	Comments Template on Consultation Paper on EIOPA's second set of advice to the European Commission on specific items in the Solvency II Delegated Regulation	Deadline 5 January 2018 23:59 CET
Name of Company:	**AMICE**	
Disclosure of comments:	Please indicate if your comments should be treated as confidential:	Public
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Reference	**Comment**	
General Comment	**General comment** We appreciate the opportunity to provide comments on the consultation provided by EIOPA. Our general comments are the following: **Holistic view** In Recital 150 of the Delegated Regulation 2015/35 the basis for the review of the Standard Formula is mentioned*: "In order to ensure that the standard formula*	

continues to meet the requirements set out in paragraphs 2 and 3 of Article 101 of Directive 2009/138/EC on an ongoing basis, the Commission will review the methods, assumptions and standard parameters used when calculating the Solvency Capital Requirement with the standard formula […] This review should make use of the experience gained by insurance and insurance undertakings during the transitional period and the first years of application of these delegated acts, and be performed before December 2018."

Recital 150 refers to Article 101 (2) and (3) of the Solvency II Directive. These two articles indicate the "going concern" principle and the calibration of VaR with a confidence level of 99.5% over a 12 month time horizon. However, in this Consultation Paper **there is no assessment of this holistic view and whether the changes put forward by EIOPA are appropriate**. For example, suppose that the low interest rate environment would understate the interest rate risk for a downward scenario, the low interest rate environment would overstate the risk margin (based on discounting and the impact on the capital factors related to underwriting risk and operational risk). Would the solvency position of undertakings reflect a VaR with a of 99.5% confidence level or not? Is EIOPA in a position to indicate whether there any compelling reasons for the suggested changes based on a holistic view? By changing some elements of the solvency regime and not considering the total, this equilibrium would be unbalanced and biased towards current policyholders. **We are therefore not in favour of this piecemeal approach and any change should be considered in a holistic manner**.

Inconsistencies

We have found some inconsistencies in some of the proposed changes. EIOPA uses the low yield interest rate environment to argue for the need for a change in the design of the interest rate risk module; EIOPA states that the current shock scenarios are inappropriate considering this environment. However, when assessing the risk margin the interest rate sensitivity is also just the result of using a formula. If the current environment identifies the need for a revision of the interest rate risk, this surely should trigger the need to rethink the risk margin as well.

EIOPA proposes some dramatic changes in the individual sub-risk components. Notwithstanding our comments, EIOPA has not assessed the need for a change in the correlation structure. A significant increase within mortality risk would, in our opinion, also justify a change in the correlation between mortality and longevity risk (e.g. towards -0.5). **The change in the interest rate scenarios should also result in a revision of the resulting correlation structure.**

Impact assessment

EIOPA explains that it will include an impact assessment as part of its final advice towards the European Commission. In our opinion, this impact assessment should not only look at the individual components but also at the total impact of the proposed changes. In principle EIOPA should look at all the proposed changes in the previous advices (including the UFR) and the current proposals put up for consultation. All of these should be analysed and it should be assessed whether the resulting variation in the solvency position is actually warranted.

Section 1: Recalibration of standard parameters of Premium and Reserve Risk

Medical expenses

EIOPA proposes to recalibrate the standard parameters for some LoBs to be used for calculating the premium and reserve risk. However, the medical expense line of business is so different across Europe that any calibration will not do justice to the medical expense insurance obligations.

In general, the current factor-based approach leads to a significant difference between the resulting capital requirements and the actual risk profile. One of the main differences with most other lines of business is the fact that a health care service has to be provided before a claim is actually incurred; no service implies no claim. We would like to reiterate the need for a change in the formula to reflect this and/or the **allowance of a scenario-based approach for medical expenses LoB in order to properly reflect the different risk characteristics of this LoB**

across different markets in Europe.

More transparency is also needed as to the outcomes of the different calculations performed. We would welcome the release the detailed results of the calibration exercise by EIOPA with the same format as in 2011 (see EIOPA 11/163 C Annex 6_2 Report JWG on NL and Health NSLT Calibration) and a comparison between 2011 and 2017 results of calibration exercises. Having access to all this information would be very helpful and would also give an indication about the risk heterogeneity between different markets and the potential changes inside a country if the nature of the collected data has evolved.

Section 2: Volume measure for premium risk

We welcome the analysis and clarifications provided by EIOPA in the Consultation Paper with regards the exposures to the different components of the non-life underwriting premium risk (NLUPR) notably with respect to « unexpected risk 1 » (UR1) and « unexpected risk 2 » (UR2). Nevertheless, we consider that none of the proposed options 1 & 2 are satisfactory as they maintain an unjustified excessive calibration and spurious volatility over time and across undertakings and markets, as well as an unfair treatment between one year and multiyear contracts.
Based on the clarifications provided by EIOPA in its Consultation Paper, we propose the following formula to appropriately capture the exposures to NLUPR:

$V_{PREM,s}$ = Max[P (s); P (last, s)] + Adjust_Factor x[FP (existing, s) + BETA x FP (future,s)],
With FP(existing,s) and FP(future,s) set to zero for **one year duration insurance contracts.** And Adjust_Factor set to 30% as a maximum and BETA to 50%.

Finally, basing new business $_{N+1}$ recognition dates on notification periods may be both heavily counter-effective providing wrong risk incentives and inducing a strong volatility as shown in Appendix III. It is also inadequately distorting the reality of the risk exposures in the different years. Yet, this issue would eventually be largely simplified and solved with the suggested formula above where recognition dates rightfully do not enter into play when assessing exposures to fluctuations in

	frequency, severity and timing of claims over the 1 year horizon for 1 year duration contracts. **Section 3: Recalibration Mortality and Longevity Risk** Longevity risk Given the increasing life expectancy of the population and the need for the public sector to transfer to citizens part of the longevity risk which was being assumed by governments, it is paramount to ensure that this risk can be transferred to insurers. It is therefore key to guarantee that insurance firms are not required to hold an enormous amount of capital to provide life annuities. **We support the granularity of the longevity shocks that are referenced to the age and residual maturity of the insurance contract.** We acknowledge that the current approach (20% stress for longevity risk) is a simple approach and it is easy to implement. For that reason we would like to propose **the current shock of 20% as a simplification** and the more granular shocks to be part of the standard formula for this module. Given that in some jurisdictions the mortality table used in the best estimate already includes future projections, **the shock should be corrected by an adjustment factor which would take into account whether the mortality tables already allow for future improvements in mortality.** Mortality risk Regarding mortality risk, the trend risk is not applicable to calibrate the level of the shock. Moreover, No technical evidence is provided to justify the recalibration upwards over the current 15%. **The current calibration is sufficient to cover volatility and level risk.** **Section 4: Health catastrophe risk** Mass accident risk sub-module	

- We welcome the changes made to the mass accident risk sub-module by which the "10yr disability scenario" is deleted.

Pandemic risk simplification

- We do not believe it is necessary to prescribe any simplification in the Delegated Regulation on the pandemic risk sub-module.

Accident concentration

- We support EIOPA's proposal not to provide a simplification in the Delegated Regulation on the accident concentration risk sub-module.

Section 5: Man-made catastrophe risk

Fire risk submodule

- We welcome the EIOPA's proposal for a simplification for the fire risk sub-module. However, the **fire risk sub-module should be further simplified** by reducing the number of largest exposures to be calculated from 5 to 3 for industrial and commercial risks, and by determining the exposure for residential risk with the underpin factor only because these risks are sufficiently homogeneous. .

Identification of the largest man-made catastrophe exposures on gross against net of reinsurance basis risk sub-module

- We do not support the **amendment proposed to compute the man-made catastrophe exposures on a net basis** for fire risk as it increases dramatically the complexity of calculations. We propose instead to introduce this proposal as an option in Article 132 of the Delegated Regulation, to be applied by companies for which the net approach proposed by EIOPA would improve significantly the reflection of VaR 99,5% of the fire cat loss on their own funds. For numerous insurance undertakings reinsurance programs are such that the net of RI approach at the 200m radius circle level determination stage will not yield any different bottom line fire cat risk result as compared to

the gross approach since RI layers of stop losses and aggregate covers would eventually make up for any difference, by which a defined global retention level is targeted by the insurer.

Marine risk sub-module

- We support the changes made to this module however the **proposed threshold is too low** because the value of pleasure crafts and small boats, which are not targeted by this sub-module can easily be above €100k. The threshold should therefore significantly increase to €1m (at least €500k).

Section 6: Natural catastrophe risk

- Calibration country factors:
  - the proposed country factor for Greek Earthquake risk is too conservative.
  - the proposed country factor for Finnish Windstorm is too conservative.
  - the proposed country factor for German Windstorm and Flood is appropriate.
  - the proposed country factor for Spanish Windstorm is appropriate as agreed with the Spanish industry.
  - We agree with the proposed country factor for Hungary Flood. However, we do not see the need to propose a country factor for Hungarian Windstorm given the no materiality of this module.
- Calibration zonal weights
  - the proposed zonal weights for Finnish Windstorm would have to be reviewed.

- Correlation factors
  - the correlation factors for Finnish Windstorm would have to be reviewed.
  - the correlation factors for Hungarian Windstorm would have to be reviewed.
- Contractual limits: We agree with EIOPA's proposal for an ex-post adjustment to take into account the specific exposure of undertakings that sell contract with policy conditions different than the average undertaking.
- Simplification Cresta zones: We welcome EIOPA's proposal to provide a simplification so that insurers do not have to allocate the sum insured across the different Cresta zones. We also appreciate that the proposed simplification would be allowed for both regionally concentrated and well diversified insurers. However, the option selected by which firms would have to allocate the undertaking's exposure to the Cresta zone with the highest risk weight in the region is very conservative and would hardly be used by undertakings. We would rather support **the use of the risk factor for the region without consideration of risk zones and applying a prudency factor for the undertaking's exposure**.

Section 7: Interest rate risk

We question the timing, the piece meal approach and the need for the change of the interest rate risk scenarios.The interest rate risk scenario do play a vital role in the whole determination of the capital requirement for market risk, not only by means of the own calculation of interest rate risk but also because the scenarios determine which correlation matrix is to be used. With respect to the interest rate risk, there are two dimensions to consider: the first is the size of the shock and the second is the model for the shock, i.e. how the shock depends on the level of interest rates. In order to acknowledge the concerns regarding the downward shock, we would like to propose EIOPA **refers back to the original CEIOPS's proposal** which was submitted to the European Commission in its first advice. The size of the shock is too large and it is more appropriate to implement the **CEIOPS's initial calibration at**

	100 basis points. Proposal A and Proposal B would be devastating for the life insurance industry in Europe with impacts in the SCR up to 60%% and 45%% respectively for a life insurance company. **Section 8: Market risk concentration** When calculating the market concentration risk, any participations over which control is exercised should be exempted from market concentration risk provided these participations are considered to be of a strategic nature. **Section 9: Currency risk at group level** See our detailed comments below in paragraph 9.4.2. **Section 10: Unrated debt** The approach proposed by EIOPA would imply an enormous increase in the administrative burden for insurers who are willing to use the CQS2 for these exposures. We are aware that few insurers would go the extra distance to obtain this CQS and they would simply not invest in this asset class. The criteria proposed by EIOPA would also disqualify any start-ups and new initiatives. Some of the criteria are such that almost none of the possible exposures would be able to comply with them (i.e the requirement for a semi-annually audited financial data in combination with "corporate with limited liability" would be very challenging). **Section 11: Unlisted equity** The approach proposed by EIOPA would imply an enormous increase in the administrative burden for insurers willing to use the equity type 1 for these exposures. We are aware that not many insurer will go the extra distance to obtain this category and they would simply not invest in this asset class. **Section 12: Strategic equity investments** We welcome the work conducted by EIOPA on the assessment of the application of the criteria of the Delegated Regulation for the identification of strategic equity	

investments. EIOPA acknowledges the difficulties encountered in demonstrating that the strategic equity investments are less volatile. The **need to assess the 12-month volatility criteria should therefore be removed from the Delegated Regulation**.

Section 13: Simplification of the counterparty default risk
We welcome EIOPA's assessment of the current simplifications as well as the improvements and clarifications provided on the existing criteria within the sub-modules.

Section 14: Treatment of exposures to CCPs and changes resulting from EMIR
When assessing the appropriate treatment of exposures to CCPs, EIOPA should look at the actual counterparty default risk following the CCP cleared derivatives, the structure of clearing members, and how the EMIR regulation and CCP deal with possible defaults of clearing members.

Section 15: Simplification of the look-through approach
We support EIOPA's proposal on this simplification and in particular the exclusion of the investments backing unit-linked and index-linked products from the 20% limit on the look-through approach. We also welcome the option of using the last reported asset allocation of the collective investment undertaking or fund to calculate the SCR and the allowance to use groupings of exposures when the target asset allocation is not available at the level of the needed granularity. However, we do not see the need for a specific article for applying the proposed simplified calculations. We would strongly propose this to remain within the framework provided by Article 88 of the Delegated Regulation. Additionally, where the look through approach cannot be applied there should be no requirement as to the management of the fund strictly according to the reported asset allocation since this is not required when the full look through is applied even if the subsequent asset allocation may change.

