setting parameters that are weighted towards the larger undertakings? It may be worth outlining a set of parameters that depend on the size of the undertaking determined by, say, premium income.	Noted
113.	Groupe Consultatif	3.14.	The size of insurer is likely to be important in determining its capital requirements. This should be considered further.	Noted
114.	UNESPA-Association of Spanish Insurers and Reinsu	3.14.	Standard deviations weighted by volume means providing them with the characteristics common of those entities/countries with a larger portfolio, meaning this may not represent the smaller entities/countries characteristics. We therefore imply the process of standard deviations' calibration must be carried out with a wider volume of information where all the casuistic for each case should be captured.	Noted
115.				
116.	XL Capital Ltd	3.14.	Instead of presenting results for small, medium and large firms and then selecting one factor, it would make sense to have three factors that will adjust depending on the amount of business written by the undertaking. Otherwise it may be appropriate to clearly indicate that these factors are geared towards a specific type of undertakings (eg smaller or personal insurance).	Noted
117.	ACA – ASSOCIATION DES COMPAGNIE	3.15.	We welcome the possibility to apply undertaking specific parameters.	Noted

	S D'ASSURANCES DU			
118.	Association of British Insurers	3.15.	(It is unclear whether USP would be the answer for undertakings that consider the parameters inappropriate. For example, the loss distribution selected and the control of cofactors in the analysis are just as important to goodness of fit. Simply repeating the CP 72 analysis with an undertaking's data would not by definition generate a better result. (It is unclear if USP would apply only in respect of EU insurance business in the group solvency assessment. Or will the USP itself based on consolidated data? (It is unclear if USP would have a pre-approval process available before 2012.	Noted
119.	Assuralia	3.15.	It is not clear if any company can use undertaking specific parameters in the Standard Model or if it is considered as a partial internal model if it chose to do so.	Noted
120.	Bupa	3.15.	It should be kept in mind that it is not yet clear what the outcome of CP 75 will ultimately be in respect of Undertaking Specific Parameters or how these would apply (assuming supervisor approval) at the point of Solvency II commencement in October 2012. Furthermore, assessing USP properly will entail a similar level of analytic effort that CEIOPS has and will have to put into the health underwriting risk module to date.	Noted
121.	CEA	3.15.	We welcome the use of undertaking specific parameters where appropriate and consider that this approach could be widened to include other risks.	Noted
122.	CRO Forum	3.15.	We appreciate the option to make use of undertaking specific parameters in	Noted

			case the proposed parameters by CEIOPS are inappropriate.	
123.	Dutch Actuarial Association	3.15.	While recognising the proposed calibrations are now so far away from the internal model estimates that we feel it could be justified that regulators will be put in a difficult position surrounding the approval of models.	Noted
124.				
125.	German Insurance Association – Gesamtverband der D	3.15.	We welcome the use of undertaking specific parameters where appropriate and consider that this approach could be widened to include other risks.	Noted
126.	Groupe Consultatif	3.15.	While recognising this the proposed calibrations are now so far away from the internal model estimates that we feel could be justified that regulators will be put in a difficult position surrounding the approval of models.	Noted
127.	Munich Re	3.15.	The option to make use of undertaking specific parameters (in case the proposed parameters are considered inappropriate) is appreciated. In addition to having the chance to derive company specific standard deviations, a reasonable sub-segmentation should also be facilitated - to take into greater account different risk exposures of different primary insurance products / reinsurance treaties.	Noted
128.	PKV, (German) Association of Private Health Insure	3.15.	We welcome the use of undertaking specific parameters where appropriate and consider that this approach could be widened to include other risks.	Noted
129.	Unum	3.15.	It is unclear whether USP would be the answer for undertakings that consider the parameters inappropriate. Simply repeating the CP 72 analysis	Noted

			with a firm's data would not by definition generate a better result. It is unclear if USP would have a pre-approval process available before 2012.	
130.				
131.	Zorgverzekeraars Nederland	3.15.	We acknowledge the possibility to either use undertaking specific parameters or a partial internal model. However when considering CP 75 the proposals made will not help the short term health insurance. These type of health insurance are typically frequently changing due to political and governmental adjustments. The n=15 will not be reached due to these changes. As a form of social insurance, health insurance in the Netherlands is outsourced to commercial insurance companies. In order to achieve a level playing field between these insurance companies, the risk structure over the population of 16 million insured persons is analysed through a linear least squares econometric model. This model makes heterogeneous risks homogeneous as regards the remaining error term and generates fair premiums. Besides this econometric model, this equalisation scheme is extended with mutual claim pools between insurance companies, that from an actuarial point of view has a shrinking effect on the final standard deviation which has direct relevance for Solvency II. The measurement of this standard deviation is done by iBMG, an independent institute on health economics, affiliated with Erasmus University in Rotterdam. Each year this institute analyses the dataset (cross-section) of that year as a linear model and applies parameter estimation for the mean and standard deviation. Given the large size of this dataset (individual and anonimised observations on the population of the Netherlands) the estimation error for these parameters is virtually zero and parameter estimation is actually measurement which is free from any measurement error. As a result the	Noted

			Netherlands produces each year a quantification of the standard deviation. Although, historically, this results in a time series of standard deviations, only the standard deviation of the most recent year is of importance for the current solvency calculations. Any weight for other sources for the standard deviation will imply a distortion of the risk-based truth. So, there is no need and no room for any other source and the own weight should be 100%. The above should be compared with the approach of a time series of loss ratios, using a weighted mean to determine an average loss ratio and the implied standard deviation which both is viewed representative for the whole time span. Here a credibility mixture might be of value to achieve a more stable result in case the own data of the insurance company is not large. In our nation-wide social health insurance we have a mega dataset (cross-section) that allows year-specific consistent parameter estimation with zero uncertainty to its calculated values. In our opinion if the calibration is not adjusted a Member State is required to develop and implement a partial internal model for the specific line of business. This will imply a costly and burdensome process which cannot be met by all participants in the market especially the SME health insurers. This effect is in our opinion in contradiction to the principles underlying the Solvency II project.	
132.	Assuralia	3.17.	(refers also to 3.18.) The actuarial techniques used in the Health Insurance Business, specifically for the calculation of long term provisions (Ageing reserves, Workers compensation) are very specific and cannot be simply described as "Similar to life". The "Similar to life" module described in this is a simple "copy paste" of the life underwriting module, including the risk calibration, and fails to describe properly the risks existing in the health insurance business and to calculate the right amount of SCR for the Health underwriting risk.	Noted
133.	Association	3.19.	The diagram does not seem to make any allowance for the loss absorbing	Agreed

	of British Insurers		capacity of the technical provision in the health module as provided in the final advice on CP50.	
134.	CEA	3.19.	The final advice on the former CP50 now includes the ability to allow for the loss absorbing capacity of technical provisions in the health module but the diagram shows a slightly different picture.	Noted
135.	Groupe Consultatif	3.19.	Health insurance characteristically covers losses or expenses caused by medical treatment or short or long term care, but it's indifferent to causes of the medical treatment/illness (e.g. disability, accident). So neither disability nor accident risk is covered by health insurance: ☐ Remove "SLT Longevity risk" because the risk driver "longevity risk" is typically not relevant for health insurance. ☐ Remove "Disability" in "SLT Disability – morbidity risk" because disability risk is covered by life insurance. The obligations for the German disability insurance should only be calculated in the life underwriting module. This applies also for contracts which can be unbundled because based on the nature of the business disability insurance belongs in Germany to the life segment. ☐ Remove "SLT Revision risk" because the risk driver "revision risk" is typically not relevant for health insurance or it is handled in connection to other risks.	Noted
136.	ACA –	3.20.	Health risk is different even if the biometric variables are often the same. A health specific analysis should therefore be made.	Noted
137.	Assuralia	3.20.	(refers also to 3.21.) Mortality & Longevity risks are mutually exclusive events and should be treated in the same sub-module (like it is the case for interest rate risk and lapse risk for example). Two shocks can be applied to the Qx, one up and	Noted

			one down, and one providing the highest capital charge is used for SCR purpose.	
138.	CEA	3.20.	As no health specific analysis for this risk is available we would recommend an USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a mortality shock similar to life is a possible simplification which should be actively reviewed.	Noted
139.				
140.	German Insurance Association – Gesamtverband der D	3.20.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a mortality shock similar to life is a possible simplification which should be actively reviewed.	Noted
141.	Groupe Consultatif	3.20.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a mortality shock similar to life is a possible simplification which should be actively reviewed.	Noted
142.	PKV, (German) Association of Private Health Insure	3.20.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a mortality shock similar to life is a possible simplification which should be actively reviewed.	Noted
143.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURAN	3.21.	Health risk is different even if the biometric variables are often the same. A health specific analysis should therefore be made.	Noted

	CES DU			
144.	CEA	3.21.	As no health specific analysis for this risk is available we would recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a longevity shock similar to life is a possible simplification which should be actively reviewed.	Noted
145.	Dutch Actuarial Association	3.21.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a longevity shock similar to life is a possible simplification which should be actively reviewed.	Noted
146.				
147.	German Insurance Association – Gesamtverband der D	3.21.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a longevity shock similar to life is a possible simplification which should be actively reviewed.	Noted
148.	Groupe Consultatif	3.21.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a longevity shock similar to life is a possible simplification which should be actively reviewed. In respect of 3.19 remove "SLT Longevity risk".	Noted
149.	PKV, (German) Association	3.21.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a longevity shock similar to	Noted

	of Private Health Insure		life is a possible simplification which should be actively reviewed.	
150.	European Union member firms of Deloitte Touche Toh	3.22.	There seems to be an overlap between the disability module and revision risk, as it appears as if both modules address the risk of revision of the level of claims as well as inflation risk.	Noted
151.	Groupe Consultatif	3.22.	In respect of 3.19 remove "disability". The obligations for the German disability insurance should only be calculated in the life underwriting module. This applies also for contracts which can be unbundled because based on the nature of the business disability insurance belongs in Germany to the life segment.	Noted
152.	Association of British Insurers	3.23.	Using the same 1% point stress as for expense risk may need further consideration. For example, one would expect an overall higher level of medical inflation (although this may depend on the specific product), with possibly higher volatility than expense inflation. Consistency with the valuation approach for technical provisions must be ensured. [In QIS 4, medical inflation was not allowed for in the calculation of technical provisions (assuming that medical inflation and premium adjustments cancel out).] Contrary to CP 50, there is only an upward shock. In some cases, the downward shock may be relevant (due to premium adjustment mechanism).	Noted
153.	CEA	3.23.	The usage of the same 1 percentage point stress as for expense risk may need further consideration. For example, one would expect an overall higher level of medical inflation (although this may depend on the specific product),	Noted

			with possibly higher volatility than expense inflation. Consistency with the valuation approach for technical provisions must be ensured. [In QIS 4, medical inflation was not allowed for in the calculation of technical provisions (assuming that medical inflation and premium adjustments cancel out).] Opposed to CP 50, it seems there is only an upward shock. In some cases, the downward shock may be relevant (due to premium adjustment mechanism).	
154.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.25.	What was the ratio of complementary health insurance in the analysis of the German market? An analysis based solely on this sector (which is in fact more common to the rest of the European market) may give completely different results.	Noted
155.	Association of British Insurers	3.25.		
156.	CEA	3.25.	There should be a possibility to distinguish between lines of businesses and to check whether they are exposed to the risks described. For example daily benefit insurances pay a fixed amount while the insured person is in a defined state. These products are calculated with expected annual medical expenses instead of inception rates. These kinds of daily benefit insurances are not subject to claim inflation, but to permanent relative changes of claims. For these contracts a shock factor of 10% is too high. Such a high value could not be deduced from historical data of the German market.	Noted

			We would welcome a distinction between lines of businesses. The standard deviation from 2% to 10% is not an appropriate indicator for the annual claims risk, because the data contains other elements stemming from other risks, especially lapse risk or mortality risk. By using the data of the PKV-Dokumentationsreihe, Heft 19: "Zu den Altersbeiträgen der Privatversicherten", Gutachten der Unabhängigen Expertenkommission, March 1997, we suggest a stress of 3%. Besides this the broad range of claim standard deviations shows that any average value differs significantly from possible market values. Consequently we fear that the suggested standard procedure could lead to material mis-estimation in the German and in the European market. We see that the data from the German market gives a clear advice that here a USP procedure is necessary. Also we stress the fact that a calibration based on data from a single market could lead to significant model errors in other countries. In contrast to mortality risk we also see from the mentioned data significant portfolio dependence in claim risks so again we would welcome an USP approach for calibrating this risk. A distinctive feature of Austrian health insurance contracts under this regime is the right of the insurer to regularly change (increase) premiums in certain nationally different but legally defined/restricted ways. The proposed scenarios "permanent absolute change of claims inflation" and "permanent relative change of claims" allow (may even require) management actions, i.e. to increase future premiums of existing insurance contracts. As this management action is certainly not instantaneous	

			(because of a permanent stress) it is not subject to CP54 – so HealthSLT and nHealtSLT are identical in this case (except of discretionary profit sharing) However, technical provisions vary considerably, depending on the extent that these management actions, which compensate a permanent absolute/relative change of claims, are taken into consideration. Again, consistency with the valuation approach for technical provisions must be ensured.	
157.	Dutch Actuarial Association	3.25.	The standard deviation from 2% to 10% is not an appropriate indicator for the annual claims risk, because the data contains other elements stemming from other risks, especially lapse risk or mortality risk. Besides this the broad range of claim standard deviations shows that any average value differs significantly from possible market values. Consequently we fear that the suggested standard procedure could lead to material misestimation in the German and in the European market. We see that the data from the German market gives a clear advice that here a USP procedure is necessary. Also we stress the fact that a calibration based on data from a single market could lead to significant model errors in other countries. In contrast to mortality risk we also see from the mentioned data a significant portfolio dependence in claim risks so again we would welcome an USP approach for calibrating this risk.	
158.				
159.	German Insurance Association – Gesamtverb	3.25.	The standard deviation from 2% to 10% is not an appropriate indicator for the annual claims risk, because the data contains other elements stemming from other risks, especially lapse risk or mortality risk. By using the data of the PKV-Dokumentationsreihe, Heft 19: "Zu den Altersbeiträgen der Privatversicherten", Gutachten der Unabhängigen	Noted

	and der D		Expertenkommission, March 1997, we suggest a stress of 3%. Besides this the broad range of claim standard deviations shows that any average value differs significantly from possible market values. Consequently we fear that the suggested standard procedure could lead to material misestimation in the German and in the European market. We see that the data from the German market gives a clear advice that here a USP procedure is necessary. Also we stress the fact that a calibration based on data from a single market could lead to significant model errors in other countries. In contrast to mortality risk we also see from the mentioned data significant portfolio dependence in claim risks so again we would welcome an USP approach for calibrating this risk.	
160.	Groupe Consultatif	3.25.	The standard deviation from 2% to 10% is not an appropriate indicator for the annual claims risk, because the data contains other elements stemming from other risks, especially lapse risk or mortality risk. By using the data of the Documentation Series, Issue 19 by PKV (Association of Private Health Insurance Companies in Germany): "Zu den Altersbeiträgen der Privatversicherten", Gutachten der Unabhängigen Expertenkommission, March 1997, a stress of 3% seems adequate. To include a risk margin we therefore suggest an overall stress of 6%. Besides this the broad range of claim standard deviations shows that any average value differs significantly from possible market values. Consequently we fear that the suggested standard procedure could lead to material misestimation in the German and in the European market. We see that the data from the German market gives a clear advice that here a USP procedure is necessary. Also we stress the fact that a calibration based on data from a single market could lead to significant model errors in other countries. In contrast to mortality risk we also see from the mentioned data a significant portfolio dependence in claim risks so again we would welcome an USP approach for calibrating this risk.	Noted

