Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09

CP No. 75 - L2 Advice on Undertaking specific parameters

CEIOPS would like to thank AB Lietuvos draudimas, ABI, ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU, AFA, AMICE, Association of Run-Off Companies, Assuralia, Bupa, CEA, Centre Technique des Institutions de Prévoyance (C, CNP Assurances, CRO Forum, Deloitte, DIMA (Dublin International Insurance & Management , EMB Consultancy LLP, Federation of European Accountants (FEE), FFSA, GDV e. V., GROUPAMA, Groupe Consultatif, Institut des actuaires (France), INTERNATIONAL GROUP OF P&I CLUBS, IUA, Just Retirement Limited, KPMG ELLP, Legal & General Group, Lloyds, Munich Re, RBS Insurance, ROAM, RSA Insurance Group, and UNESPA – Association of Spanish Insurers

The numbering of the paragraphs refers to Consultation Paper No. 75(CEIOPS-CP-75/09)

No.	Name	Reference	Comment	Resolution
1.	AB Lietuvos draudimas	General Comment	We believe that USPs provide a sensible halfway house between Partial Internal Models and the Standard Formula. We think that as written CP75 makes uses of USPs very difficult in practice. More detail on this is given in paragraphs 3.130 and 3.171 below.	Noted
2.	ABI	General Comment	We believe that undertaking specific parameters should be accepted within the whole standard formula, where a firm demonstrates that the USP better reflects the risk individual risk profile than the standard formula There is no obvious reason why firms should not be able to use USPs for sub-modules such as longevity or lapse risks.	According to the Directive, other risk than underwriting risk are excluded. The European Commission's interpretation of USP says that the calculation of USP must be carried out according to prescribed methodology (for example the probability distribution must be fixed). So only parameters for which the satisfied calculation methodology can be provided are classified as USP. We are ready to extend the

				number of potential USP if there are methods which can be applied and fulfil the conditions of "standardised methods".
			The approval process as described in this paper appears to be very onerous CEIOPS sets high barriers with the proposals in this CP, which may prevent the use of USP in many cases. In our view, the application of USP should be supervised in a more flexible manner.	Partially agree. Some requirements in the approval process are relaxed in the paper.
			We note that none of the proposed methods makes an allowance for the underwriting cycle We believe that undertakings should be allowed to make adjustments for the underwriting cycle, where they can demonstrate that most of the historical variability is caused by the underwriting cycle.	Adjustment for underwriting cycle is a good example of an issue which can be solved by a (partial) internal model.
			We do not agree with the proposed credibility factors for non-life premium and non-life reserve risk We also believe that the credibility weights attached to data external but directly relevant to operations is too low (especially for 10-15 years of data) and should be much closer to the weights for internal data.	Partially agree. See changes in the paper.
3.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	General Comment	Globally we are satisfied with the alternative proposed to undertakings, as well as to the supervisory authorities. The supervisory approval, process as well as the standardised methods for USP seems to us clear. We don't understand the use of the 10% parameter for the Non Life Reserve Risk, for all the line of business, Independently of real risk	Partially agree - see changes in the paper.

			(for example same factor for Motor Liability and fire).	
4.	AFA	General Comment	AFA Insurance would like to comment on the possibility to use undertaking specified parameters in the Non-SLT Health model. 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. As stated in the answer of CP 72 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 opens up for the use of expert judgment then calculating the undertaking specific parameters. AFA Insurance stresses the importance of expert judgment in calculating the best estimate especially for the long tail insurance products within AFA Insurance. CEIOPS also discusses the data limitations with respect to the availability of historical best estimate data. The insurance industries in Sweden have up to now valued the technical provisions prudent. Therefore it is very rare that any Swedish insurance company has a long series of best estimated technical provisions. AFA Insurance stresses therefore the importance of the possibility to reproduce historical best estimated technical provisions. It is also important that the Level 3 supervisory guidance is clear on the rules of using undertaking specified parameters. It is important that a insurance company that are interested in using own data can do that from the start 2012 without any delay.	Noted Undertaking are allowed to use undertaking specific parameters for premium risk, reserve risk and revision risk in health underwriting risk module on standard basis for the social security system. Noted
5.	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 agree that there should not be restrictions on the methodologies used for the calculation of USP. We are in favor of defining general principles for applying "undertaking specific parameters" in accordance with the principles applied to the standard formula. Level 1 text explicitly grants, in its article 111(j), the development of implementing measures on the use of undertaking specific parameters in the life, non-life and health areas. CEIOPS limits its proposals to the Non-Life Underwriting Risk. ☐ USP on Health Underwriting Risk	See the resolution to the comment 2. Standardised methodology must be provided according to the level 1 text, not general principles. Additionally your suggestion would lead to an evading (partial) internal model approval process. It would in fact lead to an unjustified privilege in compare with an (partial) internal model and is not in line with the directive.
			Some players whose risk profile deviates significantly from the assumptions underlying the standard formula, will decide to replace a subset of the standard formula parameters by parameters specific to the undertaking;	
			However, undertaking specific parameters cannot solve structural deficiencies in the model as it is the case for health insurance. The proposal to introduce specific credibility factors for the Sickness Line of Business in order to take into account the characteristics of the Dutch market - highlights the inadequacy of the model, and more precisely the inadequacy of the current segmentation in the non-SLT Health module.	Agree. See changes in the paper.
			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.	Agree. See changes in the paper.
			Social Security Systems are country-specific and since Social	Noted

			Security systems are not harmonized, their impact differs and it is neither country-specific nor European wide. AMICE members therefore believe it will not be possible to have a harmonized approach in the Level 2 but rather as part of the Level 3 guidance ☐ USP on Non-Life Underwriting Risk AMICE members support Alternative 3 and Alternative 4 which are based on Merz and Würthlich (an adaptation of the Mack Methodology to the one-year horizon) as the most appropriated approach for calculating the reserve risk over one year horizon.	Noted
6.	Association of Run-Off Companies	General Comment	This is a paper that could be important for run-off companies. The importance will depend on the appropriateness of the final parameters used in the standard formula. It is likely that many run-off companies will not have the resources to develop an internal model and so will use the standard formula. If the standard parameter is not appropriate to the run-off sector then run-off companies may seek to use a USP. If the standard parameters are a good fit to the risks found in run-off business then companies will not need to apply to use USP's. This will increase costs. If CEIOPS could consider run-off companies when setting the final parameters for underwriting risks then these costs could be avoided. It is also likely that the data available to many run-off companies or blocks of business in run-off will not meet the required data standards and so there will be a reliance on pooled data. Obtaining the pooled data required could be an onerous task and so more guidance on the data standards needed for industry data would be appreciated.	The calibration of non life underwriting risk was carried out on the best effort basis for all undertakings in Europe together. CEIOPS is currently working on an improvement. Noted

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7.			Confidential comments deleted.	
8.	CEA	General Comment	The CEA welcomes the opportunity to comment on the Consultation Paper (CP) No. CP 75 on Undertaking specific parameters. 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. 1. 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. In our view the use of undertaking specific parameters should not be restricted in terms of the scope of risks which are covered and the methods which can be used. By definition, undertaking specific parameters are allowed where	Timetables are fixed by the European Commission See the resolutions to the comments 2 and 5.

			they better reflect the risk profile of undertakings and as such we do not see any valid reason why their use should be de facto restricted to predefined lists of methods to be used and risks to be modelled. For example, undertakings should be able to use undertaking specific parameters for risks such as lapse, longevity and expense risk (this list is not exhaustive).	
			The restriction of methods to the "standard methods" proposed in this CP will, in most cases, make it impossible to obtain valid results, as these "standard methods" have severe limitations as discussed in our comments to CP 71 and CP72. We believe that there isn't an optimal alternative that should be selected as the only alternative to determine USP. There as pros and cons for each of the presented alternatives. As a consequence, we propose to allow for further alternatives not being already captured in this CP for determining USPs. For instance, undertakings should be allowed to choose methods adapted to each line of business instead of using the same standardised for all lines of business.	Partially agree- there is no perfect method. Disagree the freedom in methodology is in partial internal model. For USP according to the Directive standardised methods must be provided as level 2 implementing measures. See also the resolution to the comment 5.
			To this extent, the methods developed by our Spanish□ and German members (which are willing to share) should be considered as an example of how to overcome some of the limitations highlighted in our comments to CP71 and CP72. Undertaking should be able to use them if they prove to be more appropriate. We stand ready to provide more details to Ceiops on these methodologies.	CEIOPS has some reservations about this methodology. The method can be however used as a (partial) internal model.
			The approval procedure described in this paper is counterproductive as it sets much too high barriers and thereby limits the use of USP. We argue that the use of USP should be supervised in a more flexible manner. The approval process needs to be much better designed along the lines of the required flexibility. For instance, regarding the proposed criteria for the use of external pooled data,	There are differences in calibration depending on the size of undertakings. Text has been revised.

			we do not understand the reason why the sizes of the different business feeding the pool have to be similar.	
			The component under the reserve risk for unexpected extreme events is redundant. Extreme events are allowed for in the catastrophe risk module. This component will lead to double counting.	See the resolution to the comment 3
			The weights given to USP in the credibility weight approach are not providing enough incentives for undertakings to develop parameters which by definition better reflect their risk profile	
			More weight should be given to USPs. Indeed, as highlighted in our comments to CP71 and CP72 the proposed methods and the data used present a number of major drawbacks such as the fact that Ceiops they do not make any allowance for the underwriting cycle. Therefore, we do not see any reason why the standard factors should be given more weight.	Agree. See changes in the paper.
			Furthermore, we believe that allowing for 100% weight on USP only when 15 years of data is available is excessive. Instead, consideration should be given to the introduction of requirements in terms of number of years of data which would depend on the type of business which is being considered (long or short tail).	Partially agree. See changes in the paper.
			We propose that a sliding transitional mechanism could be put in place in order to ensure a smooth transitioning to Solvency II	Noted. A transitional mechanism concerning data requirements and data adjustments/smoothing could be an issue for Level 3 guidance
			We believe there will be cases where companies will not have sufficient data in order to comply with these requirements when Solvency II comes into force and will therefore not be able to use as much entity specific parameters which by definition better reflect	

			their business. Therefore, we propose that a sliding transitional mechanism could be put in place in order to ensure a smooth transitioning to Solvency II. In practice this could mean that instead of allowing undertakings to use a 100% weight factor for their entity specific parameters only when the required years of historical data are available, undertakings are allowed to use a 100% weight factor with a reduced number of historical data at the entry in force of Solvency II. This reduced number of years of historical data would increase by a year every year after to reach the number of years required by the legislation.	
9.	Centre Technique des Institutions de Prévoyance (C	General Comment	Undertaking-specific parameters make for a useful feature of the SCR standard formula, and we appreciate and strongly support the possibility of setting up pools of data. Still these possibilities do not remove the necessity to work out the most appropriate parameters in the standard formula, for undertakings which will not be able to take part into a pool, or for new undertakings.	Noted
10.	CNP Assurances	General Comment	CNP Assurances considers that undertaking specific parameters should replace standard parameters for even life and market risk sub modules when the undertaking can demonstrate the use of this USP as adequate to the supervisor.	See the resolution to the comment 2 (life). The suggestion regarding market risk is not in line with the directive.
11.	CRO Forum	General Comment	A Undertaking specific parameters for Life business should be widened to include lapse and expense risk as these are both very company specific risks (priority: high) However, additional time would be needed for the CROF to be able to suggest a standardised methodology for the derivation of Life	See the resolution to the comment 2. We appreciate any "standardised methodology".

			expenses and lapse specific parameters. B We dispute the justification for a 10% adjustment factor for Non-Life reserve risk (as proposed by CEIOPS in advice 3.85) (priority: very high) CEIOPS has argued that "extreme reserve risk events" are not captured in historical data triangles. Extreme risk events include reserve risk events such as APH claims. We do not agree there is an absolute need for such an adjustment factor, which could have a major impact. Unexpected extreme events belong in the non-life catastrophe risk sub-module, not the premium and reserve risk sub-module, and the proposal here runs the risk of double counting. As USPs are only allowed if "the assumptions underlying the standard formula are appropriate" (cf. 3.130), USPs and the standard formula parameters refer to the same model and any such adjustment would make a USP more onerous. We urge CEIOPS to ensure that standard formula parameters and USPs are subject to consistent underlying requirements i.e. we strongly suggest CEIOPS withdraw the tau-complement.	See the resolution to the comment 3
12.	Deloitte	General Comment	In our comments below, we have abbreviated undertaking-specific parameters as USP. We have chosen to comment on the explanatory text only. We refer to the explanatory text for the applicable paragraphs in the advice section.	Noted
13.	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. Premium risk methods do not make an allowance for the underwriting cycle.	Adjustment for underwriting cycle is a good example of an issue which can be solved by a (partial)

			In general, the detail of the paper was sufficient to understand the key requirements from CEIOPS with regard to how to treat undertaking-specific parameters in the standard formula for the SCR. However, Solvency 2 is principles-based. Therefore it should not be over-prescriptive, and it should give some flexibility in terms of data requirements (relax some assumptions), methodology (well known and accepted by the actuarial profession, like Mack Bootstrapping) where the (re)insurer believes it is more appropriate. The supervisor could assess whether or not (re)insurers' choices satisfy requirements. Adapting models to CEIOPS' assumptions and methodologies that might not be the most appropriate for the (re)insurer could be costly in resources. We would recommend CEIOPS could have regard to a harmonised European professional actuarial standard to inform the selection of appropriate methodology.	internal model. Agree, there is such possibility - internal model. Noted
14.	Federation of European Accountants (FEE)	General Comment	We have considered as we have been developing our detailed responses to individual Consultation Papers whether there are any matters which come to mind as generic observations that CEIOPS and the European Commission might find helpful. We are mindful that the general principle underlying the regulatory framework is to develop Level 2 and Level 3 regulation and guidance which supports the intention of the Directive. Whilst we recognise the challenge faced by CEIOPS in sustaining where possible a principles based regulatory framework, our sense is that the detail developed in most of the Consultation Papers have tended to be more prescriptive than might initially have been envisaged. There is little doubt that to achieve consistency of	

			application a degree of clarification is necessary. Accountants and auditors face the same challenge when interpreting Accounting Standards with many correspondents seeking greater clarity. However, the temptation to publish detailed supplementary guidance or rules should be strenuously avoided where possible. We suggest that the European Commission in making the final Level 2 regulation might best be focused on narrowing down rather than extending the guidance proposed by CEIOPS where possible. This would have the added advantage of reducing the apparent and ever increasing weight of the regulatory text.	Noted
15.	FFSA	General Comment	1. The main issues identified by FFSA regarding Underwriting Specific Parameters (USP) as described in the CP are the following: 2. - FFSA thinks that a lot of information is missing in this paper. In particular, it should give more information on the functioning and approval of USP (formalization of the demand, motivation for any refusal, timing of answer,…), and the frequency of updates of USP. In general, the approval process and formalisation should be less burdensome than an internal model and should be validated in a short period of time by supervisors. 3. - USP for premium risk should not allow for expense volatility explicitly. This is in opposition with the calibration of the standard formula (e.g CP 71). 4. - The volume measure for premium risk should be in accord with the calibration of the risk in the standard formula (e.g CP 71). The calibration is based on earned premium; therefore the volume measure should be the earned premium. 5. - FFSA is against the allowance of some standardised methodology for USP. Undertakings should only be in line with the overall methodology used for the standard formula.	Partially agreed. See some changes in the paper. The standardisation of the approval process could be an issue for Level 3 guidance/standards. Agree. See changes in the paper Misunderstanding - The advice in line with CEIOPS Advice CEIOPS-DOC-41-09 Your suggestion is not in line with the Directive. See also the resolution to the comment 5

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			- FFSA is strongly against the use of an arbitrary wide spread reserve risk component for unexpected extreme events and model risk.	See the resolution to the comment 3
16.			Confidential comments deleted.	
17.	GDV e. V.	General Comment	GDV recognises CEIOPS' effort regarding the implementing measures and likes to comment on this consultation paper. In general, GDV supports the detailed comment of CEA. Nevertheless, the GDV highlights the most important issues for the German market based on CEIOPS' advice in the blue boxes. It should be noted that our comments might change as our work develops. Based on our experience during the previous two consultation waves we also want to express our concerns with regard to CEIOPS decisions: - restricting the consultation period of the 3rd wave to less than 6 six weeks - splitting the advice to the EU-commission in two parts ((1) first+second wave and (2) third wave) although both parts are highly interdependent - not taking into account many comments from the industry 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.	Timetables has been fixed by the European Commission. Some solutions in the directive were discussed until the last minute, they have various consequences and CEIOPS also needed some time.

			In our view the use of USP should be accepted within the total framework of the standard formula, naturally under the condition that the undertaking has to demonstrate that the USP better reflect the risk profile than the standard factors. In general, we do not see any arguments as to why sub-modules from the life, non-life and health underwriting should be excluded from the use of USP.	See the resolution to the comment 2
			In case the standard model with European wide standard calibration would not reflect the undertaking specific risk profile appropriately, there are two possibilities: an internal model as well as USP have to be applied. Because CEIOPS will not allow for geographical diversification in the standard approach it is of high priority to allow for USP because USP comprise intrinsically geographical diversification. But the approval procedure described in this paper is counterproductive as it sets much too high barriers and thereby prevents the use of USP. We argue that the use of USP should be supervised in a more flexible manner. The approval process needs to be much better designed along the lines of the required flexibility in order to encourage undertakings to use USP as a way to obtain risk sensitive results and encourage proper underwriting risk management. The standard formula parameters were estimated based on data that do not satisfy the requirements stated in this CP (cf. e.g. CP71 3.12 or 3.29). Given this, we propose not to require exceedingly additional data requirements for using USP and giving the undertaking specific data less weight in the credibility approach by requiring a rather long history and rather low credibility weights.	Noted Partially agreed. See some changes in the paper. The standard calibration was made on the best effort basis and CEIOPS is currently working on the improvement of the standard calibration, but we partially agree. See some changes in the paper.
			Many questions are raised concerning premium cycles and whether	Adjustment for underwriting

			/ how to take them into account. A broader discussion of this topic seems necessary. This topic must be linked to the calibration of the standard risk factors in CP 71 and the use of simplifications in CP76.	cycle is a good example of an issue which can be solved by a (partial) internal model.
			Methods to calculate USP should not be fixed on Level 2.	This is the Directive requirement.
			We believe that there is not an optimal alternative that should be selected as the only alternative to determine USP. As a consequence, we propose to allow for further alternatives not being already captured in this CP for determining USPs being proved resp. to be proved to cover the risk conceptually the same as the standard formula parameters.	Noted, however methods have to be fixed – it is the Directive requirement
			For example, a method developed by the GDV tries to overcome at least technical limitations for the use of USP. We stand ready to provide more details to CEIOPS about this method.	Noted
			The component under the reserve risk for unexpected extreme events is redundant for all lines of business. Extreme events are allowed for in the catastrophe risk module. This component will lead to double counting.	See the resolution to the comment 3
18.	GROUPAMA	General Comment	Groupama is against the allowance of some standardised methodology for USP. Undertakings should only be in line with the overall methodology used for the standard formula.	See the resolution to the comment 5
19.	Groupe Consultatif	General Comment	We propose to keep the approval process for using USPs as simple as possible. It is very likely that the standard formula parameters won't accurately reflect the undertaking's risk profile generally as	Partially agree. CEIOPS has relaxed some requirements –see

			there were several limitations in the estimation process. A re approval should only be necessary in exceptional circumstances.	changes in the paper.
			The list of parameters allowed to be replaced by USP should not be restricted. In order to obtain results reflecting the risk profile of the individual undertaking it is necessary that all parameters can be substituted by USP. This is especially important for the correlation factors. Otherwise results obtained by the standard formula can never be called to be risk sensitive.	Correlation factors can be changed in an internal model as it is impossible to provide a "standardised methodology" for correlation factors.
			The hurdles set for using USPs seem to be burdensome esp. for entities with non-standard risk where partial internal models might not be approved for whatever reason.	See the resolution to the comment 2.
			Additionally, using simplified calculations due to the nature or scale of the risk, does not necessarily imply the lack of data, as these simplified methods might lead also to stable results compared to more complex methods but are more efficient. Thus, using USPs as well as simplifications seems appropriate (3.14).	According to the range of methods in 3.20 the European Commission is of the opinion that "it would not appear to be consistent with this hierarchy to allow undertaking specific parameters to be used in conjunction with a simplified method".
			As an additional hurdle, the approval process sketched in this CP is too unspecific, that undertakings could be prepared for using USPs. The approval process does neither explain, under which circumstances supervisors could require that the calculation of USPs has to be performed more frequently than the calculation of the	Partially agree. See some changes in the paper.

			SCR (3.18), nor does the sketched process describes the requirements in detail which data/ information has to be provided to supervisors to make the assessment and verify the suitability of the USPs (3.19d/ 3.130d). And based on this additional data/ information, supervisory authorities will asses, whether the data and revised calibration are relevant to the undertaking and whether the data is sufficient to justify the revised calibration (3.16e/ 3.130d).	
			In some member states, pooled data of high quality is available, especially regarding the similarity of the risk profile. Therefore the same credibility should be given to USPs which are calculated on pooled data than those calculated on undertaking specific data (3.26/ 3. 136/ 3.151b/ 3,179b).	Disagree. Pooled data is external data and undertaking has lower control on data quality and data collection.
			We note that the emphasis made in this paper on the data quality in combination with having to prove that the SCR isn't applicable most likely makes it close to impossible to use USP.	Partially agree. See some changes in the paper.
			Therefore an alternative could be that the requirements for USP is less based on pre-approval, but instead based on process around USP (explained by company) and spot check by supervisors. Indeed the pre approval is in our view not possible for USP and supervision should rely on a mix of spot check, reliance on senior management responsibility and internal/ external independent reviews. Moreover the implementation of this pre-approval process could also be a challenge for supervisors (ongoing approval and needed on quarterly basis). Relying on the internal approval by the administrative and management body will also result in the fact that the onus lies with the undertaking and not the supervisor. This approach of course requires strict confidentiality agreement between supervisory authorities and the undertakings	The supervisory approval . is the directive requirement and cannot be replaced by the spot check or reliance on senior management. See the resolution to the comment 2.

			Even if we note that the Level 1 text requires supervisory approval (Art 109) for the USP, we think that the emphasis should be that the undertaking has to show that the standard parameters are applicable to their risk profile, and the base case should be the own internal assessment (USP or (partial) internal model).	
			Regarding the scope of USP, we note that USP is only permitted for premium and reserve risk, but excluded for catastrophe risks and correlations. We recognise that evidence can be difficult to supply in these areas for a move from the standard parameterisation but this should not be ruled out. In our view it could introduce a systemic risks and also removes responsibility from management (and thereby moves away from the emphasis placed on the company proactively forming a view on its risks and their correlations).	Noted. For every USP a standardized methodology must be provided which for cat risk is especially difficult.
			Regarding the methods, we would like to point out that no fixed method is directly mechanically applicable as it requires judgements, adaptation and a mix of methods dependent on the available data, the type of business.	Agree.
			No allowance for underwriting year means that large parts of the London market may struggle to get meaningful, audited history. Replacing earned premium with written premium, and accident year with underwriting year, would not alter the general approach of the CP, but would make it more accessible within the industry	Agree. See changes in the paper.
			Non-life underwriting risk All three alternatives assume that there is no underlying rating cycle, which is unlikely to prove true within the non-life industry.	

			For example, if there was a class that had a perfect cycle, alternatives 1 and 2 would estimate that it had a large variability around the mean (which is true), but would not reflect the nil variability around the cycle. The same is true of the frequency parameter in alternative 3. Another possible approach is to use an auto-regressive (2) time-series, and then assess the variability around the cycle. This can easily be incorporated into alternative 1 or 2 through a re-specification of the mean for each class of business, and would make it better reflect the proper uncertainty around the underwriting cycle. Happy to write this mathematically if helpful. I don't think it is easy to remedy this issue for alternative 3. Non-life reserving risk No particular view on which of the alternative parameterisation methods is better. Alternatives 1 and 2 are relatively easy to understand, whereas alternatives 3 and 4 involve too much Greek (my working assumption is that the approach would have to be understood by the Board, and it would be difficult to explain 3 and 4). Given a choice between 1 and 2, I would opt for 1 since it is a closed form solution.	See the resolution to the comment 2. Noted Noted.
20.	Institut des actuaires (France)	General Comment	Generally speaking, the methodologies to be followed by undertakings who wish to make use of undertaking-specific-parameters (USP) have not been really used within the actuarial community yet. Hence, they should be thoroughly tested to be sure they can represent appropriate and relevant alternatives in the selection of USP.	Noted.
21.	INTERNATIONAL GROUP	General Comment	The IG is very supportive of the proposals set out in this CP, which will allow insurers to calculate insurance risk factors that more	Noted.

	OF P&I CLUBS		accurately reflect the risks inherent in their sector.	
22.	IUA	General Comment	In the timescale provided, comments cannot be provided on the quantitative methods suggested in this CP as we have not been able to adequately analyse the impacts of the different methods. Our understanding is that there is a deliberate "spectrum" of calculations to obtain the SCR built into Solvency II which varies in complexity and representation of an undertaking's risk profile. This ranges from a full internal model which is most complex and representative, to a partial internal model, and becoming less complex and less representative through the standard formula with undertaking specific parameters (USP), and finally the standard formula. We therefore believe that in order to maintain any such spectrum the proposals for USP must be proportionate to ensure that this spectrum is maintained. Therefore the USP requirements should not be unduly onerous comparative to a partial internal model. As we have previously stated, Operational Risk is insufficiently risk sensitive. We believe it important that operational risk should be reflective of the risk that is posed by the undertaking. Where no change is made to the actual operational risk module, we believe that there should be USPs available for operational risk where firms believe that their operational risk profile is materially different from that of a standard formula. One option that might be available (either from a standard formula or USP perspective), could be that the regulator assesses the level of a firms' risk at, say two yearly intervals and "grade" a firm accordingly (e.g. high risk, medium risk, low risk). That could form part of the Supervisory Review Process. That could then affect the operational risk parameters	Noted. Agree. For partial internal model requirements are in art. 112, 113 and 120-126 The suggestion is not in line with the Directive.

			applied to a firm. We believe that that would at least provide some incentive for improvement of risk management - befitting of a risk based regime. Data quality - the standards required are the same as for internal model approval, which seems overly onerous. Given that USPs are meant to be a relatively low cost alternative to a partial internal model, this does not seem proportionate. In particular, it should be clear that a firm's own data, even if not entirely complete, accurate or appropriate as required by the current guidance should be more complete, accurate and appropriate than the standard formula's own calibrations (which are manifestly lacking in these qualities), should therefore be permissible for the purposes of USPs.	The requirements of "completeness, accurateness and appropriateness" are the Directive requirements. CEIOPS takes the comment into account by changing the credibility factors. CEIOPS is currently working on the improvement of the standard calibration.
23.	Just Retirement Limited	General Comment	We welcome the opportunity to comment on CP75. We have the following comments of a general nature: - We believe that undertaking specific parameters (hereafter referred to as "USPs") should be permitted for any element of the standard formula, i.e. they should not be restricted to the small number of risks suggested in this paper. - We agree with the principles behind the approval process, in terms of the undertaking needing to demonstrate that the standard formula parameter is not appropriate to their circumstances, and that their USP has been derived appropriately. However we believe that the process described in the consultation paper and associated requirements are unduly burdensome, and in practice would deter undertakings from seeking to use USPs. This would therefore lead to inappropriate capital calculations for such undertakings and is likely to affect the incentives of such undertakings to take risk mitigating actions.	Only for underwriting risk modules. Otherwise this is not in line with the directive. See also the resolution to the comment 2. Partially agree. See some changes in the paper.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
24.	KPMG ELLP	General Comment	Choice of 10% adjustment factor for Non-Life reserve risk appears arbitrary and lacks adequate justification We disagree with the inclusion of the 10% adjustment factor included to account for unaccounted unexpected extreme events in the non-life reserve risk sub-module. We believe that insufficient justification has been given for the choice of the 10% fixed parameter as well as question its relevance and applicability within this sub-module. If the 10% factor is maintained by CEIOPS we believe further justification for the size of this factor as well as for its inclusion would be necessary. We further question the applicability of this factor across all lines of business (LOBs) given the examples provided by CEIOPS. We would propose that certain LOBs would not be exposed to such "unexpected extreme events" for which the factor is included. In addition to the above argument, we also question the applicability of this factor across all accident years given that certain extreme risks mentioned would only be applicable for less recent years (e.g. asbestos claims). We feel that the inclusion of a parameter within this sub-module to account for unexpected extreme events may run the risk of double counting risks included in the catastrophe modules. Given the above arguments we would propose that the factor is withdrawn.	See the resolution to the comment 3
25.	Lloyds	General Comment	Overall the introduction of Undertaking Specific Parameters adds significant complexity to the standard formula but this is required to allow for specifics in the risk profile of undertakings. It is essential there is a consistent approach to supervision of USPs as the consultation provides little information on the level of	Noted.

			discretion supervisors should allow. In practice it would be virtually impossible to satisfy all the data requirements needed and hence all undertakings will require some form of dispensation from their supervisor. A broad similarity in supervisors' approaches is required.	
			There should be some recognition of underwriting cycles that do naturally exist in insurance. A firm's history may be perfectly aligned to the cycle (and hence have little "real" deviation) but would always be credited with volatility caused by the cycle. This can be easily done by including adjustments for rate movements (or rate indices) over the period. By "normalising" the returns, the volatilities would be more representative of the underlying volatilities.	Adjustment for underwriting cycle is a good example of an issue which can be solved by a (partial) internal model.
			A related point is that the derived factors make no allowance for the expected outcome of the underlying policies. The approaches selected are designed to be a fair economic assessment of the capital required to write business. By ignoring the expected outcome of the policies there is a fundamental divergence from the economic bases which underpin Solvency II. This could be introduced by including the expected outcome of a policy versus the sums involved.	
			We propose that geographical diversification be introduced as an USP in the non-life underwriting risk as it has been removed under the final advice (which we disagree with). The rationale is that the geographical diversification included in the calibration of the non-life underwriting module is known to be inappropriate for a number of firms writing multi-national business. A main reason for its removal was the complexity introduced. The complexity is far less than that of some of the proposals here. The method used could be similar to the QIS4 approach but we suggest using regions split using the UN geo scheme with some modifications. This leads to less than 20 regions (which are deemed non-political) compared to	The concept of USP implicitly takes into account the geographical diversification.