Section 16: Look-through approach at group level
We support EIOPA's proposal to make a change in Article 336 of the Delegated

Regulation so that these related undertakings are treated at group level in the same way that they are treated at solo level.

Section 17: Loss absorbing capacity of deferred taxes

In the first EIOPA advice to the European Commission, EIOPA put forward a comprehensive overview of the LAC_{DT} across Europe. However, the analysis is only based on a single real calculation of the LAC_{DT} including evidence on the methodology and assumptions used. In some Member States, the supervisory authorities have developed new guidance to be followed for coming calculations and have engaged individual insurers within the supervisory review process. The impact of these activities has not been highlighted even though they will ensure a better convergence within and across jurisdictions.

Additionally an excessive bias towards prudence in some national markets has impeded the unfolding of implementations of the LACDT with proper reflections of all features on a going concern basis; so the starting point of EIOPA's analysis should not entirely rely on currents results produced as they are biased by excessive constraints and conservative bias at supervisory national level. We would like to emphasise that the published solvency ratios of insurance undertakings should be derived from consistent components, i.e. both the numerator (the own funds) and denominator (risk based required capital) should be net of tax. Any attempt to unduly limit LAC_{DT} will destroy the consistency of the solvency ratio and also create procyclical effects. Under a going concern approach insurance undertakings should compute their SCR with the full impact of the LAC_{DT} and bearing in mind that according to the different national tax regimes the nature of the projections should enable all the features of the regime to be captured, e.g. a sufficient time horizon when carry forward is unlimited.

Although we agree with most of the principles put forward by EIOPA, we have concerns regarding the manner in which these principles might be implemented. We would favour an approach whereby EIOPA assesses on an annual basis the methodology used to calculate the LAC_{DT} and makes recommendations for the 2020 review of the Solvency II legislation, if needed.

	Section 18: Risk Margin We disagree with EIOPA's current proposal on the risk margin CoC rate but acknowledge that a solution could be achieved which would fix many of the issues that currently exist. In particular, we see that the overall risk margin should be fixed to reflect the cost of residual non-hedgeable risks only, not to force an over capitalization of certain risks and not to cause issues on pricing of long maturity products. There are several issues relating to the CoC rate proposal in that there is no future business, no market risk and a low market beta in the assumed risk margin calculation which all have a substantial effect to the CoC rate lowering it. A more suitable CoC rate is in the range of 3% to 4,5% when taking all these elements into account. This CoC rate should also bear comparison with equity risk premiums projected by insurance undertakings in their ALM models and risk management tools without incentivizing overstatements. **Section 19: Comparison of own funds in insurance and banking sectors** No comments. **Section 20: Capital instruments only eligible as tier 1 up to 20% of total tier 1** We call on EIOPA to reconsider its position and to remove the 20% sub-tier limit for subordinated mutual members accounts.	
Introduction		
1.1	**Recalibration standard parameters premium and reserve risk** *Appropriateness of formula* Combined Standard Deviation Function For premium and reserve risk, the parameter used to approximate the 99,5% quantile is equal to 3 which reflects the 99,5% quantile of a lognormal distribution. This is not consistent with the underlying distribution used to calibrate the standard deviation for premium and reserve risk.	

The capital requirement for the combined premium risk and reserve risk was computed as follows

$$\rho(\sigma) = \frac{\exp\left(N_{0.995} \bullet \sqrt{\log(\sigma^2 + 1)}\right)}{\sqrt{\sigma^2 + 1}} - 1$$

$N_{0.995}$ = 99.5% quantile of the standard normal distribution

σ = Combined standard deviation for non-life premium and reserve risk

Given that

$$\rho(\sigma) = \frac{exp(N_{0,995} \cdot \sqrt{\ln(\sigma^2 + 1)})}{\sqrt{\sigma^2 + 1}} - 1 \approx 3 \cdot \sigma$$

The formula above has been replaced by the following proxy which overstates in most cases the calibration for premium and reserve risk

$$NL_{pr} = 3 \cdot \sigma \cdot V$$

The table below shows that the simplification overstates the capital requirements for premium and reserve risk for low standard deviations (from 5% to 13%) whereas it understates the capital requirements for high standard deviations (from 14% to 19%).

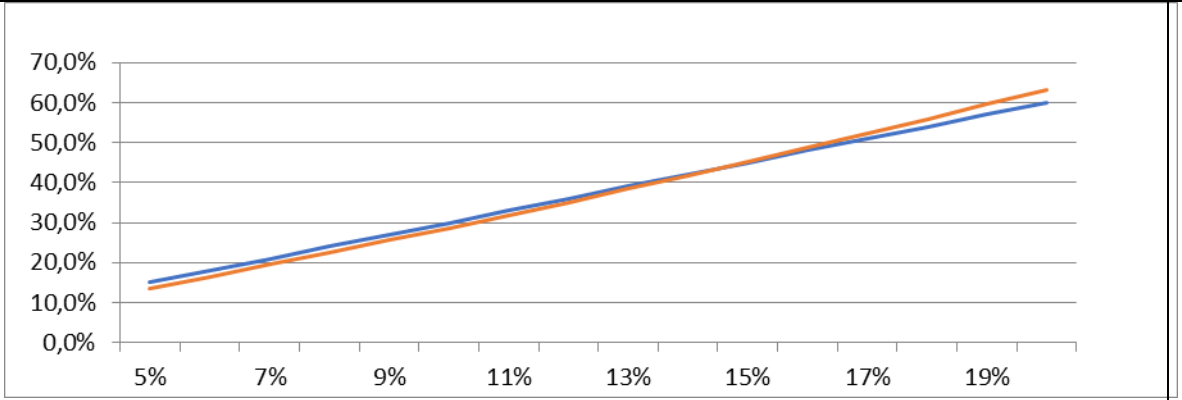
Line of Business	Standard deviation premium risk	p(sigma)	
		Simplification	Standard calculation

Medical Expenses	5,0%	15,0%	13,6%
Income Protection	8,5%	25,5%	24,0%
Worker's compensation	8,0%	24,0%	22,5%
Non-proportional health reinsurance	17,0%	51,0%	52,3%
Motor vehicle liability insurance	8 %	24,0%	22,5%
Other motor insurance	8 %	24,0%	22,5%
Marine, aviation and transport insurance	15 %	45,0%	45,2%
Fire and other damage to property insurance	6,4 %	19,2%	17,7%
General liability insurance	14 %	33,6%	32,5%
Credit and suretyship insurance	12 %	36,0%	35,1%
Legal expenses insurance	7 %	21,0%	19,4%
Assistance	9 %	27,0%	25,5%
Miscellaneous financial loss insurance	13 %	39,0%	38,4%
Non-proportional casualty reinsurance	17 %	51,0%	52,3%
Non-proportional marine, aviation and transport reinsurance	17 %	51,0%	52,3%
Non-proportional property reinsurance	17 %	51,0%	52,3%

Line of Business	Standard deviation reserve risk	p(sigma)	
		Simplification	Standard calculation
Medical Expenses	5,0%	15,0%	13,6%
Income Protection	14,0%	42,0%	41,8%
Worker's compensation	11,0%	33,0%	31,8%
Non-proportional health reinsurance	20,0%	60,0%	63,3%
Motor vehicle liability insurance	9,0%	27,0%	25,5%
Other motor insurance	8,0%	24,0%	22,5%
Marine, aviation and transport insurance	11,0%	33,0%	31,8%
Fire and other damage to property insurance	10,0%	30,0%	28,7%
General liability insurance	11,0%	33,0%	31,8%
Credit and suretyship insurance	19,0%	57,0%	59,6%
Legal expenses insurance	12,0%	36,0%	35,1%
Assistance	20,0%	60,0%	63,3%
Miscellaneous financial loss insurance	20,0%	60,0%	63,3%
Non-proportional casualty reinsurance	20,0%	60,0%	63,3%
Non-proportional marine, aviation and transport reinsurance	20,0%	60,0%	63,3%
Non-proportional	20,0%	60,0%	63,3%

property reinsurance			

Standard deviation	p(sigma)	
	Simplification	Standard calculation
5%	15,0%	13,6%
6%	18,0%	16,5%
7%	21,0%	19,4%
8%	24,0%	22,5%
9%	27,0%	25,5%
10%	30,0%	28,7%
11%	33,0%	31,8%
12%	36,0%	35,1%
13%	39,0%	38,4%
14%	42,0%	41,8%
15%	45,0%	45,2%
16%	48,0%	48,7%
17%	51,0%	52,3%
18%	54,0%	55,9%
19%	57,0%	59,6%



The rounding of the factor comes up with the most conservative impact on the HME LoB leading to a level of prudence exceeding more than 10% of the basic requirement. This overstament of the risk is particularly important given the nature of this LoB as the costs are only incurred when the medical treatment is actually provided to the policyholder. If there is no treatment, there is no costs and thus no loss. The formula does not recognise this restrictive nature within the medical expense LoB. For example, within the 12 months time horizon a hospital cannot be built up, staffed and become operational. In various countries across Europe medical care utilisation is almost at full capacity. Therefore the approach of using the volumefactor for premium risk and reserve risk is not appropriate. For other contracts there are limits on the possible claim amounts for example the policyholder is only able to claim a certain number of treatments with a medical professional. The price per medical treatment is fixed during the accident year.

Level playing field

The standard formula should provide for a level playing field across Europe according to the Solvency II legislation. To do that the risk characteristics of the various member states should be reflected in an appropriate manner. Some lines of business are very much dependent on the underlying legislation which drives the actual risks faced by both the policyholder and the insurer. This is especially the case within the

	health medical expense LoB. Most HME insurance is based on specific underlying legislation per Member State. An average European calibration does not do justice to the diverging realities and results in capital requirements which deviate very significantly from the actual risk profiles. The health medical expense LoB is also different from most other lines of business because a claim is only incurred when the policyholder has received a medical service (for example an hospitalisation, a visit to the doctor or when the patient receives medication). So, if the policyholder is not able to receive this medical service there is actually no claim incurred. In most Member States the medical sector is close to its natural boundary and the services cannot increase exponentially and without any restriction. However, this scenario is suggested by the formula used in the Delegated Regulation to determine premium and reserve risk. Also, many health insurance contracts contain limitations in the possible services insured. This further restricts the possible increases in the number and amount of claims. If we go into detail we would find more specific issues with the health medical expense line of business and further challenges to achieve a level playing field. To solve these particular issues a scenario-based approach would be desirable given its superiority to the factor-based approach. A scenario-based approach would do justice to the specific medical expense insurance contracts in each jurisdiction and would ensure a level playing field across Member States. In any case, we propose amending the factor-based approach to accommodate a restriction in the possibility for increases in the volumefactor. This restriction would be articulated by the **introduction of factor which should reflect the possibility for a cost increase based on the health csare utilisation on each Member State. This factor should be calibrated between 0 and 1**.	
1.1.1	In paragraph 20 EIOPA has described the reasons for choosing a specific Line of Business eligible for recalibration e.g. less than 100 undertakings or 20 countries. Following the table related to paragraph 22 HWC would not satisfy these criteria.	