161.	Munich Re	3.25.	The standard deviation from 2% to 10% is not an appropriate indicator for the annual claims risk, because the data contains other elements stemming from other risks, especially lapse risk or mortality risk. Besides this the broad range of claim standard deviations shows that any average value differs significantly from possible market values. Consequently we fear that the suggested standard procedure could lead to material misestimation in the German and in the European market. We see that the data from the German market gives a clear advice that here a USP procedure is necessary. Also we stress the fact that a calibration based on data from a single market could lead to significant model errors in other countries. In contrast to mortality risk we also see from the mentioned data a significant portfolio dependence in claim risks so again we would welcome an USP approach for calibrating this risk.	Noted
162.	PKV, (German) Association of Private Health Insure	3.25.	The standard deviation from 2% to 10% is not an appropriate indicator for the annual claims risk, because the data contains other elements stemming from other risks, especially lapse risk or mortality risk. By using the data of the PKV-Dokumentationsreihe, Heft 19: "Zu den Altersbeiträgen der Privatversicherten", Gutachten der Unabhängigen Expertenkommission, March 1997, we suggest a stress of 3%. Besides this the broad range of claim standard deviations shows that any average value differs significantly from possible market values. Consequently we fear that the suggested standard procedure could lead to material misestimation in the German and in the European market. We see that the data from the German market gives a clear advice that here a USP procedure is necessary. Also we stress the fact that a calibration based on data from a single market could lead to significant model errors in other countries. In contrast to mortality risk we also see from the mentioned data a significant portfolio dependence in claim risks so again we would welcome an USP approach for	Noted

			calibrating this risk.	
163.	Unum	3.25.		Noted
164.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.26.	The simple doubling without further estimation seems not adequate.	CEIOPS has removed the former adjustment with the revised factor being 5%. Furthermore, CEIOPS has lowered the calibration for Lapse risk in Health SLT to 20%
165.	CEA	3.26.	The doubling of a risk to cover model risk, random change etc without precise reasons is not adequate. For the German SLT health business for example a shock factor of 10% in combination with 1% inflation seems too high.	CEIOPS has removed the former adjustment with the revised factor being 5%. Furthermore, CEIOPS has lowered the calibration for Lapse risk in Health SLT to 20%
166.	CRO Forum	3.26.	The doubling for other risk without precise reasons is not adequate. So for the German SLT Health business a shock factor of 10% in combination with 1% inflation seems too high.	CEIOPS has removed the former adjustment with the revised factor being 5%. Furthermore, CEIOPS has lowered the calibration for Lapse risk in Health SLT to 20%
167.	Dutch Actuarial Association	3.26.	The doubling of a risk to cover model risk, random change etc seems not appropriate. We would like to see some evidence that doubling the estimation risk, gives the combination of estimation and other risk	CEIOPS has removed the former adjustment with the revised factor being 5%. Furthermore, CEIOPS has lowered the calibration for Lapse risk

				in Health SLT to 20%
168.				
169.	German Insurance Association – Gesamtverband der D	3.26.	The doubling of a risk to cover model risk, random change etc without precise reasons is not adequate. So for the German SLT Health business a shock factor of 10% in combination with 1% inflation seems too high.	CEIOPS has removed the former adjustment with the revised factor being 5%. Furthermore, CEIOPS has lowered the calibration for Lapse risk in Health SLT to 20%
170.	Groupe Consultatif	3.26.	The doubling of a risk to cover model risk, random change etc seems not appropriate.	CEIOPS has removed the former adjustment with the revised factor being 5%. Furthermore, CEIOPS has lowered the calibration for Lapse risk in Health SLT to 20%
171.	Munich Re	3.26.	The doubling of a risk to cover model risk, random change etc seems not appropriate. Especially in Connection with a undertaking specific approach we would suggest an additive risk load (e.g. 3%).	CEIOPS has removed the former adjustment with the revised factor being 5%. Furthermore, CEIOPS has lowered the calibration for Lapse risk in Health SLT to 20%
172.	PKV, (German) Association of Private Health Insure	3.26.	The doubling of a risk to cover model risk, random change etc without precise reasons is not adequate. So for the German SLT Health business a shock factor of 10% in combination with 1% inflation seems too high.	CEIOPS has removed the former adjustment with the revised factor being 5%. Furthermore, CEIOPS has lowered the calibration for Lapse risk in Health SLT to 20%

173.	Assuralia	3.27.	It is not clear what CEIOPS means by "There are no indications that the disability risk of health obligations differs substantially from the disability risk of life obligations…" What exactly is the disability risk of life obligations? How was this shock calibrated in the life underwriting module and is the CEIOPS certain that the methodology applies to health obligations?	Noted
174.				
175.	CEA	3.27.	The CEA proposes to CEIOPS that the life risk module supports the development of separate stresses for disability which would take into account the specific features provided by disability products. A specific analysis of the calibration of disability risk for income insurance should be done. As no health specific analysis for this risk is available we would recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a disability shock similar to life is a possible simplification which should be actively reviewed.	Noted
176.	CRO Forum	3.27.	No change appears to be proposed to the stresses defined in CP49. Further analysis would be necessary to assess whether this is appropriate.	Noted
177.	Dutch Actuarial Association	3.27.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a disability shock similar to life is a possible simplification which should be actively reviewed.	Noted
178.	German Insurance	3.27.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality,	Noted

	Association – Gesamtverband der D		given e.g. in CP 77 (3.39), we would agree that a disability shock similar to life is a possible simplification which should be actively reviewed.	
179.	Groupe Consultatif	3.27.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a disability shock similar to life is a possible simplification which should be actively reviewed. In respect of 3.19 remove "disability risk". The obligations for the German disability insurance should only be calculated in the life underwriting module. This applies also for contracts which can be unbundled because based on the nature of the business disability insurance belongs in Germany to the life segment.	Noted
180.	PKV, (German) Association of Private Health Insure	3.27.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a disability shock similar to life is a possible simplification which should be actively reviewed.	Noted
181.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.28.	Health risk is different even if the biometric variables are often the same. A health specific analysis should therefore be made.	Noted
182.	CEA	3.28.	As no health specific analysis for this risk is available we would recommend an USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that an expense shock similar to life is a	Noted

			possible simplification which should be actively reviewed. We remind that the expense structure in health insurance is different from life insurance.	
183.	Dutch Actuarial Association	3.28.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a expense shock similar to life is a possible simplification which should be actively reviewed. It should be mentioned that the expense structure in health insurance is different from life insurance.	Noted
184.				
185.	German Insurance Association – Gesamtverband der D	3.28.	As no health specific analysis for this risk is available we would recommend an USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that an expense shock similar to life is a possible simplification which should be actively reviewed. We remind that the expense structure in health insurance is different from life insurance.	Noted
186.	Groupe Consultatif	3.28.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a expense shock similar to life is a possible simplification which should be actively reviewed. It should be mentioned that the expense structure in health insurance is different from life insurance.	Noted
187.	PKV, (German) Association of Private Health Insure	3.28.	As no health specific analysis for this risk is available we would recommend an USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that an expense shock similar to life is a possible simplification which should be actively reviewed. We remind that the expense structure in health insurance is different from life insurance.	Noted
188.	ACA – ASSOCIATIO	3.29.	Health risk is different even if the biometric variables are often the same. A health specific analysis should therefore be made.	Noted

	N DES COMPAGNIES D'ASSURANCES DU			
189.				
190.	CEA	3.29.	As no health specific analysis for this risk is available we would recommend an USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a revision shock similar to life is a possible simplification which should be actively reviewed. Especially the risk of significant differences between revision risks in health insurance and life insurance should be analysed. In this context, we query CEIOPS about the specific shock of 1% assumed to be added compared to the life underwriting risk module.	Noted
191.	CRO Forum	3.29.	What is Revision Risk? Elsewhere it is stated as referring to a change by the insurer to an annuity already in payment, in which case it would not apply to UK IP and PMI business – is this a correct interpretation?	Noted See the definition of SLT Health Revision risk in the final advice related to CP50.
192.	Dutch Actuarial Association	3.29.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a revision shock similar to life is a possible simplification which should be actively reviewed. Especially the risk of significant differences between revision risks in health insurance and life insurance should be analysed.	Noted
193.				

194.	German Insurance Association – Gesamtverband der D	3.29.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a revision shock similar to life is a possible simplification which should be actively reviewed. Especially the risk of significant differences between revision risks in health insurance and life insurance should be analysed.	Noted
195.	Groupe Consultatif	3.29.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a revision shock similar to life is a possible simplification which should be actively reviewed. Especially the risk of significant differences between revision risks in health insurance and life insurance should be analysed.	Noted
196.	PKV, (German) Association of Private Health Insure	3.29.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a revision shock similar to life is a possible simplification which should be actively reviewed. Especially the risk of significant differences between revision risks in health insurance and life insurance should be analysed.	Noted
197.	Association of British Insurers	3.30.	CEA comment: "We remain uncertain as to what is meant to be covered by revision risk. Can CEIOPS please clarify? Does this cover both the (uncertain) future inflation of benefits and rehabilitation? Does the calibration of the 25% recovery stress under health SLT morbidity risk allow for revision risk already? For non-SLT sickness risk there could be revision risk due to unexpected increases in medical expenses in an inflationary environment. There is a certain inconsistency with CP75 on USP regarding the exclusion or inclusion of inflation in this context. CP75 states in 3.116 that the USP shock for revision risk is restricted on to products not subject to significant inflation risk, but CP72 includes an additional allowance for inflation risk in the stress?"	Noted See the definition of SLT Health Revision risk in the final advcse related to CP50.

			Do members agree	
198.	CEA	3.30.	We agree that differences between revision risk in health and life exist. However, we remain uncertain as to what is meant to be covered by revision risk. Can CEIOPS please clarify? Does this cover both the (uncertain) future inflation of benefits and rehabilitation? Does the calibration of the 25% recovery stress under health SLT morbidity risk allow for revision risk already? For non-SLT sickness risk there could be revision risk due to unexpected increases in medical expenses in an inflationary environment. There is a certain inconsistency with CP75 on USP regarding the exclusion or inclusion of inflation in this context. CP75 states in 3.116 that the USP shock for revision risk is restricted on to products not subject to significant inflation risk, but CP72 includes an additional allowance for inflation risk in the stress? The effect of the revision risk for the Dutch market still isn't very clear. The extra risk mentioned because of possible 'changes in inflation' is a risk recognized in some of our income protection (disability) products. If next to this risk unexpected changes in recovery rates are also part of this risk, then it doesn't seem fair to use the same calibration for this risk as for the life revision risk (changes in recovery rates are mostly concerning income products in the Netherlands, not medical care products). As no health specific analysis for this risk is available we would recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a revision shock similar to life is a possible simplification which should be actively reviewed. Especially the risk	Noted See the definition of SLT Health Revision risk in the final advice related to CP50.

			of significant differences between revision risks in health insurance and life insurance should be analysed.	
199.	Dutch Actuarial Association	3.30.	We agree that differences between revision risk in health and life exist.	Noted
200.	European Union member firms of Deloitte Touche Toh	3.30.	A justification or calibration of the 1% shock for inflation risk is missing. Does the 1% shock represent a shock equivalent with 99.5% VaR over one year?	Noted
201.	German Insurance Association – Gesamtverband der D	3.30.	We agree that differences between revision risk in health and life exist. However, we remain uncertain as to what is meant to be covered by revision risk. Can CEIOPS please clarify? Does this cover both the (uncertain) future inflation of benefits and rehabilitation? Does the calibration of the 25% recovery stress under health SLT morbidity risk allow for revision risk already? For non-SLT sickness risk there could be revision risk due to unexpected increases in medical expenses in an inflationary environment. There is a certain inconsistency with CP75 on USP regarding the exclusion or inclusion of inflation in this context. CP75 states in 3.116 that the USP shock for revision risk is restricted on to products not subject to significant inflation risk, but CP72 includes an additional allowance for inflation risk in the stress? As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a revision shock similar to life is a possible simplification which should be actively reviewed. Especially the risk of significant differences between revision risks in health insurance	Noted See the definition of SLT Health Revision risk in the final advice related to CP50.

			and life insurance should be analysed.	
202.	Groupe Consultatif	3.30.	We agree that differences between revision risk in health and life exist.	Noted
203.	PKV, (German) Association of Private Health Insure	3.30.	We agree that differences between revision risk in health and life exist. However, we remain uncertain as to what is meant to be covered by revision risk. Can CEIOPS please clarify? Does this cover both the (uncertain) future inflation of benefits and rehabilitation? Does the calibration of the 25% recovery stress under health SLT morbidity risk allow for revision risk already? For non-SLT sickness risk there could be revision risk due to unexpected increases in medical expenses in an inflationary environment. There is a certain inconsistency with CP75 on USP regarding the exclusion or inclusion of inflation in this context. CP75 states in 3.116 that the USP shock for revision risk is restricted on to products not subject to significant inflation risk, but CP72 includes an additional allowance for inflation risk in the stress? As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a revision shock similar to life is a possible simplification which should be actively reviewed. Especially the risk of significant differences between revision risks in health insurance and life insurance should be analysed.	Noted See the definition of SLT Health Revision risk in the final advice related to CP50.
204.	PricewaterhouseCoopers LLP	3.30.	The definition of revision risk in this paragraph is expanded beyond that currently given in the advice on the life underwriting risk module. This contradicts paragraph 3.29 which states that there are no indications that the revision risk for health obligations differs substantially from that of the revision risk for life obligations. There is a further contradiction in the final sentence, where the shock of 1% is "as for the life underwriting risk module". Current advice for the life underwriting risk module does not include this shock.	Noted See the definition of SLT Health Revision risk in the final advice related to CP50.

			Consideration should be given to whether it is appropriate to extend the scope of the revision risk sub-module for life underwriting risk in a similar way to cover the risk of changes due to inflation. The wording in this advice should be clarified in line with the conclusion of such consideration.	
205.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.31.	Health risk is different even if the biometric variables are often the same. A health specific analysis should therefore be made.	CEIOPS is aware of the large varieties in health insurance on the European market. However, CEIOPS has been asked to provide a calibration based on an European average risk profile.
206.	Assuralia	3.31.	The lapse risk should have a specific calibration for the health module instead of simply copying the one done in the life module. The reasons why a policyholder would chose to end his health insurance contract are completely different than those of a life insurance policyholder. The advantages and inconvenient of doing so are also very different. And the impact for the insurer differs a lot. - A life insurance policyholder could chose to change his contracts for financial reason (change of interest rate, personal need for money, competition in profit sharing, …) while in health insurance those calculations are not made. - For health insurance, the way the provisions are handled impacts a lot the decision of the policy holder. If it is lost, he will be much more reluctant to move as if it is transferable. A specific calibration should be made for the health insurance module, or the company should be able to use underlying specific parameters for this risk.	CEIOPS is aware of the large varieties in health insurance on the European market. However, CEIOPS has been asked to provide a calibration based on an European average risk profile.
207.	CEA	3.31.	No specific analysis for the calibration of lapse risk was made. In some	CEIOPS is aware of the

			markets, nevertheless there are major differences between life and health contracts with regard to the lapse risk. For example, in Germany everybody must have a health insurance, thus cancelling an insurance contract means getting a new one with another insurance company. Because the policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile. A different calibration from life is needed or, better, undertakings should be allowed to use entity specific data. An USP approach could increase the reliability of the results and reduce the model error in the health underwriting risk.	large varieties in health insurance on the European market. However, CEIOPS has been asked to provide a calibration based on an European average risk profile.
208.	CRO Forum	3.31.	In some markets, there are major differences between life and health contracts with regard to the lapse risk. For example, in Germany everybody must have a health insurance, thus cancelling an insurance contract means getting a new one with another insurance company. Because the policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile. A different calibration from life is therefore needed or undertakings should be allowed to use entity specific data.	CEIOPS is aware of the large varieties in health insurance on the European market. However, CEIOPS has been asked to provide a calibration based on an European average risk profile.
209.	Dutch Actuarial Association	3.31.	As no health specific analysis for this risk is available we would usually recommend a USP approach. According to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a lapse shock similar to life is a possible simplification for the Dutch market which should be actively reviewed.	CEIOPS is aware of the large varieties in health insurance on the European market. However, CEIOPS has been asked to provide a calibration based on an European average risk profile.