			the 54 introduced in QIS4. The method could be the same: undertakings would split their premium and claims outstanding between the predefined groups and diversification is allowed for using a Herfindahl index with a maximum credit of 25%. We do not agree with the use of USPs that are based largely on external data or for new lines of business. This defeats the objective: if an undertaking has no specific history to rely on then USPs should not be considered. We propose there is a minimum term before the use of USPs and a minimum proportion of data classed as internal.	According to the Directive, the undertaking shall calibrate undertaking-specific parameters on the basis of the internal data of the undertaking concerned, or of data which is directly relevant for the operations of that undertaking. Both data should meet criteria of the completeness, accuracy and appropriateness. We partially agree and therefore give lower credibility factors for external data.
26.	Munich Re	General Comment	We fully support all of the GDV statements and would like to add the following points: The standard formula parameters were estimated based on data that do not satisfy the requirements stated in this CP (cf. e.g. CP71 3.12 or 3.29). Given this, we propose not to require exceedingly additional data requirements for using USP and not to giving the undertaking specific data to less weight in the credibility approach by requiring a rather long history and rather low credibility weights. We propose to keep the approval process for using USPs as simple as possible. It is very likely that the standard formula parameters won't accurately reflect the undertaking's risk profile generally as there were several limitations in the estimation process. A re approval should only be necessary in exceptional circumstances.	See the resolution to the comment 17 See the resolution to the comment 19

			We believe that there is not an optimal alternative that should be selected as the only alternative to determine USP. There as pros and cons for each of the presented alternatives. As a consequence, we propose to provide a set of standardised methods and allow for further alternatives not being already captured in this CP for determining USPs being proved resp. to be proved to cover the risk conceptually the same as the standard formula parameters (cf. 3.130 c)) and to leave it to the undertakings to choose that one that reflects their risk profile best. There shouldn't be too burdensome restrictions for methods to be used to determine USPs. Methods, that fulfil common quality requirements (i.e. deriving the biometric basis for life risks according to principles of actuarial associations), should be allowed for. We especially do not believe that alternative 3 for determining non-life premium risk is the optimal alternative as it seems to be proposed in 3.169. We further propose that undertakings should be allowed to choose a standardised method per line of business instead of using the same for all lines of business. We strongly propose to follow a risk-based approach coherently and not to alter parameters and data requirements for certain lines of business depending on social importance (cf. 3.181). We strongly propose not to penalise the use of USPs by applying conservative adjustments justified by reasons that apply to the standard formula methods but that are not applied there (cf. 3.182). We strongly propose not to restrict the use of USP for the parameters mentioned in this CP but to allow for USPs for all	See the resolution to the comment 17. Partially agree - no method is perfect. The standardised methods are however the Directive requirement. The suggested degree of flexibility (other methods not captured in the CP) is not in line with the Directive. Noted (the remark about method 3). Agree. Noted. See the resolution to the comment 3 See the resolution to the comment 2. The list as well methodologies are the level 2 issues and shall be fixed to be in line with the Directive.

			parameters in the underwriting module (cf. recital 14b in the Level 1 text). Especially, the list of replaceable parameters in 3.10 should be interpreted as an open list.	
27.	RBS Insurance	General Comment	We have a question over whether or not a Firm can use undertaking specific parameters when calculating the SCR that has been requested by its Supervisor for comparison purposes only (i.e. in the case of a Firm that uses an Internal Model).	No.
28.	ROAM	General Comment	ROAM wants first of all to thank CEIOPS for the efforts to supply a CP with propositions of explicit methods. ROAM thanks CEIOPS also for the approach of credibility which allows better taking into account the specialization of a (re) insurer. ROAM, which supports the position of FFSA and AMICE on this subject, wishes that there is no limitation on the modelling to be used for the calculation of the USP. We are in favour of general principles in agreement with the principles of the standard formula but every company has to have the possibility of adapting the models according to its profile. Every company has to take into account the evolution of its risk profile, programs of reinsurance and the policy of pricing. The estimation of the standard deviation of the reserve risk specific to the company is completed by a load in respect of the unexpected extreme risks and with the risk engendered by the model. ROAM considers that the methods of estimations have to include the error of estimation and the error of model. Therefore the additional inclusion of the parameter Tau is inappropriate. ROAM asks for the deletion of this supplementary load. (see comment to 3.85)	Noted. See the resolution to the comment 5. A major adaptation are rather in the scope of a partial internal model. See the resolution to the comment 3
29.	RSA	General	We believe that USPs provide a sensible halfway house between	Noted.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
	Insurance Group	Comment	Partial Internal Models and the Standard Formula. We think that as written CP75 makes uses of USPs very difficult in practice. More detail on this is given in paragraphs 3.130 and 3.171 below.	
30.			Confidential comments deleted.	
31.	UNESPA	General Comment	UNESPA (Association of Spanish Insurers and Reinsurers) appreciates the opportunity to analyze and comment on *Consultation Paper 75 on Undertaking specific parameters* UNESPA is the representative body of more than 250 private insurers and reinsurers that stand for approximately the 96% of Spanish insurance market. Spanish Insurers and reinsurers generate premium income of more than € 55 bn, directly employ 60.000 people and invest more than € 400 bn in the economy. The comments expresed in this response represent the UNESPA´s views at this stage of the project. As our develops, these views may evolve depending in particular, on other elements of the framework which are not yet fixed. **One of the objectives to be followed by Solvency II is to promote the culture of assessment and risk management by companies.** We understand that the current USP is not a good way to comply with it since does not allow or encourage undertakings to develop methods of calculating the underwriting risk adjusted to their risk profile. In our opinion to mix undertakings and market parameters in a formula is not consistent in order to evaluate the undertakings risk, the formula obtain is not risk sensitive and it does not promote the undertaking risk management. In our opinion the USP parameters must be undertakings parameters, because the market parameters used in the USP really does not reflect the undertakings	It is not the aim of USP. The idea of USP should not be confused with idea of an internal model. The USPs are the intermediary step between standard formula and partial internal model. Due to the estimation error stemming from the use of the standardised methods, CEIOPS preserves the

			risk, one of the objectives of Solvency II. CEIOPS assumes in the CP that most of the proposed alternatives include a very significant error in the estimation, solving this problem with a single charge in some cases. We believe that this is not the right way due to the fact that any model that does not fit the undertaking's risk profile should not be used as a reference in the option USP. **Alternative to current USP methods should be allowed and boosted by CEIOPS and industry** We understand there is a gap between the CEIOPS´ proposed standard approach and the development of internal models. From UNESPA this problematic gap is intended to be solved through an alternative proposal based on adjusting the capital requirement for premium and reserve risks to the real risk that undertakings are facing. Although this proposal shall not cover the calibration of a partial internal model, it seeks to fill that large gap which exists between the standard formula and internal models for undertakings. We propose a feasible alternative to the USP calibration proposed by CEIOPS. There is a brief description of the methodology in the annex of this document. Our work has not been only a development of the methodology on a paper, furthermore, we are currently building up a macro (Excel) in which we offer this methodology in fully disclosed manner to be followed (basically Monte Carlo and Bootstrapping). Please find attached an advance of the alternative methodology for the USP option:	credibility approach. Otherwise more strict requirements regarding data quality should be introduced. Noted. The method is unfortunately not consistent with the standard methodology for USP – for example probability distribution should be fixed. Other distributions are possible in the (partial) internal model.


Adobe Acrobat Document

After analyzing the document and comparing it conceptually with the alternative method we can

conclude the following:

	CEIOPS Proposal	Alternative Proposal
Flexibility	✗	✓
Promote risk management	✗	✓
Reflect undertaking profile	✗	✓
Applicability	✓	✓
Simplicity	✓	✓

We will be very pleased if CEIOPS want to contact us in order to collaborate in future development. We think that the best way to analyze a method is in practice, so we consider very useful to take advantage of the next QIS5 to test an alternative method that may be among other, this one that we present to you. Contact: contabilidad.solvencia@unespa.es

Using Lognormal distribution may not be adequate to represent the loss function of the different LOBs Non-life risk

Given the characteristics of each LOB, the frequency and severity of claims for each LOB, etc, so others distributions have to be used to

Disagree. The assumption on distribution results from the

			better suit the LOB's loss function. **<u>The longevity stress would be suitable for replacement with USP</u>** We understand that the calculation with a 1-off shock for mortality/longevity is appropriate as a simplification and these simplifications should be retained. However the standard formula <u>trough the USP option</u> should be refined to allow at least for the age of the insured person and consideration/analysis should be carried out to determine whether it would also be appropriate to allow for additional refinement such as an allowance for other characteristics such as outstanding duration of the contract or sex of the insured person. CEIOPS will remember that we forwarded you a a study carried out by UNESPA1 proposing a methodology to calibrate longevity risk in a more granular manner than that used in QIS4 which has been proposed by Ceiops in CP49. **We believe that the Unespa study should be considered as a possible alternative to develop the USP option for longevity sub-risk in the final advice on the Level 2 implementing measures**. Longevity risk is a material risk for many insurers and the proposed 25% immediate shock for all business subject to longevity risk is not appropriate.	assumptions made in CEIOPS' Advice CEIOPS-DOC-41-09 Disagree. The USP cannot change the structure of standard formula.
32.	DIMA (Dublin International Insurance & Management	1.2.	Is there a pre-approval process for undertakings to replace standard formula parameters with undertaking-specific parameters? If a supervisory authority refuses to allow undertaking-specific parameters, is there a right of appeal?	At this stage CEIOPS does not recommend pre-approval process. It is possible within level 3 guidance.

[1] http://www.cea.eu/uploads/DocumentsLibrary/documents/1236954597_unespa_longevity.pdf

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
33.	DIMA (Dublin International Insurance & Management	1.3.	What is the response time involved if a supervisory authority insists that the undertaking replaces standard formula parameters with undertaking-specific parameters? Is there a right of appeal?	Each supervisory authority should state the time in its decision. Supervisory authority is opened for arguments and discussion wih undertaking.
34.	CEA	2.	It is stated in the part regarding "Article 104 – Design of the Basic Solvency Capital Requirement" that the "supervisory authorities shall verify the completeness, accuracy and appropriateness of the data used". Could one assume that the requirements for the data used regarding the Standard Formula parameters are as stated in CP43?	In next paras. CEIOPS gives references to CEIOPS' Advice on Standards for Data Quality (CEIOPS-DOC-37/09, former CP 43).
35.	Groupe Consultatif	2.	The working group especially welcomes the explicit reference to Recital 14b indicating that undertakings are specifically allowed to use own data to calibrate parameters of the underwriting risk modules of the standard formula of the SCR.	Noted
36.			Confidential comments deleted.	
37.	CRO Forum	3.1.	It is suggested that data could be taken from statutory accounting systems. While there may be some merit in this (audit, QA etc.), data from strategic MI systems (as long as reconciled to the statutory accounting systems) should be acceptable, and perhaps even preferable.	See the resolution to the comment 36.
38.	Federation of European Accountants (FEE)	3.2.	According to paragraph 3.2, CEIOPS advised in section 10.151 of the "Answers to the European Commission on the Second Wave of Calls for Advice in the Framework of the Solvency II project" (October 2005) that the level of reserve risk might be reflected in the run-off results, assuming that the claims provisions are consistently valued in line with the general rules on the valuation of technical provisions within the solvency framework.	

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
			It is not yet clear whether the credibility factors have to be used based on the length of the claims triangles currently used or the length of the time series of the run-off results. If the latter should be the case, the quality of the run-off results might i) require to reperform the valuation of claims provisions for prior periods as the historical data (based on the valuation of technical provisions in the past) of the undertaking might not be in line with the general rules on the valuation of technical provisions within the solvency framework and ii) the quality of these valuations depends again on the length of data used to perform the triangle valuation.	The credibility factors should be based on the length of time series of one-year results.
39.	UNESPA	3.5.	A significant deviation for the use of the USP should not be necessary owing to the fact that the use of the USP encourages undertakings to calculate their capital requirements according to the risk borne by them, to invest in data collection in the calculation of their regulatory capital and **the undertakings Risk management**.	Noted
40.	UNESPA	3.6.	It should be necessary to clarify the term *significant deviation*, that allows Supervisors to require the use of internal models or impose a capital add-on to the undertakings, rather than the use of the USP formula as indicated in the previous section. We regard extremely necessary that CEIOPS should propose other alternatives to capital add-on requirements. Therefore, increasing supervisors' leeway.	It is wording from the Level 1 text. The Level 1 text foresees UPS, internal models or capital add-on.
41.	ABI	3.10.	We do not agree with CEIOPS to limit the scope of USPs, as set out in the Directive. We believe that undertaking specific parameters should be accepted within the whole standard formula, where a firm demonstrates that the USP better reflects the individual risk profile than the standard formula.	The scope of USP is limited to underwriting risk modules by the directive. Further remarks - see the resolution to the comment 2.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
42.	CEA	3.10.	Recital 65 states: "Where the use of undertaking specific parameters allows for the true UW risk profile of the undertaking to be better reflected, this should be allowed, provided such parameters are derived using a standardised methodology." Article 111 (j) of the Directive allows the development of implementing measures on the use of USP in the life, non life and health areas. Based on above we oppose to the limited view of Ceiops related to the use of undertaking specific parameters. In our view the use of USP should be accepted within the total framework of the standard formula, naturally under the condition that the undertaking has to demonstrate that the USP better reflect the risk profile than the standard factors. For example, the disability stress for income insurance would be suitable for replacement with USP, as would the lapse, longevity and expense factors for life and health business. Also, biometric assumptions can be USP if an undertaking observes an adverse client structure / risk profile compared to market standards used to set parameters in the standard formula.	See the resolution to the comment 2.
43. vncf;	GDV e. V.	3.10.	We oppose to the limited view of CEIOPS related to the use of undertaking specific parameters. In our view the use of USP should be accepted within the total framework of the standard formula, naturally under the condition that the undertaking has to demonstrate that the USP better reflect the risk profile than the standard factors.	See resolution to comment 42

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
44.	Groupe Consultatif	3.10.	3.10, 3.11, 3.124, 3.125: The standard model has to be put into question basically, if undertaking specific conditions have to be modelled. In such case the standard model would not reflect the undertaking specific risk profile appropriately, so that an internal model as well as USP have to be applied. This implies all kinds of USP, also parameters like correlation factors between certain lines of business, not only standard deviations.	See the resolution to the comment 19
45.	Munich Re	3.10.	The list of replaceable parameters in 3.10 should be interpreted as an open list. Especially, lapse risk and biometric risks should be additionally included.	See the resolution to the comment 2.
46.	Association of Run-Off Companies	3.11.		N/A
47.	Assuralia	3.11.	If no geographical diversification is permitted in the standard formula, we suggest to give the possibility to the undertaking to define its own diversification effect and to apply it to the volume as defined in the QIS4. The correlation parameters can also be different undertaking by undertaking; therefore in case of availability and reliability of data, an undertaking would be able to change the correlation parameters	See the resolution to the comment 19 (the 3rd one)
48.	CEA	3.11.	Based on the argumentation we gave in paragraph 3.10 we suggest Ceiops to drop this paragraph.	See the resolution to the comment 2
49.	Deloitte	3.11.		N/A
50.	GDV e. V.	3.11.	Based on the argument we give in paragraph 3.10 we suggest CEIOPS to drop this paragraph.	See resolution to comment 48

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
51.	ABI	3.12.	See comments to 3.10	See resolution to comment 41
52.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.12.	We can use the undertaking-specific parameters for correlations, but we think this is very complicated to estimate (method of copulas)	It is complicated indeed but can be done in the internal model. Copulas methods are not possible to apply as "standardised methodology" in line with the EC interpretation.
53.	Association of Run-Off Companies	3.12.	Operational risk should be included. Run-off companies could have a very different risk profile to live companies. If data for operational risk is scarce then many companies may need to use the standard formula for operational risk as internal model approval may not be possible. Using USPs for operational risk could be a good way to make this risk module more targeted to individual companies. A similar point was raised in a letter from Paul Corver, Chairman of the Association of Run-off Companies, to Karel Van Hulle, sent 17th November 2009.	USPs in operational risk are not allowed by the directive. It can be done in the (partial) internal model
54.	Assuralia	3.12.	There is allowance in the CP for the use of undertaking specific parameters for the non-life and the health underwriting risk modules. We are also considering the possibility to use specific parameters for the life underwriting risk module (e.g. for lapse risk and longevity risk). Furthermore, the current definition of the shocks to be applied appears as relatively arbitrary. It should be possible to use different levels of shocks if the undertaking is able to demonstrate the difference for its own situation based on credible and robust data.	A methodology for life module is welcome. See the resolution to the comment 2.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
			Yet, we note that USP are excluded for catastrophe risks. As long as companies can satisfy the criteria relating to the data and as long as they apply accepted methods, we don't see any reason for not allowing them to calculate appropriate USP for catastrophe risks.	
55.			Confidential comments deleted.	
56.	Bupa	3.12.	We strongly encourage an assessment of USP for health, but it should be viewed in concert with the wider issue of health analysis and calibration as per CP 72. Please see our comments as such in CP 72. In addition, a proper analysis of suitable methods will take more than one month, and should coordinated across Member States and firms to avoid a repeat of the issues we are collectively dealing with in regard to the health module.	Noted
57.	CEA	3.12.	The disability stress for income insurance would be suitable for replacement with USP, as would the lapse, longevity and expense factors for life and health business. Biometric assumptions can be USP if an undertaking observes an adverse client structure / risk profile compared to market standards used to set parameters in the standard formula. 2. With regards to longevity risk, undertakings may want to use the standard formula with USP refined to allow at least for the age of the insured person. Companies may give also consideration to determine whether it would also be appropriate to allow for additional refinements, such as an allowance for other characteristics such as outstanding duration of the contract or sex of the insured person. A study carried out by UNESPA□, proposing a methodology to	See the resolution to the comment 2. See the resolution to the

			calibrate longevity risk in a more granular manner than that used in QIS4 which had been proposed by Ceiops in CP49, was put forward recently. The Unespa study may be considered as a possible alternative to develop the USP option for longevity sub-risk by undertakings. Longevity risk is a material risk for many insurers and the proposed 25% immediate shock for all business subject to longevity risk is not necessarily appropriate. It is important that undertakings have the freedom of choosing such approaches or other methods in determining longevity USPs.	comment 31
			Standardized methods on lapse profiles resemble methodology used in the derivation of biometrical tables.	This method was not tested in the standard formula calibration and requires many assumption which can be different among undertakings.
			Another example where to use USP is the SLT Health disability risk for medical insurance. Ceiops itself notes in CP72, 3.35, that the standard deviations varied from 2% to 10%. Hence, using the average for all undertakings seems neither risk sensitive nor justified.	See the resolution to the comment 2
			In general, we do not see any arguments as to why sub-modules from the life, non-life and health underwriting should be excluded from the use of USP. This specific argumentation is lacking from the Consultation Paper. In our view the use of USP should be accepted within the total framework of the standard formula, naturally under the condition that the undertaking has to demonstrate that the USP better reflect the risk profile than the standard factors.	See the resolution to the comment 17 (the 3rd one)

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
58.	CRO Forum	3.12.	In general, we do not see any arguments as to why any sub-modules from the life, non-life and health underwriting should be excluded from the use of USP. This specific argumentation is lacking from the Consultation Paper. In our view the use of USP should be accepted within the total framework of the standard formula, naturally on the condition that the undertaking has to demonstrate that the USP better reflect the risk profile than the standard factors and has proper controls in place to ensure quality of the data. In particular the proposed standardised methodologies in this paper will be critical for those companies with non-standard risks but where, for one reason or another, internal model approval will not be obtained. Given that a significant number of standard factors have increased (like the ones for the premium and reserve risks in CP 71), those companies will find it all the more important to be able to calibrate and use USP, where appropriate.	See the resolution to the comment 57 (the last one) Noted.
59.	Deloitte	3.12.	In general, we do not see any argument as to why submodules from the life, non-life and health underwriting should be excluded from the use of USP. This specific argument is lacking from the Consultation Paper. In our opinion, the standardised method for the calculation of the USP should be in line with the method used to calculate the standard parameters as much as possible. The effect of using USP instead of standard parameters should not be caused by a difference in applied methodology, in accordance with the requirements laid out in paragraph 3.19 a) and c) of this Consultation Paper. We therefore request CEIOPS to clarify the reasons for not allowing the replacement of certain standard parameters by USP. Furthermore, to ensure maximum consistency between the calculation method for USP and for standard parameters, we would recommend CEIOPS to develop standard methods based on the	See the resolution to the comment 2. Partially agree. To the possible extend they will be consistent. Agree. CEIOPS will clarify it in the paper.

			methods used to calculate the standard parameters.	
60.	DIMA (Dublin International Insurance & Management	3.12.	DIMA seeks the inclusion of life premium and reserve risks within undertaking specific parameters.	It would be a change in the life module design so it is out of the scope of USP.
61.			Confidential comments deleted.	
62.	Groupe Consultatif	3.12.	We note that USP is only permitted for premium and reserve risk, but excluded for catastrophe risks and correlations. We recognise that evidence can be difficult to supply in these areas for a move from the standard parameterisation but this should not be ruled out. In our view it could introduce a systemic risks and also removes responsibility from management (and thereby moves away from the emphasis placed on the company proactively forming a view on its risks and their correlations).	See the resolution to the comment 19
			Stakeholder feedback: The working group strongly suggests an open list of possible parameters in any underwriting risk module to become USP. E.g. lapse risk in life is undertaking dependant and not yet listed. Future product development may arise in other parameter subsets subject to USP due to significant deviation from the current standard approach.	According to the Directive the standardised methods must be provided, so the list can not be open. See also the resolution to the comment 2.
			Also, biometric assumptions can be USP if an undertaking observes an adverse client structure / risk profile compared to market standards used to set parameters in the standard formula.	
			Standardized methods on lapse profiles resemble methodology used in the derivation of biometrical tables.	See the resolution to the comment 57
			cf. 3.124	

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63.	Just Retirement Limited	3.12.	No justification is given why the usage of USPs should be restricted only to those risks set out in 3.10. In principle USPs should be permitted for all risk categories, as long as the undertaking can demonstrate that by using the USP a better reflection of the underlying risk is achieved than by using the standard formula without amendment. For example, the longevity stress is likely to be at least in part determined by the number of an undertaking's policyholders and their demographic mix, with smaller insurers having greater uncertainty over their opening longevity assumptions than larger.	See the resolution to the comment 2.
64.	Lloyds	3.12.	We propose introducing geographical diversification as an USP in the non-life underwriting risk as it has been removed under the final advice (an action we not agree with). The allowances for geographical diversification included in the calibration of the non-life underwriting module are known to be inappropriate for a number of firms, including those writing multi-national business. A main reason for its removal was the complexity introduced. The complexity is far less than some of the other proposals relating to USPs. The method used could be similar to the QIS4 approach but amended, to use a regional split based on the UN geo scheme definitions (with some modifications to reflect the incidence of insurance). This leads to less than 20 regions (which are deemed non-political) compared to the 54 introduced in QIS4. The underlying method would be as per QIS4, where undertakings are required to split premium and outstanding claims data between the predefined groups and diversification is allowed for using a Herfindahl index with a maximum credit of 25%. Our proposed region splits are attached. This would be workable and proportionate to any credit for geographical diversification granted.	See the resolution to the comment 25.

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65.	Munich Re	3.12.	Undertaking specific parameter should also be used in the SLT Health disability risk for medical insurance. CEIOPS itself notes in CP72, 3.35, that the standard deviations varied from 2% to 10%. Hence, using the average for all undertakings seems neither risk sensitive nor justified.	See the resolution to the comment 57.
66.			Confidential comments deleted.	
67.	UNESPA	3.12.	**The longevity stress would be suitable for replacement with USP** The standard formula trough the USP option should be refined to allow at least for the age of the insured person and consideration/analysis should be carried out to determine whether it would also be appropriate to allow for additional refinement such as an allowance for other characteristics such as outstanding duration of the contract or sex of the insured person. CEIOPS will remember that we forwarded you a a study carried out by UNESPA proposing a methodology to calibrate longevity risk in a more granular manner than that used in QIS4 which has been proposed by Ceiops in CP49. **We believe that the Unespa study is a good study which should be considered as a possible alternative to develop the USP option for longevity sub-risk in the final advice on the Level 2 implementing measures**. Longevity risk is a material risk for many insurers and the proposed 25% immediate shock for all business subject to longevity risk is not appropriate. **Other life sub-risks** With respect to lapse and expense sub-risks, there should be given the possibility of incorporating specific parameters as in the Non-life risks.	See the resolution to the comment 31. See the resolution to the comment 2.
68.	Assuralia	3.13.	We would like to receive some further information about the exact	For more details see CEIOPS'

			meaning of "expert judgment"?	Advice on Technical Provisions - Article 86 Actuarial and statistical methodologies to calculate the best estimate (CEIOPS-DOC-33/09, former CP 39), section 3.10.
69.	CEA	3.13.	☐ We are not sure what is meant by "standard methodology". Does this mean that the only methods an undertaking may use to obtain USP are those described in this CP in section 3.1.3.5? If this is the case, this would not be acceptable, because most of the methods described in CP 75 are not sufficiently appropriate. Applying such methods in an automated manner will never yield robust and reliable estimations. ☐ In many cases "parameters based only on expert judgement" will be the only ones available. An approach more proportionate to risk should be taken in such cases.	Yes. Partially agree. . The use of other methods or only expert judgement is however possible in the framework of a partial internal model.
70.	UNESPA	3.13.	Further clarification is needed on cases when you might use the expert judgment and the requirements for its use	See the resolution to the comment 68
71.	ABI	3.14.	In our opinion, the use of simplifications and USP are not mutually exclusive. If an undertaking can demonstrate to the supervisor that it meets the requirements for using both simplifications and USP, this possibility should not be excluded on beforehand. Even though in its approval decision, the supervisor should take into account the arguments presented in paragraph 3.14, the onus should also in this case be on the undertaking to demonstrate the fulfilment of the data requirement (in accordance with Paragraph 3.32) as well as to demonstrate the appropriateness of using both simplifications and USP.	See the resolution to the comment 19.

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72.	CEA	3.14.	In our opinion, the use of simplifications and USP are not mutually exclusive. It is also wrong to claim that an undertaking using simplifications usually has a lack of data. If an undertaking can demonstrate to the supervisor that it meets the requirements for using both simplifications and USP, this possibility should not be excluded on beforehand. Even though in its approval decision, the supervisor should take into account the arguments presented in paragraph 3.14, the onus should also in this case be on the undertaking to demonstrate the fulfilment of the data requirement (in accordance with Paragraph 3.32) as well as to demonstrate the appropriateness of using both simplifications and USP.	See also the resolution to the comment 71.
73.	Deloitte	3.14.	In our view, the use of simplifications and USP are not mutually exclusive. If an undertaking can demonstrate to the supervisor that it meets the requirements for using both simplifications and USP, this possibility should not be excluded beforehand. Even though in its approval decision, the supervisor should take into account the arguments presented in paragraph 3.14, the onus should also in this case be on the undertaking to demonstrate the fulfilment of the data requirement (in accordance with paragraph 3.32) as well as to demonstrate the appropriateness of using both simplifications and USP.	See also the resolution to the comment 71.
74.			Confidential comments deleted.	
75.	CEA	3.16.	We argue that the use of USP should be supervised in a more flexible manner. Undertakings should be able to prove the appropriateness of the USP at all times. Making undertakings to ask further for supervisory approval could be counterproductive in some cases. Essentially, we ask for more information on the functioning and	Partially agree – see changes in the paper.

			approval of USP (formalization of the demand, motivation for any refusal, timing of answer,…), and the frequency of updates of USP. In general, the approval process and formalisation should be less burdensome and more flexible than for internal model and should be validated in a short period of time by supervisors.	
76.	CRO Forum	3.16.	See our comments for 3.130	See the resolution to the comment 377.
77.	Groupe Consultatif	3.16.	See "General comment" above on the need for this to be clearer.	See the resolution to the comment 19.
78.	RBS Insurance	3.16.	We agree that if Firms wish to replace a subset of the parameters with undertaking specific parameters supervisory approval should be sought.	Noted
79.			Confidential comments deleted.	
80.	CEA	3.17.	A flexible process for approval of using USP or reverting to the standard parameters should be defined.	Disagree. Text has been clarified.
81.	CRO Forum	3.17.	We agree with this requirement. If an insurer had a reason to switch to USP, there should also be a good reason to switch back to the standard parameters. This reason should be substantiated.	Noted, Text has been clarified.
82.	Deloitte	3.17.	We agree with this requirement. If an insurer had a reason to switch to USP, there should also be a good reason to switch back to the standard parameters. This reason should be substantiated.	Noted, Text has been clarified.
83.	Lloyds	3.17.	This is an important requirement.	Noted.
84.	ABI	3.18.	We do not agree that USP shall be calculated more frequently than the SCR, if requested by the supervisor. This requirement would be particularly burdensome where a firm is on a quarterly reporting or	Agree - see changes in the paper.

			monitoring. Furthermore, the term "certain exceptional circumstances" is not clear.	Text has been changed.
85.			Confidential comments deleted.	
86.	CEA	3.18.	First, we would recommend Ceiops to further specify 'certain exceptional circumstances'. Second, there should be more allowance for the current practice; USP calculation may differ in frequency from the SCT calculation. However, clearly stated intervals could be defined between supervisors and undertakings during the approval process.	Text has been changed. Agree - see changes in the paper.
87.	CRO Forum	3.18.	We would like to recommend CEIOPS to further specify 'certain exceptional circumstances'. See also our comments for 3.129.	Text has been changed.
88.	Deloitte	3.18.	We request CEIOPS to specify further 'certain exceptional circumstances'.	Text has been changed.
89.	Groupe Consultatif	3.18.	USP calculation may differ in frequency from the SCR calculation. However, clearly stated intervals should be defined between supervisor and undertaking during process of approval. E.g. lapse profiles are regularly revised but not every single year or even shorter intervals. cf. 3.129	Agree - see changes in the paper.
90.	INTERNATIONAL GROUP OF P&I CLUBS	3.18.	The IG questions the need for USPs to be recalculated 'at least as frequently as the SCR calculation' (which will be at least annually) and to obtain re-approval each time from the supervisor. The IG would prefer that USPs, once approved, remain valid unless there are significant changes to the risk profile of the undertaking, in which case recalculation and re-approval would be appropriate.	Partially agree - see changes in the paper.