	Furthermore see also our remarks made in 1.1.	
1.2.1	We can see in the section about the data that the sample has increased for all LoBs subject of the review except for HME where the number of companies submitting data is quite similar to that of 2011. More information is therefore needed as to why are the reasons behind the 20% increase in the sigma factor for HME.	
1.2.2	More information is also needed as to the data cleaning exercise conducted by EIOPA. This information is key to understand the significant increase in the sigmas for some LoBs. If data has been excluded from the analysis, did EIOPA provide a feedback to the providers of the information regarding the exclusion and what was the reason for it?	
1.2.3		
1.2.4		
1.3	EIOPA used the same method (Method 2) as applied in 2011. However, **insurers** using this methodology **are asked to reassess in a frequent manner whether the methodology applied is still appropriate**. **We would expect EIOPA to have a similar requirement** but following the information provided in this Consultation Paper it appears that such an assessment has not been made. We query whether the used approach is still valid for the various lines of business and whether the approach still provides appropriate capital requirements following the structure of the underlying legislation and the characteristics of the individual markets while maintaining a level playing field across Europe.	
1.3.1		
1.3.2		
1.3.3	<u>Portfolio-size heterogeneity</u> We welcome the clarification provided by EIOPA regarding the kappa factors. However more transparency is needed regarding the value of these parameters. In	

	particular we would request EIOPA to disclose: • the kappa values for the different lines of business. • the population (i.e data used) used in the calibration of kappa factor. • Confirmation that the kappa factors have been calibrated at European level and not at Member State level. EIOPA explains that the kappa factor has been defined at the European level using the full dataset and then applied at the national level. Can EIOPA provide clarification as to how the "full data set" has been obtained?	
1.3.4	The current approach does not allow country specific situations to be properly reflected. This is particularly the case for the medical expenses LoB. A level playing field does not necessarily imply "one size fits all"; a level playing field should ensure that all insurers willing to do business in a Member State will have the same approach to the calculation of the solvency capital requirements. We would recommend EIOPA to conduct a comprehensive analysis of the functioning of the health market in Europe before taking a decision about the review of the sigmas.	
1.3.5	We understand that a normal distribution is used to model the volatility of the premium risk. For HME LoB premium risk, method 2 - normal distribution provides a higher value than the USP method whose underlying distribution is the lognormal distribution. These results seem to be somewhat counterintuitive; Could EIOPA provide some reasoning for that?	
1.4	Can EIOPA provide information as to the goodness of fit carried out for the different methods? We would appreciate if EIOPA can disclose the tests carried out as in 2011 (see EIOPA 11/163 C Annex 6_2 Report JWG on NL and Health NSLT Calibration).	
1.4.1		
1.4.2		

2.1	**Volume measure Premium Risk**	
2.2		
2.3		
2.4.1		
2.4.2	We welcome the analysis and clarifications provided by EIOPA in the Consultation Paper regarding the exposures to the different components of the non-life underwriting premium risk (NLUPR) notably with respect to « unexpected risk 1 » (UR1) and « unexpected risk 2 » (UR2). This is helpful and appreciated. Nevertheless, we consider that **none of the proposed options are satisfactory as they maintain an unjustified excessive calibration,** as follows. • **Option 1** maintains an inappropriate gap in the premium volume exposures, although this gap has been criticised in EIOPA's December 2016 Discussion Paper and the majority of stakeholders acknowledged that this gap should be corrected. Furthermore, the assessment of the 99.5% quantile on a one year time horizon basis[1] of the NLUPR may imply premium exposures on several time periods beyond N+1. These exposures referred to as $FP_{existing}$ and FP_{future} in Article 116 of the Delegated Regulation should be handled with care to avoid over-calibration and adequately reflect diversification effects over time. Hence, the split between UR1 and UR2 should be properly reflected on those exposures, which is not the case in option 1. • **Option 2** still overestimates the NLUPR premium exposures beyond N+1. UR1 is overestimated on FP_{future} exposures notably because undertakings have the	

[1] See SCR definition in article 101-3 of Directive 2009/138/EC

ability to accommodate UR1 in new tariffs associated with new business. There is also a significant overestimation of NLUPR for multi-year contracts with respect to $FP_{existing}$ exposures (see Appendix I).

PART 1 : KEY FEATURES

Based on the clarifications provided by EIOPA in its Consultation Paper, we elaborate a comprehensive reasoning and deliver a formula to define more appropriately the exposures of non-life insurance contracts to NLUPR. The proposal we support and ask EIOPA to consider is the one provided below in Part 2. It is building on the features described below.

1. **We agree with EIOPA that UR2 should not apply to premiums to be earned after (N+1)**. This is indeed responding to the initial strong concern industry held while commenting on EIOPA's December 2016 Discussion Paper and identifying the over-calibration that the Delegated Regulation design of NLUPR is leading to, going beyond the one year time horizon underlying the SCR definition.

2. **We agree with EIOPA that UR2 is the main source of volatility** targeted by NLUPR on short term contracts. We note that UR1 tends to have a different impact on the volatility depending on the duration of the contract.

3. **We agree with EIOPA on the need to define an adjustment** to be applied to exposure components referring to premiums earned beyond N+1 in order to capture the proportion of UR1.

4. **We disagree on the method adopted by EIOPA to calibrate the adjustment factor** under the target to maintain the NLUPR global value at the same level as under the current Delegated Regulation design, although the latter is yielding capital requirements that are overstated (as summarized

above when rejecting option 1). This logic is flawed and results are overstated.

5. **We disagree with EIOPA on limiting the application of the adjustment factor to the sole FP_{future} component**, whereas an adjustment should also be applied to $FP_{existing}$. As illustrated in figure 2.1 of the Consultation Paper $FP_{existing}$ may only by exposed to UR1 to comply with the SCR overarching time horizon definition.

   It is important to recognise sufficiently the UR1 and UR2 components to which the different premiums exposures are submitted since exposures once derived from underlying contracts are gathered according to their period coverage irrelevant of whether they are sourced from one year or multiyear contracts. Moreover, a fair treatment of all types of contracts is key as mentioned in recital 43, "to avoid restructuring long-term contracts as short-term renewable contracts". Indeed, multi-year contracts correspond to a policyholder need and undertakings delivering these kinds of guarantees should not be charged beyond the risk they bear.

6. We want to underline that events corresponding to UR1 actually correspond to market events (e.g. change in Ogden rate in the UK, withdrawal of FGAO in annuities revaluations in case of personal injuries linked to motor insurance in France, states withdrawal from healthcare costs). **Those events are often foreseen long before they occur and known enough in advance to be accommodated for in the new tariffs associated with new premiums** or through some other type of management action. Furthermore, consequences of this kind of events being quite homogeneous on the whole market, new business price increase should not cause competition issues for insurers, and should then be quite easy to decide and manage.

Hence, we consider that as indicated in the final proposal, an additional deflating adjustment factor should be applied to FP_{future}. This would be at least 50% for multi-year contracts, considering that they are mostly issued throughout the year. The one year contract case is described in more detail in the following paragraph.

7. <u>The one year contract case</u>

Following paragraph 6 above, we would like to demonstrate that <u>for one year contracts FPf_{uture} can only always remain negligible and in fact mostly insignificant</u>.

➔ **Always negligible (4.2% of one year of earned premiums at maximum) even when <u>not</u> taking into account the insurer's ability to adapt new business tariffs to UR1 predictable events (a case we do not believe in because we consider that UR1 events are predictable as shown by the historical events displayed in paragraph 6) :**

Let us assume that on the European non-life insurance market contracts are on average issued/renewed on 1 March[2]. We can then consider that companies are on average exposed to 10/12 of UR1 (the first 2 months of $UR1_{N+1}$[3] being catered for by new business tariffs since January $_{N+1}$ and February $_{N+1}$ are past events from 1 March $_{N+1}$onwards) i.e 83%. The amount

[2] It can be considered as a reasonable assumption because many European non-life insurers (at least 50%) issue their contracts on 1 January and a large part of other insurers issue their contract on 1 April.

[3] For the sake of clarity we define $UR1_{N+1}$ as the permanent rise in cost due to an event taking place in N+1, that could potentially have an impact on $FP_{existing}$ and FP_{future} ie on premium exposures beyond N+1

of FP_{future} at exposure is equal to 2 months (ie January and February N+2). Picking up the conservative adjustment alpha factor set to 30% (see appendix I) the exposure to the non-life volatility factors calibrated by the JWG in December 2011 can be estimated as :
(a)10/12*2/12*30% = 4.2% of one year of earned premiums.

➔ **But in fact mostly insignificant, when considering the insurer's ability to adapt new business tariffs to UR1 and allowing for extreme cases by which no anticipation could be made :**

Hence, although we have shown in paragraph 6 that historical events underlying UR1 should always be known in advance to some degree to insurers, we explore the possibility of extremely rare cases by which no anticipation could be made and assess that they might represent 10% of UR1 events.
(b)This would lead the 4.2% in (a) above to drop to 0,4% on average.

Additionally we would like to underline that the demonstrations above do stand whatever the actual date at which the yearly renewal takes place. Simple examples illustrate this point in Appendix II. They also show that **the proposal displayed in Part 2 below leads to the least volatility**.

Furthermore, we point out that the Standard Formula does not comprehend the full economy of new business risk. Contracts acquired during (N+1) generate a NLUPR in the SCR as at 31/12/N whereas the related future profits are not recognized in the balance sheet. We consider that the average annual profits yielded by European non-life insurers more than compensate any small FP_{future} amounts we might find as shown in b) above.

The removal of/ or setting to zero of FP_{future} for annual contracts would only be fair and reflective of all of the above arguments.

PART 2 : PROPOSAL

For all the reasons stated above in Part 1, we propose the following as a new definition for V_{prem} in Article 116 of the Delegated Regulation :

For one-year renewable contracts :

i) $V_{PREM,s}$ = Max[P (s); P (last, s)]

ie FP(future,s) in the formula ii) below is equal to zero, which is already the case for FP(existing,s) (see appendix II)

For multi-year contracts :

ii) $V_{PREM,s}$ = Max[P (s); P (last, s)] + Adjust_Factor x[FP (existing, s) + BETA x FP (future,s)]

Adjust_Factor is equal to the proportion of UR1 within the NLUPR factor sigma and BETA an additional reduction factor to accommodate for the capacity of insurers to adapt the new business tariffs to UR1. We propose Adjust_Factor to be set to 30% as a maximum (see appendix I for more detail) and BETA to 50%.

PART 3 : COMMENTS ON THE NOTIFICATION PERIOD

In the Consultation Paper EIOPA defines the initial recognition date for new business $_{N+1}$[4] with reference to the definition in Article 17 of the Delegated Regulation.

1. **We think that this approach is not in line with the December 2011 calibration of the JWG of NLUPR volatility factors** : this work was carried out on the volatility of loss ratios by accident year taking the earned premiums on that accident year as the denominator. Defining a volume

[4] new business $_{N+1}$ stands for contracts where the initial recognition date falls in the following 12 months as from the reference date (31/12/N) ie the date at which NLUPR is computed.

measure for NLUPR different from earned premiums leads to inconsistency with the initial calibration and ultimately overestimates NLUPR.

2. **Moreover, we underline the absence of a need to refer to new business recognition dates in formula i) of Part 2**.

3. **We point out that the reference to a recognition date based on Article 17 of the Delegated Regulation for the identification of NLUPR exposures is contradictory with an earlier position** of EIOPA as in 2014 Q&A where by FP_{future} should be nil for annual contracts and reported below :

Standard_SCR	SCR.9.2. NLpr Non-life premium & reserve risk	9.9	If a company writes annual or shorter duration policies is our understanding that the company would enter zero premium into FP future correct?	Yes, this is correct understanding.

4. **We contend the fact that NLUPR should be compliant with recital 43 of the Delegated Regulation and that the economic substance should prevail over the legal form when deriving risk exposures**. See Appendix III for examples illustrating the potential for inadequate and irrelevant risk exposure definitions when based on notification periods. Notification periods are legal features that do not properly reflect the risk exposures and sensitivity. For an identical risk exposure period, there cannot be two different amounts of SCR. Otherwise, this leads to an unjustified volatility of NLUPR between insurers. The theoretical example displayed in Appendix III highlights the shortcomings (threshold effect) induced by the notification period consideration.

5. **Additionally, basing new business $_{N+1}$ recognition dates on notification periods is both strongly counter-effective and lead to huge volatility**

in the following cases : in some markets a notification period only exists when the insurer decides to review its tariffs, i.e. change the premium rates as from the renewal date. In the absence of a tariff revision, there is no notification period.

This means that an insurer would experience major changes in its NLUPR from one closing date to the other depending on its change in tariffs practice. Worse still, NLUPR would increase in times when the insurer decides to raise its rates and be on the safe side with regards UR1 and conversely, would drop when the insurer does not review its tariffs and actually faces more risks. This situation appears inexplicable from an economic point of view and illustrates that EIOPA's approach is clearly in contradiction to the principle of favoring economic substance over legal form (Recital 43 of the Delegated Regulation).

6. We underline that under both options 1 & 2 as proposed by EIOPA in the Consultation Paper the reference to notification periods to define **the recognition date of new business $_{N+1}$ would lead to major increases in NLUPR of the markets that were not considering this feature so far**.

7. By determining new business $_{N+1}$ initial recognition dates on notification periods, EIOPA aims at increasing the consistency between the prudential balance sheet and NLUPR approaches.

   This consistency makes sense as far as $FP_{existing}$ are concerned. But it does not reach its goal as far as FP_{future} are concerned. Indeed, these contracts generate a capital charge in the NLUPR that is not compensated by future profits in the balance sheet.

   Future profits from future contracts will eventually be integrated in the prudential balance sheet at N+1 closing date where they will affect the

distribution of the Net Asset Value. The 99.5th quantile of variation in Net Asset Value between (N) and (N+1), depends on the expected profitability accounted in the (N+1) balance sheet which the current approach is omitting.

We do not intend to request a change in the valuation method, because such a change would generate a major change in the Standard Formula structure which is not the purpose of this review. But we consider that this consideration points to a structural excess in prudency in the Standard Formula as far as NLUPR is concerned and that this structural excess in prudency could be compensated by a less conservative way in assessing the premium volume, as expressed in Part1.

APPENDICES

APPENDIX I : Background developments for UR1 &UR2 approaches

We disagree with the assumption that "diversification effects over time [is] taken into account in the value of expected present value of premiums to be earned". We believe that actualisation is supposed to quantify the time value of money and not the diversification effects over time. According to our studies, the impact on the 99.5th quantile of this diversification effect should lead to **take into account at most 30% of all premiums to be earned after (N+1).** -For contracts where future premiums would exceed one year, only 15% of premiums to be earned after (N+2) should be taken into account.