210.				
211.	German Insurance Association – Gesamtverband der D	3.31.	As no health specific analysis for this risk is available we would usually recommend a USP approach. According to the definition of materiality, given e.g. in CP 77 (3.39), we see that a lapse shock could be the dominant risk in health underwriting risk in Germany. Here a USP approach could increase the reliability of the results and reduce the model error in the health underwriting risk. In some markets, there are major differences between life and health contracts with regard to the lapse risk. For example, in Germany everybody must have a health insurance, thus cancelling an insurance contract means getting a new one with another insurance company. Because the policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile. A different calibration from life is therefore needed or undertakings should be allowed to use entity specific data.	CEIOPS is aware of the large varieties in health insurance on the European market. However, CEIOPS has been asked to provide a calibration based on an European average risk profile.
212.	Groupe Consultatif	3.31.	As no health specific analysis for this risk is available we would usually recommend a USP approach. According to the definition of materiality, given e.g. in CP 77 (3.39), we see that a lapse shock could be the dominant risk in health underwriting risk in Germany. Here a USP approach could increase the reliability of the results and reduce the model error in the health underwriting risk. In some markets, there are major differences between life and health contracts with regard to the lapse risk. For example, in Germany everybody must have a health insurance, thus cancelling an insurance contract means getting a new one with another insurance company. Because the policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile. A different calibration from life is therefore needed or undertakings should be allowed to use entity specific data.	CEIOPS is aware of the large varieties in health insurance on the European market. However, CEIOPS has been asked to provide a calibration based on an European average risk profile
213.	Munich Re	3.31.	As no health specific analysis for this risk is available we would highly recommend a USP approach. According to the definition of materiality, given e.g. in CP 77 (3.39), we see that a lapse shock could be the dominant	CEIOPS is aware of the large varieties in health insurance on the

			risk in health underwriting risk for example in Germany. Here a USP approach could increase the reliability of the results and reduce the model error in the health underwriting risk. In some markets, there are major differences between life and health contracts with regard to the lapse risk. For example, in Germany everybody must have a health insurance, thus cancelling an insurance contract means getting a new one with another insurance company. Because the policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile and typically on a lower level than in other lines of business. A different calibration from life is therefore needed or undertakings should be allowed to use entity specific data. Also a undertaking specific approach is recommended to cover the different situations in different countries.	European market. However, CEIOPS has been asked to provide a calibration based on an European average risk profile
214.	PKV, (German) Association of Private Health Insure	3.31.	As no health specific analysis for this risk is available we would usually recommend a USP approach. According to the definition of materiality, given e.g. in CP 77 (3.39), we see that a lapse shock could be the dominant risk in health underwriting risk in Germany. Here a USP approach could increase the reliability of the results and reduce the model error in the health underwriting risk. In some markets, there are major differences between life and health contracts with regard to the lapse risk. For example, in Germany everybody must have a health insurance, thus cancelling an insurance contract means getting a new one with another insurance company. Because the policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile. A different calibration from life is therefore needed or undertakings should be allowed to use entity specific data.	CEIOPS is aware of the large varieties in health insurance on the European market. However, CEIOPS has been asked to provide a calibration based on an European average risk profile
215.	Zorgverzekeraars Nederland	3.33.	Cpp LOB should be introduced in this table too and explained.	Noted
216.				

217.	CRO Forum	3.37.	Definition of LoB still not clarified, for example would all PMI business be a single LoB?	Noted
218.	CEA	3.38.	Cpp LOB should be introduced in this table too.	Noted
219.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.39.	The term CPPLOB is not defined.	Referred to Technical Specifications.
220.	Dutch Actuarial Association	3.39.	We see that element C lob pp is still part of the Volume measure. In our comment on CP 48 we stated the following: The element C lob pp is assumed to relate to the risk (newly introduces in this CP) of the change in premium provision set up for multi-year contracts. Although we can understand the thoughts we think it is not in line with the one year time horizon for capital requirements as stated in Framework Directive article 104-4 Even though it seems reasonable to consider the risks covered within the contract (it will be done for the Best Estimate valuations as specified in CP30) it is arguable whether including this volume after t+1 is in line with the Framework Directive (article 104-4) as principally the capital charge should be based on a one year time horizon. By combining both the earned or written premium over a full one year time horizon (independently if the contracts are already in place) and adding up an additional component of exposure after the one year time horizon for unexpired risks at t+1, one does not seem to follow the principles as laid out in the Framework Directive and ultimately charge capital for more than a 1 year exposure measure. One may consider to include a charge for the 'rereserving risk', that is the risk that the reserves at the end of the 1 st	Noted

			year need to be adjusted due to events occurring during the 1 st year, This is however of a different order than the currently proposed inclusion of the element C lob pp in the volume measure for premium risk.	
221.				
222.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.40.	The term CPPLOB is not defined.	Noted
223.				
224.	CEA	3.42.	In The Netherlands the premium level is determined each year. The level of the premium is in first instance not correlated with the run off results because of the risk mitigation and equalisation system which takes more than three years. Furthermore through the macro equalisation features, the run off result in year t will have a positive effect on the premium contribution in year t+1. This implies even a negative correlation. Also the insurer is able to reset its premium levels when needed. Again this shows the necessity to include more appropriate calibration regarding the health module.	Noted
225.	Zorgverzekeraars Nederland	3.42.	In The Netherlands the premium level is determined by each insurance company each year. The level of the premium is in first instance not correlated with the run off results because of the risk mitigation and equalisation system which takes more than three years. Furthermore through the macro equalisation features, the run off result in year t will have a positive effect on the premium contribution in year t+1. This implies even a negative correlation. Also the insurer is able to reset its premium levels	Noted

			when needed. Again this shows the necessity to include more appropriate calibration regarding the health module.	
226.	CEA	3.46.	The CEA proposes to stick to point A of the Annex I of framework directive which clearly distinguishing between "Accident" and "Sickness" cover. Accident should be treated under non life module. In Holland there is in the legally compulsory basic health-insurance and the supplementary health-insurance no distinction between Accident and Sickness, opposite to the accident insurance'. In the first case there should be the possibility to abandon Accident.	During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.
227.	CRO Forum	3.46.	In The Netherlands there the legally compulsory basic health-insurance and the supplementary health-insurance make no distinction between Accident and Sickness, opposite to the accident insurance'. In the first case there should be the possibility to abandon Accident.	During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.
228.	German Insurance Association – Gesamtverband der D	3.46.	The GDV proposes to stick to point A of the Annex I of framework directive which clearly distinguishing between "Accident" and "Sickness" cover.	Noted
229.	Groupe Consultatif	3.46.	For some health risks it is difficulty to separate the accident and is sickness elements.	Noted
230.	PKV, (German) Association of Private	3.46.	The PKV proposes to stick to point A of the Annex I of framework directive which clearly distinguishing between "Accident" and "Sickness" cover.	Noted

	Health Insure			
231.				
232.	Zorgverzekeraars Nederland	3.46.	In Holland there is in the legally compulsory basic health-insurance and the supplementary health-insurance no distinction between Accident and Sickness, opposite to the accident insurance'. In the first case there should be the possibility to abandon Accident.	During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.
233.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.47.	The procedure is not very transparent; therefore the results aren't quite retraceable. What are the methods used?	CEIOPS developed additional analysis based on further available Member states data.
234.	Association of British Insurers	3.47.	Data ☐ In general, very limited. ☐ A number of sources of heterogeneity for which no allowance has been made, including the underwriting cycle, accounting and regulatory regimes, claims environment, reinsurance programmes and reserving philosophy. ☐ Sometimes net data was not available so gross data was used, likely to overstate variability (though it would be difficult to quantify this without carrying out the appropriate analysis on the actual data) Premium Risk Methods No allowance for underwriting cycle or changes in reinsurance programmes	Noted CEIOPS developed additional analysis based on further available Member states data.

			Methods 2-4 assume all companies have the same loss ratio and/or the same variability of results, which may lead to under-fitting to the data and overstating variability Some methods ignore the diversification benefits generally seen in larger portfolios of business An analysis has been carried out on time-series data collected during QIS4. The results have been considered as a minimum for the premium factors, when there are a number of reasons why this analysis might actually overstate variability.	
235.	Bupa	3.47.	In respect of data feeding the triangles, for example, is it certain that claims incurred are defined consistently? Some health insurers and markets tie incurred dates to original date of illness, others to the date of initial treatment dates, others to the date of each treatment, etc. With only 4 Member States represented, one has to wonder about the generalisability of the findings. There is variation in this practice even within Member States. As mentioned in paragraphs 3.10 and 3.11, there should be some form of model sensitivity testing to assess this influence.	Noted
236.	CEA	3.47.	Data ☐ In general, very limited. ☐ A number of sources of heterogeneity for which no allowance has been made, including the underwriting cycle, accounting and regulatory regimes, claims environment, reinsurance programmes and reserving philosophy. ☐ Sometimes net data was not available so gross data was used, likely to overstate variability (though it would be difficult to quantify this without carrying out the appropriate analysis on the actual data)	Noted CEIOPS developed additional analysis based on further available Member states data. During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.

			Premium Risk Methods No allowance for underwriting cycle or changes in reinsurance programmes Methods 2-4 assume all companies have the same loss ratio and/or the same variability of results, which may lead to under-fitting to the data and overstating variability Some methods ignore the diversification benefits generally seen in larger portfolios of business An analysis has been carried out on time-series data collected during QIS4. The results have been considered as a minimum for the premium factors, when there are a number of reasons why this analysis might actually overstate variability. Based on the results shown in the following table, we have observed a notable difference between the obtained results through the use of different methods. Find attached a summary table of LOB factors along with the method used: From our point of view, the factors proposed by CEIOPS are unrealistically high, making it necessary to perform a calibration analysis based on methods 1, 2 and the analysis of QIS4 information, based on a larger and more representative volume of data then the one applied here. We also take this opportunity to encourage CEIOPS to indicate the method they followed to choose the final factor. Also, none of the proposed models takes into account the impact of cyclical effects in terms of subscription. The loss ratio volatility experienced by the	

			entities, can be explained by a variety of variables that have not been considered in the calibration process object of this paper (changes in premium rates, regulatory changes affecting claim size, etc.). There is a high degree of heterogeneity in the data used as the substrate of the calibration process, which leads to an artificial increase in the levels of volatility. The use of gross reinsurance information also affects an increase in such volatilities. Furthermore the final factor aggregation through a premium weighting is not the best option from our point of view, i.e. in the case of a company increasing premium rates but maintaining the same portfolio, will lead to a higher capital requirements. The allocation of the risks will be done by undertakings following a proper analysis of the underlying risk and based on the principles of proportionality and materiality.	
237.				
238.	UNESPA-Association of Spanish Insurers and Reinsu	3.47.	• ☐ Despite of the fact of the topics and based on the results shown in the following table, we have observed a notable difference between the obtained results through the use of different methods. Find attached a summary table of LOB factors along with the method used:	Noted CEIOPS has developed additional analysis based on further available Member states data. In the revised advice, data from 11 countries was taken into account. During the revision, CEIOPS has engaged in

LOB	Method 1	Method 2	Method 3	Method 4	QIS4*_Median	QIS4*_Mean	QIS4	Ceiops Sug	Nb Firms Calib	Nb Firms qis4*	Dif_%
Health Sickness	7.00%	34.00%	24.00%	18.00%	4.60%	4.30%	3.00%	7.5%	94	275	192.6%
Health Acc	15.00%	14.00%	32.00%	35.00%	6.80%	5.90%	5.00%	10.0%	229	330	44.1%
WC	11.00%	7.00%	7.00%	5.00%	10.60%	9.30%	7.00%	10.0%	19	108	468.4%

			• From our point of view, **the factors proposed by CEIOPS are unrealistically high, making it necessary to perform a calibration analysis based on methods 1, 2 and the analysis of QIS4 information, based on a larger and more representative volume of data then the one applied here**. We also take this opportunity to encourage CEIOPS to indicate the method they followed to choose the final factor (there are cases such as that suggested for MAT, in which there is no correspondence between the factor suggested and any of those resulting from the application of the methods proposed). • Also, **none of the proposed models takes into account the impact of cyclical effects in terms of subscription**. The LR volatility experienced by the entities, can be explained by a variety of variables that have not been considered in the calibration process object of this paper (changes in premium rates, regulatory changes affecting claim size, etc.). • **There is a high degree of heterogeneity in the data used** as the substrate of the calibration process, which leads to an artificial increase in the levels of volatility. The use of gross reinsurance information also affects an increase in such volatilities. • Furthermore the final factor aggregation through a premium weighting is not the better option from our point of view (i.e) in the case of a company increasing premium rates but maintaining the same portfolio, will lead to a higher capital requirements. Lastly, we believe that data set (just six countries taken into account) under which calibration was done, do not enough represent the casuistry of every European as such. Therefore we encourage CEIOPS to take into account the calibration done over the Spanish insurance industry (calibrated health premium factor is 5.43% which is in line with the factor derived from Qis4 analysis for Health Sickness sub line of business).	exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.
239.	Association	3.48.	Based on the table in 3.49, the ABI asks for a more granular approach to	Noted

	of British Insurers		the accident factor, which would be significantly more appropriate; factors should be calculated separately for large, medium and small undertakings.	
240.	CEA	3.48.	Based on the table in 3.49, the CEA asks for a more granular approach to the accident factor, which would be significantly more appropriate; factors should be calculated separately for large, medium and small undertakings.	Noted
241.	CRO Forum	3.48.	The recommendation is not derived from the text. There is no link with the column 'Fitted', nor with the results from QIS-4. The recommendations are coming out of the blue. In The Netherlands there the legally compulsory basic health-insurance and the supplementary health-insurance make no distinction between Accident and Sickness, opposite to the accident insurance'. In the first case there should be the possibility to abandon Accident.	Noted
242.	Dutch Actuarial Association	3.48.	As indicated above these figures look to be too high.	CEIOPS developed additional analysis based on further available Member states data.
243.	Groupe Consultatif	3.48.	As indicated above these figures look to be too high.	CEIOPS developed additional analysis based on further available Member states data.
244.				
245.	Association of British Insurers	3.49.	The sample chosen only includes 3 countries. We doubt that it is sufficient to obtain a representative view of the European market.	CEIOPS developed additional analysis based on further available Member states data.
246.	CEA	3.49.	The data was from Germany, Poland and Luxembourg only, although a good	CEIOPS developed

			number of companies were included. Why so few countries and how were these countries chosen? From the PP plot it would appear that none of the methods fit really well.	additional analysis based on further available Member states data.
247.	CRO Forum	3.49.	The CRO Forum would recommend CEIOPS to also include Dutch data in the analysis, since. it is an important insurance industry with material substance in the local market. The methods are not explained, which does not make the process transparent.	CEIOPS developed additional analysis based on further available Member states data.
248.	Dutch Actuarial Association	3.49.	We are unclear as to whether these figures in €'000s or €m's. If these figures are in €'000's the sample looks to be very small.	Noted
249.	European Union member firms of Deloitte Touche Toh	3.49.	Are these countries expected to be representative of Europe? Considering the method of classification of 'small', 'medium' and 'large' explained in CP71, could it be due to the size of the country (and the health system) that all data from Luxembourg are rated as small, Poland as medium and Germany as large companies?	CEIOPS developed additional analysis based on further available Member states data.
250.	German Insurance Association – Gesamtverband der D	3.49.	The branches (Non Life, Health, Life) should be treated in the sub-risk-module according to the business model.	Noted
251.	Groupe Consultatif	3.49.	We are unclear as to whether these figures in €'000s or €m's. If these figures are in €'000's the sample looks to be very small.	Noted
252.	PKV, (German) Association	3.49.	The branches (Non Life, Health, Life) should be treated in the sub-risk-module according to the business model.	Noted