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91.	Just Retirement Limited	3.18.	We believe that it would be unduly burdensome to require (i.e. in all circumstances) the undertaking to recalculate the USP at the same frequency as the SCR, or indeed at greater frequency. Whilst the same frequency would be a helpful target, allowance should be made for less frequent calculations of the USPs, for example where there is no evidence to suggest that the previous value of the USP has changed or become less relevant in relation to the standard formula.	Agree - see changes in the paper.
92.	UNESPA	3.18.	We would recommend CEIOPS to clarify the term 'certain exceptional circumstances'.	Text has been changed.
93.	ABI	3.19.	The approval process has very high requirements. This is counterproductive because: - The factors proposed by CEIOPS are not appropriate in many cases and - The methods applied by CEIOPS for calibration of the standard formula are not appropriate for many situations, therefore - The factors given by CEIOPS do not reflect the risk profile of many insurance undertakings. It is not appropriate to insist that partial internal models have to be used when the risk profile deviates from the assumptions of the standard formula. In most cases this problem can be solved by applying USP. The preference for partial internal model unnecessarily restricts the area of application of USP. Methods used to derive USP should not be limited to the "standard methods" described in this paper. It is one of the main principles of Solvency II that undertakings are responsible for establishing and choosing appropriate methods. Therefore the restriction of methods described here is not appropriate. The second bullet asks firms "to explain that the assumptions	Partially agree - see changes in the paper. Disagree – UPS may replace standard parameters if assumptions are met. According to Level 1 text – USP should be calculated by the standardised methods defined in the Level 2 measures. Agree - see changes in the paper.

			underlying the standard formula are appropriate". This is not appropriate for several reasons. a) The assumption of independence of loss ratios between accident years is not appropriate when considering the next accident year. For the next accident year the premium rating environment is usually known within reasonably tight parameters. b) There is no allowance within the standard formula for the expected profitability, when profitability is often as important as volatility in assessing capital requirements. We believe the Commission's intended status of USPs as a halfway house between the standard formula and a partial internal model would be undermined by this requirement to justify the assumptions underlying the standard formula which, in many cases, even CEIOPS have been unable to do satisfactorily. We believe that the second bullet should be deleted.	
			It is simply unrealistic to assume a mean combined ratio of 100%, as the standard formula is supposed to aim to be a realistic standard. This particularly impacts high-layer excess-of-loss reinsurance, particularly catastrophes. For some of the written business, the likelihood of loss is so small that the long-term combined ratios are as low as 15%. The bulk of the premium (85% in this case) can be viewed as capital. This is clearly "high risk / high return" business. Under the standard formula, premium risk would be measured by assuming a log-normal distribution of combined ratio with a mean of 100% and a very high volatility parameter, reflecting the high standard deviation from the fact that the business occasionally, and infrequently, results in a large loss. Effectively, the standard formula treats this as "very high risk / zero return" business, which is not realistic. Companies would never write such business, if this were the case.	This assumption is consistent with assumption behind the standard formula.

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94.	AMICE	3.19.	CEIOPS states that the undertakings shall demonstrate as best as possible and subject to proportionality, that the calibration of the standard formula parameters do not appropriately reflect their risk profile and that the use of USP leads to a more appropriate result; We appreciate that proportionality is mentioned in the paper and we would like to remind CEIOPS members that proportionality is not only proportionality of rules but also proportionality in the supervisory review process.	Noted
95.			Confidential comments deleted.	
96.	CEA	3.19.	The approval process has too high requirements. This is counterproductive because: ☐ The factors proposed by Ceiops are not appropriate in many cases and ☐ The methods applied by Ceiops for calibration of the standard formula are not appropriate for many situations, therefore ☐ The factors given by Ceiops do not reflect the risk profile of most insurance undertakings. It is not adequate that partial internal models have to be used when the risk profile deviates from the assumptions of the standard formula. In most cases this problem can be solved by applying USP. The claim for partial internal model unnecessarily restricts the area of application of USP. Methods that can be applied to derive USP should not be limited to the "standard methods" described in this paper. It is one of the main principles of Solvency II that undertakings are responsible to establish and choose an appropriate method. Therefore the	See the resolution to the comment 93.

			restriction of methods described here is not acceptable. 3.19 c) It's very possible that there are some other appropriate techniques or more or less modified methods to calibrate the USP.	
97.	CRO Forum	3.19.	3.19a specifies requirements for an undertaking to demonstrate the inappropriateness of the standard formula assumptions. We consider the design of the standard formula to be too high level and lacking in detail for this to be possible. We therefore suggest CEIOPS reconsider this excessive requirement. We suggest a requirement to demonstrate that USP better reflect the company's risk profile and proof of quality of the underlying data should be sufficient to justify use of USP.	Agree – see changes in the paper.
98.	Deloitte	3.19.	We would like to emphasise that the requirements laid out under a) and c) demand that the standardised method for calculating USP should be in line with the method for calculating the standard parameters.	Noted
99.	Groupe Consultatif	3.19.	3.19 c), 3.130 c): It is entirely possible that there are some other appropriate techniques or more or less modified methods to calibrate the USP?	According to Level 1 text – USP should be calculated by the standardised methods defined in the Level 2 measures.
100.	IUA	3.19.	We agree that USP's should not be used to "cherry-pick", and that supervisors need to be satisfied that this is not the case. However, by virtue of USPs being more representative of the undertaking' s business, it is possible it may lead to a lower SCR as a consequence. Where USPs genuinely better represent the undertaking's business, it would be wrong to automatically assume that a lower SCR means the undertaking is "cherry-picking".	Noted

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101.	Just Retirement Limited	3.19.	The process for receiving approval to use USPs appears to be unduly burdensome. There should also be the flexibility for undertakings to derive USPs using a method other than those outlined in this paper, as long as it is appropriate (and fulfils other necessary conditions) – this would enable the methods used to be consistent with the nature of the undertaking itself and its risks.	See the resolution to the comment 99.
102.	RBS Insurance	3.19.	Confirmation is required whether when a firm has been asked by the supervisor to produce a SCR using the Standard formula, for comparison purposes, it can use undertaking specific parameters in calculating a Firm's SCR using the Standard Formula i.e. in cases where a Firm already has an approved Internal Model that is being used for calculating SCR. The process for approval of undertaking specific parameters appears to be overly onerous.	See the resolution to the comment 27.
103.	ROAM	3.19.	ROAM is of the opinion that it is within the competence of the supervisor to demonstrate that the coefficients calculated by the company are not appropriate and not the inverse. The company, to calculate its USP, develops and presents the approach; it is thus logical that it belongs to the supervisor to contest the method or the data used.	Partially agree – see changes in the paper. See the resolution to the comment 99.
104.			Confidential comments deleted.	
105.	UNESPA	3.19.	We understand that it is not necessary for the use of the USP that the standard formula does not appropriately reflect the risk profile, as we believe that the requirement should be that the USP better reflects the risk profile of the undertaking to promote the culture of assessment and risk management by the undertakings, risk profile USP parameters has to be undertakings parameters to be sensitive risk.	Noted.
106.	CEA	3.20.	We agree that requirements with regard to data quality are to be	Noted.

			met; further analyses are necessary whether undertakings are able to fulfil in practice all requirements to use USP.	
107.			Confidential comments deleted.	
108.	CRO Forum	3.22.	See our comments for 3.133	See the resolution to the comment 387.
109.			Confidential comments deleted.	
110.	CRO Forum	3.23.	See our comments for 3.134	See the resolution to the comment 390.
111.	INTERNATIONAL GROUP OF P&I CLUBS	3.23.	This paragraph notes that data used to determine USPs 'can be internal or external'. But it could also be a combination of internal and external, for example where a group of similar undertakings pools data in order to derive parameters for use by all of them.	Agree - see changes in the paper.
112.	Lloyds	3.23.	We do not agree with widespread use of external data to estimate USPs as these are not representative of an undertaking by definition. The majority of the data used should be internal. The requirement that all points in the time series should be representative of the coming year will in practice be impossible.	The Level 1 text allows to use data which is directly relevant for the operations – this data are not restricted to the internal data. Noted.
113.	Deloitte	3.24.	The use of external data is welcomed to help new companies and smaller companies.	Noted.
114.	INTERNATIONAL GROUP OF P&I CLUBS	3.24.	This paragraph proposes that if external data is to be used, then this data should be 'more suitable than internal data'. Where a group of similar undertakings pools data in order to derive parameters for use by all of them (which is likely to result in more robust parameters than those based solely on individual data), the pooled data will include a combination of internal and external data.	Agree - see changes in the paper.

			To reflect this, the IG proposes that the requirement be redrafted to require that external data should 'be more suitable than, or complement, internal data.'	
115.	Lloyds	3.24.	It is rare that external data is representative of the risk profile of an undertaking and the reliance on external data should be constrained.	Noted
116.	ABI	3.25.	For a company writing a new line of business, relevant external data might be the performance of other insurers writing that line of business in the same territory. This should be included in the list of possible external data sources, as it would be more representative of the likely experience than the data underlying the standard parameters.	It is already in the advice.
117.	CEA	3.25.	For a company writing a new line of business, relevant external data might be the performance of other insurers writing that line of business in the same territory. This should be included in the list of possible external data sources, as it would be more representative of the likely experience than the data underlying the standard parameters.	See the resolution to the comment 116.
118.	Lloyds	3.25.	We disagree. The concept of using USPs for new lines of business based on external data appears to be completely counter to the intention of USPs – i.e. there would be no track record, no evidence the standard formula doesn't fit the risk profile of the undertaking and no relevant data to base the analysis on. For this reason there should be restrictions on using USPs for new products or in cases where sparse internal data exists.	Disagree – other stakeholders welcome use of external data for new LoBs.
119.	UNESPA	3.25.	We consider necessary to include more cases for the use of external data, for example, those cases in which undertakings only use external data in order to have available more information for	List of use of external data is an open list. CEIOPS provides only examples.

			high impact events, this kind of data may come directly from the market through a pool of similar undertakings or reinsurance companies, in order to model the tail of the risk distribution, other example is a undertaking writing a new line of business, in which external data might be the performance of other insurers writing that line of business. This should be included in the list of possible data source, as they would be more representative of the likely experience than the data underlying the standard parameters. .	
120.	Assuralia	3.26.	In case of a small portfolio with similar coverage's & risks profile as another portfolio in the undertaking, we suggest that the undertaking would be able to use USP of the similar portfolio; therefore we think that we can extend the definition of a pool with similar portfolio in the sense of risks profile. Further, it is mentioned that "the business considered to build the pool of data shall have comparable reinsurance, in such a manner that net data proceeding to each business maintain a high degree of homogeneity". It is probably a utopia to think that pool of data with comparable reinsurance can be build. We suggest to work based on a pool of gross data, and to apply the reinsurance cover of the underwriting for the following year.	See the resolution to the comment 119. See the resolution to the comment 122.
121.			Confidential comments deleted.	
122.	CEA	3.26.	We agree on multidimensional quality criteria to be met by pooling mechanisms used in external units. Transparency and audibility may be proven by external unit. We don't understand the requirement about the size of the different business feeding the pool to be similar. Also the requirement of "comparable reinsurance" makes little sense because reinsurance should be undertaking specific and there are several gross to net	Noted. Agree - see changes in the paper

			techniques. Instead of the size, in particular the risk profile has to be homogeneous, which is of course the more difficult to assess the more different the sizes are.	
123.	CRO Forum	3.26.	See our comments for 3.136	See the resolution to the comment 399.
124.	GDV e. V.	3.26.	We don't understand the requirement about the size of the different business feeding the pool to be similar. Also the requirement of "comparable reinsurance" makes little sense because reinsurance should be undertaking specific and there are several gross to net techniques. Instead of the size, in particular the risk profile has to be homogeneous, which is of course the more difficult to assess the more different the sizes are.	See the resolution to the comment 122.
125.	Groupe Consultatif	3.26.	3.26, 3.136: Why should the size of the different business feeding the pool be similar? Instead of the size in particular the risk profile has to be homogeneous, which is of course the more difficult to assess the more different the sizes are. The working group agrees on multidimensional quality criteria to be met by pooling mechanisms used in external units. Transparency and audibility should be proven by external unit and not within the responsibility scope of the undertaking. cf. 3.136	See the resolution to the comment 122. Noted.
126.	IUA	3.26.	This paragraph requires that externally pooled data has a governance mechanism which is signed and fulfilled by all members of the pooling mechanism. Whilst we do not doubt the merit of such a provision, and the ability to use external or pooled data is a welcome one, we would question whether this would restrict the availability of such external data from the date of Solvency II implementation (as prior data may not have been subject to such rigorous governance processes). Consequently, might this mean	Noted. See revised text on Solvency I data used for Solvency II

			that start-up firms and undertakings starting new product lines, will be unlikely to be able to rely on externally pooled data for USPs for a sometime after Solvency II has been implemented; at least until such data has complied with the Solvency II standards for some time.	purposes.
127.	UNESPA	3.26.	***"- The size of the different business feeding the pool should be similar"*** We understand that although the size of business can be determinant in some risks with respect to the homogeneity degree of data, the general application of this requirement seems excessive, since the size of the business does should not affect the homogeneity of data. In those cases in which there are few undertakings operating, the fragmentation of the sample may adversely affect the sample quality. ***"- The business considered to build the pool of data shall have comparable reinsurance…"*** It seems appropriate to be given the option to use the data gross of reinsurance from the pool of similar undertakings, with the aim of having a higher risk sample base. Then undertakings shall apply their own reinsurance structure to the data, especially considering the fact that, for the calibration of the Non-life risks it had to be performed the analysis from gross data, without taking reinsurance into account, when there was no availability of net data of reinsurance.	See the resolution to the comment 122. See the resolution to the comment 122.
128.	Assuralia	3.28.	It is mentioned that "data should reflect the current reinsurance programme of the undertaking". To be in line with the prospective view of Solvency II, data should reflect the reinsurance cover of the underwriting for the following year. That is also in line with the formulation of articles 3.54 and 3.70.	Partially agree - see changes in the paper.

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129.	Lloyds	3.28.	Reinsurance structures change and so this requirement is unlikely to be met in practice. The need for data to stem from a sufficiently long time series is important. This requirement would exclude the application to new undertaking's or new lines of business otherwise it defeats a main objective. If an undertaking has no undertaking specific history to rely on then USPs should not be considered.	Noted Partially agree - see changes in the paper.
130.	UNESPA	3.28.	See comment on point 3.26	See the resolution to the comment 122.
131.	Just Retirement Limited	3.29.	The requirement for "continuous" monitoring of data is unduly burdensome.	Disagree – whenever undertaking makes use of data, undertaking should verify its quality.
132.	Lloyds	3.30.	Paragraph 3.30 is clear that if the data is not suitable then USPs cannot be applied. Given the limitations often seen in non-life insurance data, this statement would restrict most firms from using USPs without (possibly significant) dispensation from the supervisor.	Noted.
133.	CEA	3.31.	Applying the proportionality principle does not automatically mean that data quality is poor. Even when simplifications are used it will often be necessary to use USP in order to get results reflecting the individual risk profile.	See the resolution to the comment 19, 136 and 385.
134.	Deloitte	3.31.	It says the application and relevance of the proportionality principle is limited due to the optional character of USP. The data criteria set out in order for companies to gain supervisory approval for their USP are likely to be harder for smaller companies to comply with than larger organisations. Some principles of proportionality should be considered.	See the resolution to the comment 19, 136 and 385.

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135.	UNESPA	3.31.	See comment on point 3.26	See the corresponding resolution.
136.	CEA	3.33.	Undertakings may not have access to data in the required format, i.e. split by accident year and Solvency II LOB. Past data will have been prepared according to the relevant accounting and regulatory regime which will not correspond to Solvency II data requirements. Undertakings should be able to use reasonable methods to adjust data in such cases. It can also be very difficult to adjust historical data to make it representative of expected conditions in the coming year. This can be a subjective process particularly where the original data is very old.	Partially agree – see changes in the paper and resolution to the comment 8.
137.	Deloitte	3.33.		N/A
138.	Groupe Consultatif	3.33.	This paragraph is open for many an interpretation. Clarification would be highly appreciated as to which specific adjustments would classify data to be eligible for USP. Data requirements were fully outlined e.g. in CP 43.	Noted. See resolution to the comment 8.
139.	Lloyds	3.33.	We agree that this will be almost impossible to meet in practice given the historic reporting bases being quite markedly different from a "Solvency II" basis. Our concern is that this casts severe doubts on the applicability of most current historic insurance data and hence the application of USPs	Noted.
140.	UNESPA	3.33.	Where underwriting have a data limitation or may not have access to data in the required format, due different accounting, regulatory regimen, undertakings should be able to use reasonable methods to adjust data in that case. It can also be very difficult to adjust historical data to make it representative of expected conditions in the coming year. This can be a subjective process particularly where the original data is very	Partially agree – see changes in the paper. Noted. See changes in the paper.

			old.	
141.			Confidential comments deleted.	
142.	CEA	3.34.	We would note that it might be possible to estimate future variability of best estimates by looking at the past variability of results calculated on basis other than best estimate, provided that such variability has not been smoothed in the reported results. We feel that supervisors should judge whether the data and adjustments are fit for purpose in cases wider than just where a best estimate was not made, including where adjustments have been made to move from the previous accounting basis to a Solvency II basis. We suggest that 3.33 and 3.34 are therefore widened to include other such cases such as when data has been historically recorded by underwriting year or has been recorded by different lines of business to the Solvency II LOBs.	Noted. Partially agree – see changes in the paper and resolution to the comment 8.
143.	CRO Forum	3.34.	This wording appears to allow quite an amount of latitude and devolve quite an amount of discretion down to individual Supervisors and also raises the possibility /risk that certain regulator(s) will take a different stance compared to other regulators - which potentially offends the desire for maximum harmonisation Europe-wide. We believe more guidance is needed here, to ensure that firms know what's expected of them and as harmonised an approach as possible is taken by regulators in different Member States. Strengthening the requirements on use of accident year best estimates and giving greater weight to more robust methods & strong data used to generate such best estimates would be particularly helpful.	Noted. Noted. Noted.

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144.	UNESPA	3.34.	We would note that it might be possible to estimate future variability of best estimates by looking at the past variability of results calculated on basis other than best estimate, provided that such variability has not been smoothed in the reported results. We feel that supervisors should judge whether the data and adjustments are fit for purpose in cases wider than just where a best estimate was not made, including where adjustments have been made to move from the previous accounting basis to a Solvency II basis. We suggest that 3.33 and 3.34 are therefore widened to include other such cases such as when data has been historically recorded by underwriting year or has been recorded by different lines of business to the Solvency II LOBs.	Noted. Partially agree – see changes in the paper and resolution to the comment 8.
145.			Confidential comments deleted.	
146.	CEA	3.35.	The limitations of data and methods used to derive the standard parameters should be addressed by way of further analysis of a wider set of data, particularly as the credibility-weighting approach for USP means that nearly all insurers will be using the standard parameters to an extent. If the limitations of the standard factors are not overcome, the use of USP through a much more significant weight associated to them under the credibility formula could solve many of such shortcomings. (also the comment to 3.43).	Noted. CEIOPS is currently working on the improvement of the standard calibration. CEIOPS is of the opinion that USPs are not necessary more credible than standard parameters as they also have some shortcomings.
147.	CRO Forum	3.35.	Several methods have been proposed in calculating the USP for both premium and reserve risk. None of the methods proposed make an allowance for the underwriting cycle. We request CEIOPS provide a justification for this.	See the resolution to the comment 2
148.	Groupe Consultatif	3.35.	3.35, 3.143: The justification is unclear, since the USP can include an appropriate estimation error as well.	Misunderstanding. By "standardised method" CEIOPS means methods used to calculate

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				USPs.
149.	UNESPA	3.35.	So the estimators used in the standardised methods could include a significant estimation error. We proposed an alternative premium method in our annex, because a model with a significant estimation error could not be suitable and it cannot be used to calculate the undertakings risk and their regulatory capital.	See the resolution to the comment 31
150.	ABI	3.36.	We note that a number of methods have been proposed to calculate USP, but none of the methods makes an allowance for the underwriting cycle. We believe that undertakings should be allowed to make adjustments for the underwriting cycle, where they can demonstrate that most of the historical variability is caused by the underwriting cycle.	See the resolution to the comment 2
151.	CEA	3.36.	Several methods have been proposed in calculating the USP for both premium and reserve risk. None of the methods proposed make an allowance for the underwriting cycle. We would ask Ceiops to provide a justification for this.	See the resolution to the comment 147
152.	UNESPA	3.36.	See comment on point 3.35	See the resolution to the comment 149
153.	ABI	3.37.	We believe that the Lognormal distribution function generally allows for enough flexibility and simplicity in the calculation because it is a distribution that generally adjusts to many of the empirical distribution values, depending on the symmetry and kurtosis that this empirical distribution returns. However, we regard as too strict to limit the use of other functions for the reasons below.	

			The Lognormal distribution is a long-tailed distribution, so when considering a high percentile (e.g. 99.5% according to Solvency II), it could provide extreme values that should be included in the CAT risk module. Hence, there would be duplication in the SCR for Non-life risk underwriting, because these extreme values are included in both sub-risks. Care is needed in the definition of the CAT scenarios in order to avoid such duplication. Using Lognormal distribution may not be adequate to represent the loss function of the different LOBs, given the characteristics of each LOB, the frequency and severity of claims for each LOB, etc. This is why we consider convenient to make an adaptability study of the Lognormal, compared to other alternatives for each of the LOB, to select the function that better fits the risk, considering the cost-benefit of implementing various functions. When calculating the capital requirement for premium risk, consideration needs to be given to the following aspects: - The underwriting cycle has not been taken into account. - A premium increase leads to an increase in required capital, even when it is done to improve the profitability of the undertaking and not due to a claims increase. We ask for more clarity about the element C pp lob. What expenses are included in the term C lob pp? Are claims handling expenses included? It is also not clear how it relates to the value at risk over	Lognormal distribution is the standard formula assumption. Different probability distributions are possible as a partial internal model. See also the resolution to the comment 2. See the resolution to the comment 2. For explanation see the CEIOPS Advice CEIOPS-DOC-41-09. The expenses included in C_{lob}^{pp} are expenses for which technical provision has been established. Standard formula is designed to

			the next 1 year time horizon. The standard formula should consider all risk mitigation techniques, such as securitization and not only consider reinsurance.	keep a balance between risk sensitivity and simplicity.
154.	CEA	3.37.	We believe that the Lognormal distribution function generally allows for enough flexibility and simplicity in the calculation because it is a distribution that generally adjusts to many of the empirical distribution values, depending on the symmetry and kurtosis that this empirical distribution returns. However, we regard as too strict to limit the use of other functions for the reasons below. The Lognormal distribution is a long-tailed distribution, so when considering a high percentile (e.g. 99.5% according to Solvency II), it could provide extreme values that should be included in the CAT risk module. Hence, there would be duplication in the SCR for Non-life risk underwriting, because these extreme values are included in both sub-risks. Care is needed in the definition of the CAT scenarios in order to avoid such duplication. Using Lognormal distribution may not be adequate to represent the loss function of the different LOBs, given the characteristics of each LOB, the frequency and severity of claims for each LOB, etc. This is why we consider convenient to make an adaptability study of the Lognormal, compared to other alternatives for each of the LOB, to select the function that better fits the risk, considering the cost-benefit of implementing various functions.	See resolution to the comment 153

			When calculating the capital requirement for premium risk, consideration needs to be given to the following aspects: ☐ The underwriting cycle has not been taken into account. ☐ A premium increase leads to an increase in required capital, even when it is done to improve the profitability of the undertaking and not due to a claims increase. We ask for more clarity about the element C pp lob. What expenses are included in the term C lob pp? Are claims handling expenses included? It is also not clear how it relates to the value at risk over the next 1 year time horizon. The standard formula should consider all risk mitigation techniques, such as securitization and not only consider reinsurance.	
155.	Federation of European Accountants (FEE)	3.37.	The use of net premium and net claims as described in paragraph 3.37 or of net paid or net incurred triangles as defined in paragraph 3.75 might not satisfy the requirement that undertaking-specific historical data shall be relevant to the associated reinsurance programme. Consequently, an analysis of gross figures and of the relevant reinsurance programme should be performed separately and accordingly combined to evaluate the Premium Risk as well as the Reserve Risk. It should also be pointed out as that "stoploss"-contracts generally are not included in run-off triangles as they either cover a portfolio of different lines of business or even cover	Noted. See explanations in other paras.

			not only claims risk but a certain combined ratio. This comment also applies to paragraph 3.75.	
156.	Groupe Consultatif	3.37.	In 3.19, the CP sets that "the underlying assumptions behind the standard formula parameters calibration and behind undertaking-specific parameters are the same". However some assumptions set out here are inconsistent with the information contained in CP71 e.g. definition of volume measure	Misunderstanding - The advice is in line with CEIOPS Advice CEIOPS-DOC-41-09
157.	Institut des actuaires (France)	3.37.	The interpretation of CPP is not straightforward in the formula. Indeed, if for the LOB considered, risks are covered by accident year and Pt, written is the maximum value within the proposed formula, there exists a risk of double-counting between CPP and Pt, written (those premiums should cover claims that will incur in the forthcoming year and claims incurred in the following year) and overstatement of the volume measure for premium risk. If risks are covered by underwriting year then Pt-1, written or Pt, written is already a proxy of the volume measure for premium risk and CPP would implicitly be included in that proxy.	The advice is in line with CEIOPS Advice CEIOPS-DOC-41-09 Partially agree, C_{lob}^{pp} is for multi-years contracts and for amounts which were not taken into account in the first part of the formula.
158.	UNESPA	3.37.	• ***" The underlying risk follows a lognormal distribution"*** The Lognormal distribution is a long-tailed distribution, so when considering a high percentile (e.g. 99.5% according to Solvency II), it could provide extreme values that should be included in the CAT risk module. Hence, there would be duplication in the SCR for Non-life risk underwriting, because these extreme values are included in both sub-risks. Using Lognormal distribution may not be adequate to represent the loss function of the different LOBs Non-life risk, given the characteristics of each LOB, the frequency and severity of claims for each LOB, etc.	There is no perfect distribution but the only one must be chosen. The lognormality can be changed in your partial internal model. In CEIOPS opinion the lognormal distribution is the best option and is used since previous QIS surveys. This assumption is consistent with CEIOPS' Advice on the SCR non-life underwriting risk module.

			• ***" capital charge for premium risk is calculated as a function of the volume measure for premium risk…"*** When calculating the capital requirement for premium risk, based on previous year premiums and forthcoming year premiums, we have to consider the following aspects: - The underwriting cycle has not been taken into account. - A premium increase leads to an increase in required capital, even when it is done to improve the profitability of the undertaking and not due to a claims increase. - Profit making products are considered the same way that loss making products. - When considering the prior year premiums on those products with high lapse rates a higher SCR than necessary in being requested. ***C lob pp Definition*.-** It is necessary to clarify what expenses are included in the term *C lob pp*, and if they include claims handling expenses. We understand that the element *C pp lob* that relates to the risk of the change in premiums provisions should be clarified. ***Risk mitigation.-*** The standard formula should consider all risk mitigation techniques, such as securitization and not only consider reinsurance. It seems appropriate a proxy to cover the non-proportional reinsurance without the use of an internal model. 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.	See the resolution to the comment 153.