On the following graphs,

- ⇨ The "1/200 years event" capital charge is assessed by randomly sampling a lognormal law with mean value equal to the premium perimeter (after correcting the gap existing in the current Standard Formula) and standard error equal to the ones currently defined per LoB in the Standard Formula.

- ⇨ The "Discussion Paper Model" capital charge corresponds to the capital charge calculated with the formula proposed in the 5 December 2016

Discussion Paper issued by EIOPA.

$V=Max(P_s,P_{last}) + FP_{existing} + FP_{future}$

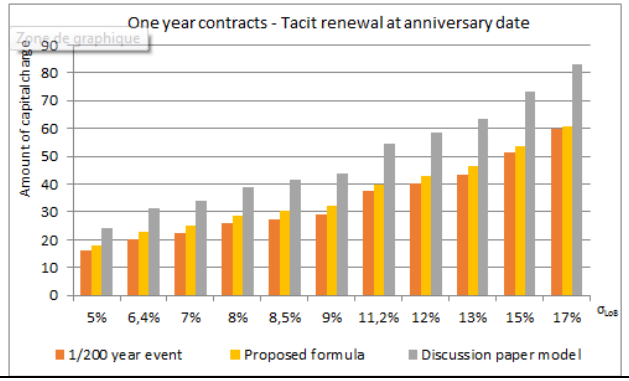
⇨ The "Proposed Formula" charge correspond to the model we propose with a view to target the "1/200 years event" capital charge with a very simple formula. It appears that two formulas could be retained :

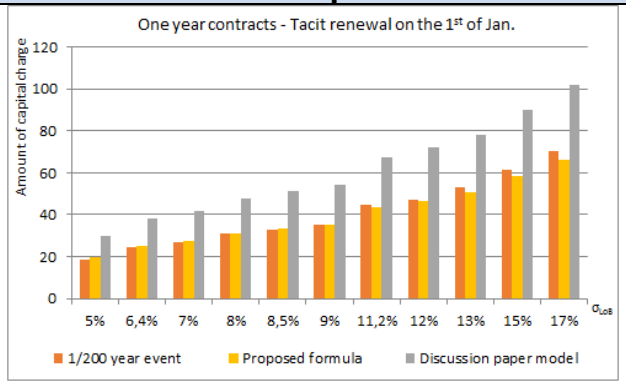
Formula with one factor – most simple one although somewhat conservative:

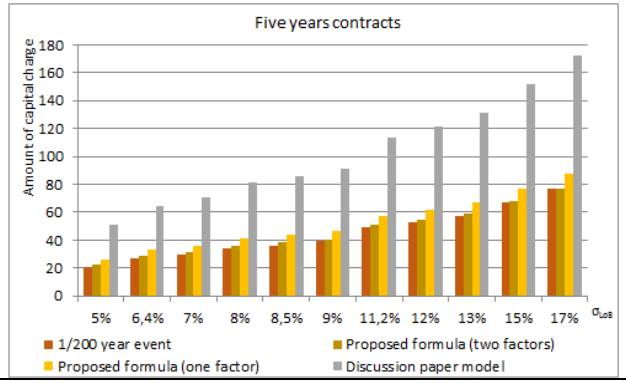
$V=Max(P_s,P_{last}) + 30\%.(FP_{existing} + FP_{future})$

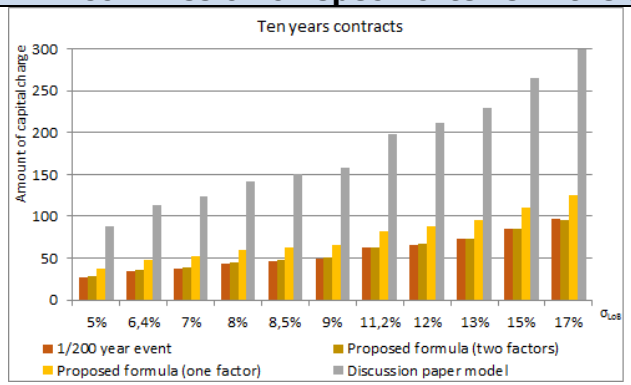
Two factors – more complex one but still very easy to integrate in the Standard Formula, and more precise on long term contracts:

$V=Max(P_s,P_{last}) + 30\%.[FP_{existing}(N+2)+ FP_{future}(N+2)] + 15\%.[FP_{existing}(>N+2)+ FP_{future}(>N+2)]$




One year contracts - Tacit renewal on the 1st of Jan.
Amount of capital charge
120
100
80
60
40
20
0
5%
6,4%
7%
8%
8,5%
9%
11,2%
12%
13%
15%
17%
σLoB
1/200 year event
Proposed formula
Discussion paper model


Five years contracts
Amount of capital charge
180
160
140
120
100
80
60
40
20
0
5%
6,4%
7%
8%
8,5%
9%
11,2%
12%
13%
15%
17%
σLoB
1/200 year event
Proposed formula (two factors)
Proposed formula (one factor)
Discussion paper model



<u>Appendix II</u> : analysis of FP(future) term according to Option 1 and Option 2 from CP and a third option, which we believe is more appropriate.

Tables and figures presented below intend to illustrate the low level that the term FP (future) should represent for one-year renewable contracts if one considers that UR1 risk cannot be fully absorbed by the insurer.

An estimate of the Vprem amount is provided according to the options 1 and 2 as proposed by EIOPA in the Consultation Paper and whatever the issue's month of the contract in N+1.

Another more appropriate way to estimate the amount of Vprem is highlighted (so called Option 2 corrected). It takes into account the real exposure period in N+1 during which an undertaking would not be able to absorb theUR1 shock if such a shock happened. **It is important to remember that it is an assumption we do not believe in because we think UR1 events are predictable and can be absorbed**.

For instance, we will consider that if a new contract is recognised in the beginning of March N+1, the undertaking will be exposed to UR1 between March and December N+1, i e during 83% of the whole N+1 period (10 months divided by 12 months). This feature is not currently taken into account by EIOPA in its proposal.

By assumption and for simplicity, all contracts already present in the portfolio at end N are renewed and the portfolio is not expected to increase in the future. This leads to Max[P(s); P(last,s)] = 100 in all cases (corresponding to the annual earned premium for an undertaking).

Results are shown with and without a notification period (2 months) and illustrates the following points:

- Options 1 and 2 lead to more volatility in volume measure of risk premium according to the month of issue.
- A more realistic vision of premium risk in N+1 tends to demonstrate that whatever the date of the contracts issued :
  - the volume measure of premium risk is stable over the year
  - the FP(existing) and FP(future) impacts are broadly the same over the year: less than 7,5% under the EIOPA's hypothesis of 30% adjustment factor and less than 5% with a 20% adjustment factor.

In the European non-life insurance market contracts are on average issued/renewed on 1 March. In this case, the impact would range between 2,8% and 4,2% according to the level of the adjustment factor.

<u>Tables and Figures 1</u> : Impact of FP(future) without taking into account a notification period

Adjustment factor alpha = 30% (left) or 20% (right)

One-year renewable contracts
without notification period

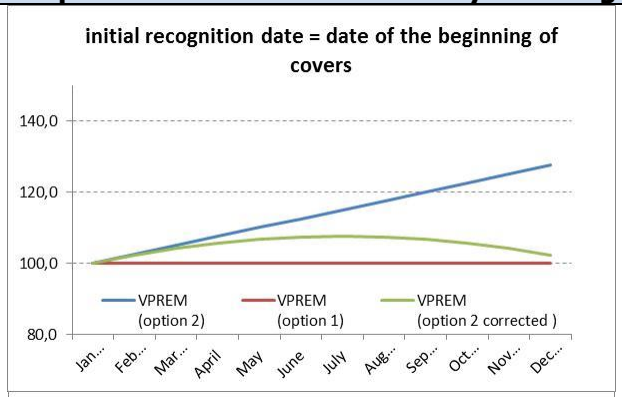
Adjustment factor - alpha	30%

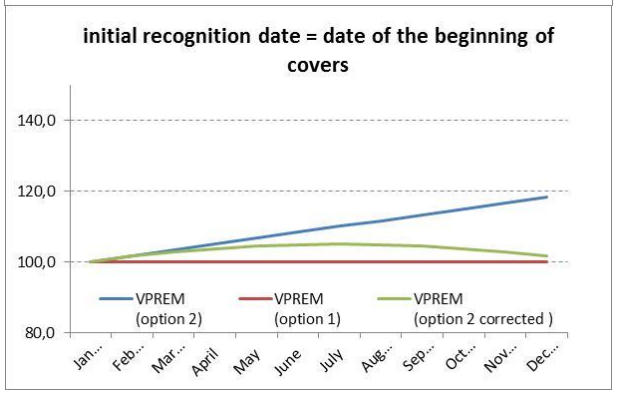
month of issue of contracts	UR1 exposure period during N+1	FP(future) option 1	FP(future) option 2	FP(existing)	max (p(s), p(last,s))	VPREM (option 1)	VPREM (option 2)	VPREM (option 2 corrected)
January	100%	0,0	0,0	0	100	100,0	100,0	100,0
February	92%	0,0	8,3	0	100	100,0	102,5	102,3
March	83%	0,0	16,7	0	100	100,0	105,0	104,2
April	75%	0,0	25,0	0	100	100,0	107,5	105,6
May	67%	0,0	33,3	0	100	100,0	110,0	106,7
June	58%	0,0	41,7	0	100	100,0	112,5	107,3
July	50%	0,0	50,0	0	100	100,0	115,0	107,5
August	42%	0,0	58,3	0	100	100,0	117,5	107,3
September	33%	0,0	66,7	0	100	100,0	120,0	106,7
October	25%	0,0	75,0	0	100	100,0	122,5	105,6
November	17%	0,0	83,3	0	100	100,0	125,0	104,2
December	8%	0,0	91,7	0	100	100,0	127,5	102,3

One-year renewable contracts
without notification period

Adjustment factor - alpha	20%

month of issue of contracts	UR1 exposure period during N+1	FP(future) option 1	FP(future) option 2	FP(existing)	max (p(s), p(last,s))	VPREM (option 1)	VPREM (option 2)	VPREM (option 2 corrected)
January	100%	0,0	0,0	0	100	100,0	100,0	100,0
February	92%	0,0	8,3	0	100	100,0	101,7	101,5
March	83%	0,0	16,7	0	100	100,0	103,3	102,8
April	75%	0,0	25,0	0	100	100,0	105,0	103,8
May	67%	0,0	33,3	0	100	100,0	106,7	104,4
June	58%	0,0	41,7	0	100	100,0	108,3	104,9
July	50%	0,0	50,0	0	100	100,0	110,0	105,0
August	42%	0,0	58,3	0	100	100,0	111,7	104,9
September	33%	0,0	66,7	0	100	100,0	113,3	104,4
October	25%	0,0	75,0	0	100	100,0	115,0	103,8
November	17%	0,0	83,3	0	100	100,0	116,7	102,8
December	8%	0,0	91,7	0	100	100,0	118,3	101,5





Explanations : (with 30% adjustment factor)
If the undertaking issues all its contracts on 1 January N+1 for an amount of 100.

Option 1: FP(future) is nil because there are no premiums above N+1. Vprem (option 1) = 100

Option 2: FP(future) is nil because there are no premiums above N+1. Vprem (option 2) = 100

Option 2 corrected: FP(future) is nil because there are no premiums above N+1. Vprem (option 2) = 100

If the undertaking issues all its contracts on 1 February N+1 for an amount of 100.