	of Private Health Insure			
253.				
254.	Zorgverzekeraars Nederland	3.49.	The data was from Germany, Poland and Luxembourg only, although a good number of companies were included. Why so few countries and how were these countries chosen? From the PP plot it would appear that none of the methods fit really well. The fit would be better when regional adjustments as proposed in the general comments are applied. We would urge CEIOPS to consider this approach.	CEIOPS developed additional analysis based on further available Member states data.
255.	Association of British Insurers	3.51.	The graph shows diversification effects when the portfolio size increases. Yet the chosen risk factor applies to companies of all sizes. This "one size fits all" approach results in requirements that are not suitable for many large and many small companies.	Noted
256.	Bupa	3.51.	It is well known that health insurance diversifies very rapidly by size. What does this analysis suggest for those markets where the vast majority of market share is held by firms with an average volume several times the size of the right most range in the sample frame shown?	Noted
257.	CEA	3.51.	The graph shows diversification effects when the portfolio size increases. Yet the chosen risk factor applies to companies of all sizes. This "one size fits all" approach results in requirements that are not suitable for many large and many small companies.	Noted
258.	CRO Forum	3.51.	The graph shows diversification effects when the portfolio size increases. Yet the chosen risk factor applies to companies of all sizes. This "one size fits all" approach results in requirements that are not suitable for many large	Noted

			and many small companies.	
259.	Zorgverzekeraars Nederland	3.51.	The graph shows diversification effects when the portfolio size increases. Yet the chosen risk factor applies to companies of all sizes. This "one size fits all" approach results in requirements that are not suitable for many large and many small companies.	Noted
260.	Dutch Actuarial Association	3.52.	Regarding the plot in 3.51 one should use undertaking specific factors. A general factor isn't really adequate.	Noted
261.	Groupe Consultatif	3.52.	Regarding the plot in 3.51 one should use undertaking specific factors. A general factor isn't really adequate.	Noted
262.	UNESPA-Association of Spanish Insurers and Reinsu	3.52.	The volume of information provided (expressed in number of entities) for the purpose of the calibration process accounts for 70% of the volume produced in QIS4. QIS4 factor in Table 3.49 corresponds to the median obtained on the analysis of the information available for the purposes of Quis4 and detailed in Annex 4.4 of CP 71. We understand that the information that has been used for the factor calibration may not be representative of the entire European insurance sector as it has been provided by only three countries, among which, only Germany is significant. CEIOPS suggests that the methodology for determining the factor (10%) was taking the average of method 2 and the outcome of QIS4. It would be desirable a choice resulting from a higher level of analysis depth, weights, etc., since their methodologies have different approaches.	CEIOPS developed additional analysis based on further available Member states data.
263.	Association of British Insurers	3.53.	Based on the table in 3.54, the ABI asks for a more granular approach to the sickness factor, which would be significantly more appropriate; factors should be calculated separately for large, medium and small undertakings.	Noted
264.	CEA	3.53.	Based on the table in 3.54, the CEA asks for a more granular approach to the sickness factor, which would be significantly more appropriate; factors should be calculated separately for large, medium and small undertakings.	Noted

265.	CRO Forum	3.53.	The recommendation is not derived from the text. There is no link with the column 'Fitted', nor with the results from QIS-4. The recommendations are coming out of the blue.	Noted
266.	Zorgverzekeraars Nederland	3.53.	Based on the table in 3.54, we asks for a more granular approach to the sickness factor, similar to the proposal made in the general comments which would be significantly more appropriate; factors should be calculated separately for large, medium and small undertakings.	Noted
267.	Association of British Insurers	3.54.	The sample chosen only includes 4 countries. We doubt that it is sufficient to obtain a representative view of the European market.	CEIOPS developed additional analysis based on further available Member states data.
268.	CEA	3.54.	The data was gross of reinsurance so is likely to be more volatile. The calibration is based on only four CEIOPS Member States. Why so few countries and how were these countries chosen? For some countries such as FR or BEL there is a strong statutory social security system that allows a great mitigation for the Heath business; this doesn't seem to be taken in account.	CEIOPS developed additional analysis based on further available Member states data.
269.	CRO Forum	3.54.	The CRO Forum would recommend CEIOPS to also include Dutch data in the analysis, since. it is an important insurance industry with material substance in the local market. The methods are not explained, which does not make the process transparent.	CEIOPS developed additional analysis based on further available Member states data.
270.	Dutch Actuarial	3.54.	We are unclear as to whether these figures in €'000s or €m's. If these figures are in €'000's (as would seem to make logical sense) the sample	Noted

	Association		looks to be very small.	
271.	Groupe Consultatif	3.54.	We are unclear as to whether these figures in €'000s or €m's. If these figures are in €'000's (as would seem to make logical sense) the sample looks to be very small. The combined premium income for domestic health insurance in Ireland is over €1.8 billion.	Noted
272.				
273.	Zorgverzekeraars Nederland	3.54.	The calibration used for the whole short term health insurance should reflect the major health insurance markets. Omitting one of these markets will lead to a distorted calibration. Therefore we urge CEIOPS to include the data which is available of the Dutch market in their final advice.	CEIOPS developed additional analysis based on further available Member states data.
274.	CEA	3.56.	The graph shows diversification effects when the portfolio size increases. Yet the chosen risk factor applies to companies of all sizes. This "one size fits all" approach results in requirements that are not suitable for many large and many small companies.	Noted
275.	CRO Forum	3.56.	The graph shows diversification effects when the portfolio size increases. Yet the chosen risk factor applies to companies of all sizes. This "one size fits all" approach results in requirements that are not suitable for many large and many small companies.	Noted
276.	Zorgverzekeraars Nederland	3.56.	See comments 3.51	
277.	CEA	3.57.	In the Netherlands a method should be used which allows for a size factor because of the substantial diversification effects existing due to volume of the portfolio.	Noted
278.	UNESPA-Association of Spanish Insurers and	3.57.	The volume of information provided (expressed in number of entities) for the purpose of the calibration process accounts for a 34% of the volume produced in QIS4. QIS4 factor in Table 3.53 corresponds to the median obtained on the analysis of the information available for the purposes of	Noted

	Reinsu		Quis4 and detailed in Annex 4.4 of CP 71. We understand that the information that has been used for the factor calibration may not be representative of the entire European insurance sector due to the small number of entities involved. The information has been provided by entities from four countries, of which only UK and Germany are representative. The information used for factor calibration is gross of reinsurance, which could provide an additional degree of volatility to it. CEIOPS suggests that the methodology for determining the factor (7.5%) has been taking the average of methods 1, 4 and the outcome of QIS4. It would be desirable a choice resulting from a higher level of analysis depth, weights, etc., since their methodologies have different approaches.	
279.	Zorgverzekeraars Nederland	3.57.	In the Netherlands a method should be used which allows for a size factor because of the substantial diversification effects existing due to volume of the portfolio.	Noted
280.	CEA	3.58.	The method used to derive the factor and the recommendation are not clear.	Noted
281.	Association of British Insurers	3.59.	Based on the table in 3.54, the ABI asks for a more granular approach to the workers compensation factor, which would be significantly more appropriate; factors should be calculated separately for large, medium and small undertakings.	Noted
282.	CEA	3.59.	Based on the table in 3.54, the CEA asks for a more granular approach to the workers compensation factor, which would be significantly more appropriate; factors should be calculated separately for large, medium and small undertakings.	Noted
283.	CRO Forum	3.59.	The recommendation is not derived from the text. There is no link with the	Noted

			column 'Fitted', nor with the results from QIS-4. The recommendations are coming out of the blue.	
284.	Association of British Insurers	3.60.	The data was gross of reinsurance so will be more volatile and the data set was limited, only 19 undertakings and all in Portugal. Why only one country and how was this country chosen?	Noted
285.	CEA	3.60.	The data was gross of reinsurance so will be more volatile and the data set was limited, only 19 undertakings and all in Portugal. Why only one country and how was this country chosen?	Noted
286.	CRO Forum	3.60.	The CRO Forum would recommend CEIOPS to also include Dutch data in the analysis, since. it is an important insurance industry with material substance in the local market. The methods are not explained, which does not make the process transparent.	CEIOPS developed additional analysis based on further available Member states data.
287.	European Union member firms of Deloitte Touche Toh	3.60.	Workers' compensation calibration is based purely on data from Portugal. We highly doubt that this data is representative for the whole of Europe. There is no justification for this in the paper.	CEIOPS developed additional analysis based on further available Member states data.
288.	Institut des actuaires (France)	3.60.	Only one country is used as a reference, this might not be representative	CEIOPS developed additional analysis based on further available Member states data.
289.	CEA	3.62.	A graph is mentioned that shows no diversification effect. There is no graph below.	Noted

290.	UNESPA-Association of Spanish Insurers and Reinsu	3.63.	The volume of information provided (expressed in number of entities) for the purposes of the calibration process represents 17% of the volume produced in QIS4. QIS4 factor in Table 3.60 corresponds to the median obtained on the analysis of the information available for the purposes of Quis4 and detailed in Annex 4.4 of CP 71. We understand that the information that has been used for the factor calibration may not be representative of the entire European insurance sector due to the small number of entities involved. The information has been provided by entities from a single country. The information used for factor calibration is gross of reinsurance, which could provide an additional degree of volatility to it. CEIOPS suggests that the methodology for determining the factor (10%) has been taking the average of methods 4 and the outcome of QIS4. It would be desirable a choice resulting from a higher level of analysis depth, weights, etc., since their methodologies have different approaches.	CEIOPS developed additional analysis based on further available Member states data.
291.	Dutch Actuarial Association	3.64.	If the factor is chosen considering QIS 4 (10.6%) and method 4 (5%), we think that the factor should be 7.5% in stead of 10%. Also because method 4 was a 'particular good fit'.	CEIOPS developed additional analysis based on further available Member states data.
292.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.65.	As 3.47: but as indicated by CEIOPS itself, the results of the different approaches are apparently too bad to be used.	CEIOPS developed additional analysis based on further available Member states data.
293.	Association of British Insurers	3.65.	Data Much of the analysis was based on gross data, likely to overstate variability	CEIOPS developed additional analysis based on further available Member states data.

			There is often only very limited data, and the methods used gave a poor fit to this data. Reserve risk methods There are a number of potential weaknesses in the methods used, including: ☐ Assuming chain ladder projections are the best estimate, which may not be the case in practice ☐ Making variability assumption for all classes, which may lead to under-fitting and overstatement of variability ☐ Method 4 ignores the diversification benefits generally seen in larger portfolios of business It is difficult to see how the data will be homogenous for these calculations as the reserving procedures and policies between different countries and companies will be different. We encourage CEIOPS to do deeper analysis before definitive factors are proposed. This deeper analysis should include the method of election, but above all a more comprehensive data. It is doubtful if the data set is representative and of sufficient good quality.	
294.	CEA	3.65.	Data Much of the analysis was based on gross data, likely to overstate variability There is often only very limited data, and the methods used gave a poor fit to this data.	CEIOPS developed additional analysis based on further available Member states data.

			Reserve risk methods There are a number of potential weaknesses in the methods used, including: ☐ Assuming chain ladder projections are the best estimate, which may not be the case in practice ☐ Making variability assumption for all classes, which may lead to under-fitting and overstatement of variability ☐ Method 4 ignores the diversification benefits generally seen in larger portfolios of business It is difficult to see how the data will be homogenous for these calculations as the reserving procedures and policies between different countries and companies will be different. We encourage CEIOPS to do deeper analysis before definitive factors are proposed. This deeper analysis should include the method of election, but above all a more comprehensive data. It is doubtful if the data set is representative and of sufficient good quality. The allocation of the risks will be done by undertakings following a proper analysis of the underlying risk and based on the principles of proportionality and materiality.	
295.				
296.	German Insurance	3.65.	The branches (Non Life, Health, Life) should be treated in the sub-risk-module according to the business model.	Noted

	Association – Gesamtverband der D			
297.	PKV, (German) Association of Private Health Insure	3.65.	The branches (Non Life, Health, Life) should be treated in the sub-risk-module according to the business model.	Noted
298.	Association of British Insurers	3.66.	Based on the table in 3.67, the ABI asks for a more granular approach to the accident factor, which would be significantly more appropriate; factors should be calculated separately for large, medium and small undertakings.	Noted
299.	CEA	3.66.	Based on the table in 3.67, the CEA asks for a more granular approach to the accident factor, which would be significantly more appropriate; factors should be calculated separately for large, medium and small undertakings.	Noted
300.	CRO Forum	3.66.	The recommendation is not derived from the text. There is no link with the column 'Fitted', nor with the results from QIS-4. The recommendations are coming out of the blue. There is also no plot with actual standard deviations to support the recommendation of 17,5%	Noted
301.	Association of British Insurers	3.67.	Data gross of reinsurance so likely to be overstated. The calibration is based on only three Member States. Why so few countries and how were these countries chosen?	CEIOPS developed additional analysis based on further available Member states data.
302.	CEA	3.67.	Data gross of reinsurance so likely to be overstated. The calibration is based on only three Member States. Why so few countries and how were these countries chosen?	CEIOPS developed additional analysis based on further available

				Member states data.
303.	CRO Forum	3.67.	The CRO Forum would recommend CEIOPS to also include Dutch data in the analysis, since. it is an important insurance industry with material substance in the local market. The methods are not explained, which does not make the process transparent.	CEIOPS developed additional analysis based on further available Member states data.
304.	Association of British Insurers	3.74.	Based on the table in 3.75, the ABI asks for a more granular approach to the sickness factor, which would be significantly more appropriate; factors should be calculated separately for large, medium and small undertakings.	Noted
305.	CEA	3.74.	Based on the table in 3.75, the CEA asks for a more granular approach to the sickness factor, which would be significantly more appropriate; factors should be calculated separately for large, medium and small undertakings.	Noted
306.	CRO Forum	3.74.	The recommendation is not derived from the text. There is no link with the column 'Fitted', nor with the results from QIS-4. The recommendations are coming out of the blue.	Noted
307.	Dutch Actuarial Association	3.74.	As indicated previously this suggested calibration seems to be inconsistent with the Dutch data.	CEIOPS developed additional analysis based on further available Member states data.
308.	Groupe Consultatif	3.74.	As indicated previously this suggested calibration seems to be inconsistent with the Irish data.	CEIOPS developed additional analysis based on further available Member states data.
309.				
310.	Zorgverzeke	3.74.	See comments 3.53	

	raars Nederland			
311.	Association of British Insurers	3.75.	Data gross of reinsurance so likely to be overstated. The calibration is based on only three CEIOPS Member States. Why so few countries and how were these countries chosen?	CEIOPS developed additional analysis based on further available Member states data.
312.	CEA	3.75.	Data gross of reinsurance so likely to be overstated. The calibration is based on only three CEIOPS Member States. Why so few countries and how were these countries chosen? The countries presented in the underlying data are different that those used in 3.54. It is difficult to compare when different sub sets of countries are used. How does this allow for a consistent framework of calibration? Furthermore other important countries with substantial health insurance markets are not included.	CEIOPS developed additional analysis based on further available Member states data.
313.	CRO Forum	3.75.	The CRO Forum would recommend CEIOPS to also include Dutch data in the analysis, since. it is an important insurance industry with material substance in the local market. The methods are not explained, which does not make the process transparent.	CEIOPS developed additional analysis based on further available Member states data.
314.	Dutch Actuarial Association	3.75.	As indicated above we are unclear as to whether these figures in €'000s or €m's. If these figures are in €'000's the sample looks to be very small. The combined premium income for domestic health insurance in Ireland is over €1.8 billion.	Noted
315.	Groupe Consultatif	3.75.	As indicated above we are unclear as to whether these figures in €'000s or €m's. If these figures are in €'000's the sample looks to be very small. The combined premium income for domestic health insurance in Ireland is over €1.8 billion.	Noted

316.				
317.	Zorgverzekeraars Nederland	3.75.	The calibration used for the whole short term health insurance should reflect the major health insurance markets. Omitting one of these markets will lead to a distorted calibration. Therefore we urge CEIOPS to include the data which is available of the Dutch market in their final advice.	Noted
318.	Zorgverzekeraars Nederland	3.76.	According to the data as provided by the IBMG study a R2 is estimated to be around 99.1%. This suggests that the regional adjustments will provide a better match with the actual risk profile of the health market. Any additional information can be obtained at the Ministry of Health in The Netherlands.	Noted
319.	Association of British Insurers	3.81.	Based on the table in 3.82, the ABI asks for a more granular approach to the workers compensation factor, which would be significantly more appropriate; factors should be calculated separately for large, medium and small undertakings.	Noted
320.	Assuralia	3.81.	A study on the Belgian Workers Compensation market shows that the factor of 10%, which was used in the QIS 4, is sufficient. A study based on a bootstrapping method has been applied to company specific data collected by Assuralia. The method that has been used to calculate volatilities is based on the article « Risk Based Capital in P&C Loss Reserving or Stressing the Triangle » by M De Felice et F Moriconi. The method described in the article had been adapted to take also into account the volatility due to the introduction of a tail factor. This method has been applied to triangles of 8 Belgian Workers	Noted