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159.	ABI	3.39.	See comments to 3.146	See the corresponding resolution
160.	Assuralia	3.39.	The definition of expense is not clear; do you also include administrative expenses and acquisition cost? Do you only mean the ULAE? If all expenses are included, the volatility parameter will increase by about 20% (in average), which seems to us exaggerated because the expenses volatility is significantly lower than the loss ratio one.	Agree. See changes in the paper.
161.			Confidential comments deleted.	
162.	CEA	3.39.	The proposed formula may not be appropriate if expenses in the previous year were not representative of expected expenses next year, or if part of the unallocated expenses are largely fixed and hence do not contribute to variability of results. Expenses would generally be considered as less volatile than claims experience so this approach overestimates the total variability. Also it's not clear that such an adjustment respects the 99.5% criterion. Other volume measures than premiums could be applied, avoiding the variation of combined ratios, which is mostly based on the premium cycle. In order to calculate the adjustment for expenses, the amount of unallocated expense payments for each line of business separately is necessary. We would like to point out, that obtaining this data might be a problematic task, as unallocated expenses are not classified to specific lines of business.	Agree. See changes in the paper Disagree. Premium as volume measure is used also in standard formula. Agree. See changes in the paper.
163.	CRO Forum	3.39.	See our comments for 3.146	See the corresponding resolution
164.	Groupe	3.39.	3.39, 3.53, 3.58, 3.146, 3.156, 3.161: Other volume measures	See the resolution to the

	Consultatif		than premiums could be applied, avoiding the variation of combined ratios, which is solely based on the premium cycle. The model is not clear! Why should σ(U,premlob) be calibrated by factor which describes a kind of cost ratio. We need a factor for levelling on the 99.5% quantile!	comment 162 Agree. See changes in the paper
165.	UNESPA	3.39.	***Risk expenses volatility.-*** We would much appreciate to have a clarification on which expenses and charges should be included in the formula, for instance, whether claims handling costs, the acquisition costs, etc, should be included. We understand that the formula for the calculation the undertaking standard deviation parameter increases the value of the standard deviation of premiums (without allowance for expense risk) in the percentage that expenses represent over the total amount of claims. Besides, we believe this may not be representative of the real impact of expenses on the standard deviation of risk premium, since independence may not exist between the expense variance and premiums variance without regard to expenses. The proposed formula may not be appropriate if expenses in the previous year were not representative of expected expenses next year, or if part of the unallocated expenses are largely fixed and hence do not contribute to variability of results.	See the resolution to the comment 160 Agree. See changes in the paper.
166.	CEA	3.40.	Further guidance is required on how data could be adjusted to be representative of future inflation risk.	The requirement has been relaxed. See the change in the paper
167.	CEA	3.41.	We ask for more clarity about the element C pp lob. It is not clear how it related to the value at risk over the next 1 year time horizon.	See the resolution to the comment 153

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168.	IUA	3.41.	As we have noted elsewhere, net earned premiums may not always be an accurate representation of volume of business particularly over time.	Net earned premium has been used to calibration. As volume measure in the calculation of capital requirement are various amounts used
169.	UNESPA	3.41.	See comment on point 3.37.	See the corresponding resolution
170.	UNESPA	3.42.	See comment on point 3.37.	See the corresponding resolution
171.	Assuralia	3.43.	We do not understand why you maintain a credibility formula and so the inclusion of a market parameter; first, by estimating a USP, we valuate too the process variance, the estimation error and a model error. Secondly, having in mind all the limits of the market parameters (see CP71), the undertaking's USP (if approved following § 3.1.3.2) is more appropriate. If the USP estimation is not approved, for example due to a low number of data, we agree to use the credibility formula with the option B) 3.46.	This is in fact in the presented approach. If the data history is sufficient the credibility weight is 100% for USP. Another possibility would be a binary approach (accepted with long history and rejected otherwise?)
172.	CEA	3.43.	The limitations of data and methods used to derive the standard parameters should be addressed by way of further analysis of a wider set of data, particularly as the credibility-weighting approach for USP means that nearly all insurers will be using the standard parameters to an extent. If the limitations of the standard factors are not overcome, the use of USP through a much more significant weight associated to them under the credibility formula could solve many of such shortcomings.	See resolution to comment 146
173.	UNESPA	3.43.	The calibration of the standard parameter of the standard deviation has been done by taking into account data provided by different countries, so there is a diversity of data due to different regulatory,	National calibration is not in line with the Directive. CEIOPS is currently working on an

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			accounting, actuarial and products practices, that make us consider necessary the option to determine the calibration of this parameter in terms of national markets.	improvement of standard calibration (taking into account more countries).
174.	Groupe Consultatif	3.44.	Would agree that Option 2 (lower credibility when using market level information) is better given the potential risk that the industry data is not representative of the company.	Noted
175.	IUA	3.44.	Our members preference is for option B, as we agree internal data should be a more accurate reflection of the risk an undertaking bears.	Noted
176.	Lloyds	3.44.	We agree that Option B (lower credibility when using market level information) is preferred given the potential risk that the industry data is not representative of the company.	See the resolution to the comment 174
177.	RBS Insurance	3.44.	We prefer option B as it makes a distinction between internal and external data.	Noted
178.	ABI	3.45.	See comments to 3.151	See the corresponding resolution
179.			Confidential comments deleted.	
180.	CEA	3.45.	We believe that the approach in Option A is inappropriate as 61% credibility is far too low after 14 years when the Level 1 text supports 100% credibility after 15 years.	Noted
181.	CRO Forum	3.45.	See our comments for 3.151	See the corresponding resolution
182.	Deloitte	3.45.	With potentially 100% credibility given to USP it could make comparison of standard formula results from undertakings more difficult to compare. The concept of requiring 15 years data to take 100% credibility potentially conflicts with the requirements for the data to be current	Noted Agree. See the changes in the paper

			and relevant.	
183.	Groupe Consultatif	3.45.	The difference in the credibility of parameters derived from 14 years of history is almost no different from the credibility of parameters derived from 15 years of history. We would suggest reducing the time for complete credibility to 10 years	Partially agree. See the changes in the paper
184.	AMICE	3.46.	AMICE members do not understand the need for including credibility factors in the calculation; Undertaking Specific Parameters derived from own data are more appropriate for assessing the risks of the undertaking.	If the history is sufficiently long the credibility factor is 100%.However if the undertaking experience is quite short a mix of market and own data is a better solution than allowing for USP only if very long history can be used (for instance 15 years).
185.			Confidential comments deleted.	
186.	CEA	3.46.	We would first of all question the need for a credibility approach as, by definition, the parameter derived from own data is more relevant for assessing the risk for a specific undertaking than the standard parameter. Our view is that full credibility should be achieved much more quickly than 15 years. Certainly 60% credibility after 10 years we feel is far too low. It might be appropriate to have higher credibility weights for the less volatile lines of business, for which it will take less years' data to obtain a good indication of underlying variability. We would expect the credibility weights to increase more quickly in the earlier years than the later years. When a line of business has been written for, say, 7 years the extra year's data can add significantly to the overall analysis of own data. If a line of business has been written for 14 years, adding an extra year's data	See the resolution to the comment 184 See the resolution to the comment 183 Agree. See the changes in the paper

			would probably not add much to the overall analysis. However, the actual credibility weights increase slowly in the earlier years and quickly in the later years which we feel is not appropriate. We also feel that the credibility weights attached to data external but directly relevant to operations is too low (especially for 10-15 years of data) and should be much closer to the weights for internal data. There is even an argument that good quality pooled data from a homogeneous group of competing insurers may have greater credibility than data from one insurer only (even for the likely volatility of that insurer).	Disagree. External data in most cases are more biased at least by their collecting process. Of course there are exceptions.
187.	CRO Forum	3.46.	We agree with the considerations given in this paragraph for the use of a two-stage approach for the credibility factor.	Noted
188.	Deloitte	3.46.	We agree with the considerations given in this paragraph for the use of a two-stage approach for the credibility factor.	Noted
189.	Groupe Consultatif	3.46.	This approach should be used, because C is more continuous. We think that credibility weighting can be used under the following assumptions: that the historical experience is a good proxy for the future; there has been no major changes in the business; and the market is representative of the company. In addition given USP may be approved it appear unnecessary to then put weight on market average that has already been decided to be non representative. We agree with some of the points made that explains why undertaking specific parameters are more appropriate.	Noted The two requirements are taken into account in the data quality section as they are necessary not only in credibility approach but in the estimation on the basis of history. The third requirement –it is better to take market data than a non credible estimation which is the case when the data history is very short.

			The difference in the credibility of parameters derived from 14 years of history is almost no different from the credibility of parameters derived from 15 years of history. We would suggest reducing the time for complete credibility to 10 years	See the resolution to the comment 183
190.	INTERNATIONAL GROUP OF P&I CLUBS	3.46.	This paragraph proposes that different credibility factors would apply depending on whether data used to determine USPs was 'internal data' or 'directly relevant external data'. While, with 15 years of data, the credibility factor for internal data would be 100%, where external data is used, this is capped at 63%. The IG suggests that in sectors where a group of insurers pools risks on condition that the individual policies contain substantially identical terms, the pooled data derived from each insurer that is party to the insurers' agreement should be regarded as internal data rather than external data, for the purpose of determining USPs for the individual insurers.	See the resolution to the comment 186
191.	UNESPA	3.46.	**Use of external data to model the distribution tail.-** We agree that the use of internal data should have a higher degree of credibility than the use external data, but we missed a credibility factor which combines both kinds of data, for example, in those cases which undertakings used the external data to have more information due to the lack of internal data regarding the tail of the distribution, due the tail takes the extreme and unusual events, and the underwritings usually don't have enough information, usually the underwritings data are around the mean, and is a general practice to use external data to model the distribution tail. This type of data may come directly from the market through a	Agree. See changes in the paper.

			pool of similar undertakings or reinsurance companies, in order to model the tail of the risk distribution. The linear interpolation as a method of adjusting the evolution of credibility up to 100% (used in option B) is inconsistent with the results in Annex A, although it is true that the factors of credibility in option A are too low.	
192.			Confidential comments deleted.	
193.	Bupa	3.47.	See paragraph 3.12. The only way to deal with this is to have some means of controlling for health risk profile variation across Member States. This should be dealt with in tandem with the issues in CP 72.	Noted
194.	CEA	3.47.	Social Security systems generally have a national character and it is important that these systems are taken into account in a consistent manner per country. For this reason, we recommend that national supervisors develop methods for the treatment of these systems, for all business written in relation to the Social Security system in the supervised country.	Noted
195.	CRO Forum	3.47.	Agree. Different member state healthcare systems mean different levels of risk. Social Security systems generally have a national character, and it is important that these systems are taken into account in a consistent manner per country. For this reason, we recommend that national supervisors develop methods for the treatment of these systems, for all business written in relation to the Social Security system in the supervised country	See the resolution to the comment 194
196.	Deloitte	3.47.	Social Security systems generally have a national character, and it is important to take these systems into account in a consistent manner per country. For this reason, we recommend for national	See the resolution to the comment 194

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			supervisors to develop methods for the treatment of these systems, for all business written in relation to the Social Security system in the supervised country.	
197.	KPMG ELLP	3.47.	Given the intricacies and differences between Social Security and health systems within the various participating countries, we agree that further consultation will be required for health business. Competitive parity should be borne in mind when developing these methods as well as consistency and ease of application across countries. National supervisors will most likely be in the best position to advise on the appropriate method for all business pertaining to its specific system. See also point 3.80.	See the resolution to the comment 194
198.	ABI	3.51.	In the timescale provided, we are unable to comment on the quantitative methods suggested in this CP as we have not been able to adequately analyse the impacts of the different methods.	noted
199.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.51.	Alternative 1 and 3 are easy to use, but not in line with the standard model. Alternative 2 is in line with the standard model but the Maximization of the likelihood is not easy to obtain. So the alternative 1 and 3 are suitable, but we don't have preference between both methods (The difference of result between both methods is weak)	Noted
200.	AMICE	3.51.	AMICE members agree that there should not be restrictions on the model used for the calculation of USP. We are in favor of defining general principles for applying "undertaking specific parameters" in accordance with the principles applied to the standard formula. However, undertakings must be able to adapt the models according to their risk profile. Undertakings have to take into account changes in their risk profile, reinsurance programs and in pricing when applying USP.	See the resolution to the comment 5.

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201.	Association of Run-Off Companies	3.51.	The ARC working group is uncertain as to which method is most suitable. A full analysis of the most appropriate method would take considerable resource which not available in the short timescales given. More guidance from CEIOPS on the pros and cons and possible impact of each method would help the industry make a more informed decision. A simple and transparent method with limited data requirements would favour run-off companies	Noted.
202.			Confidential comments deleted.	
203.	CEA	3.51.	Methods that can be applied to derive USP should not be limited to the "standard methods" described in this paper. It is one of the main principles of Solvency II that undertakings are responsible to establish and choose an appropriate method. Therefore restricting the undertakings to the methods described here should be lifted. One of our concerns is that none of the suggested methods make any allowance for the underwriting cycle. This is a significant issue which is likely to distort the results of any variability analysis. We believe that undertakings should be allowed to make adjustments for the underwriting cycle, where they can demonstrate to the supervisor's satisfaction that much of the historical variability is caused by the underwriting cycle, by reference to some data source (such as a premium rate index, derived from internal or external data). Undertakings should be allowed to adjust historical premiums and claims to be in line with the rating environment expected for the following year. In fact, it is necessary for the data to reflect expected conditions for the following year which is a stated data requirement for entities wishing to use USP.	See the resolution to the comment 5 See the resolution to the comment 2

			These adjustments are not designed to eliminate the variability caused by the underwriting cycle, but instead to ensure it is included appropriately in the historical variability. Changes in mix of business (e.g. re-underwriting) could also impact expected loss ratios from one year to the next, and allowance should be made for this where material and demonstrable.	CEIOPS considers it as more appropriate in a partial internal model
204.	CRO Forum	3.51.	In general, we believe that the standardised method for calculating the USP should be consistent with the method used to calculate the standard parameters as much as possible. The effect of using USP instead of standard parameters should not be influenced by a difference in applied methodology, in accordance with the requirements laid out in paragraph 3.19 a) and c) of this Consultation Paper. We believe there is no one optimal alternative that should be selected as the only method of determining USP. Alternative 1 has the advantage of being distribution-free but also the disadvantage of depending both on the volatility of paid losses and expenses and on the volatility of case reserves and IBNR estimates that become more reliable over time. Alternative 2 is based on a distribution assumption that needs to be verified before using this method. Alternative 3 was not tested in the context of the development of Solvency II so far, and in particular, was not tested by CEIOPS to derive the standard formula parameters as outlined in CP71. Therefore, this alternative should not be proposed as the only standardised method for determining USPs, although the current draft advice seems to favour this alternative as it is alleged that the	See the resolution to the comment 59 Noted. See the resolution to the comment 472

			other two alternatives include a significant element of estimation error (cf. 3.169) and that this would disqualify them under the data requirements proposed in 3.159 and 3.168. We do not see how alternative 3 leads a priori to better USPs than the other two methods (or than any other alternatives not mentioned) as it is based on: ☐ distribution assumptions (cf. 3.170) that would have to be verified, ☐ simplifications (cf. 3.171) that might materially undermine the possible advantages of this method and ☐ an estimate of the random variable that models the estimation error (cf. 3.172) that leads to an estimation error itself, especially when based on too few years' data. This problem of limited number of years' data resulting in estimation error applies equally to the other two methods. The essential compound Poisson distribution assumption inherent in Alternative 3 will also not be adequate for many types of reinsurance business. In conclusion we believe CEIOPS should not specify one method for determining USPs as we do not believe it is possible to identify one single optimal approach. We believe CEIOPS should allow a degree of flexibility within a range of agreed standardised methods, including further alternatives not captured in this CP. These alternatives should be capable of covering the risk in conceptually the same as the standard formula parameters (cf. 3.130 c)). This flexible approach should be underpinned by requirements for full transparency of the methods allowed and those applied by undertakings. We also propose that undertakings should be allowed to choose a standardised method per line of business instead of using the same for all lines of business.	Partially agree.

			Of the proposed methods, only Alternative 2 is considered in Consultation Paper 71 (as Method 2), that deals with the calibration of premium risk. We note however, that this approach has not been applied consistently in CP 71.	Noted.
205.	Deloitte	3.51.	In general, we believe that the standardised method to calculate the USP should be consistent as much as possible with the method used to calculate the standard parameters. The effect of using USP instead of standard parameters should not be influenced by a difference in applied methodology, in accordance with the requirements laid out in paragraph 3.19 a) and c) of this Consultation Paper. Of the proposed methods, only Alternative 2 is considered in Consultation Paper 71 (as Method 2), that deals with the calibration of premium risk. We note however, that this approach has not been applied consistently in CP 71.	See the resolution to the comment 59. Noted.
206.			Confidential comments deleted.	
207.	Groupe Consultatif	3.51.	No fixed method is directly mechanically applicable as it requires judgements, adaptation and a mix of methods dependent on the available data, the type of business. Consequently we are not able to recommend one alternative over the others Given the time involved we have not as Groupe Consultatif assessed the appropriateness of the different methods and whether these will work in practice Alternative 3 adopts a complex frequency/severity approach, and goes beyond the parameterisation carried out within CP71. Therefore, we don't think this is suitable. Alternatives 1 (least-squares fit to the historic loss ratios) and alternative 2 (maximum	Agree.

			likelihood fit to an assumed underlying log-normal) both look sensible approaches, and I don't think they will give materially different answers given they both assuming the underlying ultimates have a variance proportional to the earned premium. We would suggest alternative 1 is the best given that it offers a closed-form solution, whereas there may be additional complexities in maximising the likelihood function in alternative 2.	
208.	Lloyds	3.51.	Alternative 3 adopts a complex frequency/severity approach, and goes beyond the parameterisation carried out within CP71. We therefore do not think this is suitable. Alternatives 1 (least-squares fit to the historic loss ratios) and alternative 2 (maximum likelihood fit to an assumed underlying log-normal) both look sensible approaches, and should not give materially different answers given they both assuming the underlying ultimates have a variance proportional to the earned premium. We propose alternative 1 is the best given that it offers a closed-form solution, whereas there may be additional complexities in maximising the likelihood function in alternative 2. We do note that none of the methods allow for increased volatility effects introduced by the underwriting cycle. This will overstate the true underlying volatility of claims experience.	Noted. See the resolution to the comment 2.
209.	ROAM	3.51.	ROAM, which supports the position of FFSA and AMICE on this subject, wishes that there is not a limitation on the modelling to be used for the calculation of the USP. We are in favour of general principles in agreement with the principles of the standard formula but every company has to have the possibility of adapting the models according to its profile. Every company has to take into account the evolution of its risk profile, programs of reinsurance and the policy of pricing.	See the resolution to the comment 5

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210.			Confidential comments deleted.	
211.			Confidential comments deleted.	
212.	CEA	3.53.	Assumptions made here are restrictive for most lines of business. Good methods concerning premium risk haven't been developed yet. Therefore more research is needed to check if the proposed methods will yield appropriate results if assumptions are violated.	Noted. In the cases you mentioned the right solution is partial internal model.
213.	CRO Forum	3.53.	A data input called N(lob) is specified which represents the number of historic data points available to the entity. Is it envisaged that these "data points" would be based on an annual interval? Would results from Quarterly Reserving / Analysis would be acceptable or not? More clarity is needed here.	Annually, as in the standard approach.
214.	ABI	3.56.	This method does not allow for the underwriting cycle, but it gives diversification benefits for larger portfolios. It is suited to normal loss distributions so may not be appropriate in practice. Estimation error we feel should be within reasonable limits - due to limitations of the assumptions, it may not be possible for estimation error to be immaterial.	Noted.
215.	CEA	3.56.	This method does not allow for the underwriting cycle, but does give diversification benefits for larger portfolios. It is suited to normal loss distributions so may not be appropriate in practice. Estimation error we feel should be within reasonable limits - due to limitations of the assumptions, it may not be possible for estimation error to be immaterial.	See the resolution to the comment 214
216.	UNESPA	3.56.	• ***"Claims should be net of reinsurance…."*** In this particular point, reinsurance should be the principal	See the resolution to the comment 153

			mitigation technique but other forms of risk mitigation, as securitizations should be considered. Gross data, without reinsurance consideration or other forms of risk mitigation increment premium volatility. • ***"The data should stem from sufficiently long period such that…. "*** We understand that the establishment of the inferior limit should depend on the LOBs. See comment on point 3.46	CEIOPS means by net: the historical data should be taken gross and the future reinsurance programme should be applied No, it is rather to exclude estimation on the basis of too short sample. See the corresponding resolution
217.	ABI	3.58.	See comments to 3.56	See the corresponding resolution
218.	CEA	3.58.	This method does not allow for the underwriting cycle, but does give diversification benefits for larger portfolios. The lognormal assumption could be tested for goodness of fit in practice. Estimation error we feel should be within reasonable limits - due to limitations of the assumptions, it may not be possible for estimation error to be immaterial. See also comments about lognormal distribution in para. 3.37.	See the resolution to the comment 214 See the corresponding resolution
219.	UNESPA	3.58.	With respect to the distribution function see comments on 3.37. We believe that the Lognormal distribution function allows for enough flexibility and simplicity in the calculation because it is a distribution that generally adjusts to most of the empirical distribution values, depending on the symmetry and kurtosis that this empirical distribution returns. However, in every case we regard as very strict to limit the application of other functions. This	See the corresponding resolution and the resolution to the comment 153

			is why we consider convenient to make an adaptability study of the Lognormal, compared to other alternatives for each of the LOB, to select the function that better fits the risk, considering the cost-benefit of implementing various functions.	
220.	UNESPA	3.59.	See comments on point 3.37 about V lob.	See the corresponding resolution
221.	CEA	3.61.	Alternative 1 uses less assumptions and seems to be therefore a more general approach and furthermore closer to a standard model.	Noted
222.	Assuralia	3.66.	The alternative 3 seems for us more an internal model than a USP approach as you need to model the severity distribution and their parameters	Noted
223.	CEA	3.66.	This method is interesting, but it doesn't have too many areas of applications. For example premium cycles cannot be appropriately reflected although it is not of primary interest in a standard approach: see also our comments on para. 3.53.	Noted
224.	CEA	3.67.	This method may be more suited to some classes of business than others. Further investigation should be carried out to analyse this in more detail. We note that this method was not considered for the standard parameter analysis, when it may have been suitable in some cases. Estimation error we feel should be within reasonable limits - due to limitations of the assumptions, it may not be possible for estimation error to be immaterial.	Noted.
225.	UNESPA	3.67.	We understand that ALTERNATIVE 3 is complicated to use, the data requirements are severe, the level of prudence in the earned premium must be sufficiently homogeneous and the others volumes used must be sufficiently proportional in order to obtain valid USP	Noted

			parameters, this alternative induce a significant estimation error so it cannot be used to measure the undertakings risks, so we propose a friendly alternative to adjust the capital requirement for premium to the real risk that undertakings are facing The function used to model the random severity variable is not defined in the CP, the frequency random variable is bounded on the explanation of document to a Poisson. However, we understand that the Poisson distribution function, in most of the LOBs can be a good approximation because of its simplicity, but we do not understand the limitation in the use of other functions to model frequency (such as, negative binomial, Polya-Eggenberger, ...).	
226.	Institut des actuaires (France)	3.68.	We do believe that the number of contracts is a better volume measure to assess the number of claims than the earned premiums. Earned premiums include rate increases which level may not be only driven by claims frequency changes.	Noted.
227.	UNESPA	3.70	In this particular point, not only it should be considered reinsurance but other forms of risk mitigation, as securitizations. We understand that the establishment of the inferior limit should depend on the LOBs. We understand that the concepts of sufficiency in the homogeneity and proportionality should be clarified. **We suggest introducing a new ALTERNATIVE 4 based on the proposal mentioned in section General Comments.**	See the resolution to the comment 153 See the resolution to the comment 216 See the resolution to the comment 31
228.	UNESPA	3.71.	The Lognormal distribution is a long-tailed distribution, so when considering a high percentile (e.g. 99.5% according to Solvency II), it could provide extreme values that should be included in the CAT risk module. Hence, there would be duplication in the SCR for Non-life risk underwriting, because these extreme values are included in both sub-risks.	See the resolution to the comment 158.

			Despite of the fact that lognormal distribution is a commonly used distribution in the simulation of random and independent events, we understand that it is convenient the use of other distribution functions according to the LOB and its loss.	See the resolution to the comment 2.
229.	CEA	3.72.	The assumption of equal volatility of claims and expenses might be wrong as we consider the payout pattern of claims and LAE payments to be quite different for several lines of business. Is this assumption really needed?	Agree - see changes in the paper. Without this assumption undertaking would have to model volatility of expenses separately.
230.	Groupe Consultatif	3.72.	3.72, 3.174: The assumption of equal volatility of claims and expenses might be wrong as we consider the payout pattern of claims and LAE payments to be quite different for several lines of business.	See the resolution to the comment 229.
231.	UNESPA	3.72.	We would much appreciate to have a clarification on which expenses and charges should be included in the formula, for instance, whether claims handling costs, the acquisition costs, etc, should be included. We do not agree that for every LOB the volatility of claims and expenses is equivalent.	See the resolution to the comment 229. Expenses include those expenses for which technical provision was set up.
232.	CEA	3.76.	The limitations of data and methods used to derive the standard parameters should be addressed by way of further analysis of a wider set of data, particularly as the credibility-weighting approach for USP means that nearly all insurers will be using the standard parameters to an extent. If the limitations of the standard factors are not overcome, the use of USP through a much more significant weight associated to them under the credibility formula could solve many of such shortcomings.	See the resolution to the comment 172.

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233.	UNESPA	3.76.	See comment on point 3.43.	See the corresponding resolution.
234.	Groupe Consultatif	3.77.	Would agree that Option 2 (lower credibility when using market level information) is better.	Noted.
235.	IUA	3.77.	As per our comment to paragraph 3.44, we support option B for the same reasons.	Noted.
236.	Lloyds	3.77.	We agree that Option B (lower credibility when using market level information) is preferred.	Noted.
237.	RBS Insurance	3.77.	We prefer option B as it makes a distinction between internal and external data.	Noted.
238.	UNESPA	3.77.	We disagree in the application of the same credibility factors to premiums and reserves, due the premium & reserves are different random variables (maybe correlated) so the credibility factor have to be different and we should need more reserve historical data to obtain the same credibility factor than the premium one. The credibility factor are introduced to mitigate any potential estimation error, so the application the same credibility factors not mitigate but increment the estimation error, so USP don't reflect the undertakings risk profile.	Noted.
239.	ABI	3.78.	See comments to 3.45	See the corresponding resolution.
240.			Confidential comments deleted.	
241.	CEA	3.78.	Same comments apply as for premium risk. We believe that the approach in Option A is inappropriate as 61% credibility is far too low after 14 years when the Level 1 text supports 100% credibility after 15 years.	See the resolution to the comment 180.
242.	CRO Forum	3.78.	See our comments for 3.179	See the corresponding resolution.

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243.	Groupe Consultatif	3.78.	Would suggest that the scaling should be made consistent with 3.79a if this option is adopted.	See changes in the paper.
244.	Lloyds	3.78.	The scaling should be made consistent with 3.79a if this option is adopted	See the resolution to the comment 243.
245.	UNESPA	3.78.	See comment on point 3.45.	See the corresponding resolution.
246.	ABI	3.79.	See comments to 3.45	See the corresponding resolution.
247.	Assuralia	3.79.	See 3.43	See the corresponding resolution.
248.			Confidential comments deleted.	
249.	CEA	3.79.	Same comments apply as for premium risk. We would first of all question the need for a credibility approach as, by definition, the parameter derived from own data is more relevant for assessing the risk for a specific undertaking than the standard parameter. Our view is that full credibility should be achieved much more quickly than 15 years. Certainly 60% credibility after 10 years we feel is far too low. It might be appropriate to have higher credibility weights for the less volatile lines of business, for which it will take less years' data to obtain a good indication of underlying variability. We would expect the credibility weights to increase more quickly in the earlier years than the later years. When a line of business has been written for, say, 7 years the extra year's data can add significantly to the overall analysis of own data. If a line of business has been written for 14 years, adding an extra year's data would probably not add much to the overall analysis. However, the actual credibility weights increase slowly in the earlier years and quickly in the later years which we believe is not appropriate. We also believe that the credibility weights attached to data	See the resolution to the comment 186.

			external but directly relevant to operations is too low (especially for 10-15 years of data) and should be much closer to the weights for internal data. There is even an argument that good quality pooled data from a homogeneous group of competing insurers may have greater credibility than data from one insurer only (even for the likely volatility of that insurer).	
250.	CRO Forum	3.79.	See also our comment on paragraph 3.46. We agree with the considerations given in this paragraph for the use of a two-stage approach for the credibility factor.	Noted.
251.	Deloitte	3.79.	See also our comment on paragraph 3.46. We agree with the considerations given in this paragraph for the use of a two-stage approach for the credibility factor.	Noted.
252.	Groupe Consultatif	3.79.	This approach should be used, because C is more continuous.	Noted.
253.	UNESPA	3.79.	See comment on point 3.46.	See the corresponding resolution.
254.	AMICE	3.80.	Social Security Systems are country-specific and as CEIOPS mentions in this paragraph Social Security systems are not harmonized, their impact differs and it is neither country-specific nor European wide. AMICE members therefore believe it will not be possible to have a harmonized approach in the Level 2 but rather as part of the Level 3 guidance.	See the resolution to the comment 194.
255.			Confidential comments deleted.	
256.	CEA	3.80.	Social Security systems generally have a national character, and it is important that these systems are taken into account in a consistent manner per country. For this reason, we recommend that national supervisors develop methods for the treatment of these systems, for all business written in relation to the Social Security system in the supervised country.	See the resolution to the comment 194.

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257.	CRO Forum	3.80.	See also our comment on paragraph 3.47. Social Security systems generally have a national character, and it is important that these systems are taken into account in a consistent manner per country. For this reason, we recommend that national supervisors develop methods for the treatment of these systems, for all business written in relation to the Social Security system in the supervised country.	See the resolution to the comment 194.
258.	Deloitte	3.80.	See also our comment on paragraph 3.47. Social Security systems generally have a national character, and it is important that these systems are taken into account in a consistent manner per country. For this reason, we recommend that national supervisors develop methods for the treatment of these systems, for all business written in relation to the Social Security system in the supervised country.	See the resolution to the comment 194.
259.	KPMG ELLP	3.80.	Given the intricacies and differences between Social Security and health systems within the various participating countries, we agree that further consultation will be required for health business. Competitive parity should be borne in mind when developing these methods as well as consistency and ease of application across countries. National supervisors will most likely be in the best position to advise on the appropriate method for all business pertaining to its specific system. See also point 3.47.	See the resolution to the comment 194.
260.	UNESOA	3.80.	See comment on point 3.47.	N/A
261.			Confidential comments deleted.	
262.	CEA	3.81.	Whether or not extreme reserve risk events have been observed in the historical data should be assessed on a case by case basis. Otherwise, since unexpected extreme events may have been already considered in the catastrophe model, another loading within the reserve risk is not necessary..	See the resolution to the comment 265.