Option 1: the FP(future) term is nil because there are no premiums beyond 12 months after the initial recognition date that corresponds to the beginning of cover. Vprem (option 1) = 100
Option 2: the FP(future) term is equal to 8.3 (1/12*100) for the premium share that exceeds N+1. Vprem (option 2) = 102.5 (100 + 0 + 30% + 30% x 8.3)
Option 2 corrected : the FP(future) term is equal to 8.3 (1/12*100) for the proportion of premium that exceeds N+1. Vprem (option 2 corrected) = 102.5 (100 + 0 + 30% + 30% x 8.3)

Tables and Figures 2 : Impact of FP(future) by taking into account a notification period
Adjustment factor alpha = 30% (left) or 20% (right)

One-year renewable contracts
without notification period

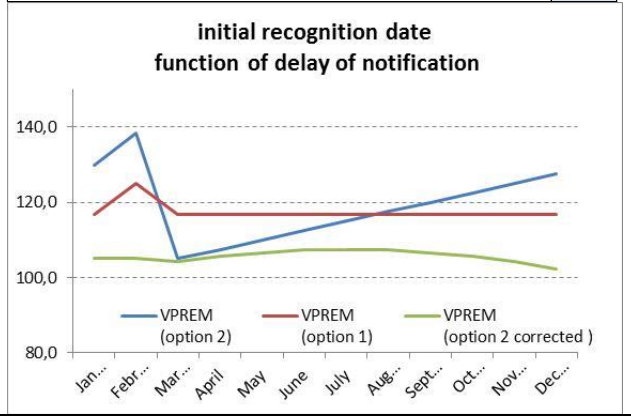
Adjustment factor - alpha	30%

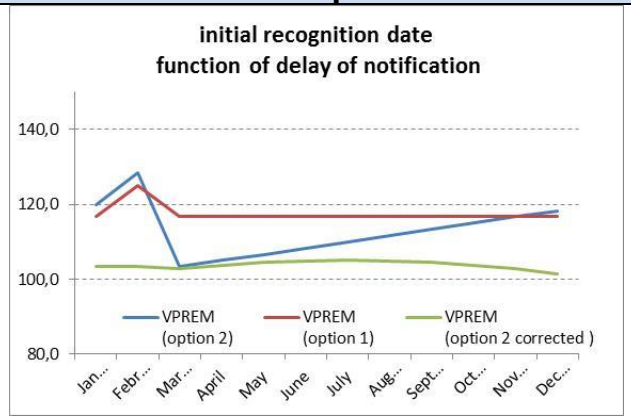
month of issue of contracts	UR1 exposure period during N+1	FP(future) option 1	FP(future) option 2	FP(existing)	max (p(s), p(last,s))	VPREM (option 1)	VPREM (option 2)	VPREM (option 2 corrected)
January	17%	16,7	100,0	0,0	100	116,7	130,0	105,0
February	8%	16,7	100,0	8,3	100	125,0	138,3	105,0
March	83%	16,7	16,7	0,0	100	116,7	105,0	104,2
April	75%	16,7	25,0	0,0	100	116,7	107,5	105,6
May	67%	16,7	33,3	0,0	100	116,7	110,0	106,7
June	58%	16,7	41,7	0,0	100	116,7	112,5	107,3
July	50%	16,7	50,0	0,0	100	116,7	115,0	107,5
August	42%	16,7	58,3	0,0	100	116,7	117,5	107,3
September	33%	16,7	66,7	0,0	100	116,7	120,0	106,7
October	25%	16,7	75,0	0,0	100	116,7	122,5	105,6
November	17%	16,7	83,3	0,0	100	116,7	125,0	104,2
December	8%	16,7	91,7	0,0	100	116,7	127,5	102,3

One-year renewable contracts
without notification period

Adjustment factor - alpha	20%

month of issue of contracts	UR1 exposure period during N+1	FP(future) option 1	FP(future) option 2	FP(existing)	max (p(s), p(last,s))	VPREM (option 1)	VPREM (option 2)	VPREM (option 2 corrected)
January	17%	16,7	100,0	0,0	100	116,7	120,0	103,3
February	8%	16,7	100,0	8,3	100	125,0	128,3	103,3
March	83%	16,7	16,7	0,0	100	116,7	103,3	102,8
April	75%	16,7	25,0	0,0	100	116,7	105,0	103,8
May	67%	16,7	33,3	0,0	100	116,7	106,7	104,4
June	58%	16,7	41,7	0,0	100	116,7	108,3	104,9
July	50%	16,7	50,0	0,0	100	116,7	110,0	105,0
August	42%	16,7	58,3	0,0	100	116,7	111,7	104,9
September	33%	16,7	66,7	0,0	100	116,7	113,3	104,4
October	25%	16,7	75,0	0,0	100	116,7	115,0	103,8
November	17%	16,7	83,3	0,0	100	116,7	116,7	102,8
December	8%	16,7	91,7	0,0	100	116,7	118,3	101,5





Explanations : (with 30% adjustment factor and a notification period equals to 2 months)

If the undertaking issues all its contracts on 1 January N+1 for an amount of 100.

Option 1: because of the delay, the company is engaged from November N+1 with future contracts for which cover begins on 1 January N+2. Hence, the FP(future) term corresponds to 2 months of annual premiums (16,7). Vprem (option 1) = 116,7 (100 +16,7)

Option 2: because of the delay, the company is engaged from November N+1 with future contracts for which cover begins on 1 January N+2. Hence, the FP(future) term corresponds to the overall annual premiums in N+2 (100) adjusted by alpha factor (30%). Hence, Vprem (option 1) = 130 (100 +30%x100)

Option 2 corrected : because of the delay, the company is engaged from November N+1 with future contracts for which cover begins on 1 January N+2. Hence, the FP(future) term corresponds to the overall annual premiums in N+2 (100).This term is both adjusted by alpha factor (30%) and the exposure period to UR1 which corresponds to approximately 17% (2 months –November and December N+1- divided by 12 months). Hence, Vprem

(option 2 corrected) = 105 (100 +17%x30%x100)

If the undertaking issues all its contracts on 1 February N+1 for an amount of 100.

Option 1: because of the delay, the company is engaged :

- from December N with existing contracts for which cover begins on 1 February N+1. Hence, the FP(existing) term corresponds to 1 month of annual premiums (January N+2) and is equal to 8,3.
- from December N+1 with future contracts for which cover begins on 1 February N+2. Hence, the FP(future) term corresponds to 2 months of annual premiums (16,7).
- Hence, Vprem (option 1) = 125 (100 + 8,3 +16,7)

Option 2: because of the delay, the company is engaged :

- from December N with existing contracts for which cover begins on 1 February N+1. Hence, the FP(existing) term corresponds to 1 month of annual premiums (January N+2) and is equal to 8,3.
- from December N+1 with future contracts for which cover begins on 1 February N+2. Hence, the FP(future) term corresponds to the overall annual premiums in N+2 (100) adjusted by alpha factor (30%).
- Hence, Vprem (option 2) = 138,3 (100 + 8,3 +30%x100)

Option 2 corrected : because of the delay, the company is engaged

- from December N with existing contracts for which cover begins on 1 February N+1. Hence, the FP(existing) term corresponds to 1 month of annual premiums (January N+2) and is equal to 8,3.
- from December N+1 with future contracts which cover begins on 1

February N+2. Hence, the FP(future) term corresponds to the overall annual premiums in N+2 (100).This term is both adjusted by alpha factor (30%) and the exposure period to UR1 which corresponds to approximately 8% (1 month –December N+1- divided by 12 months)

- Hence, Vprem (option 2 corrected) = 105 [100 + (8,3 +8% x100) x30%]

<u>Appendix III</u> : impact assessment on the volume measure of premium risk for two companies with different delays of notification but exposed to the same risk period

The example below illustrates a theoretical case with two tacit renewal contracts, renewed each year on 1 March with 2 cases (one with a notice delay of 2 months and another one with a notice delay of 2 months - 1 day). The results are presented according to options 1 and 2 and according to whether they are annual or multi-year contracts (2 years).

annual	Vprem	
	option 1	option 2
notice = 2 months - 1 day	14 months	12,6 months
notice = 2 months	16 months	17,6 months

The above table shows that there is a 2 month difference for Option 1 between the two cases and a 5-month difference for Option 2.

Multi-year (2 years)	Vprem	
	option 1	option 2
notice = 2 months - 1 day	14 months	14 months
notice = 2 months	28 months	21,2 months

	The difference is larger in the case of multi-year contracts with +14 months for option 1 and about 7 months for option 2. This approach leads to very significant differences and clearly contradicts the principle of economic substance over legal form (recital 43 of the Delegated Regulation).	
2.4.3		
3.1	**Recalibration mortality and longevity risk** EIOPA is requested to assess the costs / benefits of more granular approaches; not to consider reassessing the correlation between mortality and longevity risk is a missed opportunity. We believe that this correlation arises largely because of different ages for the two different 'products'. The proposed calibration (both at age 60) suggests that the correlation between mortality and longevity risk should be '-1'.	
3.2		
3.3	**Longevity risk** STAKEHOLDER' FEEDBACK The historical information shows that longevity changes gradually rather than abruptly. QIS4 feedback from several Member States suggested that a gradual change to inception rates and trends would be more appropriate than a one-off shock for biometric risks. We cannot find any justification for a one-off, immediate and permanent shock on the mortality rates. With regard to the calibration of the longevity stress, several undertakings have argued for an age and duration dependent treatment of longevity. reinforcing the general comments that a one-off shock is not the most appropriate form of stress for biometric risks. Stakeholders proposed prudence to take account of parameter and model risk. As a result, EIOPA has chosen to use two models. Longevity risk reflects trend risk and	

	changes in best estimates are primarily driven by changes in the assessment of trends. Uncertainty about trends should therefore be the main driving factor for longevity risk.	
3.4.1		
3.4.2	Paragraph 194: This is a crucial, incorrect and untested assumption: *Crucial:* In the underlying model, the size of the error term is independent of age, and independent of time. The only real 'model' therefore (which completely drives the results) is that risk (of all products for any one client) is one-to-one related to life expectancy. *Incorrect:* The sensitivity of liability valuation to age does not go through life expectancies: Each possible future age is presumed to contribute equally to the risk of a product of a particular client. This may be meaningful for longevity products (from a certain age onwards), but not for mortality products (that often end at, say, age 65). This leads to systematic biases. For the portfolio as a whole, this approach puts far too much weight on mortality risks at very high ages, since it is incorrectly deemed to apply to all products at all ages. In this case, we are concerned that it leads to exaggerated mortality risks. *Untested:* This assumption should have been tested. How do liability valuation risks depend on age? If changing mortality tables result in different Best Estimates, which ages are most affected? STOCHASTIC MORTALITY MODELS In paragraph 208 there is an important assumption that the error terms are independent over time (i.i.d.). This assumption should be made explicit. 1. One-year longevity risk largely arises from the fact that mortality trends are stochastic. Here, Θ is regarded as fixed, i.e. non-stochastic. Risk therefore appears in the form of parameter risk. This model is not by itself suited to capture longevity risk. One needs time-series of realistic estimates of Θ (given some estimation period). Indeed, there is a dependency between the BE estimation period and the risk estimation period. If the BE is driven by short-term histories, risk will be relatively large.	

	2. EIOPA was requested to examine granular approaches to estimate risk. This cannot do that with a model where the size of the error term is independent of age, and independent of time. The assumption 194 is crucial. 3. We wonder whether something is missing. There is a whole (t.x) matrix of η terms to be explained, but one a line-item ('t') of error-terms? We suggest that another error term dimension is needed. 4. A crucial assumption relates to the fact that the size of the risk term is independent of the logit level. Has that assumption been checked? Our guess is that higher logits lead to higher absolute risks (except perhaps at the highest levels). 'Same' applies to paragraph 209: There is an important assumption that the error terms are independent over time (i.i.d.). This assumption should be made explicit. 1. One-year longevity risk arises from the fact that mortality trends are stochastic. Here, Θ, particularly Θ1, is regarded as fixed, i.e. non-stochastic. Risk therefore appears in the form as parameter risk. This model is not by itself suited to capture longevity risk. One needs time series of realistic estimates of Θ1 (given some estimation period). Indeed, there is dependency between the BE estimation period and the risk estimation period. If the BE is driven by short-term histories, risks will be relatively large. 2. EIOPA was requested to examine granular approaches to estimate risk. That cannot be done t with a model where the size of the error term is independent of age, and independent of time. The assumption 194 is crucial. 3. There is a whole (t.x) matrix of η terms to be explained, but one two line-items ('t') of error-terms? We believe that another error term dimension is needed. A crucial assumption relates to the fact that the size of the risk terms is independent of the level of logit. Has that assumption been checked? Paragraph 209: We understand the negative correlation between mortality risk and longevity risk to be related to the stochasticity of k2. However, how would you create correlation between two trends with stochastic error terms? Also on the basis of a single age, 60?	