			Compensation companies, covering more than 91% of the market. The calculations were made on data gross of reinsurance. So the results are overestimated, because the sigma used in the standard model is representing the volatility of the reserves net of reinsurance. This graph shows the obtained volatilities expressed in function of size of the company. This study shows that the 10% used in the QIS 4 should not be replaced by a higher coefficient. Note that Wutrich (another Method) leads to results that are lower.	
321.	CEA	3.81.	Based on the table in 3.82, the CEA asks for a more granular approach to the workers compensation factor, which would be significantly more appropriate; factors should be calculated separately for large, medium and small undertakings.	Noted
322.	CRO Forum	3.81.	The recommendation is not derived from the text. There is no link with the column 'Fitted', nor with the results from QIS-4. The recommendations are coming out of the blue.	Noted
323.	Association of British Insurers	3.82.	Gross data so likely to be overstated and only from Portugal. The calibration is based on only one CEIOPS Member State. Why only one country and how was this country chosen?	CEIOPS developed additional analysis based on further available

				Member states data.
324.	CEA	3.82.	Gross data so likely to be overstated and only from Portugal. The calibration is based on only one CEIOPS Member State. Why only one country and how was this country chosen?	CEIOPS developed additional analysis based on further available Member states data.
325.	CRO Forum	3.82.	The CRO Forum would recommend CEIOPS to also include Dutch data in the analysis, since it is an important insurance industry with material substance in the local market. The methods are not explained, which does not make the process transparent.	CEIOPS developed additional analysis based on further available Member states data.
326.	Dutch Actuarial Association	3.84.	The statement that there is little evidence of diversification effect is not demonstrated (no graph for method 6). We would like to see the graph, to be able to judge the factor of 12.5%. Because method 2 showed already a good fit, a factor of 11% is also a good possibility.	Noted
327.				
328.	CEA	3.85.	Typo? Should the sickness reserve factor be 12.5% or 15%?	Noted
329.	CRO Forum	3.85.	Typo – Sickness reserve factor should be 12.5% not 15%	Noted
330.	European Union member firms of Deloitte Touche Toh	3.85.	The reserve factor for sickness is shown as 15% in this table. However, this factor is 12.5% in 3.7 and 3.74.	Noted
331.	CEA	3.86.	With respect to cat risk the regional circumstances are even more important to consider. Local circumstances imply different results due to a specific catastrophe. Governmental behaviour, specific legislation and equalisation	Health underwriting risk module is now split into 3 sub-modules. One of

			principles should be considered.	them covers Catastrophe risks capital requirements.
332.	Institut des actuaires (France)	3.86.	The catastrophe risk is no studied at that stage (comment 3.86 of CP 72). This SCR proves to be significant for some health insurance companies. It would be highly useful to see how the related figures may be altered or how they may be changed after the spring reassessment of this factor since this may lead to a global change in the capital requirement for this LOB	Health underwriting risk module is now split into 3 sub-modules. One of them covers Catastrophe risks capital requirements.
333.	Zorgverzekeraars Nederland	3.86.	With respect to cat risk the regional circumstances are even more important to consider. Local circumstances imply different results due to a specific catastrophe. Governmental behaviour, specific legislation and equalisation principles should be considered.	Health underwriting risk module is now split into 3 sub-modules. One of them covers Catastrophe risks capital requirements.
334.	UNESPA-Association of Spanish Insurers and Reinsu	3.87.	It's deemed necessary, given the results, to validate from a technical and practical standpoint the proposals put forward by CEIOPS and its applicability to the Spanish insurance industry. From our point of view, some of CEIOPS proposals ,for the purpose of calibrating captive entities, are not very sensitive to certain aspects of everyday business practice (an increase in premium rates, holding the portfolio of policies, would mean an increase in the factor). CEIOPS does not specify the methodology used to compute the factors suggested. It would be advisable to know as well as the methodology used, the information used for the calibration process, and the method or methods used for the final selection of the factor.	Noted
335.	ACA – ASSOCIATION DES COMPAGNIES	3.88.	This makes clear that the correlations indicated in the subsequent paragraphs have to be examined thoroughly. Health insurance is not the same as life insurance.	Noted

	D'ASSURANCES DU			
336.	Association of British Insurers	3.88.	CEA comment: "It is unclear how disability risk for medical insurance and disability risk for income insurance are aggregated. CP 50 proposed a 100% correlation which seems overly prudent. Furthermore, correlations with other risks may differ between income insurance and medical insurance (e.g. higher correlation with expense risk for medical insurance compared to income insurance; also for lapse risk, higher correlation may be observed for medical insurance (e.g. due to premium adjustment mechanism)). This could require splitting the morbidity/disability module into two parts relating to medical and income insurance, respectively." Do members agree	Noted
337.	CEA	3.88.	It is unclear how disability risk for medical insurance and disability risk for income insurance are aggregated. CP 50 proposed a 100% correlation which seems overly prudent. Furthermore, correlations with other risks may differ between income insurance and medical insurance (e.g. higher correlation with expense risk for medical insurance compared to income insurance; also for lapse risk, higher correlation may be observed for medical insurance (e.g. due to premium adjustment mechanism)). This could require splitting the morbidity/disability module into two parts relating to medical and income insurance, respectively.	Noted
338.				
339.	Unum	3.88.	It is unclear how disability risk for medical insurance and disability risk for income insurance are aggregated. CP 50 proposed a 100% correlation which seems overly prudent. Furthermore, correlations with other risks may differ between income insurance and medical insurance (e.g. higher correlation	Noted

			with expense risk for medical insurance compared to income insurance; also for lapse risk, higher correlation may be observed for medical insurance (e.g. due to premium adjustment mechanism)).	
340.				
341.	CEA	3.89.	The correlation of 1 between SLT and non SLT health is conservative. A more appropriate correlation matrix would need to consider the structural diversification given by the different types of risks covered by the general labels of SLT and non SLT.	Noted
342.	CRO Forum	3.89.	Clearly a correlation factor of 1 would be too high in respect of UK business (although it might be appropriate in other jurisdictions)	Noted
343.	Dutch Actuarial Association	3.89.	The correlation matrix shows no diversification between the different lines of business. Usually different lines of business cover different risks and this should lead to a structural diversification.	Noted
344.	German Insurance Association – Gesamtverband der D	3.89.	The correlation matrix shows no diversification between the different lines of business. Usually different lines of business cover different risks and this should lead to a structural diversification.	Noted
345.	Groupe Consultatif	3.89.	The correlation matrix shows no diversification between the different lines of business. Usually different lines of business cover different risks and this should lead to a structural diversification.	Noted
346.	Munich Re	3.89.	The correlation matrix shows no diversification between the different lines of business. Usually different lines of business cover different risks and this should lead to a structural diversification.	Noted
347.	PKV,	3.89.	The correlation matrix shows no diversification between the different lines of	Noted

	(German) Association of Private Health Insure		business. Usually different lines of business cover different risks and this should lead to a structural diversification.	
348.	Bupa	3.90.	We disagree. In our case (and the UK's more generally) on the non-SLT side, we have short tail sickness business where heath system medical inflation fluctuations over near term is the principle risk. On the SLT side our health insurance risk is principally driven by adverse morbidity. These are different risks. Furthermore, the reason why health diversifies so quickly is the high degree of independence of exposures. Thus, the correlation is closer to 0 than to 1. Is this parameter biased because it is perceived through the lens of those Member States where SLT and non-SLT are really the same benefit covers that differ only against the period of time? This is not the case in the UK and other territories.	Noted
349.	CEA	3.90.	Below are some indications for different risks in Health SLT and Health Non-SLT. One typical representative of Health Non-SLT is travel health insurance. Here catastrophic losses and pandemic events have significant impact while lapse risk and claim risk have no significant impact on the risk situation in travel health insurance. In Health SLT the most dominant risks could be lapse risk and claim risk. So if a company is well diversified in both lines of business the whole SCR is not the sum of Health Non-SLT and Health SLT, but something smaller than the sum due to the inherent diversification. Also the portfolio of Health Non-SLT insured differs from the portfolio of Health SLT insured.	Noted
350.	German Insurance Association –	3.90.	Some indications for different risks in Health SLT and Health Non-SLT should be given in the following. One typical representative of Health Non-SLT is travel health insurance.	Noted

	Gesamtverband der D		Here catastrophic losses and pandemic events have significant impact while lapse risk and claim risk have no significant impact on the risk situation in travel health insurance. In Health SLT the most dominant risks could be lapse risk and claim risk. So if a company is well diversified in both lines of business the whole SCR is not the sum of Health Non-SLT and Health SLT, but something smaller than the sum due to the inherent diversification. Also the portfolio of Health Non-SLT insured differs from the portfolio of Health SLT insured.	
351.	Groupe Consultatif	3.90.	Some indications for different risks in Health SLT and Health Non-SLT should be given in the following. One typical representative of Health Non-SLT is travel health insurance. Here catastrophic losses and pandemic events have significant impact while lapse risk and claim risk have no significant impact on the risk situation in travel health insurance. In Health SLT the most dominant risks could be lapse risk and claim risk. So if a company is well diversified in both lines of business the whole SCR is not the sum of Health Non-SLT and Health SLT, but something smaller than the sum due to the inherent diversification. Also the portfolio of Health Non-SLT insured differs from the portfolio of Health SLT insured.	Noted
352.	Munich Re	3.90.	Some indications for different risks in Health SLT and Health Non-SLT should be given in the following. One typical representative of Health Non-SLT is travel health insurance. Here catastrophic losses and pandemic events have significant impact while lapse risk and claim risk have no significant impact on the risk situation in travel health insurance. In Health SLT the most dominant risks could be lapse risk and claim risk. So if a company is well diversified in both lines of business the whole SCR is not the sum of Health Non-SLT and Health SLT, but something smaller than the sum due to the inherent diversification. Also the portfolio of Health Non-SLT insured differs from the portfolio of Health SLT insured.	Noted
353.	PKV,	3.90.	Some indications for different risks in Health SLT and Health Non-SLT should	Noted

	(German) Association of Private Health Insure		be given in the following. One typical representative of Health Non-SLT is travel health insurance. Here catastrophic losses and pandemic events have significant impact while lapse risk and claim risk have no significant impact on the risk situation in travel health insurance. In Health SLT the most dominant risks could be lapse risk and claim risk. So if a company is well diversified in both lines of business the whole SCR is not the sum of Health Non-SLT and Health SLT, but something smaller than the sum due to the inherent diversification. Also the portfolio of Health Non-SLT insured differs from the portfolio of Health SLT insured.	
354.	Assuralia	3.91.	We do not understand why the correlation between mortality and longevity is -0,25. It seems that those to events are much more dependent than that and that the correlation should be closer to -1. But, as stated in point 3.20., Mortality & Longevity risks are mutually exclusive events and should be treated in the same sub-module (like it is the case for interest rate risk and lapse risk for example). Two shocks can be applied to the Qx, one up and one down, and one providing the highest capital charge is used for SCR purpose. We also do not understand why the CAT risk is correlated to the other risks. Intuitively, we think a catastrophe is an independent event and that the correlation with the other risks should 0.	Noted
355.				
356.	CEA	3.91.	The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. The generally more prudent correlations could give risk to concern, particularly when combined with impact of the increases to the factors for premium and reserve risk (for non SLT) as the impact on the overall SCR for the health module would be fairly material.	Noted

			Compared to CP50 the correlation between morbidity and lapse was increased, although in the German long-term health business a negative correlation would be appropriate. Reasons for this are the following facts. As health insurance is not strongly linked to the capital market the main cause for lapses is the premium calculation and the reaction on claims inflation. So any stress on the claim side leads naturally to some reaction on side of the policyholder. Increasing claims will lead to increasing premium as the undertaking will adjust its calculation assumptions. Increasing premium will lead on one side to increasing net asset value of the undertaking, on the other side to increasing lapse rates and due to increasing lapse rates to economic losses. Summing up the two effects, we see that both effects cannot be separated and both effects mitigate each other. Decreasing claims lead to decreasing premium and decreasing premium lead to decreasing lapse rates. So also in this scenario negative effects (decreasing premium) are mitigated by positive effects (decreasing lapse rates and stable portfolio). We see that both risks have the tendency to mitigate each other. So we see no reason for a positive correlation parameter of 0.25 in this context; in contrast we believe that it is necessary to allow a diversification between the both risk (similar mortality and longevity risks) by a correlation parameter of -0.5. In important markets the costs for claim settling are included in the claim expenses thus there is only a more remote connection between expenses for claim settling and the "general expenses". Finally, risks like disability and longevity, which are generally considered as negatively correlated, shouldn't have a correlation coefficient of 0.25.	

357.	CRO Forum	3.91.	As observed in feedback to CP50, some of the correlation factors appear too high for UK business eg 0.5 between expenses and morbidity and 0.5 between expenses and lapses The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. The correlations, specially between expense and morbidity and expense and lapse, seems to high. Compared to CP50 the correlation between morbidity and lapse was increased, although in the German long-term health business a negative correlation would be appropriate.	Noted
358.	Dutch Actuarial Association	3.91.	The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. The correlations, specially between expense and morbidity and expense and lapse, seems to high.	Noted
359.	FFSA	3.91.	FFSA finds difficult to justify that risks like Disability and Longevity, which are usually considered as anti correlated, would be correlated with a 0.25 coefficient.	Noted
360.	German Insurance Association – Gesamtverband der D	3.91.	The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. The correlations, specially between expense and morbidity and expense and lapse, seems to high. Compared to CP50 the correlation between morbidity and lapse was increased, although in the German long-term health business a negative correlation would be appropriate. Reasons for this are the following facts. As health insurance is not strongly linked to the capital market the main cause for lapses is the premium calculation and the reaction on claims inflation. So any stress on the claim side leads naturally to some reaction on	Noted

			side of the policyholder. Increasing claims will lead to increasing premium as the undertaking will adjust its calculation assumptions. Increasing premium will lead on one side to increasing net asset value of the undertaking, on the other side to increasing lapse rates and due to increasing lapse rates to economic losses. Subsuming the two effects we see that both effects cannot be separated and both effects mitigate each other. Decreasing claims lead to decreasing premium and decreasing premium lead to decreasing lapse rates. So also in this scenario negative effects (decreasing premium) are mitigated by positive effects (decreasing lapse rates and stable portfolio). We see that both risk have the tendency to mitigate each other. So we see no reason for a positive correlation parameter of 0.25 in this context; in contrast we believe that it is necessary to allow a diversification between the both risk (similar mortality and longevity risks) by a correlation parameter of -0.5.	
361.	Groupe Consultatif	3.91.	The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. The correlations, specially between expense and morbidity and expense and lapse, seems to high. Compared to CP50 the correlation between morbidity and lapse was increased, although in the German long-term health business a negative correlation would be appropriate. Reasons for this are the following facts. As health insurance is not strongly linked to the capital market the main cause for lapses is the premium calculation and the reaction on claims inflation. So any stress on the claim side leads naturally to some reaction on side of the policyholder. Increasing claims will lead to increasing premium as the undertaking will adjust its calculation assumptions. Increasing premium will lead on one side to increasing net asset value of the undertaking, on the other side to increasing lapse rates and due to increasing lapse rates to economic losses.	Noted