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			The first sentence is not very clear. It also not clear which one is the referred standard method. See also comments to 3.182.	See the resolution to the comment 263. See the resolution to the comment 265.
263.	CRO Forum	3.81.	"The standard method defined the standard deviation of reserve risk are based on time series of run-off results or claims triangles." – The exact meaning of this sentence is unclear, and it is not clear to which standard method this sentence refers.	Agree – see changes in the paper. The standardised method is this one which is recommended by CEIOPS in final advice.
264.	Deloitte	3.81.	"The standard method defined the standard deviation of reserve risk are based on time series of run-off results or claims triangles." - It is not clear to which standard method is referred in this sentence.	See the resolution to the comment 263.
265.	Groupe Consultatif	3.81.	3.81-3.85, 3.182: Since unexpected extreme events may have been already considered in the catastrophe model, another loading within the reserve risk is not necessary. Furthermore the stated formula incl. the parameter of 10% seems to be arbitrary, considering, that the examples mentioned in 3.82 are highly dependent on specific regional conditions and/or should be considered in the best estimate calculation in case of sufficient data. The issue of limited time period of data has been already covered by the use of credibility factors. USPs should be treated according the parameters used in the standard formula, therefore the tau-complement should be deleted.	Partially agree – see changes in the paper. Justification of inclusion of tau in order to capture the model error is provided in Alois Gisler paper mentioned in the advice. The value of parameter is opened.
266.	UNESPA	3.81.	It is unclear whether the extreme risk events are already included in the CAT risk and whether these claims are already covered	Agree – see changes in the paper.

			partially by considering the percentile 99.5% of the distribution considered.	
267.	CEA	3.82.	The examples mentioned in 3.82 are highly dependent on specific regional conditions and/or should be considered in the best estimate calculation in case of sufficient data. The issue of limited time period of data has been already covered by the use of credibility factors.	See the resolution to the comment 265.
268.	ABI	3.85.	We do not agree with the proposed adjustment factor of 10%. The factor appears to be very high and not backed by any evidence. As unexpected extreme events should be already captured under the non-life cat risk module, there might be a risk of double counting. The parameter tau is further not mentioned in any of the standard methods in CP71.	See the resolution to the comment 265.
269.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.85.	The parameter of 10% is not acceptable, for example in motor liability, the USP is interesting only if the observed volatility is less than 7.5 % !!! The parameter must depend of the nature of the LOB. The parameter of 10 % has to depend on each lines of business, and must be differentiated by LOB	See the resolution to the comment 265.
270.	AMICE	3.85.	The estimated standard deviation of the risk reserve is complemented by a load for unexpected extreme events and risks generated by the model.We believe that estimation methods should include the estimation error and the error model. Thus, the integration of an additional load is inappropriate and should be deleted.	See the resolution to the comment 265.
271.	Assuralia	3.85.	The recommended correction (=10% is really too big (some studies show a model error of 2 to 4%) and the use of the square root formula for aggregation is clearly inadequate (for instance, if (`=5%	See the resolution to the comment 265.

			then (=11.2%).	
272.			Confidential comments deleted.	
273.	CEA	3.85.	We do not believe the flat 10% standard deviation for extreme reserve risks is appropriate. The choice of 10% appears to be arbitrary and this type of allowance is not appropriate for most lines of business. Only for classes with significant exposure to issues such as latent claims, unexpected claims inflation and retrospective legislation changes do we feel such a loading could be consider appropriate. We also note that the parameter tau is not included in any of the standard methods in CP 71.	See the resolution to the comment 265.
274.	CRO Forum	3.85.	We note that the parameter tau is not included in any of the standard methods in CP 71. CEIOPS has argued that "extreme reserve risk events" are not captured in historical data triangles. Extreme risk events include reserve risk events such as include APH claims. We do not agree there is an absolute need for such an adjustment factor, which could have a major impact. Unexpected extreme events belong in the non-life catastrophe risk sub-module, not the premium and reserve risk sub-module, and the proposal here runs the risk of double counting. As USPs are only allowed if "the assumptions underlying the standard formula are appropriate" (cf. 3.130), USPs and the standard formula parameters refer to the same model and any such adjustment would make a USP more onerous. We urge CEIOPS to ensure that standard formula parameters and USPs are subject to consistent underlying requirements i.e. we strongly suggest CEIOPS withdraw the tau-complement.	See the resolution to the comment 265 and266.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
275.	Deloitte	3.85.	We note that the parameter tau is not included in any of the standard methods in CP 71. We would like to ask CEIOPS to give a justification for this. In addition, we would recommend CEIOPS to provide a justification for the value of 10% for tau.	See the resolution to the comment 265.
276.			Confidential comments deleted.	
277.	Groupe Consultatif	3.85.	The reserve risk component is loaded for unexpected extreme events and model risks by introducing a 10% factor within the estimation of the standard deviation – this seems somewhat arbitrary	See the resolution to the comment 265.
278.	Institut des actuaires (France)	3.85.	The rationale behind the 10% fixed parameter should be explained.	See the resolution to the comment 265.
279.	IUA	3.85.	We would like CEIOPS to clarify how has the value of tau=10% been derived.	See the resolution to the comment 265.
280.	KPMG ELLP	3.85.	We believe that the inclusion of the complementary parameter τ=10% is arbitrary and not fully substantiated. No concrete justification for how this figure of 10% has been arrived at is given and as such we would request further justification if this fixed parameter is to be maintained. Further to this we question the applicability of this factor across all LOBs as the extreme events mentioned would not necessarily be applicable for all lines. Furthermore, the inclusion of extreme scenarios within this scope could also be questioned given the separate modules dealing with the risk of catastrophic events, thus running the risk of double counting. Lastly, we would question the applicability of this parameter across	See the resolution to the comment 265. See the resolution to the comment 266.

			all accident years given that extreme events such as those pertaining to asbestos would not likely be applicable to more recent accident years. We suggest the inclusion of this parameter be reviewed and justification given for any resulting value if maintained. See also 3.183.	
281.	ROAM	3.85.	The estimation of the standard deviation of the reserve risk specific to the company is completed by a load for the unexpected extreme risks and for the risk engendered by the model. ROAM considers that the methods of estimations have to include the error of estimation and the error of model. Therefore the additional inclusion of the parameter Tau is inappropriate. ROAM asks for the deletion of this supplementary load.	See the resolution to the comment 265.
282.			Confidential comments deleted.	
283.	UNESPA	3.85.	We do not believe the flat 10% standard deviation for extreme reserve risks is appropriate. **The choice of 10% appears to be arbitrary and this type of allowance is not appropriate for most lines of business**. Only for classes with significant exposure to issues such as latent claims, unexpected claims inflation and retrospective legislation changes do we feel such a loading could be consider appropriate.	See the resolution to the comment 268.
284.	EMB Consultancy LLP	3.87.	It is stated that CEIOPS is still considering whether the change in the risk margin itself should be considered when deriving undertaking specific parameters. We would urge CEIOPS to err on the side of simplicity in this respect. Drawing a parallel to what firms may have to do for internal models, if the change in the risk margin is also considered, a way of estimating the risk margin at the one year position is required	The CEIOPS position will be presented in CEIOPS' Final advice on non-life underwriting risk module. Noted.

			for each simulation in a simulation based internal model. This will be extremely difficult (or impossible) to calculate without simulation on simulation, which is intractable, without simplifying assumptions.	
285.	ACA – ASSOCIATION DES COMPAGNIES D'ASSURANCES DU	3.89.	The methods 3 and 4 are the most suited without preferences	Noted.
286.	AMICE	3.89.	AMICE members argue that Alternative 1 and Alternative 2 is consistent with Method 2 in CP71; The estimation of the standard deviation is based on the following assumption: the variance of the best estimate for claims outstanding in one year in addition to the incremental claims paid over the one year is proportional to the volume measure: $S = (\log (1 + \beta^2 / V))1/2$. This method is consistent with the principle of proportionality (i.e tail effect) since S is function of the volume measure V which in turn is equal to the sum of the Best Estimate for Claims Outstanding. Alternative 3 and Alternative 4 are based on the estimation of the conditional square error of prediction of the expected claims development result for the next accounting year. This is consistent with Method 4 in CP71. In the "AISAM-ACME Study on Non-Life Long Tail Liabilities", October 2007, we referred to the Adaption of the Mack Model (by Wüthrich, Merz and Lysenko) as an existing actuarial methodology to address the assessment of the reserve risk over a one year horizon.	Noted. Noted.

			AMICE members support Alternative 3 and 4 as appropriate to measure the reserve risk over one year horizon. However, the list of methods should not be closed and members should be allowed to use the method better reflects their risk profile. We therefore propose the following additional methodologies as acceptable for calculating undertaking specific parameters: 1. Bootstrapping applied on a Chain Ladder method including a Tail – see "Risk Based Capital in P&C Loss Reserving or Stressing Triangle" by Massimo de Felice and Franco Moriconi, December 2003 2. Estimation of the development factors according to the Bayesian Method- see "Bayesian Reserving Models Inspired by Chain Ladder Methods" by David P.M Scollnik (2002)	See the resolution to the comment 5. CEIOPS has some reservations about this methodology. These methods can be used as a (partial) internal model.
287.	Association of Run-Off Companies	3.89.	The ARC working group is uncertain as to which method is most suitable. A full analysis of the most appropriate method would take considerable resource which not available in the short timescales given. More guidance from CEIOPS on the pros and cons and possible impact of each method would help the industry make a more informed decision. A simple and transparent method with limited data requirements would favour run-off companies	Noted.
288.			Confidential comments deleted.	
289.	CEA	3.89.	A general comment is that entities should be able to make adjustments for issues such as significant changes in the underlying business, or for features of past experience that are not representative of expected future experience. In general, we believe that the standardised method to calculate	Undertakings are allowed to make data adjustments.

			the USP should be consistent with the method used to calculate the standard parameters as much as possible. The effect of using USP instead of standard parameters should not be caused by a difference in applied methodology, in accordance with the requirements laid out in paragraph 3.19 a) and c) of this Consultation Paper. In Consultation Paper 71, 6 different methods are applied for the calculation of a reserve risk factor in a mixed fashion to calculate the standard parameters for different LoB's. Comparing these Methods to the Alternatives presented in this paper: Alternative 1 and 2 are mostly consistent with Method 2. Alternative 2 uses the same assumptions as Method 2, whereas Alternative 1 uses a different assumption for the applicable fitting approach. Alternative 2 is not fully justified, since the claim development result (CDR) is typically two-tailed while the Lognormal (LogN) is one-tailed. Hence, the maximum likelihood approach may not give relevant results. (This does not contradict using a LogN for setting the SCR since there we are only interested in one tail.) Alternative 3 and 4 are mostly consistent with Method 4, where we remark that Methods 4-6 give the same final result when applied to a single company. Alternatives 3 and 4 are based on the Merz-Wütrich method of analytically calculating the variance of the one-year CDR. This result is based on the Chain-ladder method and is valid in the situation where we use a plain Chain-ladder of paid claims for our best estimate. However, in many cases the actuary would improve on the Chain-ladder by adjusting it by Bornhuetter-Ferguson, Cape cod or a similar technique; furthermore, the development factors of	Noted. Noted.

			the Chain-ladder might be smoothed by exponential regression, a tail might be estimated by special techniques, etc. Therefore, while Merz-Wütrich might be a first approximation, it is seldom the whole story, at least not for long-tailed LoBs. We do not completely understand the difference between Alternative 3 and 4. The only difference appears to be in the use of PCO and CLPCO, where CLPCO requires the use of chain ladder and PCO apparently not. The latter definition of PCO is however inconsistent with the notation chosen in CP 71, and also seems to be inconsistent with the cited paper of Merz & Wuthrich, which is based on the use of the Chain Ladder method. When analysing the results from CP 71, for most LoB's the parameter is chosen according to Method 4-6, which would imply a preference for Alternative 3 or 4. We note however, that for LoB's where in CP 71 the parameter is chosen according to Method 1-3, this would mean that the USP would be calculated using a different method than the standard parameter, which we consider undesirable.	The use of PCO and CLPCO is main difference. Noted.
290.	CRO Forum	3.89.	In general, we believe that the standardised method to calculate the USP should be consistent with the method used to calculate the standard parameters as much as possible. The effect of using USP instead of standard parameters should not be caused by a difference in applied methodology, in accordance with the requirements laid out in paragraph 3.19 a) and c) of this Consultation Paper. In Consultation Paper 71, 6 different methods are applied for the calculation of a reserve risk factor in a mixed fashion to calculate the standard parameters for different LoB's. Comparing these Methods to the Alternatives presented in this paper: Alternative 1	See the resolution to the comment 289. See the resolution to the comment 289.

			and 2 are mostly consistent with Method 2. Alternative 2 uses the same assumptions as Method 2, whereas Alternative 1 uses a different assumption for the applicable fitting approach. Alternatives 3 and 4 are mostly consistent with Method 4; we notice Methods 4-6 give the same final result when applied to a single company. We do not understand the difference between Alternative 3 and 4. The only difference appears to be in the use of PCO and CLPCO, where CLPCO requires the use of chain ladder and PCO apparently not. The latter definition of PCO is however inconsistent with the notation chosen in CP 71, and also seems to be inconsistent with the cited paper of Merz & Wuthrich, which is based on the use of the Chain Ladder method. When analysing the results from CP 71, for most LoBs a parameter is chosen according to Method 4-6, which would imply a preference for Alternative 3 or 4. We note however, that for LoBs in CP 71 a parameter is chosen according to Method 1-3. Please also refer to the comments made to the premium risk methods in 3.51.	See the resolution to the comment 289. See the corresponding resolution.
291.	Deloitte	3.89.	In general, we believe that the standardised method to calculate the USP should be consistent with the method used to calculate the standard parameters as much as possible. The effect of using USP instead of standard parameters should not be caused by a difference in applied methodology, in accordance with the requirements laid out in paragraph 3.19 a) and c) of this Consultation Paper. In Consultation Paper 71, 6 different methods are applied for the calculation of a reserve risk factor in a mixed fashion to calculate the standard parameters for different LOBs. Comparing these Methods to the Alternatives presented in this paper, Alternative 1 and 2 are mostly consistent with Method 2. Alternative 2 uses the same assumptions as Method 2, whereas Alternative 1 uses a	See the resolution to the comment 289. See the resolution to the comment 289.

			different assumption for the applicable fitting approach. Alternative 3 and 4 are mostly consistent with Method 4, where we remark that Methods 4-6 give the same final result when applied to a single company. We do not understand the difference between Alternative 3 and 4. The only difference appears to be in the use of PCO and CLPCO, where CLPCO requires the use of chain ladder and PCO apparently not. The latter definition of PCO is however inconsistent with the notation chosen in CP 71, and also seems to be inconsistent with the cited paper of Merz & Wuthrich, which is based on the use of the Chain Ladder method. When analysing the results from CP 71, for most LOBs a parameter is chosen according to Method 4-6, which would imply a preference for Alternative 3 or 4. We note however, that for LOBs where in CP 71 a parameter is chosen according to Method 1-3, this would mean that the USP would be calculated using a different method than the standard parameter, which we consider undesirable.	See the resolution to the comment 289.
292.			Confidential comments deleted.	
293.	Groupe Consultatif	3.89.	No fixed method is directly mechanically applicable as it requires judgements, adaptation and a mix of methods dependent on the available data, the type of business Consequently we are not able to recommend one alternative over the others Given the time involved we have not as Groupe Consultatif assessed the appropriateness of the different methods and whether these will work in practice As per 3.51 above (i.e. would suggest alternative 1 since it is a closed form solution).	Noted. Noted. Noted.
294.	Lloyds	3.89.	We propose alternative 1 is preferred given that it offers a closed-	Noted.

			form solution, whereas there may be additional complexities in the other methods.	
295.	ROAM	3.89.	ROAM, which supports the position of FFSA and AMICE on this subject, wishes that there is not a limitation on the modelling to be used for the calculation of the USP. We are in favour of general principles in agreement with the principles of the standard formula but every company has to have the possibility of adapting the models according to its profile. Every company has to take into account its evolution of the risk profile, programs of reinsurance and the policy of pricing.	See the resolution to the comment 5.
296.			Confidential comments deleted.	
297.	CEA	3.90.	In this CP, four alternatives are described in order to calculate reserve risk. There are other methods in literature to calculate reserve risk. For example bootstrap methods. Are such standard approaches excluded for calculating USP under Solvency II? If yes such limitations are not adequate.	Yes, there are excluded. See the resolution to the comments 2 and 5.
298.	ABI	3.91.		N/A
299.	Assuralia	3.91.	"The expected reserves in one year plus the expected incremental paid claim in one year is the current best estimate for claims outstanding.": Posted outstanding claim provision posted after one year are usually prudent (because undervaluation led to distribute unrealised gains, see for instance the table below) and consequently in contradiction with the general methodology of solvency II which tends to consider best estimate and economical value.	Noted.
300.	CEA	3.91.	This method assumes reserve movements are normally distributed which may not be appropriate in practice. It does allow for diversification benefits on larger portfolios.	Noted.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
301.	ABI	3.98.	We believe that there should be allowance for reasonable approximations, as it may be quite difficult for companies to make annual adjustments to historical data.	Noted. Standard on use of reasonable approximations could be an issue for Level 3 guidance.
302.	Assuralia	3.98.	It is mentioned that "Best estimates and payments should be net of reinsurance. The data should reflect the reinsurance cover of the underwriting for the following year". Loss reserves relate to past underwriting years. The reinsurance programme to be accounted for should be the reinsurance programme in place during each past underwriting year.	Disagree. Historic data should be representative for the future conditions and environment of operations.
303.	CEA	3.98.	It may be difficult for companies to make the required adjustments to historical data at each year end, and this could require a lot of work. For example, re-working all reinsurance recoveries to be representative of the next year, having made adjustments for inflation and to be on a best estimate basis. Reasonable approximations should be permitted.	See the resolution to the comment 301.
304.	Institut des actuaires (France)	3.98.	Regarding reserve risk which is supposed to reflect the uncertainty over one year in the amount of reserves for claims already incurred, we do not understand why the data should reflect the reinsurance cover for the following year are in most cases the risks attachment basis of reinsurance programs is the accident year.	See the resolution to the comment 302.
305.	UNESPA	3.98.	• **"Claims should be net of reinsurance…."** In this particular point, reinsurance should be the principal mitigation technique but other forms of risk mitigation, as securitizations should be considered. Gross data, without reinsurance consideration or other forms of risk	See the resolution to the comment 216.

			mitigation increment premium volatility. • **"The data should stem from sufficiently long period such that…. "** We understand that the establishment of the inferior limit should depend on the LOBs..	
306.	CEA	3.100.	Does give diversification benefits for larger portfolios. The lognormal assumption could be tested for goodness of fit in practice.	Lognormal assumption results from assumptions behind standard formula.
307.	UNESPA	3.103.	The Lognormal distribution is a long-tailed distribution, so when considering a high percentile (e.g. 99.5% according to Solvency II), it could provide extreme values that should be included in the CAT risk module. Hence, there would be duplication in the SCR for Non-life risk underwriting, because these extreme values are included in both sub-risks. Despite of the fact that lognormal distribution is a commonly used distribution in the simulation of random and independent events, we understand that it is convenient the use of other distribution functions according to the LOB and its loss.	See the resolution to the comment 306.
308.	CEA	3.108.	Shouldn't it be sqrt(MSEP) = sigma * sqrt(PCO_lob)? Is PCO_lob the correct volume measure?	The formula is correct.
309.	Assuralia	3.110.	The following comments apply also to the paragraphs 3.114. and 3.206. "The data should at least cover 5 years." : In practice, 5 years will be sufficient for short term business like "Assistance" and "Fire and Other damage" but really too short for long tail business like "Motor	Longer time series influence the error of estimator.

			vehicle liability", "Legal expenses" , "Third party liability". For instance, the Belgian experience show that after 5 development years approximately only +/- 55% of the ultimate loss amount is paid and the uncertainty about the tail factor will be important. "The data should reflect the reserve risk… ": We presume this sentence concerns only external data. We suggest stipulating that. "Payments should be net of reinsurance. The data should reflect the reinsurance cover of the undertaking for the following year.": Net of reinsurance data is usually not available (as you notice with the data collection used for calibration, see point 3.29 of the CP N° 71) and rightly change in reinsurance make the past data unable to reflect the reinsurance cover of the undertaking for the following year. For these reasons, alternative 3 must be open for gross data. "The payments should not include expenses,": External claim expenses (like expert's report, legal proceeding cost, etc.) are usually include in claim's payments. We presume that this sentence concern only the internal claim's settlement expenses. Further, the remark mentioned in para 3.98 is applicable here as well.	No. Historic data, also internal, should be should be representative for the future conditions and environment of operations. Noted. Noted.
310.	Institut des actuaires (France)	3.110.	Same comment as in 3.98	See the corresponding resolution.
311.	UNESPA	3.110.	• ***"Claims should be net of reinsurance…."*** In this particular point, reinsurance should be the principal mitigation technique but other forms of risk mitigation, as securitizations should be considered.	See the resolution to the comment 216

			Gross data, without reinsurance consideration or other forms of risk mitigation increment premium volatility. • ***"The data should stem from sufficiently long period such that…. "*** We understand that the establishment of the inferior limit should depend on the LOBs.	
312.	CEA	3.112.	The assumptions underlying the Merz method will not always hold in practice.	Noted.
313.	UNESPA	3.114.	**We propose to introduce a new ALTERNATIVE 5 based on the proposal mentioned in the section General Comments.**	See the corresponding resolution.
314.			Confidential comments deleted.	
315.	CEA	3.115.	As far as we understand the very concise description in CP 49 and in the paper "QIS 3 Calibration of the underwriting risk, market risk and MCR" to which CP 49 refers, the method proposed here is in line with the method used for the calculation of the standard parameter. Based on this, we agree with the proposed method. Nevertheless, should undertakings deem that other methods are more appropriate, they should be allowed to use them to derive USP for revision risk. We do note, however, that the standard factor was derived based only on data for pensions in payment for workers compensation in Portugal.	See the resolution to the comment 5
316.	CRO Forum	3.115.	We believe that the calibration for the USP for revision risk should	See the resolution to the

			be consistent with the standard calibration of revision risk in the Life Underwriting module (as described in CP 49, which dealt with the calibration in the life underwriting risk module). As far as we understand the very concise description in CP 49 and in the paper "QIS 3 Calibration of the underwriting risk, market risk and MCR" to which CP 49 refers, the method proposed here is in fact in line with the method used for the calculation of the standard parameter. Based on this, we agree with the proposed method. We do note however, that the standard factor was derived based only on data for pensions in payment for workers' compensation in Portugal.	comment 315
317.	Deloitte	3.115.	We believe that the calibration for the USP for revision risk should be consistent with the standard calibration of revision risk in the Life Underwriting module (as described in CP 49, which dealt with the calibration if the life underwriting risk module). As far as we understand the very concise description in CP 49 and in the paper "QIS 3 Calibration of the underwriting risk, market risk and MCR" to which CP 49 refers, the method proposed here is in fact in line with the method used for the calculation of the standard parameter. Based on this, we agree with the proposed method. We do note however, that the standard factor was derived based only on data for pensions in payment for workers compensation in Portugal.	See the resolution to the comment 315
318.	Institut des actuaires (France)	3.116.	More guidance should be given on the level above which the inflation is considered as significant.	Significance to be assessed within supervisory approval. For more guidance see the CEIOPS' Advice on proportionality.
319.			Confidential comments deleted.	
320.	CEA	3.120.	The applied notation is somewhat confusing. We assume that Rev and Re ν are identical.	See the resolution to the comment 321

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
321.	CRO Forum	3.120.	The applied notation is somewhat confusing. The terms Rev and (Re ν) are mixed in such a way that it appears as if the Real part of a complex number ν is used, which as far as we understand, is not the case.	Imaginary part is not considered here at all. It's caused by the text editor.
322.	Institut des actuaires (France)	3.121.	The rationale behind the distribution functions assumed is not provided. Undertakings should have the flexibility to use their own fitted distribution functions, providing they are able to demonstrate the adequacy of the fitting.	See the resolution to the comment 2
323.	UNESPA	3.121.	Despite of the fact that lognormal distribution is a commonly used distribution in the simulation of random and independent events, it would be convenient to study the possibility not to bounded the quantity distribution to a Lognormal (Pareto, Gamma, Exponencial, Weibull,…).	See the resolution to the comment 2
324.	Institut des actuaires (France)	3.122.	We do not understand why an average VaR has to be calculated. If this approach is used to reduce any issue around convergence of the results, we do believe that the number of simulations in steps I-V should be increased in order to get a good convergence in the results and hence a good proxy for the VaR.	Agree – see the revised text.
325.	Deloitte	3.123.	It is unclear how CEIOPS is planning to assess quality of model fit where an undertaking-specific parameter is used.	By statistical tests which check whether the assumed distribution can be fitted to the data.
326.	ABI	3.124.	See comments to 3.10	See the resolution to the comment 41.
327.	AMICE	3.124.	We only note in the Directive that undertaking specific parameters are not allowed in the market risk module. There is nothing against specific parameters for health and life underwriting risk. In this regard, it could be appropriate to develop a proposal for lapse risk, which is very dependent on the nature of the business and the	See also the resolution to the comment 2.

			benefits of the contracts (i.e fiscal benefits to be obtained after 8 years in some jurisdictions).	
328.	CEA	3.124.	Recital 65 states: "Where the use of undertaking specific parameters allows for the true UW risk profile of the undertaking to be better reflected, this should be allowed, provided such parameters are derived using a standardised methodology." Article 111 (j) of the Directive allows the development of implementing measures on the use of USP in the life, non life and health areas. Based on above we oppose to the limited view of Ceiops related to the use of undertaking specific parameters. In our view the use of USP should be accepted within the total framework of the standard formula, naturally under the condition that the undertaking has to demonstrate that the USP better reflect the risk profile than the standard factors. For example, the disability stress for income insurance would be suitable for replacement with USP, as would the lapse, longevity and expense factors for life and health business. Also, biometric assumptions can be USP if an undertaking observes an adverse client structure / risk profile compared to market standards used to set parameters in the standard formula. Standardized methods on lapse profiles resemble methodology used in the derivation of biometrical tables. However, additional time would be needed to be able to suggest for example a standardised methodology for the derivation of life expenses and lapse specific parameters.	See the resolution to the comment 42. See the resolution to the comment 62

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
329.	FFSA	3.124.	6. CEIOPS states that Underwriting Specific Parameters (USP) may be used in non life and NSLT health premium and reserve risks, and revision risk for non life and SLT health. FFSA members think that USP should be open to all underwriting risks (i.e. including life risks and SLT risks).	See the resolution to the comment 2
330.	GDV e. V.	3.124.	We oppose to the limited view of CEIOPS related to the use of undertaking specific parameters. In our view the use of USP should be accepted within the total framework of the standard formula, naturally under the condition that the undertaking has to demonstrate that the USP better reflect the risk profile than the standard factors. For example, the disability stress for income insurance would be suitable for replacement with USP, as would the lapse, longevity and expense factors for life and health business. Also, biometric assumptions can be USP if an undertaking observes an adverse client structure / risk profile compared to market standards used to set parameters in the standard formula. Standardized methods on lapse profiles resemble methodology used in the derivation of biometrical tables. However, additional time would be needed to be able to suggest for example a standardised methodology for the derivation of Life expenses and lapse specific parameters.	See the resolution to the comment 42 See the resolution to the comment 57 Noted.
331.	GROUPAMA	3.124.	We note in the Directive that undertaking-specific parameters are	See the resolution to the

			not allowed only in the market risk module. There is nothing against specific parameters for life underwriting risk. For instance, we think it could be appropriate to open it for lapse risk, which is very dependent of the nature of the business and the benefits of the contracts (for instance in France, fiscal benefits after 8 years).	comment 327
332.	Groupe Consultatif	3.124.	The working group strongly suggests an open list of possible parameters in any underwriting risk module to become USP. E.g. lapse risk in life is undertaking dependant and not yet listed. Future product development may arise in other parameter subsets subject to USP due to significant deviation from the current standard approach. Also, biometric assumptions can be USP if an undertaking observes an adverse client structure / risk profile compared to market standards used to set parameters in the standard formula.	See the resolution to the comment 62
333.	IUA	3.124.	For premium risk, firms should be allowed to vary the mean from an implicit default 100% combined ratio, and not just adjust the volatility parameters. This is basically to say that it should allow for expected profit, which is not allowed for in the standard formula, subject to being able to justify the reasons for the mean selected.	This is standard formula assumption and CEIOPS is of the opinion that such change can be made as partial internal model.
334.	Just Retirement Limited	3.124.	See comments under 3.12.	See the resolution to the comment 63
335.	Lloyds	3.124.	We propose introducing geographical diversification as an USP in the non-life underwriting risk – see below.	See the resolution to the comment 64
336.	ROAM	3.124.	See comments to 3.12	You mean rather " as general comment"? . See the resolution to the comment 28.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
337.	Assuralia	3.125.	We note that USP are excluded for catastrophe risks. As long as companies can satisfy the criteria relating to the data and apply accepted methods, allowing them to calculate appropriate USP for catastrophe risks, we don't see any reason not to give that possibility.	See the resolution to the comment 54
338.			Confidential comments deleted.	
339.	CEA	3.125.	Based on our comments to para 3.124, we suggest Ceiops to drop this paragraph.	See the resolution to the comment 48
340.	CRO Forum	3.125.	Art 111 (j) allows for implementation measures on the use of USP for life, non-life and health business. We consider this advice should also specify allowance of USP for lapse and expense risk for life business as these are both very company specific risks; in fact paragraph 3.19a bullet 2 explicitly mentions expense risk. However, additional time would be needed for the CROF to be able to suggest a standardised methodology for the derivation of Life expenses and lapse specific parameters.	Noted. See the resolution to the comment 2
341.	DIMA (Dublin International Insurance & Management	3.125.	DIMA seeks the inclusion of life premium and reserve risks within undertaking specific parameters.	See the resolution to the comment 60
342.	GDV e. V.	3.125.	Based on our comments to para 3.124, we suggest CEIOPS to drop this paragraph.	Noted. See the resolution to the comment 48
343.	Groupe Consultatif	3.125.	cf. 3.124	Noted. See the resolution to the comment 332

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
344.	Lloyds	3.125.	We propose introducing geographical diversification as an USP in the non-life underwriting risk as it has been removed under the final advice (an action we not agree with). The allowances for geographical diversification included in the calibration of the non-life underwriting module are known to be inappropriate for a number of firms, including those writing multi-national business. A main reason for its removal was the complexity introduced. The complexity is far less than some of the other proposals relating to USPs. The method used could be similar to the QIS4 approach but amended to use a regional split based on the UN geo scheme definitions (with some modifications to reflect the incidence of insurance). This leads to less than 20 regions (which are deemed non-political) compared to the 54 introduced in QIS4. The underlying method could be as per QIS4 where undertakings are required to split premium and outstanding claims data between the predefined groups and diversification is allowed for using a Herfindahl index with a maximum credit of 25%. This would be workable and proportionate to any credit for geographical diversification granted.	Noted. See the resolution to the comment 25
345.	Munich Re	3.125.	Art 111 (j) allows for implementation measures on the use of USP for life, non-life and health business. We consider this advice should also specify allowance of USP for lapse and expense risk for life business as these are both very company specific risks; in fact paragraph 3.19a bullet 2 explicitly mentions expense risk. However, additional time would be needed to be able to suggest a standardised methodology for the derivation of Life expenses and lapse specific parameters.	Noted. See the resolution to the comment 340

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
346.			Confidential comments deleted.	
347.	ABI	3.127.	We argue that the use of USP should be supervised in a more flexible manner. Undertakings should be able to prove the appropriateness of the USP at all times. Making undertakings to ask for supervisory approval could be counterproductive in many cases. The approval process needs to be much better described along the lines of the required flexibility.	See the resolution to the comment 75.
348.			Confidential comments deleted.	
349.	CEA	3.127.	We argue that the use of USP should be supervised in a more flexible manner. Undertakings should be able to prove the appropriateness of the USP at all times. Making undertakings to ask for supervisory approval could be counterproductive in many cases. The approval process needs to be much better described along the lines of the required flexibility.	See the resolution to the comment 347
350.	GDV e. V.	3.127.	We argue that the use of USP should be supervised in a more flexible manner. Undertakings should be able to prove the appropriateness of the USP. Making undertakings to ask for supervisory approval could be counterproductive in many cases. The approval process needs to be much better described along the lines of the required flexibility.	See the resolution to the comment 347
351.	Legal & General Group	3.127.	The reference to the subset of parameters (i.e. 3.113) appears to be wrong.	Agree – see changes in the paper
352.			Confidential comments deleted.	
353.	CEA	3.128.	A flexible process for approval of using USP or reverting to the standard parameters should be defined.	See the resolution to the comment 80

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
354.	CRO Forum	3.128.	Please refer to our comments in Paragraph 3.17	See the corresponding resolution
355.	Deloitte	3.128.	Please refer to our comment in Paragraph 3.17	See the corresponding resolution
356.	GDV e. V.	3.128.	A flexible process for approval of using USP or reverting to the standard parameters should be defined.	See the resolution to the comment 353
357.	Just Retirement Limited	3.128.	We can understand the purpose of this, in order to deter cherrypicking, however it is unclear how the processes would work if an undertaking felt that an already approved USP was no longer relevant and that they felt the standard formula was more appropriate. Would the undertaking be forced to continue updating and re-applying for USP approval?	Agree – see changes in the paper.
358.	Lloyds	3.128.	This is an important requirement.	Noted.
359.	ROAM	3.128.	ROAM asks CEIOPS to develop the procedure of approval of the supervisor for reverting back to standard parameters.	Noted, Text has been clarified.
360.			Confidential comments deleted.	
361.	AB Lietuvos draudimas	3.129.	We understand the SCR calculation will be required to be carried out quarterly. Updating the USPs this frequently is disproportionate as we would expect USPs not to change significantly over time.	See the resolution to the comment 84.
362.	ABI	3.129.	See comments to 3.18	See the corresponding resolution
363.			Confidential comments deleted.	
364.	CEA	3.129.	We would recommend Ceiops to further specify 'certain exceptional circumstances'. There should be explicit criteria and conditions under which circumstances the supervisor may require the calculation to be updated more frequently. Second, there should be more allowance for the current practice;	See the resolution to the comment 86.