	DATA SELECTION AND ESTIMATION Paragraph 213: For the calibration of the trend one would have selected different historic intervals from the mortality tables: a short interval (latest 10-20 yr), a medium interval (latest 30-50 yr) or a long interval (latest 100 yr). The interval chosen is quite short and may lead to volatility or distortions in the improvement factor. Paragraph 217: How are the parameters being estimated? As indicated above, the choice of estimation period is crucial for the results. Why are the parameters only estimated once, rather than repeatedly over time? Paragraph 217: The risk dimension in this figure (downward sloping with age) is driven by the use of remaining life expectancies (downward sloping with age), and by a square-root of time formula for i.i.d. distributed mortality changes over time (here downward sloping, because young people have longer remaining life expectancies). Younger people have longer life expectancies, and hence have more i.i.d. terms added. Paragraph 221: Figure 3.2 relies on the use of life expectations as a measure of risk. Our guess is that the difference between the proposal and the current standard formula is largely driven by an (untested) assumption about the relationship between the size of the shocks and mortality rates. It would be useful to at least test this assumption. Our guess is, therefore, that figure 3.3 is purely driven by this link between the size of the error term, and the size of the logit. ANALYSIS OF RESULTS Paragraph 235: We do not believe there should be one stress for each age and each year of the projection. However not all ages should have the same longevity shock as younger ages have a higher probability of experiencing an improvement in mortality. Seemingly products with longer duration are more exposed to improvements in the mortality rates, life annuities being the extreme case. Additionally the insurance portfolios more exposed to longevity risk are those with an average age of 50 yr and	

	older. That is why the analysis should not focus on younger ages. Paragraph 236: We understand that politics has intervened to prevent younger people from paying relatively more for their retirement products. However, trend risk is greater for younger people. Arguably, higher risk costs for one group should not be offset by lower risk costs for another group. Paragraph 237: If we were to believe the life expectancy approach suggested here, the mortality stress should probably be calibrated at a lower age as longevity stress, since the average age at exposure is lower. The Figure 3.1 suggests that this implies a higher risk (longer life expectations) butlower product lives argue against that.	
3.4.3	As the mortality table plays an important role in the determination of the mortality risk and longevity risk and in the best estimate, a consistent approach is needed. However, in several member states the underlying characteristics are not the same**. In some jurisdictions the mortality table in the best estimate already includes some future projections**, which could therefore be part of the shock if compared to those jurisdictions where the mortality table does not include those future projections of possible improvements in the table. Therefore, **the shock should accommodate these differences in order to avoid an under/over statement of these risks.** EIOPA changes the scenario for mortality risk, purely based on a technical analysis (see also our comments above). The calibration was performed some years ago and a recalibration should only be warranted in the circumstances that: 1) new techniques are available which would improve the calibration; or 2) if events have taken place which would change the 1-200 scenario dramatically. To our knowledge neither of the two have occurred. GRANULARITY A 20% shock on the mortality rates implies, for example, the immediate and permanent eradication of 60% of the male deaths caused by circulatory diseases or all female deaths caused by cancer. These extreme examples ignore the fact that the	

	eradication of a disease leads to a higher prevalence of the other diseases as the causes of death are not independent. We acknowledge that the current approach (20% stress for longevity risk) is a simple approach and it is easy to implement. For that reason, we would like to propose the current shock of 20% as a simplification of the longevity risk module.	
4.1		
4.2		
4.3		
4.4		
4.5.1		
4.5.2	**Accident concentration** We would support EIOPA's proposal not to provide a simplification on the accident concentration risk sub-module. We believe that both simplifications discussed will be appropriate simplifications in many cases. Undertakings should, therefore, be able to use these approaches when determining their largest concentration risk, subject to appropriate assessment and documentation. We agree that NSAs should recognise the challenges inherent in this submodule and should provide sufficient flexibility for undertakings to make an appropriate judgement of what a suitable proxy exposure is. **Pandemic risk simplification** We do not believe it is necessary to prescribe any simplification on the pandemic risk sub-module. We would support the use of average values for numbers for medical consultations and number of days at hospital. There is no need to set out maximal unit claim costs as indicated in this Consultation Paper; Some clarification may be provided in the EIOPA guidelines, however this should not be harmonised in the Delegated Regulation as there are significant differences across jurisdictions.	
4.5.3	**Mass accident risk sub-module** AMICE had raised the concerns about the "disability that lasts 10 years" scenarios	

	due to the fact that it appears uncertain whether people who are disabled for up to 10 years would recover. We support the simplification measure to delete this scenario. As a consequence, mass-accident risk and concentration risk would only rely on 4 scenarios: accidental death, permanent disability, 1-year disability and medical expenses.	
5.1		
5.2		
5.3		
5.4.1		
5.4.2		
5.4.2.1		
5.4.2.2	**Fire risk sub-module** Not enough clarity has been provided in this Consultation Paper of the different simplifications analysed by EIOPA. We would suggest this section to be improved with the formulation of the different options as discussed in EIOPA's Catastrophe Risk Workstream: ***1.1. Retain existing volume measure i.e no change*** ***1.1.1. Description*** *No change is made to the existing modelling approach.* ***1.1.2. Discussion*** *The **advantages** of this approach include* • *The current level of risk sensitivity is maintained.* • *The concept's simplicity is retained.* • *Improvements in IT systems/programs could reasonably be expected to be*	

developed over the coming years to enable most undertakings to model the risk.

- *It would encourage improved data recording.*
- *Under this methodology, the fire risk submodule is classified as risk catastrophe event within the EIOPA Guidelines on Application of Outwards Reinsurance.*

*The **disadvantages** of this approach include*

- *There are some exposures which are still likely to be burdensome for undertakings to geocode.*
- *Different simplifications may continue to be adopted by undertakings reducing consistency across undertakings.*
- *The cost may continue to be burdensome for small and medium sized undertakings.*

This option is neither a simplification nor an alternative calculation. However, this option might remain the optimal approach.

1.2. Using the largest exposure measure with an adjustment for conflagration

1.2.1. Description

The volume measure is altered to be the undertaking's largest exposure with an adjustment made to reflect the possibility of conflagration.

The conflagration adjustment could simply be a fixed factor e.g
$\boldsymbol{SCR_{fire} = (1+X) \cdot SI_{largest\_exposure}}$.

Where $SI_{largest\_exposure}$ *= undertaking's largest exposure*
X = a factor (to be calibrated)

Alternatively, it could be based upon the undertaking's specific portfolio eg

$$SCR_{fire} = SI_{largest\_exposure} + \alpha_I \cdot Expo\_Ptf$$

Where $SI_{largest\_exposure}$ *= undertaking's largest exposure*
Expo_Ptf = undertaking's total exposure, excluding the largest exposure, in the postal code area where $SI_{largest\_exposure}$ *is located*
α_i *= factor to represent damage rate in postal code i*

It was proposed to have three damage rate factors (α_1, α_2 *and* α_3*) which would broadly be representative of building density.*

1.2.2. Discussion

The ***advantages*** *of this approach include*

- *Largest single exposure is easily identifiable*
- *Using a fixed factor as an adjustment would make the calculation very straightforward*
- *Expected to be low cost and easy to implement*

The ***disadvantages*** *of this approach include*

- *There is a loss of risk sensitivity*
- *Removal of the requirement to geocode arguably reduces the incentive for better risk management practices.*

- *Calibration of the conflagration adjustment may be complicated:*
  - *A simple factor-based adjustment is difficult to justify given the differing portfolio compositions across Europe.*
  - *A more complex approach reflecting building density in different postcodes is likely to be burdensome to calibrate and may still be theoretically difficult to justify. The use of postal codes may not be appropriate for every jurisdiction.*

EIOPA considered that this proposal satisfies the simplicity and usability criteria. However, there is substantial loss of risk sensitivity and this is the primary drawback of the proposal. In addition, there are a number of practical limitations with the proposal, including the calibration of the conflagration adjustment factors and the potential use of postal codes.

1.3. Using the simplification of QIS 5 (factor based approach)

1.3.1. Description

This approach separates the undertaking's exposure into three subcategories (residential, commercial and industrial). The total value of exposure in each subcategory is multiplied by a factor and summed. The SCR_{fire} is then set as the maximum of this value or the largest sum insured eg

$$SCR_{fire} = max\ (SI_{largest\_exposure}, \sum_x SI_x \cdot F_x)$$

Where

$SI_{largest\_exposure}$ = *undertaking's largest exposure (across all subcategories)*
SI_x = *sum insured across subcategory x*
F_x = *market wide risk factors*
X = *Residential, Commercial and Industrial*

The factors, F_x, used in QIS5 are as follows:
Residential 0.004%
Commercial 0.010%
Industrial 0.073%

1.3.2. Discussion

*The **advantages** of this approach include*

- *Increased usability as factor-based approaches are easy to apply.*
- *Reduced calculation burden as requirement to identify concentration risk is removed.*
- *Minimal implementation costs are expected.*
- *The largest sum insured underpin ensures a minimum capital requirement which is realistic (albeit arguably on the low-side ie if the underpin bites then there is no explicit capital requirement for the risk of conflagration).*

*The **disadvantages** of this approach include*

- *Loss of risk sensitivity.*
- *Removal of the requirement to geocode arguably reduces for better risk management practices.*
- *Categorisation of exposures into residential, commercial, industrial can be subjective in some cases eg a mixed residential/commercial unit.*
- *Recalibration of the factors would be required.*
- *Difficult to justify the calibration of factors result in a level of capital which is*

consistent with the aim of Solvency II.

This approach provides an alternative methodology which departs significantly from the existing calculation in terms of risk sensitivity. It does, however, provide a simple and useable calculation which could be expected to be implemented uniformly across all jurisdictions.

EIOPA considered the loss of risk sensitivity arising from the implementation of this approach to be the primary drawback.

1.4. Alter the formula to reflect market share, building density and reconstruction costs

1.4.1. Description

Another proposal put forward in response to the Discussion Paper suggests adopting a model which includes market share, building density and reconstruction costs and would be calculated as follows.

$$SCR_{fire} = \%MS \cdot \%DS \cdot R^2 \cdot NF \cdot €/m^2$$

Where
MS = market share of premiums of the undertaking
DS = density of buildings in circle area
R = radius of a circle
NF = average number of floors per building
€/m² = average cost of reconstruction

1.4.2. Discussion

*The **advantages** of this approach include*

- *Reduced calculation burden as requirement to identify concentration risk is*

	removed. *The **disadvantages** of this approach include* • *Loss of risk sensitivity as the calculation averages an entire region* • *Removal of the requirement to geocode arguably reduces the incentive for better risk management practices.* • *Loss of simplicity through increased data requirements (cost of reconstruction, average number of floors etc.)* • *Calibration of the radius of the circle is required.* • *Parameters would need to be updated regularly (average cost of reconstruction, market share of premiums).* *EIOPA did not consider this proposal to satisfy the key criteria against which the proposals are being assessed. It was noted that this may provide a useful simplification for specific undertakings but that there were a number of aspects which inhibit its usefulness more widely. In particular, the data requirements such as the density of buildings in the circle area and the determination of the average cost of reconstruction.*	
5.4.2.3	We would like to question once more the conservativeness of this module. The assumption of total a destruction within a 200 m radius is overly onerous. We insist on the need to consider a lowering in the % of destruction by using PML/EML as the basis of exposure.	
5.5.1		
5.5.2.1		
5.5.2.2		
5.5.2.3	**Marine risk sub-module** We support the extension of the tanker/platform scenario to include other vessels.	

	However, we would have some remarks regarding the scenario which is being considered, the threshold proposed and the assessment of the relevant heads of damage. About the Scenario It would be useful if EIOPA defines more clearly which scenario has to be quantified; Is it the Concordia scenario event the one to be used as a reference? Or Is an scenario about two ships, one hitting another (scenario 1); or one ship hitting an oil tanker (scenario 2), or one ship hitting an oil platform (scenario 3)? This information would help companies in assessing the cost of the scenario. Further discussion is needed as to whether for a firm insuring small vessels, a complete destruction of one boat can constitute a catastrophe disaster or if those disasters occur frequently enough to be covered by the premium and reserve risk module. About the Threshold We understand EIOPA's aim to include a cut-off point so that pleasure crafts and small boats are excluded. However, this sort of vessels are also expensive and will fall well above a 100 000 Euro - threshold. Additionally, in most countries there is a minimum liability coverage for every type of vessel (included recreation vessels / pleasure crafts). For a country with a minimum liability of 350 000 euros for example, all vessels, no matter which size or value, would fall in the scope of the marine risk sub-module. We believe this threshold should therefore be significantly increased; In our view 1M€-threshold (or at least 500 000 Euro) would be a reasonable figure. Moreover, with regard to possible scenarios defined by (scenario 1),(scenario 2) and (scenario 3) above, it is reasonable to think that pleasure crafts and small boats are not concerned by a collision with a tanker (scenario 2) or an oil platform (scenario 3). And no doubt that the scenario 1 will be taken into account by the premium and reserve risk module for these kind of boats.	

	About the relevant heads of damage EIOPA indicates in the paper that all relevant heads of damage have to be included i.e (1) costs of trying to save the vessel, (2) "Total loss" if the vessel is lost and (3) Removal of wreck. However, trying to save the vessel is normally discretionary to firms. Insurance firms ask for quotes to different specialised companies and if it is more expensive to try to save the vessel than the value of the vessel as such, firms do not try to save the vessel. It is therefore not realistic to assume that firms would have to pay 3 times the sum insured. We believe it is definitely more sensible to assume that the sum insured will be paid 2 times and not three times. We do not believe that further clarification should go to the Q&A and that there is no need either to include any reference in the Delegated Regulation.	
5.6.1		
5.7.1		
5.7.2.1		
5.7.2.2		
5.7.2.3	Identification of the largest man-made catastrophe exposures on gross against net of reinsurance basis risk sub-module We believe that EIOPA's proposal would very significantly increase the complexity for companies notably for those currently fully compliant with the Delegated Regulation whereby they proceed with the full geocoding of all their risks to determine the 200 meters radius circle with the highest fire exposure. Insurers would have to estimate reinsurance recoveries for all the circles to determine the maximum net exposure. This would be extremely burdensome for undertakings. Moreover, we believe that this task would be pointless since most of the time the end result would not materially differ where aggregate covers are in place, be it as a first or last RI layer.	