			Subsuming the two effects we see that both effects cannot be separated and both effects mitigate each other. Decreasing claims lead to decreasing premium and decreasing premium lead to decreasing lapse rates. So also in this scenario negative effects (decreasing premium) are mitigated by positive effects (decreasing lapse rates and stable portfolio). We see that both risk have the tendency to mitigate each other. So we see no reason for a positive correlation parameter of 0.25 in this context; in contrast we believe that it is necessary to allow a diversification between the both risk (similar mortality and longevity risks) by a correlation parameter of -0.5. The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. The correlations, specially between expense and morbidity and expense and lapse, seems to high. Compared to CP50 the correlation between morbidity and lapse was increased, although in the German long-term health business a negative correlation would be appropriate. In respect of 3.19 remove "SLT Longevity Risk", "SLT Revision risk" and remove "disability".	
362.	Munich Re	3.91.	The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. The correlations, especially between expense and morbidity and expense and lapse, seems to high. Example: Correlation between expenses and lapse Compared to CP50 the correlation between expense and lapse was increased, although in the German long-term health business a negative correlation would be appropriate. Reasons for this are the following facts. As health insurance is not strongly linked to the capital market the main	Noted

			cause for lapses is the premium calculation and the reaction on claims inflation. So any stress on the expense side (due to the inflation assumptions) leads naturally to some reaction on side of the policyholder. Increasing inflation will lead to increasing premium as the undertaking will adjust its calculation assumptions. Increasing premium will lead on one side to increasing net asset value of the undertaking, on the other side to increasing lapse rates. Increasing lapse rates will lead to economic losses and to a decreasing net asset value. Similar arguments can be applied in the case of deflation with decrease in premium and a decrease in lapse rates. Subsuming the two effects we see that both effects cannot be separated and both effects mitigate each other. We see that both risk have the tendency to mitigate each other. So we see no reason for a positive correlation parameter of 0.25 in this context; in contrast we believe that it is necessary to allow a diversification between the both risk (similar mortality and longevity risks) by a correlation parameter of -0.5.	
363.	PKV, (German) Association of Private Health Insure	3.91.	The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. The correlations, specially between expense and morbidity and expense and lapse, seems to high. Compared to CP50 the correlation between morbidity and lapse was increased, although in the German long-term health business a negative correlation would be appropriate. Reasons for this are the following facts. As health insurance is not strongly linked to the capital market the main cause for lapses is the premium calculation and the reaction on claims inflation. So any stress on the claim side leads naturally to some reaction on side of the policyholder.	Noted

			Increasing claims will lead to increasing premium as the undertaking will adjust its calculation assumptions. Increasing premium will lead on one side to increasing net asset value of the undertaking, on the other side to increasing lapse rates and due to increasing lapse rates to economic losses. Subsuming the two effects we see that both effects cannot be separated and both effects mitigate each other. Decreasing claims lead to decreasing premium and decreasing premium lead to decreasing lapse rates. So also in this scenario negative effects (decreasing premium) are mitigated by positive effects (decreasing lapse rates and stable portfolio). We see that both risk have the tendency to mitigate each other. So we see no reason for a positive correlation parameter of 0.25 in this context; in contrast we believe that it is necessary to allow a diversification between the both risk (similar mortality and longevity risks) by a correlation parameter of -0.5.	
364.	PricewaterhouseCoopers LLP	3.91.	We refer to our comments on CP 74 in relation to correlations within the life underwriting risk module. This comment also applies to paragraph 3.110.	Noted
365.	Association of British Insurers	3.92.	In QIS4 the correlation was zero. We would like to know the reasons for this calibration.	Noted
366.	CEA	3.92.	In QIS4 the correlation was zero. The CEA asks CEIOPS to disclose the reasons for this calibration.	Noted
367.	CRO Forum	3.92.	In QIS4 the correlation was zero. If there is a correlation at all, it should be negative: a catastrophe will delay regular care.	Noted
368.	UNESPA-Association	3.92.	The section in QIS4 corresponding to the correlation treated here (TS.XII.C.3) states that it must be zero. It would be advisable to know the	Noted

	of Spanish Insurers and Reinsu		reasons and methodology used by CEIOPS to increase this correlation.	
369.	Unum	3.92.	In QIS4 the correlation was zero. We would like to know the reasons for this calibration.	Noted
370.	Zorgverzekeraars Nederland	3.92.	In our opinion the proposed correlation should actually be zero or negative. When dealing with a catastrophe event in the short term health we will see that "normal or regular" health services will be postponed as all resources will be directed to counter the catastrophic event. This is actually witnessed in the current "Mexican flu or Swine flu". The governmental vaccination program exercised by the health suppliers resulted in a postponement of regular vaccination programs.	Noted
371.	Assuralia	3.93.	We agree that there is a positive correlation between the three LoB of Health Products. However the perfect correlation of 1 fails to capture the effect of a diversification between those three different types of contracts. The correlations should therefore be lowered.	Noted
372.	CEA	3.93.	The CEA finds unlikely that no diversification occurs between the 3 types of risks, the correlation matrix seems overly prudent.	Noted
373.	Dutch Actuarial Association	3.93.	Also here the given correlation matrix seems overly prudent. Here an updating of the correlation parameters seems necessary as it is not probable that no diversification will occur between the three lines of business Accident, Sickness and WC. We cannot see how one can motivate a correlation of 1 between accident and sickness	Noted
374.	German	3.93.	Also here the given correlation matrix seems overly prudent. Here an	Noted

	Insurance Association – Gesamtverband der D		updating of the correlation parameters seems necessary as it is not probable that no diversification will occur between the three lines of business Accident, Sickness and WC.	
375.	Groupe Consultatif	3.93.	Also here the given correlation matrix seems overly prudent. Here an updating of the correlation parameters seems necessary as it is not probable that no diversification will occur between the three lines of business Accident, Sickness and WC. We cannot see how one can motivate a correlation of 1 between accident and sickness	Noted
376.	Munich Re	3.93.	The given correlation matrix seems also overly prudent. Here an updating of the correlation parameters seems necessary as it is not probable that no diversification will occur between the three lines of business Accident, Sickness and WC.	Noted
377.	PKV, (German) Association of Private Health Insure	3.93.	Also here the given correlation matrix seems overly prudent. Here an updating of the correlation parameters seems necessary as it is not probable that no diversification will occur between the three lines of business Accident, Sickness and WC.	Noted
378.	UNESPA-Association of Spanish Insurers and Reinsu	3.93.	CEIOPS maintains the correlation coefficient matrix between the three sub lines of business within Non Slt Health. Due to the implications (in terms of capital) coming from the proposed matrix, it would be advisable to conduct a deep analysis in this regard, on the basis of a greater volume and greater importance information.	Noted
379.	Association of British Insurers	3.94.	The suggestion of CEIOPS is not based sufficiently on data or reasoning, but will result in an enormous increase of solvency requirement.	Noted

			A counterexample to CEIOPS proposal is that accident and sickness are different in nature. This means that if the number and costs of accident increase then the corresponding figures for sickness will not increase. There correlation must, at least by expert opinion, be close to zero. Hence a correlation not higher than 0.25 should be used. The proposed correlations are considered much too high.	
380.	CEA	3.94.	The suggestion of CEIOPS is not based sufficiently on data or reasoning, but will result in an enormous increase of solvency requirement. A counterexample to CEIOPS proposal is that accident and sickness are different in nature. This means that if the number and costs of accident increase then the corresponding figures for sickness will not increase. There correlation must, at least by expert opinion, be close to zero. Hence a correlation not higher than 0.25 should be used. The proposed correlations are considered much too high.	Noted
381.	CRO Forum	3.94.	The suggestion of CEIOPS is not based on data or reasoning, but will result in an enormous increase of solvency requirement. The proposed correlations are considered much too high.	Noted
382.	Dutch Actuarial Association	3.94.	Accident is a non life line of business and its risks may substantially differ from health lines	Noted
383.	German Insurance Association – Gesamtverb	3.94.	The suggestion of CEIOPS is not based sufficiently on data or reasoning, but will result in an enormous increase of solvency requirement. A counterexample to CEIOPS proposal is that accident and sickness are different in nature. This means that if the number and costs of accident	Noted

	and der D		increase then the corresponding figures for sickness will not increase. There correlation must, at least by expert opinion, be close to zero. Hence a correlation not higher than 0.25 should be used. The proposed correlations are considered much too high.	
384.	Groupe Consultatif	3.94.	Accident is a P&C line of business, why its risks may substantially differ from health lines	Noted
385.	PKV, (German) Association of Private Health Insure	3.94.	The suggestion of CEIOPS is not based sufficiently on data or reasoning, but will result in an enormous increase of solvency requirement. A counterexample to CEIOPS proposal is that accident and sickness are different in nature. This means that if the number and costs of accident increase then the corresponding figures for sickness will not increase. There correlation must, at least by expert opinion, be close to zero. Hence a correlation not higher than 0.25 should be used. The proposed correlations are considered much too high.	Noted
386.	CEA	3.95.	In The Netherlands each year the premium level is determined. The level of the premium is in First instance not correlated with the run off results because of the risk mitigation and equalisation system which takes more than three years. Furthermore through the macro equalisation features the run off result in year t will have a positive effect on the premium contribution in year t+1. This implies even a negative correlation. Also the insurer is able to reset its premium levels when needed. Again this shows the necessity to include more appropriate calibration regarding the health module.	Noted
387.	Zorgverzekeraars Nederland	3.95.	In The Netherlands each year the premium level is determined. The level of the premium is in First instance not correlated with the run off results because of the risk mitigation and equalisation system which takes more than three years. Furthermore through the macro equalisation features the run off result in year t will have a positive effect on the premium	Noted

			contribution in year t+1. This implies even a negative correlation. Also the insurer is able to reset its premium levels when needed. Again this shows the necessity to include more appropriate calibration regarding the health module.	
388.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.99.	Health risk is different even if the biometric variables are often the same. A health specific analysis should therefore be made.	Noted
389.	CEA	3.99.	As no health specific analysis for this risk is available we would recommend an USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a mortality shock similar to life is a possible simplification which should be actively reviewed.	Noted
390.				
391.	German Insurance Association – Gesamtverband der D	3.99.	See 3.20	
392.	Groupe Consultatif	3.99.	See 3.20	
393.	PKV, (German) Association of Private Health	3.99.	See 3.20	

	Insure			
394.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.100.	Health risk is different even if the biometric variables are often the same. A health specific analysis should therefore be made.	Noted
395.	CEA	3.100.	As no health specific analysis for this risk is available we would recommend an USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a longevity shock similar to life is a possible simplification which should be actively reviewed.	Noted
396.	Dutch Actuarial Association	3.100.	See 3.21	
397.				
398.	German Insurance Association – Gesamtverband der D	3.100.	See 3.21	
399.	Groupe Consultatif	3.100.	See 3.21 In respect of 3.19 remove "SLT Longevity risk".	Noted
400.	PKV, (German)	3.100.	See 3.21	

	Association of Private Health Insure			
401.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.101.	Allowance should be made for the damping effects of premium adjustment clauses.	Noted
402.	Association of British Insurers	3.101.	Using the same 1% point stress as for expense risk may need further consideration. For example, one would expect an overall higher level of medical inflation (although this may depend on the specific product), with possibly higher volatility than expense inflation. Consistency with the valuation approach for technical provisions must be ensured. [In QIS 4, medical inflation was not allowed for in the calculation of technical provisions (assuming that medical inflation and premium adjustments cancel out).] Contrary to CP 50, there is only an upward shock. In some cases, the downward shock may be relevant (due to premium adjustment mechanism). Further the claim risk depends on the size of the portfolio and the type of benefits; use of insurance specific parameters should be allowed here. An increase of 10% together with 1% inflation seems rather high, in particular as an increase of 3-4% is already expected and therefore included in the best estimate.	Noted

			The proposed scenarios "permanent absolute change of claims inflation" and "permanent relative change of claims" allow (may even require) management actions, i.e. to increase future premiums of existing insurance contracts. As this management action is certainly not instantaneous (because of a permanent stress) it is not subject to CP54 – so HealthSLT and nHealtSLT are identical in this case (except of discretionary profit sharing) However, technical provisions vary considerably, depending on the extent that these management actions, which compensate a permanent absolute/relative change of claims, are taken into consideration. Again, consistency with the valuation approach for technical provisions must be ensured."	
403.	CEA	3.101.	The usage of the same 1 percentage point stress as for expense risk may need further consideration. For example, one would expect an overall higher level of medical inflation (although this may depend on the specific product), with possibly higher volatility than expense inflation. Consistency with the valuation approach for technical provisions must be ensured. [In QIS 4, medical inflation was not allowed for in the calculation of technical provisions (assuming that medical inflation and premium adjustments cancel out).] Opposed to para 3.23 where there is only an upward shock this para talks about 2 shocks. There should be a possibility to distinguish between lines of businesses and	Noted

			to check whether they are exposed to the risks described. For example daily benefit insurances pay a fixed amount while the insured person is in a defined state. These products are calculated with expected annual medical expenses instead of inception rates. These kinds of daily benefit insurances are not subject to claim inflation, but to permanent relative changes of claims. For these contracts a shock factor of 10% is too high. Such a high value could not be deduced from historical data of the German market. We would welcome a distinction between lines of businesses. The broad range of claim standard deviations shows that any average value differs significantly from possible market values. Consequently we fear that the suggested standard procedure could lead to material mis-estimation in the German and in the European market. We see that the data from the German market gives a clear advice that here a USP procedure is necessary. Also we should stress the fact that a calibration based on data from a single market could lead to significant model errors in other countries. In contrast to mortality risk we also see from the mentioned data significant portfolio dependence in claim risks so again we would welcome an USP approach for calibrating this risk. By using the data of the PKV-Dokumentationsreihe, Heft 19: "Zu den Altersbeiträgen der Privatversicherten", Gutachten der Unabhängigen Expertenkommission, March 1997, we suggest a stress of 3%. A distinctive feature of Austrian health insurance contracts under this regime is the right of the insurer to regularly change (increase) premiums in certain nationally different but legally defined/restricted ways.	

			The proposed scenarios "permanent absolute change of claims inflation" and "permanent relative change of claims" allow (may even require) management actions, i.e. to increase future premiums of existing insurance contracts. As this management action is certainly not instantaneous (because of a permanent stress) it is not subject to CP54 – so HealthSLT and nHealtSLT are identical in this case (except of discretionary profit sharing) However, technical provisions vary considerably, depending on the extent that these management actions, which compensate a permanent absolute/relative change of claims, are taken into consideration. Again, consistency with the valuation approach for technical provisions must be ensured.	
404.				
405.	German Insurance Association – Gesamtverband der D	3.101.	The broad range of claim standard deviations shows that any average value differs significantly from possible market values. Consequently we fear that the suggested standard procedure could lead to material misestimation in the German and in the European market. We see that the data from the German market gives a clear advice that here a USP procedure is necessary. Also we should stress the fact that a calibration based on data from a single market could lead to significant model errors in other countries. In contrast to mortality risk we also see from the mentioned data significant portfolio dependence in claim risks so again we would welcome an USP approach for calibrating this risk. By using the data of the PKV-Dokumentationsreihe, Heft 19: "Zu den Altersbeiträgen der Privatversicherten", Gutachten der Unabhängigen Expertenkommission, March 1997, we suggest a stress of 3%.	Noted
406.	Groupe Consultatif	3.101.	The broad range of claim standard deviations shows that any average value differs significantly from possible market values. Consequently we fear that	Noted

			the suggested standard procedure could lead to material misestimation in the German and in the European market. We see that the data from the German market gives a clear advice that here a USP procedure is necessary. Also we should stress the fact that a calibration based on data from a single market could lead to significant model errors in other countries. In contrast to mortality risk we also see from the mentioned data a significant portfolio dependence in claim risks so again we would welcome an USP approach for calibrating this risk. By using the data of the PKV-Dokumentationsreihe, Heft 19: "Zu den Altersbeiträgen der Privatversicherten", Gutachten der Unabhängigen Expertenkommission, March 1997, we suggest a stress of 3%. In respect of 3.19 remove "disability". The obligations for the German disability insurance should only be calculated in the life underwriting module. This applies also for contracts which can be unbundled because based on the nature of the business disability insurance belongs in Germany to the life segment.	
407.	PKV, (German) Association of Private Health Insure	3.101.	The broad range of claim standard deviations shows that any average value differs significantly from possible market values. Consequently we fear that the suggested standard procedure could lead to material misestimation in the German and in the European market. We see that the data from the German market gives a clear advice that here a USP procedure is necessary. Also we should stress the fact that a calibration based on data from a single market could lead to significant model errors in other countries. In contrast to mortality risk we also see from the mentioned data a significant portfolio dependence in claim risks so again we would welcome an USP approach for calibrating this risk. By using the data of the PKV-Dokumentationsreihe, Heft 19: "Zu den Altersbeiträgen der Privatversicherten", Gutachten der Unabhängigen Expertenkommission, March 1997, we suggest a stress of 3%.	Noted