			USP calculation may differ in frequency from the SCT calculation. However, clearly stated intervals could be defined between supervisors and undertakings during the approval process. Where there is evidence to suggest that the risk profile of the insurance or reinsurance undertaking has not altered significantly since the date on which the Solvency Capital Requirement was last reported, it should not be required to recalculate the USP at least as frequently as the SCR. Generally, an approval should not expire or need to be reiterated annually.	
365.	CRO Forum	3.129.	The requirement to recalibrate USPs based on the same frequency as for calculating the SCR needs to be made clearer. If, as expected, the SCR for the purposes of reporting to the regulator needs to be reported annually, then an annual frequency for re-calibration of USPs seems fine. If required more frequently, then this could be problematic where a firm calculates its SCR on say a quarterly (i.e. more frequently than annual) basis - but purely for internal reporting / monitoring purposes - is full recalibration of USPs required on a quarterly basis? This would seem overly burdensome." Where there is evidence to suggest that the risk profile of the insurance or reinsurance undertaking has not altered significantly since the date on which the Solvency Capital Requirement was last reported, it should not be required to recalculate the USP at least as frequently as the SCR. The USP should at least be recalculated once a year. A clear description of requirements triggering a re approval of the use of USPs should be given. Generally, an approval should not expire or even be reiterated annually. We would also request clarification that requirements for recalibration of USPs will only apply to reporting to supervisors and not for the purposes of	See the resolution to the comment 84. Noted. Agree, text has been clarified.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
			undertakings' own internal monitoring of the SCR. Please also refer to our comments in Paragraph 3.18	See the corresponding resolution
366.	Deloitte	3.129.	Please refer to our comment in Paragraph 3.18	See the corresponding resolution
367.	FFSA	3.129.	CEIOPS states that "Calculation of the USP shall be carried out at least as frequently as the SCR calculation. However supervisors may require the calculation to be updated in certain exceptional circumstances" FFSA thinks that CEIOPS should state clearly what an exceptional circumstance is. Otherwise it could lead to abuses. FFSA thinks it should be stated that USP should not change each year, but a company has just to verify that its USP still fit with its business yearly (not quarterly). The USP may change only if there is an exceptional change in risks, but the change of USP could only be done at a quarter not between quarters.	See the resolution to the comment 87. Noted.
368.	GDV e. V.	3.129.	We would recommend CEIOPS to further specify 'certain exceptional circumstances'. There should be explicit criteria and conditions under which circumstances the supervisor may require the calculation to be updated more frequently. We therefore propose: Where there is evidence to suggest that the risk profile of the insurance or reinsurance undertaking has not altered significantly since the date on which the Solvency Capital Requirement was last reported, it should not be required to recalculate the USP at least as frequently as the SCR. The USP should at least be recalculated once a year. Generally, an approval should not expire or even reiterated annually.	See the resolution to the comment 87. See the resolution to the comment 365.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
369.	Groupe Consultatif	3.129.	USP calculation may differ in frequency from the SCR calculation. However, clearly stated intervals should be defined between supervisor and undertaking during process of approval. E.g. lapse profiles are regularly revised but not every single year or even shorter intervals. cf. 3.18	See the resolution to the comment 89.
370.	Just Retirement Limited	3.129.	See comment on 3.18.	See the corresponding resolution
371.	Munich Re	3.129.	Where there is evidence to suggest that the risk profile of the insurance or reinsurance undertaking has not altered significantly since the date on which the Solvency Capital Requirement was last reported, it should not be required to recalculate the USP at least as frequently as the SCR. The USP should at least be recalculated once a year. A clear description of requirements triggering a re approval of the use of USPs should be given. Generally, an approval should not expire or even reiterated annually.	See the resolution to the comment 365.
372.	RSA Insurance Group	3.129.	We understand the SCR calculation will be required to be carried out quarterly. Updating the USPs this frequently is disproportionate as we would expect USPs not to change significantly over time.	See the resolution to the comment 84.
373.	AB Lietuvos draudimas	3.130.	The second bullet of sub-paragraph (a) seems to require undertakings to explain why the assumptions underlying the standard formula are appropriate. There are numerous reasons why these assumptions may not hold and so the undertaking could not give this explanation. (Examples: SF assumes independence of historic loss ratios; no allowance for profitability in the SF; double counting of cat. Losses in the SF; no geographical diversification in the SF; poor allowance for non-proportionate reinsurance in the SF, etc). This would seem to force undertakings to move directly to a	See the resolution to the comment 93.

			PIM in most practical situations, thus making USPs somewhat obsolescent. The requirement in the second bullet goes beyond what is called for in the Directive. We think that the intention of the Directive can be met by deleting the second bullet.	
374.	ABI	3.130.	See comments to 3.19	See the corresponding resolution
375.			Confidential comments deleted.	
376.	CEA	3.130.	The approval process has too high requirements. This is counterproductive because: ☐ The factors proposed by Ceiops are not appropriate in many cases and ☐ The methods applied by Ceiops for calibration of the standard formula are not appropriate for many situations, therefore ☐ The factors given by Ceiops do not reflect the risk profile of most insurance undertakings. It is not adequate that partial internal models have to be used when the risk profile deviates from the assumptions of the standard formula. In most cases this problem can be solved by applying USP. The claim for partial internal model unnecessarily restricts the area of application of USP. Methods that can be applied to derive USP should not be limited to the "standard methods" described in this paper. It is one of the main principles of Solvency II that undertakings are responsible to establish and choose an appropriate method. Therefore the restriction of methods described here is not acceptable.	See the resolution to the comment 93.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
377.	CRO Forum	3.130.	The supervisory approval requirements standards / requirements outlined seem reasonable - though it would be advisable to better define the boundary between "cherry-picking" and the legitimate situation where lower a capital requirement results from properly-calibrated USPs Please also refer to our comments in Paragraph 3.19	"Cherry-picking" is situation when undertaking uses each year this method (USP or standard formula) which gives lower result.
378.	Deloitte	3.130.	Please refer to our comment in Paragraph 3.19	See the corresponding resolution
379.	GDV e. V.	3.130.	This para. (section c) has several references back into the text to many more pages of requirements! Additional requirements are mentioned or reiterated in para. 3.131 to 3.134, 3.138 to 3.141. E.g. there is no realistic chance of any undertaking to comply with this. This is counterproductive because: - The European wide factors proposed by CEIOPS are not appropriate in many cases and - The methods and data applied by CEIOPS for calibration of the standard formula seem not appropriate for many situations, therefore - The factors given by CEIOPS do not reflect the risk profile of many insurance undertakings. It is not adequate that partial internal models have to be used when the risk profile deviates from the assumptions of the standard formula. In most cases this problem can be solved by applying USP. The claim for partial internal model unnecessarily restricts the area of application of USP. Methods that can be applied to derive USP should not be limited to the "standard methods" described in this paper. It is one of the main principles of Solvency II that undertakings are responsible to establish and choose an appropriate method. Therefore the restriction of methods described here is not acceptable.	See the resolution to the comment 93.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
380.	Groupe Consultatif	3.130.	The calibration of the standard formula is a little simplistic for some lines of business (e.g. non-proportional property comment in CP71 , 3.169), which suggests that USPs will almost certainly prove to be a better parameterisation. Level 3 guidance will need to be put around what evidence a firm could provide to supervisors to demonstrate that USPs are better than the standard formula.	Noted.
381.	Just Retirement Limited	3.130.	In relation to the second bullet point under (a), it is unduly burdensome to require firms to "explain that the assumptions underlying the standard formula are appropriate" – taken literally such an explanation would be a significant amount of work in its own right, and could act as a significant disincentive for undertakings to see approval of USPs (and hence a disincentive to apply parameters which are better suited to their risk profile).	See the resolution to the comment 93.
382.	ROAM	3.130.	ROAM is of the opinion that it is within the competence of the supervisor to demonstrate that the coefficients calculated by the company are not appropriate and not the inverse. The company, to calculate its USP, develops and presents the approach; it is thus logical that it belongs to the supervisor to contest the method or the data used.	See the resolution to the comment 103.
383.	RSA Insurance Group	3.130.	The second bullet of sub-paragraph (a) seems to require undertakings to explain why the assumptions underlying the standard formula are appropriate. There are numerous reasons why these assumptions may not hold and so the undertaking could not give this explanation. (Examples: SF assumes independence of historic loss ratios; no allowance for profitability in the SF; double counting of cat. Losses in the SF; no geographical diversification in the SF; poor allowance for non-proportionate reinsurance in the SF, etc). This would seem to force undertakings to move directly to a PIM in most practical situations, thus making USPs somewhat	See the resolution to the comment 93.

			obsolescent. The requirement in the second bullet goes beyond what is called for in the Directive. We think that the intention of the Directive can be met by deleting the second bullet.	See the resolution to the comment 93.
384.			Confidential comments deleted.	
385.	Just Retirement Limited	3.131.	Whilst we agree that the data underpinning the derivation of the USPs should be complete, accurate and appropriate, the provisions of paragraphs 3.131 to 3.142 together represent an extremely onerous set of requirements, and therefore a potential deterrent to undertakings seeking to use a USP. At the very least the proportionality principle should be applied to the data requirements.	Noted. Methods for data adjustments for smoothing Solvency I data could be an issue for Level 3 guidance. See the resolution to the comment 19 concerning hierarchy of methods for SCR calculation.
386.			Confidential comments deleted.	
387.	CRO Forum	3.133.	It is encouraging to see that firms are permitted to apply reasonable & proportionate adjustments to their own data when deriving USP. This is necessary – as many firms are likely to have features in their data which require adjustment(s) - CATs, change of reporting systems, change in admin procedures, acceleration of claims settlement, etc	See the resolution to the comment 385.
388.	AB Lietuvos draudimas	3.134.	The data requirements underlying the calibration of the USPs should not be overly onerous. The calibration of the parameters for the SF, as described in CP 71, contains a number of approximations and limitations. Many undertakings will face similar limitations with their historic data. To use USPs undertakings must be allowed to use appropriate and proportionate judgement to translate historic data into a form suitable for calibrating USPs.	See the resolution to the comment 385.
389.			Confidential comments deleted.	
390.	CRO Forum	3.134.	The requirements set out for using own-entity data seem comprehensive but reasonable	Noted.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
391.	DIMA (Dublin International Insurance & Management	3.134.	1. The data requirements appear very stringent, particularly with regard to how the data is used to determine the key parameters, e.g. "…data can be easily adapted and incorporated into the proposed standardized methodology. This shall apply at all stages of the calculation..." While some of the requirements can be met at certain aggregated levels of data they may not be met at lower levels of granularity. Assumptions will certainly need to be made in order to comply with all the data requirements and some flexibility (that satisfies the supervisor) might be required.	Noted.
392.	Groupe Consultatif	3.134.	One of the bullet points says that the data is representative of the expected conditions of the following year. This is unlikely to prove true for commercial non-life business (due to the underwriting cycle).	See the resolution to the comment 136.
393.	Lloyds	3.134.	We do not agree with widespread use of external data to estimate USPs as these are not representative of an undertaking by definition. The majority of the data used should be internal. The requirement that all points in the time series should be representative of the coming year will in practice be impossible.	See the resolution to the comment 112.
394.	RSA Insurance Group	3.134.	The data requirements underlying the calibration of the USPs should not be overly onerous. The calibration of the parameters for the SF, as described in CP 71, contains a number of approximations and limitations. Many undertakings will face similar limitations with their historic data. To use USPs undertakings must be allowed to use appropriate and proportionate judgement to translate historic data into a form suitable for calibrating USPs.	See the resolution to the comment 385.
395.	Lloyds	3.135.	It is rare that external data is representative of the risk profile of an undertaking and the reliance on external data should be constrained.	See the resolution to the comment 112.
396.	Assuralia	3.136.	It is mentioned that "the business considered to build the pool of data shall have comparable reinsurance, in such a manner that net	See the resolution to the comment 122.

			data proceeding to each business maintain a high degree of homogeneity". It is probably utopic to think that pool of data with comparable reinsurance can be build. We suggest to work based on a pool of gross data, and to apply the reinsurance cover of the underwriting for the following year.	
397.			Confidential comments deleted.	
398.	CEA	3.136.	We agree on multidimensional quality criteria to be met by pooling mechanisms used in external units. Transparency and audibility may be proven by an external unit. External data such as market data of the German GDV should be applicable directly. Why should the size of the different business feeding the pool be similar? Also the requirement of "comparable reinsurance" makes no sense because reinsurance should be undertaking specific and there are several gross to net techniques. Instead of the size in particular the risk profile has to be homogeneous, which is of course the more difficult to assess the more different the sizes are.	See the resolution to the comment 122. See the resolution to the comment 122.
399.	CRO Forum	3.136.	The requirements for use of external data seem overly onerous; data must be sourced from a formally-structured external data pool, pooling mechanism is transparent & auditable, size of business feeding into the pool is similar, it is fully audited, data provided to the pool is sufficiently comparable, etc. Firms are likely to have limited internal data for certain classes of business and data from outside local jurisdictions is unlikely to be useful or relevant for some types of business e.g. health insurance where each jurisdiction has a different healthcare model. We suggest the requirements around data pools be made less	Partially agree – see changes in the paper. Noted. Noted.

			onerous than outlined in this section. For new market entrants, existing players are unlikely to be willing to share data. It is therefore important that the requirements for using external data be less onerous /burdensome and possibly allow reliance on externally-sourced data available from public sources (e.g. Regulatory Returns, comparable data from public health system, etc) As no explicit allowance was made for inflation in the calibration process when estimating the standard formula parameters (cf. CP71 3.36), there should be no requirement for considerably more analysis and calculations by the undertakings in the case of use of USPs.	Noted.
400.	GDV e. V.	3.136.	External data such as market data of the German GDV should be applicable directly. Why should the size of the different business feeding the pool be similar? Also the requirement of "comparable reinsurance" makes no sense because reinsurance should be undertaking specific and there are several gross to net techniques. Instead of the size in particular the risk profile has to be similar.	Disagree. Data should meet criteria. See the resolution to the comment 122.
401.	Groupe Consultatif	3.136.	The working group agrees on multidimensional quality criteria to be met by pooling mechanisms used in external units. Transparency and audibility should be proven by external unit and not within the responsibility scope of the undertaking. cf. 3.26	See the resolution to the comment 122.
402.	Legal & General Group	3.136.	The requirements that need to be met in order to use pooled data in the calibration of undertaking-specific parameters (USP) are too restrictive and cannot be justified. Existing pooled data used by the industry (e.g. CMI data on mortality) would not meet the criteria set out. Data not meeting the criteria set out could	Disagree – data should meet criteria defined in the Directive.

			nevertheless be sufficiently homogenous to be used to calibrate USP.	
403.	Assuralia	3.138.	It is mentioned that "data should reflect the current reinsurance programme of the undertaking". To be in line with the prospective view of Solvency II, data should reflect the reinsurance cover of the underwriting for the following year. That is also in line with the formulation of articles 3.159 and 3.173.	See the resolution to the comment 122.
404.	Groupe Consultatif	3.138.	The first bullet suggests that the data reflects the current reinsurance protection. This is unlikely to prove true in many practical situations.	See the resolution to the comment 122.
405.	Lloyds	3.138.	Reinsurance structures change and so this requirement is unlikely to be met in practice. The need for data to stem from a sufficiently long time series is contradictory to the proposals applying to an undertaking's new lines of business.	See the resolution to the comment 122.
406.	CEA	3.139.	A continuous monitoring is too burdensome; we would expect that an ongoing one should suffice.	See the resolution to the comment 131.
407.	GDV e. V.	3.139.	A continuous monitoring is too burdensome; we would expect that an ongoing one should suffice.	See the resolution to the comment 131.
408.	Lloyds	3.140.	Paragraph 3.140 is clear that if the data is not suitable then USPs cannot be applied. Given the limitations often seen in non-life insurance data, this statement would prevent most firms using USPs without some dispensation from the supervisor.	See the resolution to the comment 132.
409.	AB Lietuvos draudimas	3.141.	It is essential that the proportionality principle is not limited as indicated by this paragraph. Given the huge approximations implicit in the calibration of the Standard Formula parameters it is likely that even relatively sparse undertaking specific data will often lead to a more appropriate reflection of the undertaking's risk profile.	See the resolution to the comment 19, 136 and 385.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
410.	ABI	3.141.	We believe that there will be considerable practical difficulty in collecting appropriate data, especially as proportionality is not taken into account. The reasons are as follows: - Absence of best estimates on a Solvency II basis - Historic Technical Provisions omit risk margins on the Solvency II basis - Historic data will be based on then current reinsurance programs which may differ to those anticipated over the next year. - Difficultly in discounting historic technical provisions.	See the resolution to the comment 19, 136 and 385.
411.	CEA	3.141.	Applying the proportionality principle does not automatically mean that data quality is poor. Even when simplifications are used it will often be necessary to use USP in order to get results reflecting the individual risk profile.	See the resolution to the comment 19, 136 and 385.
412.	GDV e. V.	3.141.	Applying the proportionality principle does not automatically mean that data quality is poor. Even when simplifications are used it will often be necessary to use USP in order to get results reflecting the individual risk profile.	See the resolution to the comment 19, 136 and 385.
413.	RSA Insurance Group	3.141.	It is essential that the proportionality principle is not limited as indicated by this paragraph. Given the huge approximations implicit in the calibration of the Standard Formula parameters it is likely that even relatively sparse undertaking specific data will often lead to a more appropriate reflection of the undertaking's risk profile.	See the resolution to the comment 19, 136 and 385.
414.	Lloyds	3.142.	The data requirements are almost impossible to meet in practice, given the historic reporting bases being quite markedly different from a "Solvency II" basis.	Noted.
415.	AFA	3.143.		N/A

<table>
<tr><th colspan="5">Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09
CP No. 75 - L2 Advice on Undertaking specific parameters</th></tr>
<tr><td>416.</td><td>AMICE</td><td>3.143.</td><td>Uncertainty on parameter estimation can be captured by alternative statistical methods such as the Gibbs sampler or Bayesian techniques.

We can prove that in a Gaussian environment the volatility should increase by the following factors (which is turn depend on the length of the time series):
<table><tr><td>5</td><td>96%</td></tr><tr><td>6</td><td>69%</td></tr><tr><td>7</td><td>54%</td></tr><tr><td>8</td><td>44%</td></tr><tr><td>9</td><td>37%</td></tr><tr><td>10</td><td>32%</td></tr><tr><td>11</td><td>29%</td></tr><tr><td>12</td><td>25%</td></tr><tr><td>13</td><td>23%</td></tr><tr><td>14</td><td>21%</td></tr><tr><td>15</td><td>19%</td></tr><tr><td>20</td><td>18%</td></tr><tr><td>30</td><td>17%</td></tr></table>
It is worthwhile highlighting that these values do not depend on the underlying parameters; Such an approach could easily replace the credibility factors proposed by CEIOPS.

AMICE members would like this methodology to be tested as part of the QIS5 exercise.</td><td>Noted. CEIOPS revised credibility factors in line with other stakeholders comments.</td></tr>
<tr><td>417.</td><td></td><td></td><td>Confidential comments deleted.</td><td></td></tr>
<tr><td>418.</td><td>CEA</td><td>3.143.</td><td>The limitations of data and methods used to derive the standard parameters should be addressed by way of further analysis of a wider set of data, particularly as the credibility-weighting approach for USP means that nearly all insurers will be using the standard parameters to an extent.</td><td>Noted.</td></tr>
</table>

			If the limitations of the standard factors are not overcome, the use of USP through a much more significant weight associated to them under the credibility formula could solve many of such shortcomings.	
419.	GDV e. V.	3.143.	The limitations of data and methods used to derive the standard parameters should be addressed by way of further analysis of a wider set of data, particularly as the credibility-weighting approach for USP means that nearly all insurers will be using the standard parameters to an extent. If the limitations of the standard factors are not overcome, the use of USP through a much more significant weight associated to them under the credibility formula could solve many of such shortcomings. Additionally the justification of such a credibility approach is only given, if market data have a smaller estimation error than USP. But this "proof" is still pending (because of lack of data).	Noted.
420.	GROUPAMA	3.143.	Uncertainty in the estimation of parameters can be caught by statistical methods such as the Gibbs sampler or Bayesian techniques. We can prove in a Gaussian environment that volatility should increase by (depending on the length of the time series): 5 96% 6 69% 7 54% 8 44% 9 37% 10 32% 11 29% 12 25%	See the resolution to the comment 416.

			<table><tr><td>13</td><td>23%</td></tr><tr><td>14</td><td>21%</td></tr><tr><td>15</td><td>19%</td></tr><tr><td>20</td><td>18%</td></tr><tr><td>30</td><td>17%</td></tr></table> These values do not depend on the underlying parameters. Such an approach could easily replace the credibility factors. We suggest testing this methodology in the QIS 5, and we would be pleased to discuss this alternative with CEIOPS.	
421.	ABI	3.144.	We note that none of the proposed methods makes an allowance for the underwriting cycle.	See the resolution to the comment 2
422.			Confidential comments deleted.	
423.	CEA	3.144.	Several methods have been proposed in calculating the USP for both premium and reserve risk. None of the methods proposed make an allowance for the underwriting cycle. We would ask Ceiops to provide a justification for this.	See the resolution to the comment 147
424.	Just Retirement Limited	3.144.	We would question the appropriateness of including such detailed formulae and parameters within the Level 2 rules, and suggest that much of this content be moved to Level 3 guidance.	Dsagree. The requirement that methods shall be in level 2 implementing measure is in the Directive.
425.			Confidential comments deleted.	
426.	CEA	3.145.	The request to allow for expense volatility explicitly is not in line with the standard methodology used in CP71.	Agree. See changes in the paper.
427.	FFSA	3.145.	CEIOPS states that "Underwriting-specific parameters shall allow	See the resolution to the

			for expense volatility explicitly" This is in a clear opposition with the methodology applied in the standard formula (please see &3.35 of the CP 71). CEIOPS is requiring companies to stick to underlying assumptions of the standard formula; therefore CEIOPS is in opposition with its own statement in this case. FFSA requires removing these paragraphs.	comment 426
428.	GDV e. V.	3.145.	The request to allow for expense volatility explicitly is not in line with the standard methods used in CP71.	See the resolution to the comment 426
429.	ABI	3.146.	We believe that the rationale for the expense adjustment is unclear. Further I think it unlikely that the volatility of the expense component is proportionate to claims payments. Expense risk is usually more under the control of the management than components of premium risk.	See the resolution to the comment 162
430.			Confidential comments deleted.	
431.	CEA	3.146.	The proposed formula may not be appropriate if expenses in the previous year were not representative of expected expenses next year, or if part of the unallocated expenses are largely fixed and hence do not contribute to variability of results. Expenses would generally be considered as less volatile than claims experience so this approach overestimates the total variability. Also it's not clear that such an adjustment respects the 99.5% criterion. Typo compared to 3.39: unallocated instead of allocated?	See the resolution to the comment 162
432.	CRO Forum	3.146.	We consider this crude adjustment to "scale up" the premium risk standard deviation to take account of expense risk (weighted towards the risks associated with "take-on" expenses & commission) overly harsh; a pro-rata adjustment here is too high a requirement.	Agree. See changes in the paper.

			In reality, expense risk is likely to be far less volatile than premium risk - particularly when account is taken of the potentially cyclical nature of insurance premiums /profitability. Allied to this, expense risk is typically far more under the control of management than are the components of premium risk. Hence, we would advocate that something considerably lower than a pro-rata adjustment for expense risk should be used to allow for the "scale-up" required. For many firms, expenses will show a remarkable stability over a number of years - hence the requirement seems too high.	
433.	FFSA	3.146.	See comments in 3.145	See the resolution to the corresponding comment
434.	GDV e. V.	3.146.	The proposed formula may not be appropriate if expenses in the previous year were not representative of expected expenses next year, or if part of the unallocated expenses are largely fixed and hence do not contribute to variability of results. Expenses would generally be considered as less volatile than claims experience so this approach overestimates the total variability. Also it's not clear that such an adjustment respects the 99.5% criterion.	See the resolution to the comment 162
435.	Groupe Consultatif	3.146.	The model is not clear! Why should σ(U,premlob) be calibrated by factor which describes a kind of cost ratio. We need a factor for levelling on the 99.5% quantile!	See the resolution to the comment 164
436.			Confidential comments deleted.	
437.	CEA	3.147.	Further proportionate guidance is required on how data could be adjusted to be representative of future inflation risk.	See the resolution to the comment 166
438.	EMB Consultancy	3.147.	Clarification is sought on the issue of inflation adjustment. This paragraph states that "undertakings shall adjust their data for	The requirement regarding inflation has been relaxed. See

	LLP		inflation where the inflationary experience implicitly included in the time series used is not representative of the inflation that might occur in the future." That is, there is a proviso. However that proviso is dropped in paragraphs 3.194 and 3.206, where it simply states "Best estimates and payments should be adjusted for inflation". It is very unclear what this statement means in practice. It should be noted that explicit assumptions about claims inflation are rarely made when setting reserves using many standard actuarial methods (and may be extremely difficult or impossible with many commercial lines data sets). It should also be noted that "no explicit allowance was made for inflation in the calibration process" for setting the standard parameters in CP71 (see paragraphs 3.12 and 3.190).	changes in the paper
439.	GDV e. V.	3.147.	Further guidance is required on how data could be adjusted to be representative of future inflation risk. But CEIOPS should be consistent to its own advice: As no explicit allowance was made for inflation in the calibration process when estimating the standard formula parameters (cf. CP71 3.36), one might consider to not require considerably more analysis and calculations from the undertakings than was done for determining the standard formula parameters.	Partially agree. See changes in the paper
440.	Groupe Consultatif	3.147.	This is a correct but not helpful statement. No one knows the future inflation, therefore the historical inflation might be a model for the future. Assessing claims information for some of the more complicated lines of non-life insurance can be challenging, and it may be difficult to provide this information to a high standard of data and statistical quality.	Partially agree. See changes in the paper Noted

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
441.	Lloyds	3.147.	Assessing claims inflation for some of the more complicated lines of non-life insurance can be challenging, and in practice it may be unrealistic to expect this information be provided to a high standard of data and statistical quality.	See the resolution to the comment 440
442.	Munich Re	3.147.	As no explicit allowance was made for inflation in the calibration process when estimating the standard formula parameters (cf. CP71 3.36), one might consider to not require considerably more analysis and calculations from the undertakings than was done for determining the standard formula parameters.	See the resolution to the comment 439
443.			Confidential comments deleted.	
444.	AMICE	3.149.	CEIOPS states that "the volume measure shall be the maximum of: estimate of net written premium during the forthcoming year, estimate of net earned premium during the forthcoming year, net written premium during the previous year; plus expected present value of net claims and expense payments which relate to claims incurred after the following year and covered by existing contracts as in the standard formula". This paragraph is not in line with the methodology applied in the calibration of the standard formula which takes into account the earned premium as volume measure (please see &3.34 in CP71); AMICE thinks that the volume measure used in the calibration of the standard formula and the USP should be identical. Please note that the CP states that the assumptions should be the same as the ones used standard formula; More clarification is therefore needed. Finally, according to our understanding □ is defined as an economic equivalent of the premium provision. Thus, double-counting should be avoided.	See the resolution to the comment 156
445.			Confidential comments deleted.	
446.	CEA	3.149.	The methodology used for the calibration of the standard formula	See the resolution to the

			(CP71) uses the earned premium as volume measure. The analysis talks in this paragraph about all 3 volume measures.	comment 426
447.	FFSA	3.149.	CEIOPS states that: "The volume measure shall be the maximum of: estimate of net written premium during the forthcoming year, estimate of net earned premium during the forthcoming year, net written premium during the previous year; plus expected present value of net claims and expense payments which relate to claims incurred after the following year and covered by existing contracts as in the standard formula." This paragraph is in opposition with the methodology used for the calibration of the standard formula which uses the earned premium as volume measure (please see &3.34 of the CP71). FFSA thinks that the volume measure used for the calibration and the USP should be identical. Please note that the CP states that the assumptions used should be the same as the standard formula. FFSA thinks that should be more clearly defined and it should be stated that this coefficient is only useful for multi-year contracts.	See the resolution to the comment 444
448.	GDV e. V.	3.149.	The methodology used for the calibration of the standard formula (CP71) uses the earned premium as volume measure. The analysis talks in this paragraph about all 3 volume measures. Which is used in CP71 for which parameters?	See the resolution to the comment 156 It is used to the capital requirement calculation, not calibration
449.			Confidential comments deleted.	
450.	CEA	3.150.	The limitations of data and methods used to derive the standard parameters should be addressed by way of further analysis of a wider set of data, particularly as the credibility-weighting approach for USP means that nearly all insurers will be using the standard parameters to an extent.	See the resolution to the comment 146