	Hence, we would urge EIOPA to consider keeping the current approach as the default approach and introducing this proposal as an option in Article 132 of the Delegated Regulation. The "gross to net approach" would have to be applied by insurance companies whose reinsurance policy is not homogeneous across their portfolio(s) and for which the proposed net approach would better reflect the VaR 99,5% of the fire cat loss on their own funds. Additionally, we would not recommend either the introduction of the "gross to net approach" to the simplification on fire risk proposed in this Consultation Paper provided the results do not materially differ; Despite being a simplification it should not be underestimated the nature of the reinsurance covers and their complexity.	
6.1		
6.2		
6.3.1		
6.3.2		
6.3.3.1		
6.3.3.2		
6.3.3.3		
6.4.1		
6.4.2		
6.4.3.1		
6.4.3.2		
6.4.3.3	**Country factor calibration** Windstorm Finland As acknowledged by EIOPA, the model was run without data for forestry. Prudency factor for forestry is too high given that property risks and forestry risks are located in different areas; Property risks are located where population is more concentrated (i.e. in Southern and Western Finland) whereas forestry risks are concentrated	

mainly in the Eastern Finland.

The "prudency factor" is 3 despite modelling experts providing evidence for a factor in a range of 0,5-2. Insurance penetration might instead limit the forestry losses; Forestry amounts to 20% of TSI; The prudency factor should therefore be a maximum amount of 1,4 (0,8*1 + 0,2*2 = 1,4). Furthermore, the more landmass has been passed by a storm, the less impact it has. Losses in Finland are definitely lower than in Sweden because of this (benchmark in historical data, e.g. Gudrun did not cause wind losses in Finland).

The country factor affects to all sum insured values in the "Fire and other damage to property insurance" LoB (i.e. mainly property and forestry); The country factor for Finland was increased because of forestry, but forestry and property concentrations are located in different areas in Finland. This can be done by taking into account the windstorm riskiness when defining the zonal weights.

Zonal calibrations

Windstorm Finland

The "provinces" of Finland can be roughly estimated as the Cresta zones first number.
Southern Finland: 0x, 1x, 2x
Central Finland: 3x, 4x
Western Finland: 6x, 90-94, 84-86
Eastern Finland: 5x, 7x, 81-83, 87-89
Northern Finland: >95

We also support the proposal to provide a zonal calibration across 19 zones for Finland.

Zonal weights |

Windstorm Finland

Given that forestry risk is overestimated on the proposed country factor, we believe that zonal weights should be lower. Western and South-Western zones in Finland are mostly property risk areas and not forestry risk concentrated; as a result, the higher country factor should be balanced via lower zonal weights.

Hungary

(1) Zone Coding

We still consider the different zone coding for Windstorm and for Flood to be a considerable problem; We therefore reiterate the need to reconcile both zonations in order to avoid firms having to produce two different types of exposure data.
The basis for the Windstorm zone codes are not provided and companies will not be able to submit the information required.

(2) Hungary Flood

We welcome the review of the Cresta relativity factors for flood for the Csongrad zone (from 19,9 to 9,70) and the City Győr (from 13,7 to 4,60).

Correlation matrices |

Windstorm Finland

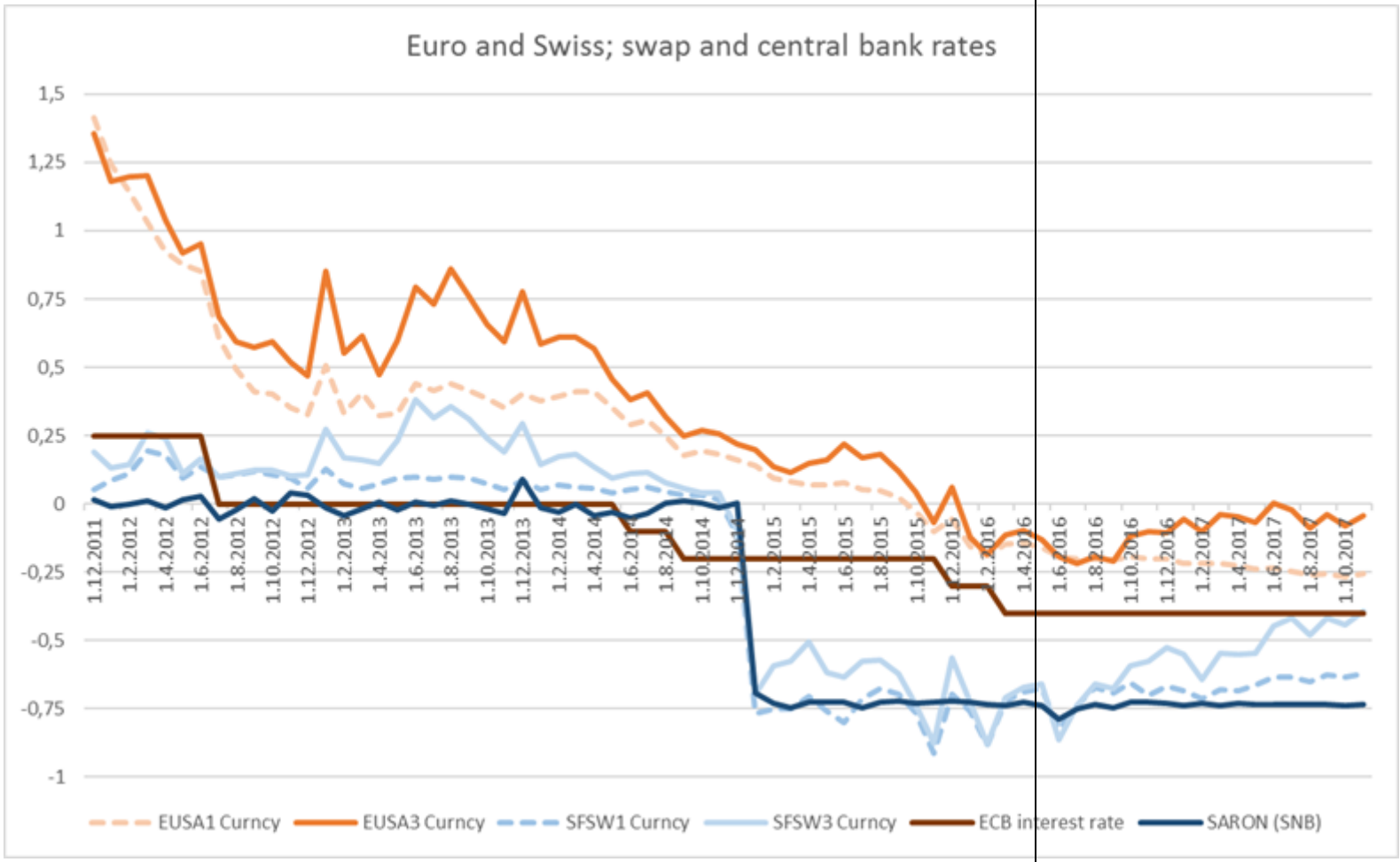
Correlations between Southern and Northern Crestas: 0,25
Correlations between Western and Eastern Crestas: 0,25
Correlations between Southern and Eastern Crestas: 0,5
Correlations between Northern and Central Crestas: 0,5
Correlations between Northern and Eastern Crestas: 0,5

We would expect the correlations between Southern and Northern Finland to be lower and the correlation between Western and Eastern Finland to be lower as well. It would also be useful if EIOPA can provide more background information as to the chosen country correlations between Finland/Norway(0,25) and Finland/Sweden (0,25); Most of the storms hitting Norway/Sweden do not reach Finland.

	Hungary Windstorm The correlation factor between the City of Miskolc (zone 17) and the City of Győr (zone 3) is 1 (both cities are within 240 km distance) whereas the correlation factor between the City of Győr (zone 3) and the county of Borsod (zone16 - *the capital of Borsod-Abaúj-Zemplén county is Miskolc*) is 0,25**.** The correlation factor between the City of Miskolc (zone 17) and the City of Budapest (zone 1), which are located within 180 km distance, is 1 whereas the correlation between Budapest (zone 1) and Borsod (zone 16 - *the capital of Borsod-Abaúj-Zemplén county is Miskolc*) is 0,5. We cannot find a valid reasoning as to why most of the correlations with the City of Miskolc are 1. Moreover, when comparing the correlations for Baranya (zone 11) and the City of Pecs (zone 12) in most cases the correlations for Baranya are higher than those for the City of Pecs despite the City of Pecs being the largest city in the Baranya county in the southern part of the country. In our view the correlation factors proposed for the City of Miskolc (zone 17) and for the County of Baranya (zone 11) seem to have been calibrated without any geographical considerations.	
6.5.1		
6.5.2		
6.5.3.1		
6.5.3.2		
6.5.3.3	**Contractual limits and natural catastrophe risk** The standard formula approach did not adequately incorporate the presence of policy conditions (indemnity limits and deductibles) for certain scenarios. We agree with EIOPA's proposal for an ex-post adjustment to take into account the specific exposure of undertakings that sell contracts with policy conditions different than the	

	average undertaking.	
7.1	**Interest rate risk** We question the timing, the piece meal approach and the need for the change of the interest rate risk scenarios. The interest rate risk scenario do play a vital role in the whole determination of the capital requirement for market risk, not only by means of the own calculation of interest rate risk but also because the scenarios determine which correlation matrix is to be used. EIOPA argues the current low interest rate environment as the main reason for the proposal for a change. Naturally, if interest rates are low the relative shocks will be low and the same goes for high interest rate environment. The calibration for the interest rate risk module was performed on historic analysis in which different economic environments were assessed, various shapes of the discount rate were observed and the resulting statistical assessment was performed on a 1-200 scenario. Low yields have been observed as from the end of the Crisis (whether or not caused by the intervention of central banks and politicians). This does not justify, however, an automatic recalibration without a more thorough analysis of the whole structure. Some questions arise in this respect: • Should all correlations be applied in a similar fashion? • Is there still a case for differences in correlation matrices between up/down ward scenarios? • How does the change influences the calculation of the risk mitigation effect within CDR-type 1 calculations, impact on tiering, etc? • How should the UFR be included in the scenarios, in particular in the wake of EIOPA's suggested change in the UFR methodology and calibration?	
7.2		
7.3		
7.4.1	The -200bps floor has been set from the lowest yields observed from CHF currency	

	at maturity point 2 years. The lowest yield was reached at -122bps below which a prudency margin of -78bps was added. However, using the CHF market as a proxy for the Euro market would need a lot of justification. The Euro area can hardly be justified as being a safe haven as the Switzerland market is. The swap rates have, in addition, different dynamics than central bank interest rates (see graph below). The correlation might be stronger but swap rates need the market behind it; two parties need to be able to find the rate that suits them both. It should be further analysed what kind of market and economy we would be looking at provided the Euro short-term rate would be set at -200bps and whether this would correspond to a 99,5% VaR. We understand that small and medium size banks might face enormous difficulties in operating in a short rate environment of -60 to -100bps. There is no doubt that such scenario would lead to a political turbulence in large scale. Therefore, the cost of holding cash should be noted as one possibly minimum level of short rates. From a practical point of view firms have allocated part of their investments to cash. The euro swap 1 or 3-years maturity has not been below the ECB rate. Additionally, the interest rate shocks beyond the last liquid point (LLP) should be a function of the earliest maturity points, just like when EIOPA calculates the risk-free rate (RFR). There is no need to design an interest rate shock calculation that cannot be in line with reality.	


Euro and Swiss; swap and central bank rates
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0,75
0,5
0,25
0
-0,25
-0,5
-0,75
-1
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1.10.2017
EUSA1 Curncy
EUSA3 Curncy
SFSW1 Curncy
SFSW3 Curncy
ECB interest rate
SARON (SNB)