408.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.102.	Health risk is different even if the biometric variables are often the same. A health specific analysis should therefore be made.	Noted
409.	CEA	3.102.	Disability risk for income insurance should be covered by life insurance. The CEA proposes to CEIOPS that the life risk module supports the development of separate stresses for disability which would take into account the specific features provided by disability products. The CEA view on the current calibration of this disability risk is expressed in the CEA paper on the Life UW module. Nevertheless the allocation of risk will be done by undertakings following a proper analysis of the underlying risk and based on the principles of proportionality and materiality.	Noted
410.	Dutch Actuarial Association	3.102.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a disability shock similar to life is a possible simplification which should be actively reviewed.	Noted
411.				
412.	German Insurance Association – Gesamtverband der D	3.102.	The branches (Non Life, Health, Life) should be treated in the sub-risk-module according to the business model. As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a disability shock similar to	Noted

			life is a possible simplification which should be actively reviewed.	
413.	Groupe Consultatif	3.102.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a disability shock similar to life is a possible simplification which should be actively reviewed. In respect of 3.19 remove "disability". The obligations for the German disability insurance should only be calculated in the life underwriting module. This applies also for contracts which can be unbundled because based on the nature of the business disability insurance belongs in Germany to the life segment.	Noted
414.	PKV, (German) Association of Private Health Insure	3.102.	The branches (Non Life, Health, Life) should be treated in the sub-risk-module according to the business model. As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a disability shock similar to life is a possible simplification which should be actively reviewed.	Noted
415.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.103.	Health risk is different even if the biometric variables are often the same. A health specific analysis should therefore be made.	Noted
416.	CEA	3.103.	As no health specific analysis for this risk is available we would recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that an expense shock similar to life is a possible simplification which should be actively reviewed. It should be mentioned that the expense structure in health insurance is different from life insurance.	Noted

417.	Dutch Actuarial Association	3.103.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a expense shock similar to life is a possible simplification which should be actively reviewed. It should be mentioned that the expense structure in health insurance is different from life insurance.	Noted
418.				
419.	German Insurance Association – Gesamtverband der D	3.103.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a expense shock similar to life is a possible simplification which should be actively reviewed. It should be mentioned that the expense structure in health insurance is different from life insurance.	Noted
420.	Groupe Consultatif	3.103.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a expense shock similar to life is a possible simplification which should be actively reviewed. It should be mentioned that the expense structure in health insurance is different from life insurance.	Noted
421.	PKV, (German) Association of Private Health Insure	3.103.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a expense shock similar to life is a possible simplification which should be actively reviewed. It should be mentioned that the expense structure in health insurance is different from life insurance.	Noted
422.	ACA – ASSOCIATION DES COMPAGNIE	3.104.	Health risk is different even if the biometric variables are often the same. A health specific analysis should therefore be made.	Noted

	S D'ASSURANCES DU			
423.	Association of British Insurers	3.104.	We remain uncertain as to what is meant to be covered by revision risk. Can CEIOPS please clarify? Does this cover both the (uncertain) future inflation of benefits and rehabilitation? Does the calibration of the 25% recovery stress under health SLT morbidity risk allow for revision risk already? For non-SLT sickness risk there could be revision risk due to unexpected increases in medical expenses in an inflationary environment. There is a certain inconsistency with CP75 on USP regarding the exclusion or inclusion of inflation in this context. CP75 states in 3.116 that the USP shock for revision risk is restricted on to products not subject to significant inflation risk, but CP72 includes an additional allowance for inflation risk in the stress?	Noted
424.	CEA	3.104.	We agree that differences between revision risk in health and life exist. However, we remain uncertain as to what is meant to be covered by revision risk. Can CEIOPS please clarify? Does this cover both the (uncertain) future inflation of benefits and rehabilitation? Does the calibration of the 25% recovery stress under health SLT morbidity risk allow for revision risk already? For non-SLT sickness risk there could be revision risk due to unexpected increases in medical expenses in an inflationary environment. There is a certain inconsistency with CP75 on USP regarding the exclusion or inclusion of inflation in this context. CP75 states in 3.116 that the USP shock for revision risk is restricted on to products not subject to significant inflation risk, but CP72 includes an additional allowance for inflation risk in the stress? The effect of the revision risk for the Dutch market still isn't very clear. The extra risk mentioned because of possible 'changes in inflation' is a risk recognized in some of our income protection (disability) products. If next to	Noted

			this risk unexpected changes in recovery rates are also part of this risk, then doesn't seem fair to use the same calibration for this risk as for the life revision risk (changes in recovery rates are mostly concerning income products in the Netherlands, not medical care products). As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a revision shock similar to life is a possible simplification which should be actively reviewed. Especially the risk of significant differences between revision risks in health insurance and life insurance should be analysed.	
425.	Dutch Actuarial Association	3.104.	As no health specific analysis for this risk is available we would usually recommend a USP approach. Especially the risk of significant differences between revision risks in health insurance and life insurance should be analysed.	Noted
426.				
427.	German Insurance Association – Gesamtverband der D	3.104.	Remove "SLT Revision risk" because the risk driver "revision risk" is typically not relevant for health insurance or it is handled in connection to other risks As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a revision shock similar to life is a possible simplification which should be actively reviewed. Especially the risk of significant differences between revision risks in health insurance and life insurance should be analysed.	Noted
428.	Groupe Consultatif	3.104.	As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a revision shock similar to life is a possible simplification which should be actively reviewed. Especially the risk of significant differences between revision risks in health insurance and life insurance should be analysed.	Noted

429.	PKV, (German) Association of Private Health Insure	3.104.	Remove "SLT Revision risk" because the risk driver "revision risk" is typically not relevant for health insurance or it is handled in connection to other risks As no health specific analysis for this risk is available we would usually recommend a USP approach. But according to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a revision shock similar to life is a possible simplification which should be actively reviewed. Especially the risk of significant differences between revision risks in health insurance and life insurance should be analysed.	Noted
430.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.105.	Health risk is different even if the biometric variables are often the same. A health specific analysis should therefore be made.	Noted
431.	Association of British Insurers	3.105.	In some markets, there are major differences between life and health contracts with regard to the lapse risk. For example health insurance might be compulsory, thus cancelling an insurance contract means getting a new one with another insurance company. Because the policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile. A different calibration from life is therefore needed or undertakings should be allowed to use entity specific data.	Noted
432.	CEA	3.105.	No specific analysis for the calibration of lapse risk was made. In some markets, nevertheless, there are major differences between life and health contracts with regard to the lapse risk. For example, in Germany everybody must have a health insurance, thus cancelling an insurance contract means getting a new one with another insurance company. Because the	Noted

			policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile. A different calibration from life is therefore needed or undertakings should be allowed to use entity specific data. An USP approach could increase the reliability of the results and reduce the model error in the health underwriting risk.	
433.	CRO Forum	3.105.	In some markets, there are major differences between life and health contracts with regard to the lapse risk. For example, in Germany everybody must have a health insurance, thus cancelling an insurance contract means getting a new one with another insurance company. Because the policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile. A different calibration from life is therefore needed or undertakings should be allowed to use entity specific data.	Noted
434.	Dutch Actuarial Association	3.105.	As no health specific analysis for this risk is available we would usually recommend a USP approach. According to the definition of materiality, given e.g. in CP 77 (3.39), we would agree that a expense shock similar to life is a possible simplification which should be actively reviewed.	Noted
435.				
436.	German Insurance Association – Gesamtverband der D	3.105.	As no health specific analysis for this risk is available we would usually recommend a USP approach. According to the definition of materiality, given e.g. in CP 77 (3.39), we see that a lapse shock could be the dominant risk in health underwriting risk in Germany. Here a USP approach could increase the reliability of the results and reduce the model error in the health underwriting risk.	Noted

			No specific analysis for the calibration of lapse risk was made. In some markets, nevertheless, there are major differences between life and health contracts with regard to the lapse risk. For example, in Germany everybody must have a health insurance, thus cancelling an insurance contract means getting a new one with another insurance company. Because the policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile. A different calibration from life is therefore needed or undertakings should be allowed to use entity specific data. An USP approach could increase the reliability of the results and reduce the model error in the health underwriting risk.	
437.	Groupe Consultatif	3.105.	As no health specific analysis for this risk is available we would usually recommend a USP approach. According to the definition of materiality, given e.g. in CP 77 (3.39), we see that a lapse shock could be the dominant risk in health underwriting risk in Germany. Here a USP approach could increase the reliability of the results and reduce the model error in the health underwriting risk. In some markets, there are major differences between life and health contracts with regard to the lapse risk. For example, in Germany everybody must have a health insurance, thus cancelling an insurance contract means getting a new one with another insurance company. Because the policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile. A different calibration from life is therefore needed or undertakings should be allowed to use entity specific data.	Noted
438.	Munich Re	3.105.	See 3.31	
439.	PKV,	3.105.	As no health specific analysis for this risk is available we would usually	Noted

	(German) Association of Private Health Insure		recommend a USP approach. According to the definition of materiality, given e.g. in CP 77 (3.39), we see that a lapse shock could be the dominant risk in health underwriting risk in Germany. Here a USP approach could increase the reliability of the results and reduce the model error in the health underwriting risk. No specific analysis for the calibration of lapse risk was made. In some markets, nevertheless, there are major differences between life and health contracts with regard to the lapse risk. For example, in Germany everybody must have a health insurance, thus cancelling an insurance contract means getting a new one with another insurance company. Because the policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile. A different calibration from life is therefore needed or undertakings should be allowed to use entity specific data. An USP approach could increase the reliability of the results and reduce the model error in the health underwriting risk.	
440.	Unum	3.105.	In some markets, there are major differences between life and health contracts with regard to the lapse risk. For example health insurance might be compulsory, thus cancelling an insurance contract means getting a new one with another insurance company. Because the policyholders do not have the option of having no insurance at all, the lapse rates will be less volatile. A different calibration from life is therefore needed or firms should be allowed to use entity specific data.	Noted

<table>
<tr><td>441.</td><td>ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU</td><td>3.106.</td><td>The methodology isn't clear and therefore the results are questionable.</td><td>Noted</td></tr>
<tr><td>442.</td><td>AMICE</td><td>3.106.</td><td></td><td></td></tr>
<tr><td>443.</td><td>AMICE</td><td>3.106.</td><td>CEIOPS has selected the following factors as the calibration for the premium and reserve risk sub-module for the purpose of the standard formula:
<table>
<tr><th>LoBs</th><th>CEIOPS Premium Factor</th><th>CEIOPS Reserve Factor</th></tr>
<tr><td>Accident</td><td>10%</td><td>17,5%</td></tr>
<tr><td>Sickness</td><td>7,5%</td><td>15%</td></tr>
<tr><td>Workmen Compensation</td><td>10%</td><td>12,5%</td></tr>
</table>
AMICE members believe that the calibration should be refined since it is the result of an inadequate segmentation of the Non-SLT Health (i.e. Non-similar to Life Techniques) sub module (as an example, the standard deviation for reserve risk of the Sickness line of business is in practice very low in the jurisdictions where health is a complementary insurance not covering high-tail risks). Our proposal in response to CP50 was as follows:
<table>
<tr><th>LoBs</th><th>Proposal Premium Factor</th><th>Proposal Reserve Factor</th></tr>
<tr><td>Accident</td><td>5%</td><td>15%</td></tr>
<tr><td>Sickness</td><td>3%</td><td>7,5%</td></tr>
<tr><td>Worker's Compensation</td><td>7%</td><td>10%</td></tr>
<tr><td>Complementary Health</td><td>x%</td><td>x%</td></tr>
<tr><td>Providence (revisable)</td><td>x%</td><td>x%</td></tr>
<tr><td>Providence (non revisable)</td><td>x%</td><td>x%</td></tr>
</table></td><td>Noted
CEIOPS developed additional analysis based on further available Member states data.</td></tr>
</table>

			Our specialised members, who are particularly interested in the health area, are currently refining this proposal. We will provide further details on the current status of the project shortly.	
444.	CEA	3.106.	"Workers compensation insurance" and "annuities related to workers compensation insurance" should be classified as life insurance obligations (disability and death part) resp. non-life insurance (P&C) (accident part). Therefore Workers compensation should be removed from Health UW Module. Nevertheless the allocation of the risks will be done by undertakings following a proper analysis of the underlying risk and based on the principles of proportionality and materiality. In general, the new calibration is higher than the QIS4 one which was considered by the market as too high. Increasing again the factors will lead to an overestimation of the capital requirements. The factors, selected by CEIOPS do not represent the Dutch health-insurance situation, neither for the basic insurance nor the supplementary. The reserve factor for sickness throughout the Consultation paper is 12.5% (3.7 and 3.74), in 3.106 a factor of 15% is mentioned. Which one is correct?	Noted CEIOPS developed additional analysis based on further available Member states data.
445.	CRO Forum	3.106.	The factors, selected by CEIOPS do not represent the Dutch health-insurance situation, neither for the basic insurance nor the supplementary. Dutch factors should be around 0,5% The reserve factor for sickness throughout the Consultation paper is 12.5%	Noted CEIOPS developed additional analysis based on further available

			(3.7 and 3.74), in 3.106 a factor of 15% is mentioned. Which one is correct?	Member states data.
446.	DIMA (Dublin International Insurance & Management	3.106.	The figures for sickness differ from those in 3.7; consistency within the paper is required.	Noted
447.	Dutch Actuarial Association	3.106.	s. 3.52	Noted
448.	FFSA	3.106.	CEIOPS: "For some classes, the data available to carry out the analysis was fairly sparse" FFSA: This analysis seems to have not been prepared enough by CEIOPS and leads to a partial or truncated vision of the situation. It leads also to lack of reliable data for the study. That will lead to major inconsistencies in the results provided by CEIOPS. CEIOPS: calibration of the factors FFSA: The new calibration of the factors by CEIOPS is higher than the QIS 4 factors. The QIS 4 factors were already considered by the market as too high compared to the risk it was facing. Therefore, increasing these factors leads to an overestimation of the risks.	Noted CEIOPS developed additional analysis based on further available Member states data.
449.				
450.	German Insurance Association – Gesamtverband der D	3.106.	The branches (Non Life, Health, Life) should be treated in the sub-risk-module according to the business model. In general, the new calibration is higher than the QIS4 one which was considered by the market as too high. Increasing again the factors will lead to an overestimation of the capital requirements.	Noted CEIOPS developed additional analysis based on further available Member states data.

451.	Groupe Consultatif	3.106.	s. 3.52	Noted
452.	Munich Re	3.106.	The Reserve factor for Sickness should probably be 12.5% as stated in the paragraphs before (instead of 15%)	Noted CEIOPS developed additional analysis based on further available Member states data.
453.	PKV, (German) Association of Private Health Insure	3.106.	The branches (Non Life, Health, Life) should be treated in the sub-risk-module according to the business model. In general, the new calibration is higher than the QIS4 one which was considered by the market as too high. Increasing again the factors will lead to an overestimation of the capital requirements.	Noted CEIOPS developed additional analysis based on further available Member states data.
454.	Zorgverzekeraars Nederland	3.106.	We are proposing to include an adjustment factor to The adjustment factor should be conditional on the following elements: 1. The market on which the health insurance is sold should be subject to governmental regulations. For example in The Netherlands the basic health insurance market is regulated on various elements such as: prohibition of premium differentiation per policyholder, all potential policyholders are to be accepted by each insurer, every health insurer is subject to risk equalisation system; 2. There should be statistically information available for the specific part of the market which is independent from a specific insurer; 3. The government should provide a guarantee of last resort for the policyholder e.g. when a health insurer would be in default and would be	Noted

			unable to provide the health services towards the policyholders the government will ensure the provision of services towards the policyholder. These condition will ensure that appropriate parameters are available to determine the adjustment factor towards the . Thus the formula to be applied should be: (1-c) x sigma_Europa + c x sigma_region C = If the conditions are fully met the factor c should 1. In the case in which a mixed system is applied or part of the conditions are fulfilled another value could be given reflecting the actual risk profile of the market. C will always be lower or equal than 1; Sigma_Europa = Calibration as used in the Standard formula Sigma_region = Calibration reflecting the risk profile of the region in which the heath insurance is sold This adjustment factor should be reviewed regularly, at least annually, and should apply to the whole of the market and may only reflect the deviation of the risk profile.	
455.	Bupa	3.107.	See comments on paragraph 3.47.	Noted
456.	Zorgverzekeraars Nederland	3.107.	With respect to cat risk the regional circumstances are even more important to consider. Local circumstances imply different results due to a specific catastrophe. Governmental behaviour, specific legislation and equalisation principles should be considered.	Noted
457.	Association of British Insurers	3.109.	The assumption that these are fully correlated seems rather prudent and not necessarily appropriate, although it is difficult to derive one correlation that would be appropriate to all the differing types of business included under these sub-modules.	Noted For the advice on correlations see CEIOPS-DOC-70/10.