			If the limitations of the standard factors are not overcome, the use of USP through a much more significant weight associated to them under the credibility formula could solve many of such shortcomings.	
451.	GDV e. V.	3.150.	see identical comment on para. 3.143	See the corresponding resolution
452.	AB Lietuvos draudimas	3.151.	The credibility factor in sub-paragraph seem to give overly increased weight as data sets grow from 10 to 15 years.	Partially agree. See the changes in the paper.
453.	ABI	3.151.	In our view, CEIOPS' proposal in option A is not appropriate, as a credibility factor of 61% is too low after 14 years, especially when the Level 1 text supports 100% credibility after 15 years. We also believe that the credibility weights attached to data external but directly relevant to operations is too low (especially for 10-15 years of data) and should be much closer to the weights for internal data.	See the resolution to the comment 180 See the resolution to the comment 186
454.			Confidential comments deleted.	
455.	CEA	3.151.	We would first of all question the need for a credibility approach as, by definition, the parameter derived from own data is more relevant for assessing the risk for a specific undertaking than the standard parameter. Our view is that full credibility should be achieved much more quickly than 15 years. Certainly 60% credibility after 10 years we feel is far too low. It might be appropriate to have higher credibility weights for the less volatile lines of business, for which it will take less years' data to obtain a good indication of underlying variability. We would expect the credibility weights to increase more quickly in the earlier years than the later years. When a line of business has	See the resolution to the comment 186

			been written for, say, 7 years the extra year's data can add significantly to the overall analysis of own data. If a line of business has been written for 14 years, adding an extra year's data would probably not add much to the overall analysis. However, the actual credibility weights increase slowly in the earlier years and quickly in the later years, which we believe is not appropriate. We also believe that the credibility weights attached to data external but directly relevant to operations is too low (especially for 10-15 years of data) and should be much closer to the weights for internal data. There is even an argument that good quality pooled data from a homogeneous group of competing insurers may have greater credibility than data from one insurer only (even for the likely volatility of that insurer). On the other hand, the definition of "internal data" must be specified further. Will for example data for a subsidiary undertaking be seen as internal or external to the parent undertaking?	Internal, of course
456.	CRO Forum	3.151.	We agree with the principle that separate sets of credibility factors be applied to internal data vs. external data. However, we disagree is on the level of rigour and formality required before an undertaking is permitted to use external data (see comments on 3.136 above)	See the resolution to the comment 399
457.	Federation of European Accountants (FEE)	3.151.	Non-life Reserve Risk strongly depends on the length of the pay-out period for the claims. It is therefore not in line with the statistical approach taken to perform a valuation of claims provisions to set the credibility factors at certain levels depending on the length of the time series (e.g. paragraph 3.151) without taking into account the length of the pay-out period for the claims of the individual portfolio. We would therefore encourage using different credibility	Agree. See changes in the paper.

			factors for individual lines of non-life business, distinguishing at least between short and long tail lines.	
458.	GDV e. V.	3.151.	We would first of all question the need for a credibility approach as, by definition, the parameter derived from own data is more relevant for assessing the risk for a specific undertaking than the standard parameter. But if credibility is used full credibility should be achieved much more quickly than 15 years. It might be appropriate to have higher credibility weights for the less volatile lines of business, for which it will take less years' data to obtain a good indication of underlying variability. We would expect the credibility weights to increase more quickly in the earlier years than the later years. However, the actual credibility weights increase slowly in the earlier years and quickly in the later years. We also believe that the credibility weights attached to data external but directly relevant to operations is too low (especially for 10-15 years of data) and should be much closer to the weights for internal data. There is even an argument that good quality pooled data from a homogeneous group of competing insurers may have greater credibility than data from one insurer only (even for the likely volatility of that insurer). On the other hand, the definition of "internal data" must be specified further.	See the resolution to the comment 455
459.	Groupe Consultatif	3.151.	The difference in the credibility of parameters derived from 14 years of history is almost no different from the credibility of parameters derived from 15 years of history. We would suggest	See the resolution to the comment 183

			reducing the time for complete credibility to 10 years	
460.	Munich Re	3.151.	The standard formula parameters include a significant estimation error such that one might consider to focus on a fair balance between the undertaking specific data requirements and those data requirements lead to the standard formula parameters. This fair balance should refer to data requirements (paragraph 3.159) as well as the credibility weights (this paragraph).	See the resolution to the comment 491
461.	RSA Insurance Group	3.151.	The credibility factor in sub-paragraph seem to give overly increased weight as data sets grow from 10 to 15 years.	See the resolution to the comment 452
462.	ABI	3.152.	See comments to 3.46	See the corresponding resolution
463.			Confidential comments deleted.	
464.	CEA	3.152.	Social Security systems generally have a national character and it is important that these systems are taken into account in a consistent manner per country. For this reason, we recommend that national supervisors develop methods for the treatment of these systems, for all business written in relation to the Social Security system in the supervised country.	See the resolution to the comment 194
465.	CRO Forum	3.152.	Please refer to our comment in Paragraph 3.47	See the corresponding resolution
466.	Deloitte	3.152.	Please refer to our comment in Paragraph 3.47	See the corresponding resolution
467.			Confidential comments deleted.	
468.	AB Lietuvos draudimas	3.154.	We believe that many of the assumptions that underlie the models are not true in practice. For example the expected loss ratio is not often constant over time. The use of overly complicated models for determining USPs is therefore spurious. Formulae should be kept simple.	Noted.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
469.	ABI	3.154.	Methods that can be applied to derive USP should not be limited to the "standard methods" described in this paper. It is one of the main principles of Solvency II that undertakings are responsible to establish and choose an appropriate method. Therefore restricting the undertakings to the methods described here should be lifted. 1. Below are some example why deviations from the methods listed in the CP ask for different methodologies: 2. • The assumption of log normality can be wrong, for example in some cases when there are a lot of claims. There is a quick convergence to the normal distribution. • All proposed methods suppose that the portfolio has a constant perimeter, whereas in real life, an undertaking may buy or sell a part of its portfolio. Standard deviation may then be artificially increased whereas risk is under control. • Another concern is that none of the suggested methods make any allowance for the underwriting cycle. This is a significant issue which is likely to distort the results of any variability analysis. We believe that undertakings should be allowed to make adjustments for the underwriting cycle, where they can demonstrate to the supervisor's satisfaction that much of the historical variability is caused by the underwriting cycle, by reference to some data source (such as a premium rate index, derived from internal or external data). Undertakings should be allowed to adjust historical premiums and claims to be in line with the rating environment expected for the following year. In fact, it is necessary for the data to reflect expected conditions for the following year which is a stated data requirement for entities wishing to use USP. These adjustments are not designed to eliminate the variability	This is the Directive requirement. See also the resolution to the comment 5 The normal distribution is too simple in many cases and the assumption is consistent with the CEIOPS Advice 41-09.See the resolution to the comment 2 It can be changed in a partial internal model. See the resolution to the comment 2

			caused by the underwriting cycle, but instead to ensure it is included appropriately in the historical variability. Changes in mix of business (e.g. re-underwriting) could also impact expected loss ratios from one year to the next, and allowance should be made for this where material and demonstrable. Alternative 1 is robust in that it, unlike the others, does not depend on any distributional assumptions. The estimation is conceptually and computationally straightforward. It may be used if Alternative 2 is not appropriate. Alternative 3 is difficult to assess this without carrying out analysis on actual data. This is a Bayesian method. Such methods are not so widely accepted. In this case, it is not obvious that it is relevant to include the extra term with Var(Θ) in the variance estimate, since the variance between undertakings is not part of the variance that a particular undertaking is exposed to. Nevertheless it may appropriate for some lines of business.	It can be changed in a partial internal model. Noted. You mean: Bayesian methods are not widely accepted? Or such a kind of Bayesian method?
470.	AMICE	3.154.	CEIOPS: "Below are alternative methodologies that CEIOPS has considered as standardised methodologies for estimating the undertaking-specific parameters" The prescribed formulae may be appropriate for many lines of business. However there could be some lines for which none of the formulas are suitable and therefore alternative distributions should be allowed.	See the resolution to the comment 2
471.			Confidential comments deleted.	
472.	CEA	3.154.	Methods that can be applied to derive USP should not be limited to the "standard methods" described in this paper. It is one of the main principles of Solvency II that undertakings are responsible to establish and choose an appropriate method. Therefore restricting	See the resolution to the comment 469

			the undertakings to the methods described here should be lifted. A definite answer to this complex topic cannot be given in such a short consultation period. Below are some example why deviations from the methods listed in the CP ask for different methodologies and why this discussion is an ongoing one, beyond the deadline of 11 Dec 2009: • The assumption of log normality can be wrong, for example in some cases when there are a lot of claims. There is a quick convergence to the normal distribution. • All proposed methods suppose that the portfolio has a constant perimeter, whereas in real life, an undertaking may buy or sell a part of its portfolio. Standard deviation may then be artificially increased whereas risk is under control. • Another concern is that none of the suggested methods make any allowance for the underwriting cycle. This is a significant issue which is likely to distort the results of any variability analysis. We believe that undertakings should be allowed to make adjustments for the underwriting cycle, where they can demonstrate to the supervisor's satisfaction that much of the historical variability is caused by the underwriting cycle, by reference to some data source (such as a premium rate index, derived from internal or external data). Undertakings should be allowed to adjust historical premiums and claims to be in line with the rating environment expected for the following year. In fact, it is necessary for the data to reflect expected conditions for the following year which is a stated data requirement for entities wishing to use USP.	

			These adjustments are not designed to eliminate the variability caused by the underwriting cycle, but instead to ensure it is included appropriately in the historical variability. Changes in mix of business (e.g. re-underwriting) could also impact expected loss ratios from one year to the next, and allowance should be made for this where material and demonstrable. Alternative 1 is robust in that it, unlike the others, does not depend on any distributional assumptions. The estimation is conceptually and computationally straightforward. It has the disadvantage that it inherently depends on the volatility of paid losses and expenses but also the volatility of case reserves and IBNR estimates that become more reliable over time. It may be used if Alternative 2 is not appropriate. Alternative 2 is based on a distribution assumption that needs to be verified before using this method. Alternative 3 is difficult to assess without carrying out analysis on actual data. This is a Bayesian method. Such methods are not so widely accepted. In this case, it is not obvious that it is relevant to include the extra term with Var(Θ) in the variance estimate, since the variance between undertakings is not part of the variance that a particular undertaking is exposed to. Alternative 3 was not tested in the context of the development of Solvency II so far, especially it was not tested by Ceiops to derive the standard formula parameters as outlined in CP71. Therefore, this alternative should not be proposed as the only standardised method for determining USPs although the current draft advice tends to promote this alternative as it is alleged that the other two alternatives include a significant estimation error (cf. 3.169) that	Noted. Misunderstanding. CEIOPS only noted that the significant estimation error arises when the estimation is based on very short sample which can be the case for methods 1 and 2.

			would disqualify the other two alternatives due to the data requirements proposed in 3.159 and 3.168. We do not see that alternative 3 leads a priori to better USPs than the other two methods as alternative 3 is based on: ☐ distribution assumptions (cf. 3.170) that would have to be verified, ☐ simplifications (cf. 3.171) that might materially undermine the possible advantages of this method and ☐ an estimate of the random variable that models the estimation error (cf. 3.172) that lead to an estimation error itself that, especially when using a too little number of years. Especially this limited number of years considered for determining USPs is the same source for estimation errors than in the other two methods. The essential compound Poisson distribution assumption inherent in Alternative 3 won't be adequate for many types of reinsurance business. Nevertheless it may appropriate for some lines of business. As a consequence, we propose to allow for further alternatives not being already captured in this CP for determining USPs, if they prove to cover the risk conceptually. We further propose that undertakings should be allowed to choose a standardised method per line of business instead of using the same for all lines of business.	See the resolution to the comment 5. Agree.
473.	CRO Forum	3.154.	Please refer to our comment in Paragraph 3.51	See the corresponding resolution
474.	Deloitte	3.154.	Please refer to our comment in Paragraph 3.51	See the corresponding resolution

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
475.	DIMA (Dublin International Insurance & Management	3.154.	The standardized methods are limited and generalised. It is uncertain at this stage whether current practices of measuring the risk parameters would all fall into the standardized methodologies prescribed by CEIOPS. Other alternatives and/or slight deviations should be acceptable where the undertaking believes it is more appropriate and the supervisor is satisfied: for example, a Gamma distribution rather than a Lognormal distribution could be more appropriate for a particular line of business. There are other stochastic methods of valuing reserve risk without assuming a parametric distribution (e.g. Mack Bootstrapping). These methods should also be acceptable in calculating the undertaking specific parameters since they are generally well known and accepted by the actuarial profession.	See the resolution to the comment 5. This can be done as partial internal model.
476.	FFSA	3.154.	10. CEIOPS states that: "Below are alternative methodologies that CEIOPS has considered as standardised methodologies for estimating the undertaking-specific parameters" 11. The prescribed formulae may be appropriate for many lines of business. However there could be lines for which none of the formulae are suitable. Therefore the FFSA suggests that the criteria should be: "to be in line with the global methodology used to define the standard formula". FFSA thinks that this criteria is enough prescriptive. For instance: • The assumption of log normality can be wrong in some cases when there are a lot of claims. There is a quick convergence to the normal distribution. • All proposed methods suppose that the portfolio has a constant perimeter, whereas in real life, an undertaking may buy or sell a part of its portfolio. Standard deviation may then be artificially increased whereas risk is under control.	See the resolution to the comment 5. See the resolution to the comment 469.

			For instance, if undertaking A is managing product X (Loss ratio = 70% and σ = 0) and bought, 2 years ago from undertaking B a portfolio constituted by product Y (Loss ratio = 50% and σ = 0) of the same LoB, risk is under control, σ should be null. This is not the case with the proposed calculation methods. What we should do is create a synthetic time series of the LoB, constituted by product X + product Y as is the acquisition had been made from the beginning of the time series.	
477.	GDV e. V.	3.154.	Methods that can be applied to derive USP should not be limited to the "standard methods" described in this paper. It is one of the main principles of Solvency II that undertakings are responsible to establish and choose an appropriate method. Therefore restricting the undertakings to the methods described here should be lifted. A finite answer to this complex topic can not be given in such a short consultation period. The comments below highlight some reasons why this discussion is an ongoing one beyond the end of the consultation period to 11. Dec. 2009. Some examples why deviations from the methods listed in the CP ask for different methods: - The assumption of log normality can be wrong. - All proposed methods suppose that the portfolio has a constant perimeter, whereas in real life, an undertaking may buy or sell a part of its portfolio. Standard deviation may then be artificially increased whereas risk is under control. - Many questions are raised concerning premium cycles and whether / how to take them into account. A broader discussion of this topic seems necessary. This topic must be linked to the calibration of the standard risk factors in CP 71 and the use of simplifications.	See the resolution to the comment 469

			- Changes in mix of business (e.g. re-underwriting) could also impact expected loss ratios from one year to the next, and allowance should be made for this where material and demonstrable. We believe that there is not an optimal alternative that should be selected as the only alternative to determine USP. Here are some points to taken into account: Alternative 1 has the advantage to be distribution-free but the disadvantage that it inherently depends on the volatility of paid losses and expenses but also the volatility of case reserves and IBNR estimates that become more reliable over time. Alternative 2 bases in a distribution assumption that needs to be verified before using this method. Alternative 3 was not tested in the context of the development of Solvency II so far, especially it was not tested by CEIOPS to derive the standard formula parameters as outlined in CP71. Therefore, this alternative should not proposed as the only standardised method for determining USPs although the current draft advice seems to tend to promote this alternative as it is alleged that the other two alternatives include a significant estimation error (cf. 3.169) that would disqualify the other two alternatives due to the data requirements proposed in 3.159 and 3.168. We do not see that alternative 3 leads a priori to better USPs than the other two methods (and further, not mentioned alternatives) as alternative 3 bases on ☐ distribution assumptions (cf. 3.170) that would have to be verified, ☐ simplifications (cf. 3.171) that might materially undermine the possible advantages of this method and ☐ an estimate of the random variable that models the	See the resolution to the comment 472.

			estimation error (cf. 3.172) that lead to an estimation error itself that, especially when using a too little number of years. Especially this limited number of years considered for determining USPs is the same source for estimation errors than in the other two methods. The essential compound Poisson distribution assumption inherent in Alternative 3 won't be adequate for many types of reinsurance business. As a consequence, we propose to provide a set of standardised methods and allow for further alternatives not being already captured in this CP for determining USPs being proved resp. to be proved to cover the risk conceptually the same as the standard formula parameters (cf. 3.130 c)). We further propose that undertakings should be allowed to choose a standardised method per line of business instead of using the same for all lines of business.	
478.	Groupe Consultatif	3.154.	Alternative 3 adopts a complex frequency/severity approach, and goes beyond the parameterisation carried out within CP71. Therefore, we don't think this is suitable. Alternatives 1 (least-squares fit to the historic loss ratios) and alternative 2 (maximum likelihood fit to an assumed underlying log-normal) both look sensible approaches, and we don't think they will give materially different answers given they both assuming the underlying ultimates have a variance proportional to the earned premium. We would suggest alternative 1 is the best given that it offers a closed-form solution, whereas there may be additional complexities in maximising the likelihood function in alternative 2	See the resolution to the comment 207.
479.	KPMG ELLP	3.154.	Our preference is for Alternative 1 due to the subjective statistical distribution assumptions inherent in the other two approaches which would not fit all risk profiles.	Noted.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
480.	Lloyds	3.154.	Alternative 3 adopts a complex frequency/severity approach, and goes beyond the parameterisation carried out within CP71. We therefore do not think this is suitable. Alternatives 1 (least-squares fit to the historic loss ratios) and alternative 2 (maximum likelihood fit to an assumed underlying log-normal) both look sensible approaches, and should not give materially different answers given they both assuming the underlying ultimates have a variance proportional to the earned premium. We propose alternative 1 is the best given that it offers a closed-form solution, whereas there may be additional complexities in maximising the likelihood function in alternative 2.	See the resolution to the comment 478.
481.	Munich Re	3.154.	We believe that there is not an optimal alternative that should be selected as the only alternative to determine USP. Alternative 1 has the advantage to be distribution-free but the disadvantage that it inherently depends on the volatility of paid losses and expenses but also the volatility of case reserves and IBNR estimates that become more reliable over time. Alternative 2 bases in a distribution assumption that needs to be verified before using this method. Alternative 3 was not tested in the context of the development of Solvency II so far, especially it was not tested by CEIOPS to derive the standard formula parameters as outlined in CP71. Therefore, this alternative should not proposed as the only standardised method for determining USPs although the current draft advice seems to tend to promote this alternative as it is alleged that the other two alternatives include a significant estimation error (cf. 3.169) that would disqualify the other two alternatives due to the data requirements proposed in 3.159 and 3.168. We do not see that alternative 3 leads a priori to better USPs than the other two	See the resolution to the comment 472.

			methods (and further, not mentioned alternatives) as alternative 3 bases on ☐ distribution assumptions (cf. 3.170) that would have to be verified, ☐ simplifications (cf. 3.171) that might materially undermine the possible advantages of this method and ☐ an estimate of the random variable that models the estimation error (cf. 3.172) that lead to an estimation error itself that, especially when using a too little number of years. Especially this limited number of years considered for determining USPs is the same source for estimation errors than in the other two methods. The essential compound Poisson distribution assumption inherent in Alternative 3 won't be adequate for many types of reinsurance business. As a consequence, we propose to provide a set of standardised methods and allow for further alternatives not being already captured in this CP for determining USPs being proved resp. to be proved to cover the risk conceptually the same as the standard formula parameters (cf. 3.130 c)). We further propose that undertakings should be allowed to choose a standardised method per line of business instead of using the same for all lines of business.	
482.	ROAM	3.154.	ROAM, which supports the position of FFSA and AMICE on this subject, wishes that there is not a limitation on the modelling to be used for the calculation of the USP. We are in favour of general principles in agreement with the principles of the standard formula but every company has to have the possibility of adapting the models according to its profile. Every company has to take into account its evolution of the risk profile, programs of reinsurance and the policy of pricing.	See the resolution to the comment 209.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
483.	RSA Insurance Group	3.154.	We believe that many of the assumptions that underlie the models are not true in practice. For example the expected loss ratio is not often constant over time. The use of overly complicated models for determining USPs is therefore spurious. Formulae should be kept simple.	See the resolution to the comment 468.
484.			Confidential comments deleted.	
485.	ABI	3.156.	We believe an assumption, that expected loss ratios are constant over time are not correct.	This is the assumption of standard formula.
486.	CEA	3.156.	Assumptions made here are restrictive for most lines of business. Good methods concerning premium risk haven't been developed yet. Therefore more research is needed to check if the proposed methods will yield appropriate results if assumptions are violated.	See the resolution to the comment 212
487.	GDV e. V.	3.156.	Assumptions made here are restrictive for most lines of business. Good methods concerning premium risk haven't been developed yet. Therefore more research is needed to check if the proposed methods will yield appropriate results if assumptions are violated.	See the resolution to the comment 486.
488.	CEA	3.157.	This paragraph implies that historic ultimate estimates enter the reserve risk calculation. With ongoing reserving experience, these historic ultimate estimates might introduce estimation volatility in the premium risk calculation that is not longer representative for the future. There are premium risk estimation methods based on paid and expenses development triangles rather than incurred development triangles that take this problem into account. We therefore suggest, not restricting the premium risk estimation to the incurred development triangles.	Noted.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
489.	GDV e. V.	3.157.	This paragraph implies that historic ultimate estimates enter the reserve risk calculation. With ongoing reserving experience, these historic ultimate estimates might introduce estimation volatility in the premium risk calculation that is not longer representative for the future. There exist premium risk estimation methods basing on paid and expenses development triangles rather than incurred development triangles that take this problem into account. We therefore suggest, not to restrict the premium risk estimation on the incurred development triangles.	See the resolution to the comment 488.
490.	Munich Re	3.157.	This paragraph implies that historic ultimate estimates enter the reserve risk calculation. With ongoing reserving experience, these historic ultimate estimates might introduce estimation volatility in the premium risk calculation that is not longer representative for the future. There exist premium risk estimation methods basing on paid and expenses development triangles rather than incurred development triangles that take this problem into account. We therefore suggest, not to restrict the premium risk estimation on the incurred development triangles.	See the resolution to the comment 488.
491.	GDV e. V.	3.158.	Sixth bullet point: The credibility mechanism should cover some amount of estimation errors as USP are weighted more with an increasing number of years that should reduce estimation errors. Furthermore, the standard formula parameters include a significant estimation error such that one might consider to focus on a fair balance between the undertaking specific data requirements and those data requirements lead to the standard formula parameters. This fair balance should refer to data requirements (this paragraph in the CP) as well as the credibility weights (paragraph 3.151).	3.159? Partially agree. But even if credibility approach is applied data can not be completely free of the requirement. CEIOPS is rather of the opinion that not necessary data as their own but the result taking into account the method and adjusted data should reduce the estimation error to the immaterial level.
492.	Groupe	3.158.	The formula for sigma* leads to vanishing values with growing	Noted.

	Consultatif		Volume. This being in line with the assumption of independent and in time identically distributed single losses. Market-wide fluctuations between the years, affecting loss-ratios independent from the underlying volume arent't allowed for. To allow for market-wide fluctuations some parameter tau has to be introduced, similar to formula 3.182. Perhaps the value of tau should be dependent of the length of the time-series used, to make sure that size-independent market-cycles are represented either in the values of beta (long time series) or tau (short time series).	
493.	ABI	3.159.	See comments to 3.56	See the corresponding resolution
494.	CEA	3.159.	Sixth bullet point: The credibility mechanism should cover some amount of estimation errors as USP are weighted more with an increasing number of years that should reduce estimation errors. Furthermore, the standard formula parameters include a significant estimation error such that one might consider focusing on a fair balance between the undertaking specific data requirements and those data requirements leading to the standard formula parameters. This fair balance should refer to data requirements (this paragraph in the CP) as well as the credibility weights (paragraph 3.151).	See the resolution to the comment 491.
495.	Munich Re	3.159.	Sixth bullet point: The credibility mechanism should cover some amount of estimation errors as USP are weighted more with an increasing number of years that should reduce estimation errors. Furthermore, the standard formula parameters include a significant estimation error such that one might consider to focus on a fair balance between the undertaking specific data requirements and those data requirements lead to the standard formula parameters. This fair balance should refer to data requirements (this paragraph in the CP) as well as the credibility weights (paragraph 3.151).	See the resolution to the comment 491.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
496.	CEA	3.160.	This method does not allow for the underwriting cycle, but does give diversification benefits for larger portfolios. It is suited to normal loss distributions so may not be appropriate in practice. Estimation error we feel should be within reasonable limits - due to limitations of the assumptions, it may not be possible for estimation error to be immaterial.	See the resolution to the comment 215.
497.	ABI	3.161.	See comments to 3.56	See the corresponding resolution
498.	AMICE	3.161.	The assumption of log normality can be wrong in some cases when the frequency of claims is high. Since there is a quick convergence to the normal distribution, the USP should also allow for an entity specific distribution.	See the resolution to the comment 469.
499.	CEA	3.161.	This method does not allow for the underwriting cycle, but does give diversification benefits for larger portfolios. The lognormal assumption could be tested for goodness of fit in practice. Estimation error we feel should be within reasonable limits - due to limitations of the assumptions, it may not be possible for estimation error to be immaterial.	See the resolution to the comment 215.
500.	GROUPAMA	3.161.	The assumption of log normality can be wrong in some cases when there are a lot of claims. There is a quick convergence to the normal distribution. The USP should also include an entity-specific distribution.	See the resolution to the comment 469.
501.	Groupe Consultatif	3.161.	We prefer Alternative 2, because the assumptions more suitable then in 1. One will get problems by using 3 if you have LoB's with low frequency and high severity claims (s. 3.171)	Noted.
502.	CEA	3.162.	This paragraph implies that historic ultimate estimates enter the	See the resolution to the

			reserve risk calculation. With ongoing reserving experience, these historic ultimate estimates might introduce estimation volatility in the premium risk calculation that is not longer representative for the future. There are premium risk estimation methods based on paid and expenses development triangles rather than incurred development triangles that take this problem into account. We therefore suggest, not restricting the premium risk estimation to the incurred development triangles.	comment 488.
503.	GDV e. V.	3.162.	see identical comment on para. 3.157	See the corresponding resolution
504.	Munich Re	3.162.	This paragraph implies that historic ultimate estimates enter the reserve risk calculation. With ongoing reserving experience, these historic ultimate estimates might introduce estimation volatility in the premium risk calculation that is not longer representative for the future. There exist premium risk estimation methods basing on paid and expenses development triangles rather than incurred development triangles that take this problem into account. We therefore suggest, not to restrict the premium risk estimation on the incurred development triangles.	See the resolution to the comment 490.
505.	AMICE	3.169.	We are in favour of the 3rd alternative for the following reasons: - the compound Poisson is quite common and natural for a global loss distribution; - the non proportional reinsurance can be added: if we know X|Θ gross of reinsurance and its distribution, the distribution net of reinsurance is immediately available (closed formulas for basic cases or Monte Carlo approach for more sophisticated reinsurance features).	Noted.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
506.	CEA	3.169.	This method is interesting, but it doesn't have too many areas of applications. For example premium cycles cannot be appropriately reflected although it is not of primary interest in a standard approach: see also our comments on para. 3.53.	Noted.
507.	GDV e. V.	3.169.	This method is interesting, but it doesn't have too many areas of applications. For example premium cycles cannot be appropriately reflected although it is not of primary interest in a standard approach: see also our general comments.	See the resolution to the comment 506.
508.	GROUPAMA	3.169.	We are in favour of the 3rd alternative for the following reasons: - the compound Poisson is quite common and natural for a global loss distribution; the non-proportional reinsurance can be added: if we know X|Θ gross of reinsurance and its distribution, the distribution net of reinsurance are immediately available (closed formulas for basic cases or Monte Carlo approach for more sophisticated reinsurance features).	See the resolution to the comment 505.
509.	ABI	3.170.	See comments to 3.56	See the corresponding resolution
510.			Confidential comments deleted.	
511.	CEA	3.170.	This method may be more suited to some classes of business than others. Further investigation should be carried out to analyse this in more detail. We note that this method was not considered for the standard parameter analysis, when it may have been suitable in	Noted.

			some cases. Estimation error we feel should be within reasonable limits - due to limitations of the assumptions, it may not be possible for estimation error to be immaterial.	
512.	CRO Forum	3.170.	In 3.170 (is defined as a vector. We would expect (to be (1 .	The general approach has been presented, and you remark is one of the assumption later.
513.	GDV e. V.	3.170.	This method may be more suited to some classes of business than others. Further investigation should be carried out to analyse this in more detail. We note that this method was not considered for the standard parameter analysis, when it may have been suitable in some cases.	See the resolution to the comment 511.
514.	CEA	3.171.	In LoB's with low frequency and high severity there might be problems in calculating a reliable σ and Var(Θ).	noted
515.	GDV e. V.	3.171.	In LoB's with low frequency and high severity there might be problems in calculating a reliable σ and Var(Θ).	See the resolution to the comment 514
516.	Groupe Consultatif	3.171.	In LoB's with low frequency and high severity there might be problems in calculating a reliable σ and Var(Θ). This approach should only be used in internal model. In cases of changes in portfolio (e.g. industrial liability), alternative 3 underestimates the risk as the claim size is assumed to be independent from Θ. The assumption of loss amounts being identically distributed (as consequence of being independent of Theta) is by far unrealistic. Imagine Third-party-liability private Persons vs. industry and hospitals, Property insurance small buildings vs. industrial plants.	Noted.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
517.	CEA	3.174.	The strong assumption of equal volatility of claims and expenses might be wrong as we consider the payout pattern of claims and LAE payments to be quite different for several lines of business. Is this assumption really needed?	See the resolution to the comment 229.
518.	GDV e. V.	3.174.	Why is this strong assumption of equal volatility of claims and expenses needed?	See the resolution to the comment 229.
519.	CEA	3.176.	Further proportionate guidance is required on how data could be adjusted to be representative of future inflation risk.	Noted.
520.	CRO Forum	3.176.	As no explicit allowance was made for inflation in the calibration process when estimating the standard formula parameters (cf. CP71 3.36), there should be no requirement for considerably more analysis and calculations by undertakings in the case of use of USPs.	Noted.
521.	GDV e. V.	3.176.	As no explicit allowance was made for inflation in the calibration process when estimating the standard formula parameters (cf. CP71 3.190), one might consider to not require considerably more analysis and calculations from the undertakings than was done for determining the standard formula parameters.	Noted.
522.	Munich Re	3.176.	As no explicit allowance was made for inflation in the calibration process when estimating the standard formula parameters (cf. CP71 3.190), one might consider to not require considerably more analysis and calculations from the undertakings than was done for determining the standard formula parameters.	Noted.
523.	CEA	3.177.	This paragraph implies that historic ultimate estimates enter the reserve risk calculation. With ongoing reserving experience, these historic ultimate estimates might introduce estimation volatility in the premium risk calculation that is not longer representative for	Noted.

			the future. There are premium risk estimation methods based on paid and expenses development triangles rather than incurred development triangles that take this problem into account. We therefore suggest, not restricting the premium risk estimation to the incurred development triangles.	
524.	GDV e. V.	3.177.	see identical comment on para. 3.157	See the corresponding resolution.
525.	Munich Re	3.177.	This paragraph implies that historic ultimate estimates enter the reserve risk calculation. With ongoing reserving experience, these historic ultimate estimates might introduce estimation volatility in the reserve risk calculation that is not longer representative for the future. There exist reserve risk estimation methods basing on paid and expenses development triangles rather than incurred development triangles that take this problem into account. We therefore suggest, not to restrict the reserve risk estimation on the incurred development triangles.	Noted.
526.	CEA	3.178.	The limitations of data and methods used to derive the standard parameters should be addressed by way of further analysis of a wider set of data, particularly as the credibility-weighting approach for USP means that nearly all insurers will be using the standard parameters to an extent. If the limitations of the standard factors are not overcome, the use of USP through a much more significant weight associated to them under the credibility formula could solve many of such shortcomings.	See the resolution to the comment 172.
527.	EMB Consultancy	3.178.	The credibility adjustment only allows full credibility to be given to the undertaking's own data if at least 15 years data are available.	See the resolution to the comment 186.