458.	Bupa	3.109.	See comments on paragraph 3.90	Noted For the advice on correlations see CEIOPS-DOC-70/10.
459.	CEA	3.109.	The assumption that these are fully correlated seems rather prudent and not necessarily appropriate. The correlation matrix shows no diversification between the different lines of business. Usually different lines of business cover different risks and this should lead to a structural diversification. We suggest a reduction of the correlation parameter between Non-SLT and SLT from 1 to 0.5. Even under the argumentation of CP 74(Correlations) the correlation between life underwriting risks and health underwriting risks with similar portfolios CEIOPS suggested a correlation of 0.75. We support the argumentation that the correlation between Health SLT and Health Non-SLT is lower than between Life underwriting and health underwriting so we would suggest a correlation of 0.5.	Noted For the advice on correlations see CEIOPS-DOC-70/10.
460.	CRO Forum	3.109.	CEIOPS presents no empirical evidence to support the proposed correlation factors of 100%. We believe that the correlation between these risk should be between 0% and 25%.	Noted For the advice on correlations see CEIOPS-DOC-70/10.
461.	Dutch Actuarial Association	3.109.	The correlation matrix shows no diversification between the different lines of business. Usually different lines of business cover different risks and this should lead to a structural diversification. We suggest a reduction of the correlation parameter between Non-SLT and SLT from 1 to 0.5. Even under the argumentation of CP 74(Correlations) the correlation between life underwriting risks and health underwriting risks with similar portfolios CEIOPS suggested a correlation of 0.75. We support the argumentation that the correlation between Health SLT and Health Non-SLT is lower than	Noted For the advice on correlations see CEIOPS-DOC-70/10.

			between Life underwriting and health underwriting so we would suggest a correlation of 0.5.	
462.	German Insurance Association – Gesamtverband der D	3.109.	The correlation matrix shows no diversification between the different lines of business. Usually different lines of business cover different risks and this should lead to a structural diversification. We suggest a reduction of the correlation parameter between Non-SLT and SLT from 1 to 0.5. Even under the argumentation of CP 74(Correlations) the correlation between life underwriting risks and health underwriting risks with similar portfolios CEIOPS suggested a correlation of 0.75. We support the argumentation that the correlation between Health SLT and Health Non-SLT is lower than between Life underwriting and health underwriting so we would suggest a correlation of 0.5.	Noted For the advice on correlations see CEIOPS-DOC-70/10.
463.	Groupe Consultatif	3.109.	The correlation matrix shows no diversification between the different lines of business. Usually different lines of business cover different risks and this should lead to a structural diversification. We suggest a reduction of the correlation parameter between Non-SLT and SLT from 1 to 0.5. Even under the argumentation of CP 74(Correlations) the correlation between life underwriting risks and health underwriting risks with similar portfolios CEIOPS suggested a correlation of 0.75. We support the argumentation that the correlation between Health SLT and Health Non-SLT is lower than between Life underwriting and health underwriting so we would suggest a correlation of 0.5.	Noted For the advice on correlations see CEIOPS-DOC-70/10.
464.	Munich Re	3.109.	A correlation of 100% between SLT and NonSLT appears to be too high. SLT will be limited to selected countries, where the type/class of NonSLT business is usually a different one.	Noted For the advice on correlations see CEIOPS-DOC-70/10.
465.	PKV, (German) Association of Private Health	3.109.	The correlation matrix shows no diversification between the different lines of business. Usually different lines of business cover different risks and this should lead to a structural diversification. We suggest a reduction of the correlation parameter between Non-SLT and SLT from 1 to 0.5. Even under the argumentation of CP 74(Correlations) the correlation between life	Noted For the advice on correlations see CEIOPS-DOC-70/10.

	Insure		underwriting risks and health underwriting risks with similar portfolios CEIOPS suggested a correlation of 0.75. We support the argumentation that the correlation between Health SLT and Health Non-SLT is lower than between Life underwriting and health underwriting so we would suggest a correlation of 0.5.	
466.	Unum	3.109.	The assumption that these are fully correlated seems rather prudent and not necessarily appropriate, although it is difficult to derive one correlation that would be appropriate to all the differing types of business included under these sub-modules.	Noted For the advice on correlations see CEIOPS-DOC-70/10.
467.	CEA	3.110.	The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. The generally more prudent correlations could give risk to concern, particularly when combined with impact of the increases to the factors for premium and reserve risk (for non SLT) as the impact on the overall SCR for the health module would be fairly material. Compared to CP50 the correlation between morbidity and lapse was increased, although in the German long-term health business a negative correlation would be appropriate. Reasons for this are the following facts. As health insurance is not strongly linked to the capital market the main cause for lapses is the premium calculation and the reaction on claims inflation. So any stress on the claim side leads naturally to some reaction on side of the policyholder. Increasing claims will lead to increasing premium as the undertaking will adjust its calculation assumptions. Increasing premium will lead on one side to increasing net asset value of the undertaking, on the other side to increasing lapse rates and due to increasing lapse rates to economic losses. Summing up the two effects, we see that both effects cannot be separated and both effects mitigate each other.	Noted For the advice on correlations see CEIOPS-DOC-70/10.

			Decreasing claims lead to decreasing premium and decreasing premium lead to decreasing lapse rates. So also in this scenario negative effects (decreasing premium) are mitigated by positive effects (decreasing lapse rates and stable portfolio). We see that both risks have the tendency to mitigate each other. So we see no reason for a positive correlation parameter of 0.25 in this context; in contrast we believe that it is necessary to allow a diversification between the both risk (similar mortality and longevity risks) by a correlation parameter of -0.5. In important markets the costs for claim settling are included in the claim expenses thus there is only a more remote connection between expenses for claim settling and the "general expenses". Finally, risks like disability and longevity, which are generally considered as negatively correlated, shouldn't have a correlation coefficient of 0.25.	
468.	Dutch Actuarial Association	3.110.	The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. The correlations, specially between expense and morbidity and expense and lapse, seems to high.	Noted
469.	German Insurance Association – Gesamtverband der D	3.110.	The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. The correlations, specially between expense and morbidity and expense and lapse, seems to high. Compared to CP50 the correlation between morbidity and lapse was increased, although in the German long-term health business a negative correlation would be appropriate. Reasons for this are the following facts.	Noted

			As health insurance is not strongly linked to the capital market the main cause for lapses is the premium calculation and the reaction on claims inflation. So any stress on the claim side leads naturally to some reaction on side of the policyholder. Increasing claims will lead to increasing premium as the undertaking will adjust its calculation assumptions. Increasing premium will lead on one side to increasing net asset value of the undertaking, on the other side to increasing lapse rates and due to increasing lapse rates to economic losses. Subsuming the two effects we see that both effects cannot be separated and both effects mitigate each other. Decreasing claims lead to decreasing premium and decreasing premium lead to decreasing lapse rates. So also in this scenario negative effects (decreasing premium) are mitigated by positive effects (decreasing lapse rates and stable portfolio). We see that both risks have the tendency to mitigate each other. So we see no reason for a positive correlation parameter of 0.25 in this context; in contrast we believe that it is necessary to allow a diversification between the both risk (similar mortality and longevity risks) by a correlation parameter of -0.5.	For the advice on correlations see CEIOPS-DOC-70/10.
470.	Groupe Consultatif	3.110.	The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. The correlations, specially between expense and morbidity and expense and lapse, seems to high. Compared to CP50 the correlation between morbidity and lapse was increased, although in the German long-term health business a negative correlation would be appropriate. Reasons for this are the following facts. As health insurance is not strongly linked to the capital market the main cause for lapses is the premium calculation and the reaction on claims inflation. So any stress on the claim side leads naturally to some reaction on side of the policyholder.	Noted

			Increasing claims will lead to increasing premium as the undertaking will adjust its calculation assumptions. Increasing premium will lead on one side to increasing net asset value of the undertaking, on the other side to increasing lapse rates and due to increasing lapse rates to economic losses. Subsuming the two effects we see that both effects cannot be separated and both effects mitigate each other. Decreasing claims lead to decreasing premium and decreasing premium lead to decreasing lapse rates. So also in this scenario negative effects (decreasing premium) are mitigated by positive effects (decreasing lapse rates and stable portfolio). We see that both risks have the tendency to mitigate each other. So we see no reason for a positive correlation parameter of 0.25 in this context; in contrast we believe that it is necessary to allow a diversification between the both risk (similar mortality and longevity risks) by a correlation parameter of -0.5. The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. In respect of 3.19 remove "SLT Longevity Risk", "SLT Revision risk" and remove "disability".	
471.	Munich Re	3.110.	See 3.91	Noted
472.	PKV, (German) Association of Private Health Insure	3.110.	The calibration should not be the same as the one used for Life underwriting risk module, because the risk nature in Health insurance differs from the one in Life insurance. The correlations, specially between expense and morbidity and expense and lapse, seems to high. Compared to CP50 the correlation between morbidity and lapse was increased, although in the German long-term health business a negative correlation would be appropriate. Reasons for this are the following facts.	Noted

			As health insurance is not strongly linked to the capital market the main cause for lapses is the premium calculation and the reaction on claims inflation. So any stress on the claim side leads naturally to some reaction on side of the policyholder. Increasing claims will lead to increasing premium as the undertaking will adjust its calculation assumptions. Increasing premium will lead on one side to increasing net asset value of the undertaking, on the other side to increasing lapse rates and due to increasing lapse rates to economic losses. Subsuming the two effects we see that both effects cannot be separated and both effects mitigate each other. Decreasing claims lead to decreasing premium and decreasing premium lead to decreasing lapse rates. So also in this scenario negative effects (decreasing premium) are mitigated by positive effects (decreasing lapse rates and stable portfolio). We see that both risks have the tendency to mitigate each other. So we see no reason for a positive correlation parameter of 0.25 in this context; in contrast we believe that it is necessary to allow a diversification between the both risk (similar mortality and longevity risks) by a correlation parameter of -0.5.	For the advice on correlations see CEIOPS-DOC-70/10.
473.	Association of British Insurers	3.111.	In QIS4 the correlation was zero. We would like to know the reasons for this calibration.	Noted For the advice on correlations see CEIOPS-DOC-70/10.
474.	CEA	3.111.	In QIS4 the correlation was zero. The CEA asks CEIOPS to disclose the reasons for this calibration.	Noted For the advice on correlations see CEIOPS-DOC-70/10.
475.	Zorgverzekeraars	3.111.	In our opinion the proposed correlation should actually be zero or negative. When dealing with a catastrophe event in the short term health we will see	Noted

	Nederland		that "normal or regular" health services will be postponed as all resources will be directed to counter the catastrophic event. This is actually witnessed in the current "Mexican flu or Swine flu". The governmental vaccination program exercised by the health suppliers resulted in a postponement of regular vaccination programs. Further analysis should be made by CEIOPS in cooperation with the industry. Therefore we propose to have a correlation of zero unless new evidence suggest otherwise.	For the advice on correlations see CEIOPS-DOC-70/10. During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.
476.	CEA	3.112.	"Workers compensation insurance" and "annuities related to workers compensation insurance" should be classified as life insurance obligations (disability and death part) resp. non-life insurance (P&C) (accident part). Therefore Workers compensation should be removed from Health UW Module. CEIOPS proposes correlation factors of 1 for accident, sickness and workers compensation. Although the risks show some correlation they are clearly not fully correlated as suggested. This will result in an overstatement of the risk and hence an overstatement of the capital requirement. We believe that the correlation between these risks should be between 0% and 25%.	Noted For the advice on correlations see CEIOPS-DOC-70/10.
477.	CRO Forum	3.112.	CEIOPS proposes correlation factors of 1 for accident, sickness and workers compensation. Although the risks show some correlation they are clearly not fully correlated as suggested. This will result in an overstatement of the risk and hence an overstatement of the capital requirement. We believe that the correlation between these risk should be between 0% and 25%.	Noted For the advice on correlations see CEIOPS-DOC-70/10.
478.	Dutch Actuarial Association	3.112.	A correlation parameter of 1 between the three lines of business seems overly prudent. We would suggest a parameter of 0.75 to allow a certain diversification and to actively review this parameter.	Noted For the advice on correlations see CEIOPS-

				DOC-70/10.
479.	German Insurance Association – Gesamtverband der D	3.112.	The branches (Non Life, Health, Life) should be treated in the sub-risk-module according to the business model. CEIOPS proposes correlation factors of 1 for accident, sickness and workers compensation. Although the risks show some correlation they are clearly not fully correlated as suggested. This will result in an overstatement of the risk and hence an overstatement of the capital requirement. We believe that the correlation between these risks should be between 0% and 25%.	Noted For the advice on correlations see CEIOPS-DOC-70/10.
480.	Groupe Consultatif	3.112.	A correlation parameter of 1 between the three lines of business seems overly prudent. We would suggest a parameter of 0.75 to allow a certain diversification and to actively review this parameter.	Noted For the advice on correlations see CEIOPS-DOC-70/10.
481.	PKV, (German) Association of Private Health Insure	3.112.	The branches (Non Life, Health, Life) should be treated in the sub-risk-module according to the business model. CEIOPS proposes correlation factors of 1 for accident, sickness and workers compensation. Although the risks show some correlation they are clearly not fully correlated as suggested. This will result in an overstatement of the risk and hence an overstatement of the capital requirement. We believe that the correlation between these risks should be between 0% and 25%.	Noted
482.	CRO Forum	3.113.	The correlation factor of 50% between premium and reserve risk is too high	Noted For the advice on correlations see CEIOPS-DOC-70/10.

			Summary of Comments on Consultation Paper 72 - CEIOPS-CP-72/09 CP No. 72 – L2 Advice on Calibration of the Health Underwriting Risk	CEIOPS-SEC-174/09 08.04.2010
483.	Zorgverzekeraars Nederland	3.113.	In The Netherlands each year the premium level is determined. The level of the premium is in First instance not correlated with the run off results because of the risk mitigation and equalisation system which takes more than three years. Furthermore through the macro equalisation features the run off result in year t will have a positive effect on the premium contribution in year t+1. This implies even a negative correlation. Also the insurer is able to reset its premium levels when needed. Again this shows the necessity to include more appropriate calibration regarding the health module.	Noted For the advice on correlations see CEIOPS-DOC-70/10.
484.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.114.	We welcome CEIOPS' intention of a closer analysis of the whole field of correlations.	Noted During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.
485.	Association of British Insurers	3.114.	The ABI welcomes the suggestion to collect appropriate data from undertakings in the future to support the revision of the correlation factors.	Noted During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.
486.	CEA	3.114.	A different calibration from life is needed or undertakings should be allowed to use entity specific data. The CEA welcomes the suggestion to collect appropriate data from undertakings in the future to support the revision of the correlation factors.	Noted During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.

487.				
488.	Zorgverzekeraars Nederland	3.114.	We would urge CEIOPS to consider setting up a joint taskforce with the industry to arrive at a proper calibration reflecting the appropriate risk profile as suggested in the Framework Directive.	Noted During the revision, CEIOPS has engaged in exchanging views with stakeholders. CEIOPS is looking forward to further discuss this.