	LLP		For most undertakings, this will inevitably lead to significant weight being given to the standard parameters, not the undertaking's own parameters. This may significantly reduce the benefits of using undertaking specific parameters.	
528.	GDV e. V.	3.178.	see identical comment on para. 3.143	See the corresponding resolution.
529.	AMICE	3.179.	We agree with the CEA that a full credibility should be achieved much more quickly than 15 years. In this regards we believe that applying a 60% credibility after 10 years is too low. We also agree with the CEA that credibility weights to be applied to external data should be much similar to the weights applicable to internal data.	See the resolution to the comment 186.
530.			Confidential comments deleted.	
531.	CEA	3.179.	Same comments apply as for premium risk. We would first of all question the need for a credibility approach as, by definition, the parameter derived from own data is more relevant for assessing the risk for a specific undertaking than the standard parameter. Our view is that full credibility should be achieved much more quickly than 15 years. Certainly 60% credibility after 10 years we feel is far too low. It might be appropriate to have higher credibility weights for the less volatile lines of business, for which it will take less years' data to obtain a good indication of underlying variability. We would expect the credibility weights to increase more quickly in the earlier years than the later years. When a line of business has been written for, say, 7 years the extra year's data can add significantly to the overall analysis of own data. If a line of business has been written for 14 years, adding an extra year's data	See the resolution to the comment 186.

			would probably not add much to the overall analysis. However, the actual credibility weights increase slowly in the earlier years and quickly in the later years which we believe is not appropriate. We also believe that the credibility weights attached to data external but directly relevant to operations is too low (especially for 10-15 years of data) and should be much closer to the weights for internal data. There is even an argument that good quality pooled data from a homogeneous group of competing insurers may have greater credibility than data from one insurer only (even for the likely volatility of that insurer). On the other hand, the definition of "internal data" must be specified further. Will for example data for a subsidiary undertaking be seen as internal or external to the parent undertaking?	See the resolution to the comment 455.
532.	CRO Forum	3.179.	The credibility factors that can be applied for external data look broadly reasonable, however see comments above (3.151) on requirements to use external data being unduly onerous	See the resolution to the comment 399.
533.	EMB Consultancy LLP	3.179.	See response to 3.178	See the corresponding resolution.
534.	GDV e. V.	3.179.	Same comments apply as for premium risk: see identical comment on para. 3.151. On the other hand, the definition of "internal data" must be specified further. Will for example data for a subsidiary undertaking be seen as internal or external to the parent undertaking?	See the corresponding resolution. See the resolution to the comment 455.
535.	CEA	3.180.	Social Security systems generally have a national character, and it	See the resolution to the

			is important that these systems are taken into account in a consistent manner per country. For this reason, we recommend that national supervisors develop methods for the treatment of these systems, for all business written in relation to the Social Security system in the supervised country.	comment 194
536.	EMB Consultancy LLP	3.180.	See response to 3.178	See the corresponding resolution.
537.			Confidential comments deleted.	
538.	CRO Forum	3.181.	Due to the impact of the politics on the compulsory health system in the Netherlands the historic data for an individual entity is difficult to generate. However on a country level the data history is available. So to credit for the use of undertaking specific data is impossible to achieve and does not solve the specific situation. We support a market consistent and risk based treatment of all types of risk, including those where country specific factors are taken into account	Noted.
539.	EMB Consultancy LLP	3.181.	See response to 3.178	See the corresponding resolution.
540.	GDV e. V.	3.181.	We are not entirely convinced that "social importance of some health insurance products" justify a different treatment than other lines of business as we support a market consistent and risk based treatment of all types of risk.	See the resolution to the comment 194
541.	Munich Re	3.181.	We are not entirely convinced that "social importance of some health insurance products" justify a different treatment than other lines of business as we support a market consistent and risk based treatment of all types of risk.	See the resolution to the comment 194

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
542.	ABI	3.182.	We do not believe the flat 10% standard deviation for extreme reserve risks is appropriate. The choice of 10% appears to be arbitrary and this type of allowance is not appropriate for most lines of business. Only for classes with significant exposure to issues such as latent claims, unexpected claims inflation and retrospective legislation changes do we feel such a loading could be consider appropriate.	See the resolution to the comment 265.
543.	AMICE	3.182.	CEIOPS proposes that the estimate based on the undertaking-specific data shall be complemented with a reserve risk component for unexpected extreme events and model risk as follows: $\sqrt{\sigma}$ (U,res,lob) = σ2 (U,res ,lob)+τ2 If the selected methods assess the "estimation error" and the "model error", there is no need for the introduction of τ parameter. Additionally CP71 does not mention the inclusion of this parameter in any of the methods used for deriving the standard calibration. AMICE members ask CEIOPS to delete this parameter.	See the resolution to the comment 265.
544.			Confidential comments deleted.	
545.	CEA	3.182.	We wonder why unexpected extreme events are a part of the premium and reserve risk sub-module rather than the non-life catastrophe risk sub-module. A double counting of risks should be avoided. As USPs are only allowed if "the assumptions underlying the standard formula are appropriate" (cf. 3.130), USPs and the standard formula parameters refer to the same model such that a proposed adjustment penalises USP. We strongly suggest treating standard formula parameters and USPs consistently, i.e. to withdraw the tau-complement.	See the resolution to the comment 265.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
546.	CRO Forum	3.182.	Please refer to our comment in Paragraph 3.85	See the corresponding resolution.
547.	Deloitte	3.182.	Please refer to our comment in Paragraph 3.85	See the corresponding resolution.
548.	EMB Consultancy LLP	3.182.	The adjustment for "unexpected extreme events and model risk" will result in a minimum standard deviation of 10%. No justification has been provided for this amount, and 10% seems onerous. Note that it is possible that an "unexpected extreme event" could already be in the data. For example, a 1 in 200 result could appear by chance in a 10 year history. Note also that no formal definition of σ' appears to be given so assume it is via the stated equation.	See the resolution to the comment 265.
549.	FFSA	3.182.	16. CEIOPS states that: "The estimate based on the undertaking-specific data shall be complemented with a reserve risk component for unexpected extreme events and model risk" 17. FFSA is strongly against this factor which should be deleted. The remarks of FFSA are the following: 18. • The credibility methodology is there to take this risk into account. 19. • This risk is highly volatile and varies a lot between companies for the same line of business depending on the business subscribed and the reserve policies. • • Why is T set to 10%?	See the resolution to the comment 265.
550.	GDV e. V.	3.182.	We wonder why unexpected extreme events are a part of the premium and reserve risk sub-module rather than the non-life catastrophe risk sub-module. A double counting of risks should be avoided: compare our comments on para. 3.37	See the resolution to the comment 265.

			As USPs are only allowed if "the assumptions underlying the standard formula are appropriate" (cf. 3.130), USPs and the standard formula parameters refer to the same model such that a proposed adjustment penalises USP. We strongly suggest to treat standard formula parameters and USPs consistently, i.e. to withdraw the tau-complement. We also note that the parameter tau is not included in any of the standard methods in CP 71.	
551.	Munich Re	3.182.	We wonder why unexpected extreme events are a part of the premium and reserve risk sub-module rather than the non-life catastrophe risk sub-module. A double counting of risks should be avoided. As USPs are only allowed if "the assumptions underlying the standard formula are appropriate" (cf. 3.130), USPs and the standard formula parameters refer to the same model such that a proposed adjustment penalises USP. We strongly suggest to treat standard formula parameters and USPs consistently, i.e. to withdraw the tau-complement.	See the resolution to the comment 265.
552.	ROAM	3.182.	The estimation of the standard deviation of the reserve risk specific to the company is completed by a load for the unexpected extreme risks and for the risk engendered by the model. ROAM considers that the methods of estimations have to include the error of estimation and the error of model. Therefore the additional inclusion of the parameter Tau is inappropriate. ROAM asks for the deletion of this supplementary load.	See the resolution to the comment 265.
553.			Confidential comments deleted.	
554.	ABI	3.183.	See comments to 3.85	See the corresponding resolution.
555.			Confidential comments deleted.	

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
556.	CRO Forum	3.183.	Please refer to our comment in Paragraph 3.85	See the corresponding resolution.
557.	Deloitte	3.183.	Please refer to our comment in Paragraph 3.85	See the corresponding resolution.
558.	KPMG ELLP	3.183.	We believe that the inclusion of the complementary parameter τ=10% is arbitrary and not fully substantiated. No concrete justification for how this figure of 10% has been arrived at is given and as such we would request further justification if this fixed parameter is to be maintained. Further to this we question the applicability of this factor across all LOBs as the extreme events mentioned would not necessarily be applicable for all lines. Furthermore, the inclusion of extreme scenarios within this scope could also be questioned given the separate modules dealing with the risk of catastrophic events, thus running the risk of double counting. Lastly, we would question the applicability of this parameter across all accident years given that extreme events such as those pertaining to asbestos would not likely be applicable to more recent accident years. We suggest the inclusion of this parameter be reviewed and justification given for any resulting value if maintained. See also 3.85.	See the resolution to the comment 265.
559.	AB Lietuvos draudimas	3.184.	We believe that many of the assumptions that underlie the models are not true in practice. For example the variance of the best estimate for claims outstanding is not often proportional to the best estimate. The use of overly complicated models for determining USPs is therefore spurious. Formulae should be kept simple.	Noted.
560.	AMICE	3.184.	See our comments to paragraph 3.154	See the corresponding resolution.
561.	FFSA	3.184.	See comment 3.154	See the corresponding resolution.
562.	GDV e. V.	3.184.	We believe that there is not an optimal alternative that should be	Agree.

			selected as the only alternative to determine USP. As a consequence, we propose to provide a set of standardised methods and allow for further alternatives not being already captured in this CP for determining USPs being proved resp. to be proved to cover the risk conceptually the same as the standard formula parameters (cf. 3.130 c)). We further propose that undertakings should be allowed to choose a standardised method per line of business instead of using the same for all lines of business. In general, we believe that the standardised method to calculate the USP should be consistent with the method used to calculate the standard parameters as much as possible. The effect of using USP instead of standard parameters should not be caused by a difference in applied methodology, in accordance with the requirements laid out in paragraph 3.19 a) and c) of this Consultation Paper. In Consultation Paper 71, 6 different methods are applied for the calculation of a reserve risk factor in a mixed fashion to calculate the standard parameters for different LoB's. Comparing these Methods to the Alternatives presented in this paper: Alternative 1 and 2 are mostly consistent with Method 2. Alternative 2 uses the same assumptions as Method 2, whereas Alternative 1 uses a different assumption for the applicable fitting approach. Alternative 2 is not fully justified, since the claim development result (CDR) is typically two-tailed while the Lognormal (LogN) is one-tailed. Hence, the maximum likelihood approach may not give relevant results. (This does not contradict using a LogN for setting the SCR since there we are only interested in one tail.)	Agree, CEIOPS proposes a set of standardised methods, however it is not in line with the Directive to use other methods not captured in the Level 2. Noted. Noted.

			Alternative 3 and 4 are mostly consistent with Method 4, where we remark that Methods 4-6 give the same final result when applied to a single company. Alternatives 3 and 4 are based on the Merz-Wütrich method of analytically calculating the variance of the one-year CDR. This result is based on the Chain-ladder method and is valid in the situation where we use a plain Chain-ladder of paid claims for our best estimate. However, in many cases the actuary would improve on the Chain-ladder by adjusting it by Bornhuetter-Ferguson, Cape cod or a similar technique; furthermore, the development factors of the Chain-ladder might be smoothed by exponential regression, a tail might be estimated by special techniques, etc. Therefore, while Merz-Wütrich might be a first approximation, it is seldom the whole story, at least not for long-tailed LoBs. We do not completely understand the difference between Alternative 3 and 4. The only difference appears to be in the use of PCO and CLPCO, where CLPCO requires the use of chain ladder and PCO apparently not. The latter definition of PCO is however inconsistent with the notation chosen in CP 71, and also seems to be inconsistent with the cited paper of Merz & Wuthrich, which is based on the use of the Chain Ladder method. When analysing the results from CP 71, for most LoB's the parameter is chosen according to Method 4-6, which would imply a preference for Alternative 3 or 4. We note however, that for LoB's where in CP 71 the parameter is chosen according to Method 1-3, this would mean that the USP would be calculated using a different method than the standard parameter, which we consider undesirable.	Noted. Noted.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
563.	Groupe Consultatif	3.184.	As per 3.51 above (i.e. would suggest alternative 1 since it is a closed form solution).	See the corresponding resolution
564.	RSA Insurance Group	3.184.	We believe that many of the assumptions that underlie the models are not true in practice. For example the variance of the best estimate for claims outstanding is not often proportional to the best estimate. The use of overly complicated models for determining USPs is therefore spurious. Formulae should be kept simple.	Noted.
565.	AMICE	3.185.	AMICE members agree that there is no restriction on the model used for the calculation of USP. We are in favor of defining general principles for applying "undertaking specific parameters" in accordance with the principles of the standard formula. However, undertakings must be able to adapt the models according to their risk profile. Undertakings have to take into account when applying USP changes in their risk profile, reinsurance programs and in pricing.	See the resolution to the comment 5.
566.			Confidential comments deleted.	
567.	CEA	3.185.	We believe that there is not an optimal alternative that should be selected as the only alternative to determine USP. As a consequence, we propose to provide a set of standardised methods and allow for further alternatives not being already captured in this CP for determining USPs, if they are appropriate. We further propose that undertakings should be allowed to choose a standardised method per line of business instead of using the same for all lines of business. A general comment is that entities should be able to make adjustments for issues such as significant changes in the underlying business, or for features of past experience that are not representative of expected future experience.	See the resolution to the comment 562.

			In Consultation Paper 71, 6 different methods are applied for the calculation of a reserve risk factor in a mixed fashion to calculate the standard parameters for different LoB's. Comparing these Methods to the Alternatives presented in this paper: Alternative 1 and 2 are mostly consistent with Method 2. Alternative 2 uses the same assumptions as Method 2, whereas Alternative 1 uses a different assumption for the applicable fitting approach. Alternative 2 is not fully justified, since the claim development result (CDR) is typically two-tailed while the Lognormal (LogN) is one-tailed. Hence, the maximum likelihood approach may not give relevant results. (This does not contradict using a LogN for setting the SCR since there we are only interested in one tail.) Alternative 3 and 4 are mostly consistent with Method 4, where we remark that Methods 4-6 give the same final result when applied to a single company. Alternatives 3 and 4 are based on the Merz-Wütrich method of analytically calculating the variance of the one-year CDR. This result is based on the Chain-ladder method and is valid in the situation where we use a plain Chain-ladder of paid claims for our best estimate. However, in many cases the actuary would improve on the Chain-ladder by adjusting it by Bornhuetter-Ferguson, Cape cod or a similar technique; furthermore, the development factors of the Chain-ladder might be smoothed by exponential regression, a tail might be estimated by special techniques, etc. Therefore, while Merz-Wütrich might be a first approximation, it is seldom the whole story, at least not for long-tailed LoBs. We do not completely understand the difference between	

			Alternative 3 and 4. The only difference appears to be in the use of PCO and CLPCO, where CLPCO requires the use of chain ladder and PCO apparently not. The latter definition of PCO is however inconsistent with the notation chosen in CP 71, and also seems to be inconsistent with the cited paper of Merz & Wuthrich, which is based on the use of the Chain Ladder method. When analysing the results from CP 71, for most LoB's the parameter is chosen according to Method 4-6, which would imply a preference for Alternative 3 or 4. We note however, that for LoB's where in CP 71 the parameter is chosen according to Method 1-3, this would mean that the USP would be calculated using a different method than the standard parameter, which we consider undesirable.	
568.	CRO Forum	3.185.	Please refer to our comment in Paragraph 3.89	See the corresponding resolution
569.	Deloitte	3.185.	Please refer to our comment in Paragraph 3.89	See the corresponding resolution
570.	DIMA (Dublin International Insurance & Management	3.185.	See 3.154.	See the corresponding resolution
571.	Lloyds	3.185.	We propose alternative 1 is preferred given that it offers a closed-form solution, whereas there may be additional complexities in the other methods.	Noted.
572.	Munich Re	3.185.	We believe that there is not an optimal alternative that should be selected as the only alternative to determine USP. As a consequence, we propose to provide a set of standardised methods and allow for further alternatives not being already	See the resolution to the comment 562.

			captured in this CP for determining USPs being proved resp. to be proved to cover the risk conceptually the same as the standard formula parameters (cf. 3.130 c)). We further propose that undertakings should be allowed to choose a standardised method per line of business instead of using the same for all lines of business.	
573.	ROAM	3.185.	ROAM, which supports the position of FFSA and AMICE on this subject, wishes that there is not a limitation on the modelling to be used for the calculation of the USP. We are in favour of general principles in agreement with the principles of the standard formula but every company has to have the possibility of adapting the models according to its profile. Every company has to take into account its evolution of the risk profile, programs of reinsurance and the policy of pricing.	See the resolution to the comment 5.
574.			Confidential comments deleted.	
575.	CEA	3.186.	In this CP, four alternatives are described in order to calculate reserve risk. There are other methods in literature to calculate reserve risk. For example bootstrap methods. Are such standard approaches excluded for calculating USP under Solvency II? If yes such limitations are not adequate.	Such methods could be used as a (partial) internal model.
576.	EMB Consultancy LLP	3.186.	Alternatives 1 and 2 effectively require a history of the expected "best estimate" reserves at each development period for each origin period. In addition to the issues mentioned in the response to para 3.203 with respect to whether this is on a discounted or undiscounted basis, it is highly likely that many companies will not have this information, since a level of prudence may have been included in the historic reserves, and as such will not be on a "best estimate" basis.	Noted.

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			Note that this was an issue with the calibration process of the standard parameters in CP 71. It is also worth pointing out that where companies use reserving techniques which implicitly result in smoothing of the reserves (such as those involving some form of credibility weighting), these options may lead to lower fitted sigmas and consequently lower capital requirements, which may be inappropriate.	Noted.
577.	ABI	3.187.	This method assumes reserve movements are normally distributed which may not be appropriate in practice. It does allow for diversification benefits on larger portfolios.	Noted.
578.	CEA	3.187.	This method assumes reserve movements are normally distributed which may not be appropriate in practice. It does allow for diversification benefits on larger portfolios.	Noted.
579.	GDV e. V.	3.187.	This method assumes reserve movements are normally distributed which may not be appropriate in practice. It does allow for diversification benefits on larger portfolios.	Noted.
580.	CEA	3.188.	This alternative should ensure that the volatility of interest rates used in discounting the best estimates is not added to the volatility of reserves.	Noted.
581.	ABI	3.194.	The second bullet seems to create difficulties, as net payment data will reflect the reinsurance applicable to the individual claim and not next year's reinsurance programme. See also comments to 3.98	See the resolution to the comment 302.

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
582.	Assuralia	3.194.	It is mentioned that "Best estimates and payments should be net of reinsurance. The data should reflect the reinsurance cover of the underwriting for the following year". Loss reserves relate to past underwriting years. The reinsurance programme to be accounted for should be the reinsurance programme in place during each past underwriting year.	See the resolution to the comment 302.
583.			Confidential comments deleted.	
584.	CEA	3.194.	It may be difficult for companies to make the required adjustments to historical data at each year end, and this could require a lot of work. For example, re-working all reinsurance recoveries to be representative of the next year, having made adjustments for inflation and to be on a best estimate basis. Reasonable approximations should be permitted.	See the resolution to the comment 301.
585.	CRO Forum	3.194.	As the reserve risk is related to prior underwriting years, we would expect in the second bullet that the data should reflect the reinsurance cover of the undertaking for the applicable underwriting year, instead of the following year.	See the resolution to the comment 302.
586.	EMB Consultancy LLP	3.194.	See response to 3.194	N/A
587.	GDV e. V.	3.194.	It may be difficult for companies to make the required adjustments to historical data at each year end, and this could require a lot of work. For example, re-working all reinsurance recoveries to be representative of the next year, having made adjustments for inflation and to be on a best estimate basis. Reasonable approximations should be permitted.	See the resolution to the comment 301.
588.	IUA	3.194.	We would suggest that this is analogous to our comment on CP71.	See the resolution to the

			If the data reflects the reinsurance cover of the undertaking for the following year then some principles on how firms can apply reasoned judgements on its reinsurance programme for the forthcoming year may be helpful. It is possible reinsurance programmes may change throughout the year, or there may be no prior experience to draw from.	comment 301.
589.	CEA	3.196.	Does give diversification benefits for larger portfolios. The lognormal assumption could be tested for goodness of fit in practice.	Noted.
590.	EMB Consultancy LLP	3.203.	By including Alternatives 3 and 4 for the calculation of the reserve risk parameters (based on the Merz-Wuthrich formula), we are grateful to CEIOPS for clarifying the definition of "reserve-risk" under Solvency II to be the standard deviation of the claims development result over 1 year, using the distribution of the expected ultimate claims after 1 year. This clarification is important since it provides a distinction between this and the standard actuarial approach to reserve risk that is based on the distribution of outstanding claims considered over the lifetime of the liabilities (not just after 1 year). As such, the Solvency II definition of reserve risk may be lower than the standard actuarial approach. A further benefit of the clarification is that there is a direct analogy to the Merz-Wuthrich formula that can be applied in simulation	Noted. Noted. Simulation methods could be used as a (partial) internal model.

			based internal capital models, giving a level of consistency between using undertaking specific parameters in the standard formula, and using a simulation-based internal capital model. In addition, a further benefit is that results from investigating reserve uncertainty under the standard actuarial approach in a simulation based internal model can also be used to investigate the 1 year view of reserve risk under Solvency II, providing a link between the two alternative views of risk. However, the Merz-Wuthrich formula has limitations, which can be overcome using a simulation-based approach (further details are described later). Despite the limitations of the Merz-Wuthrich approach, we have a preference for Alternatives 3 and 4 which seem closer to the intended reserve risk definition under the Solvency II framework. We would also raise the question as to whether undertakings would be permitted to use simulation-based methods to quantify the results for alternatives 3 and 4, perhaps with the extensions described below. All of the alternatives suggested use "PCO" (Provision for claims outstanding) as an input to the calculations, which is defined as the "best estimate". Under the Solvency II framework, the "best estimate" is defined as the expected present value of all future cash flows, ie the discounted reserves. However, because allocated investment income on the reserves held is not considered, the	Noted. Undertakings are allowed to use simulation-based methods to assess quality the results for alternatives 3 and 4, but not to derive parameters itself.

			formulae used in alternatives 1 to 4 are only applicable if undiscounted reserves are used (and the Merz-Wuthrich formula is based on undiscounted results). This should be made clear, and in fact, it would be helpful if CEIOPS always defines whether "PCO" is on a discounted or undiscounted basis whenever it is used. Note: It was necessary to calibrate the standard parameters in CP71 using undiscounted reserves. See for example CP71 sections 3.29 and 3.197. Returning to the use of the Merz-Wuthrich formula in alternatives 3 and 4, it is important to recognise that it has limitations. Specifically, the Merz-Wuthrich formula for the standard deviation of the claims development results (square root of "MSEP") was derived using the pure "chain ladder" model (without tail factors), under the assumptions of Mack's model. As such, the formula is not appropriate if: 1. Curves have been fitted and extrapolated for the estimation of tail factors for long-tailed lines 2. Assumptions associated with models other than of Mack's model have been used (for example the over-dispersed Poisson model of England and Verrall). In addition, under Solvency II, ideally we are interested in the 99.5th percentile of the claims development result, which requires a complete distribution, not just a standard deviation.	Noted.

			Using simulation based methods, it is possible to overcome all of the limitations of the Merz-Wuthrich approach, and obtain a complete distribution from which the 99.5th percentile can be obtained. Under the same assumptions as the Merz-Wuthrich approach, the two approaches are analogous. This can be obtained in the following way: 1. Given the opening reserve triangle, simulate all future claim payments to ultimate using bootstrap or Bayesian MCMC techniques. This is a standard approach that considers variability in the outstanding payments over the lifetime of the liabilities. 2. Now forget that we have already simulated what the future holds. 3. Move one year ahead. Augment the opening reserve triangle by one diagonal, that is, by the simulated payments from step 1 in the next calendar year only. 4. For each simulation, estimate the expected outstanding liabilities, conditional only on what has emerged to date. (The future is still "unknown"). This gives the distribution of expected outstanding liabilities at the one-year ahead position. 5. A reserving methodology is required for each simulation – an "actuary-in-the-box" is required. We call this "re-reserving". 6. Calculate the claims development result for each simulation (using undiscounted reserves), giving a distribution of the claims development result, from which summary statistics can be calculated (for example the standard deviation or 99.5th	

			percentile). Note that if step 1 is performed in a way that is consistent with Mack's assumptions, and the "chain ladder" method is used at step 5, then the standard deviation calculated at step 6 will be analogous to the Merz-Wuthrich formula (as used in alternatives 3 and 4 in CP 75). Note also that the standard actuarial approach to reserve uncertainty over the lifetime of the liabilities is used at step 1, which is then used to help estimate parameters under the Solvency II 1 year ahead approach. Since simulation based methods are used for the "Shock for revision risk" for benefits based on annuities, we see no reason why simulation based methods cannot be used here too, especially since they overcome the limitations of the proposed approaches. This approach was presented at the UK's annual general insurance convention (2009): the full presentation can be found at http://www.actuaries.org.uk/?a=160439. We believe that the proposed approaches in alternatives 3 and 4, using an undiscounted basis for calculating reserves for the calculation of the claims development result, without risk margins, are the most suitable out of the 4 given for reserve risk. This is due to the simplicity of the approaches, the consistency that can be achieved between the formula based SCR and simulation based internal capital models, and the link between the standard actuarial	

			definition of reserve risk and the Solvency II approach.	
591.	Groupe Consultatif	3.203.	Alternative 3 should be preferred, because this method takes into account that Solvency II is observing the volatility in one year horizon. The disadvantage of 4 is the fact that the Chain-Ladder approach might not be suitable for some LoB.	Noted.
592.	CEA	3.204.	Shouldn't it be sqrt(MSEP) = sigma * sqrt(PCO_lob)? Is PCO_lob the correct volume measure?	See the resolution to the comment 308.
593.	EMB Consultancy LLP	3.204.	See response to 3.203	See the corresponding resolution
594.	GDV e. V.	3.204.	Shouldn't it be sqrt(MSEP) = sigma * sqrt(PCO_lob)? Is PCO_lob the correct volume measure?	See the resolution to the comment 308.
595.	EMB Consultancy LLP	3.205.	See response to 3.203	See the corresponding resolution
596.	Assuralia	3.206.	It is mentioned that "Best estimates and payments should be net of reinsurance. The data should reflect the reinsurance cover of the underwriting for the following year". Loss reserves relate to past underwriting years. The reinsurance programme to be accounted for should be the reinsurance programme in place during each past underwriting year.	See the resolution to the comment 302.
597.			Confidential comments deleted.	
598.	CRO Forum	3.206.	As the reserve risk is related to prior underwriting years, we would expect in the third bullet that the data should reflect the reinsurance cover of the undertaking for the applicable underwriting year, instead of the following year.	See the resolution to the comment 302.
599.	EMB Consultancy LLP	3.206.	See responses to 3.147 and 3.203	See the corresponding resolution

Summary of Comments on Consultation Paper 75 - CEIOPS-CP-75/09 CEIOPS-SEC-177-09 CP No. 75 - L2 Advice on Undertaking specific parameters				
600.	EMB Consultancy LLP	3.207.	See response to 3.203	See the corresponding resolution
601.	CEA	3.208.	The assumptions underlying the Merz method will not always hold in practice, for example that the chain ladder result in the best estimate of future claims. We also note that these methods tended to give unrealistic results when used for the standard parameter analysis.	Noted.
602.	EMB Consultancy LLP	3.208.	See response to 3.203	See the corresponding resolution
603.	EMB Consultancy LLP	3.209.	See response to 3.203	See the corresponding resolution
604.	EMB Consultancy LLP	3.210.	See response to 3.203	See the corresponding resolution
605.			Confidential comments deleted.	
606.	CEA	3.211.	As far as we understand the very concise description in CP 49 and in the paper "QIS 3 Calibration of the underwriting risk, market risk and MCR" to which CP 49 refers, the method proposed here is in fact in line with the method used for the calculation of the standard parameter. Based on this, we agree with the proposed method. Nevertheless, should undertakings deem that other methods are more appropriate, they should be allowed to use them to derive USP for revision risk. We do note, however, that the standard factor was derived based only on data for pensions in payment for workers compensation in	See the resolution to the comment 315

			Portugal.	
607.	CRO Forum	3.211.	Please refer to our comments in Paragraph 3.115	See the corresponding resolution
608.	Deloitte	3.211.	Please refer to our comment in Paragraph 3.115	See the corresponding resolution
609.	GDV e. V.	3.211.	If undertakings should deem that other methods are more appropriate, they should be allowed to use them to derive USP for revision risk. We do note, however, that the standard factor was derived based only on data for pensions in payment for workers compensation in Portugal.	See the resolution to the comment 315
610.			Confidential comments deleted.	
611.	CEA	3.216.	The applied notation is somewhat confusing. We assume that Rev and Re v are identical.	See the resolution to the comment 320
612.	CRO Forum	3.216.	Please refer to our comments in Paragraph 3.120	See the corresponding resolution