	ANALYSIS Looking at the recent economic environment it can be argued that the "normal" supply and demand cycle of obtaining a discount rate (swap) is influenced heavily by interventions of the central banks. This impact has been seen for many years. It appears that the development of interest rates is more influenced by intervention of the central banks than by the normal economic behaviour. In this environment one could argue that using historic data would not properly reflect the calibration going forward. As the discount rates are heavily influenced by the central bank rates, is it realistic to consider that the actual swap interest rates are more negative than the rates of the central banks? When assessing the behaviour of central banks over a twelve month time-period a sharp decrease or increase in the interest rates cannot be observed. It is key to also take into consideration the way the new proposal would change the market, in particular the impact it would have on swap rates and interest rate derivatives. If any new proposal would give additional incentives to insurers into interest rate hedging, it could create a bubble on the interest rate derivative market which most likely would affect the underlying swap rates. This could make grow substantially the existing derivatives market and give the investment banks the freedom to profit from the price changes, forcing the insurance sector to pay. We support risk transfer into the market but there should be a balance for all parties. In the few years Solvency II has been in place, the interest rates have been at low levels and except for few regions, there has not been that much of economic appetite to start interest rate hedging on large scale. There is also no historic data indicating what would happen to the market if interest rate hedging would start on large scale. There is one example from the June 2012 euro swaps where just the difference in the Danish regulatory change in the discount rate specification caused the entire euro-swap to move 50bps for the long maturities (15 to 30 yr). EIOPA has not taken into account in its proposal of setting a lower bound for the low	
7.4.2	interest rate of -200bps that the **aftershock interest rate down risk**, assuming	

	that the risk would happen, would actually be much lower and this would actually lower the after shock SCR requirement*. If there was a real world event by which interest rates would go down as in the Proposals A or B, the (aftershock) interest risk could not, by definition, be anymore as high as before the shock*. For example, a company's interest rate (down) risk is of €500 and after all diversification this risk is of €400. However, if the shock would happen as suggested the aftershock interest rate down risk would be much lower, say €80 (€70 after diversification) because the lower bound of -200bps is nearly reached. This would result in a SCR capital relief of €330 (=€400 - €70). This impact would highly depend on the levels of interest rates and also how near the lower bound shock would bring the rates. It is therefore key that **EIOPA's proposal takes into account the aftershock SCR capital relief**, which lowers the actual interest risk and can be seen as a hedging element. **The *aftershock SCR capital relief* element would justify the no need for reviewing this module**.	
7.4.3	<u>EIOPA's advice</u> EIOPA proposes two options for consideration. Both options will in any case require more complex calculations and also will produce counter intuitive results. Concerning more specifically the Proposal B we note that the formula applies different shock methodologies on the various maturities. Nothing guarantees that such a process would allow to create sound yield curves in line with the absence of arbitrage opportunities. It is important to stress that simplicity is a key element to consider and the shocks should not be derived from excessively complex formulas. Furthermore, it could be questioned that in case the yield curve had a different shape than currently observed, whether the shock would be assumed appropriate in such circumstance. The original calibration as laid down in the Delegated Regulation and tested in the various QIS should not be changed only because of the observation of a low yield interest environment. If EIOPA has the impression that the calibration is insufficient, a total overhaul of the scenarios for market risk and the resulting correlation structure/approach should be considered. Notwithstanding the fact that we question the timing, the piece meal approach and the need for a change in the	

	interest rate risk scenario. With respect to the interest rate risk, there are two dimensions to consider. The first is the size of the shock. The second is the model for the shock, i.e. how the shock depends on the level of interest rates. In order to acknowledge the concerns regarding the downward shock, we would like to propose to EIOPA to refer back to the original CEIOPS's proposal which was submitted to the European Commission in their first advice; The size of the shock is too large and we would prefer CEIOPS's initial calibration at 100 basis points (see below). EIOPA's technical specification for the preparatory phase could be read as follows: SCR.5.26. Irrespective of the above stress factors, the absolute change of interest rates in the upward and downward scenario at any maturity should at least be one percentage point. When, for a given maturity, the initial value of the interest rate is negative, the undertaking should calculate the increase or decrease of the interest rate as the product between the s^{up} or s^{down} shock and the absolute value of the initial interest rate. We would suggest EIOPA to consider this proposal as an alternative to the proposals made, which should alleviate the concerns ion the low yield environment.	
8.1	**Market risk concentration**	
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8.4.3	When assessing the market concentration risk module, EIOPA should consider those exposure concentrations where there is an additional risk compared to the already determined capital requirements. One of the exposures where we are aware that an additional capital requirement is not warranted, are the exposures of (strategic) participations where the (re-) insurer is the one who holds all the shares. Strategic participations are included in the equity	

	risk module and therefore also subject to the market concentration risk module. However given that the (re-) insurer hold all the shares there is no need to require a capital requirement for concentration risk. The (re-) insurer has a direct interest in the participation, the participation is important for the insurer, there is an alignment of interest, and the management is not assessing this as two entities, but as one. There are some "exemptions" in Article 184 of the Delegated Regulation but these are too limited and should be extended to strategic participations and investment related undertakings (see first set of advice submitted by EIOPA to the European Commission). For groups, any intra-group transaction between the insurance and the banking entities should also be exempted as indicated in Article 184 (2) (b) (i). of the Delegated Regulation Regarding the options presented by EIOPA, we would support Option 1. The CQS is used multiple times in the formula for market concentration risk, first to determine the threshold and secondly to determine the risk factor. In the second option, only a reference to the risk factor is made.	
9.1	**Currency risk at group level**	
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9.4.2	The standard formula currently generates significant currency risk for groups operating in different currencies. This encourages hedging 'translation risk'. To the extent that currency hedges are relatively cheap (small bid-offer spread), it should be a red flag as to why so few companies actually hedge the translation risk. This suggests that something is missing in the standard formula. . We agree that hedging incurs operational risk and requires careful liquidity management and it presupposes significant liquid holdings. However, there are two more fundamental reasons why a one-year approach does not match the way companies manage currency risk:	

(1) Currencies are generally mean-reverting (purchasing power parity). Given that most currency-exposure is driven by strategic holdings, this suggests that a longer-term perspective is appropriate. Insurers are not willing to manage currency exposure of strategic holdings on a one-year basis.

(2) To the extent that currency exposure arises from strategic holdings in foreign affiliates, it should be noted that local currency Own Funds may move up and down with a currency but so does local SCR (in the reference currency). Managing risk involves more than just looking at own funds volatility.

The EIOPA feedback statement focuses on this second element. EIOPA is correct in its criticism of the current feedback proposals. We would like to provide an amended proposal that takes account of this shortcoming:

(group OF -/- group SCR)before shock -/- (group OF -/- group SCR) after shock.

The terms (group OF)before shock -/- (group OF)after shock correspond to 25*(Expfi -/- local liabilities), see paragraph 579.

The terms (group SCR) before shock -/- group(SCR)after shock capture the impact of currency on group SCR. You can think of it as '25*(local SCR)' from paragraph 579 after diversification at the group level.

The proposal captures two ideas:
- Account is taken of the FX impact on SCR. This corrects for the fact that Solvency II only considers the impact on OF (ex RM), implicitly assuming SCR constant. You can think of this term as a first-order correction of the Solvency II ratio for changes in SCR.
- Allowance is made for diversification. If local SCR diversifies significantly at group level, benefits from this SCR correction will be minimal. If local SCR is considered to be 'non-fungible', maximum benefits arise. Currency risk is largely neutralised.

Two main issues with this proposal:

	- It formally corrects for a systematic weakness in Solvency II. In Solvency II, risk is only assessed based on Own Funds (ex Risk Margin). The implicit assumption is that the SCR is (relatively) constant. This could be the first time that the assumption is formally dropped. It could therefore lead to more changes. - Re-assessing the SCR after a currency shock could be a little complex. Obliging all firms to do this, whether FX exposures are large or small, could be somewhat burdensome.	
10.1	**Unrated debt**	
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10.4.2.4		
10.4.2.5		
10.4.3	The approach proposed by EIOPA would imply an enormous increase in the administrative burden for (re-) insurers who are willing to use the CQS2 for these exposures. We are aware that not few insurers would go the extra distance to obtain this CQS, they will simply not invest in these asset classes. The criteria proposed by EIOPA will also disqualify any start-ups and new initiatives. Some of the criteria are such that almost none of the possible exposures would be able to comply (i.e the requirement for a semi-annually audited financial data in combination with "corporate with limited liability").	
11.1	**Unlisted equity**	
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11.4.3	The approach proposed by EIOPA would imply an enormous increase in the administrative burden for (re-) insurers willing to use the equity type 1 for these exposures. We are aware that few insurer would go the extra distance to obtain this category, they will simply not invest in these opportunities.	
12.1	**Strategic equity investments**	
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12.3.2	Information on the criteria of Article 171 of the Delegated Regulation We welcome the work conducted by EIOPA on the assessment of the application of the criteria of the Delegated Regulation for the identification of strategic equity investments. EIOPA acknowledges the difficulties encountered in demonstrating that the strategic equity investments are less volatile. The need to assess the 12-month volatility criteria should therefore be removed from the Delegated Regulation.	
12.3.3		
13.1	**Simplification of the counterparty default risk**	
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13.4.3	The relative significance of the counterparty default risk module EIOPA compares the relative importance of this module with QIS4. However, this is a flawed analysis. The earlier QIS exercises were meant to test alternative approaches and the calibration but since QIS4 many elements have changed in the Solvency II framework. Therefore this comparison is not correct. The QIS exercises were also	

very much biased towards bigger companies as smaller companies generally did not participate in the studies.

The Counterparty default risk module also depends on the development of the economic balance sheet and it can also be considered to be volatile. These features would have an impact on the relative size of this risk compared to the BSCR.

Treatment of derivatives in the counterparty default risk module

Moreover, if all derivatives are included in the CDR module, it should be made very explicitly that they are not to be treated in the spread risk and market risk concentration risk in the market risk module in order to avoid duplications of capital requirements.

Calculation of the loss-given-default on derivatives

Regarding the hedge strategy, we would agree with the change in definition proposed by EIOPA. Thus, assessing the total rather than the individual derivatives should be allowed. We also agree with the proposed changes in the calculation of the LGD on derivatives.

Clarification of the calculation of the hypothetical SCR

In the clarification of the hypothetical SCR, EIOPA should indicate how undertakings should assess the impact of the "change in sign" within the interest rate risk and the resulting change in the correlation matrix if this is not consistent with the actual dominant interest rate scenario. For example when the larger capital requirement for interest rate risk is derived from the interest rate up scenario but the interest rate risk in the hypothetical SCR calculation for a given type 1 exposure is derived from the interest rate down scenario.

Simplified calculation of Article 192(2) of the Delegated Regulation

We welcome the simplification proposed but the level of prudence introduced will limit its application.

	Simplified calculation for the risk mitigating effect of reinsurance arrangements We welcome the introduction of this simplification for the risk mitigating effect of reinsurance arrangements and its adaption to be more in line with the current design of the standard formula. We would like to reiterate however that this simplification should remain optional for undertakings.	
14.1	**Treatment of exposures to CCPs and changes resulting from EMIR**	
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14.4.3	Exposures to CCPs When assessing the appropriate treatment, EIOPA should look at the actual counterparty default risk following the CCP cleared derivatives, the structure of clearing members, how the EMIR regulation and CCP are to deal will possible defaults of clearing members, etc. This implies, the recovery rate and LGD will be significantly different compared to non-centrally cleared derivatives. The risk of non-recovery is very slim as the various "lines of defence (risk waterfall)" is introduced: 1) entry criterion set by the CCP for Clearing members; 2) Margin required by Clearing members to the CCP; 3) Default funds/clearing fund; and 4) other financial measures of the CCP. These "lines of defence" actually reduce the LGD significantly and should be factored in the capital requirements. Reference to an "A" rated bank is not reflecting this "lines of defence". Either the risk should be zero or reference should be made to a "AAA/AA" rated bank to reflect the effects of the "lines of defence". Possible implications for the calculation of the Loss-Given Default The F'-factor should also reflect the "lines of defence", the argument that the 90% should be unchanged does not reflect all the additional safety measures in the case	

	of a default of a clearing member versus the bilaterally cleared derivatives without the additional safety measures as required by EMIR. By not changing the F'-factor, there is no additional incentive for central clearing based on the effects of the standard Formula. One could even question the additional requirements following the EMIR legislation of for example the effects are not reflected in the LGD and F'-factor.	
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15.4.3	**Simplification Look-through** We support EIOPA's proposals on simplifications and in particular the exclusion of the investments backing unit-linked and index linked products from the 20% limit on the look-through approach provided the market risk on those assets is negligible (i.e unit link and index linked assets backing liabilities without guarantee). We also welcome the possibility to use the last reported asset allocation of the collective investment undertaking or fund to calculate the SCR and the allowance to use groupings of exposures also when the target asset allocation is not available at the level of the needed granularity. However, we do not see the need for a specific article for applying the proposed simplified calculations. We would strongly suggest to stay within the framework provided by Article 88 of the Delegated Regulation which indicates that a simplified calculation leading to a SCR which exceeds the SCR that results from the standard calculation is regarded as proportionate. The proposed simplifications already contain a significant level of prudence, no additional requirements are therefore needed. Additionally, where the look through approach cannot be applied there should be no requirement as to the management of the fund strictly according to the reported asset allocation since this is not required when the full look through is applied even if the subsequent asset allocation may change.	
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16.3.3	**Look-through group level** We support EIOPA's proposal to make a change in Article 336 of the Delegated Regulation so that these related undertakings are treated at group level in the same way that they are treated at solo level. As indicated in EIOPA's paper, this would mean that where there is look-through at solo level, there should be look-through at group level and where there is no look-through at solo level because of the simplification in Article 84(3) of the Delegated Regulation, then there is also no look-through at group level.	
17.1	**Loss Absorbing Capacity of Deferred Taxes** In paragraph 1258 EIOPA states "*EIOPA has provided evidence that National Supervisory Authorities (NSAs) have similar approaches with respect to more than 75 % of almost 100 billion euros in LAC_{DT} across the EEA, which is the part of LAC_{DT} where likely utilisation is being demonstrated by a net deferred tax liability (DTL) on the balance sheet. While recognising that positive position, with respect to the remaining part of LAC_{DT} where likely utilisation is being demonstrated by future profits, NSAs do have different approaches. Where carry-back is applicable in the tax regime NSAs also allow for its use to demonstrate likely utilisation of LAC_{DT}, increasing the 75 % of LAC_{DT} where supervisors have similar approaches*." It appears that different approaches are used, however the approach taken per member State is very much depended on the actual fiscal situation and resulting deferred tax position on the Economic Balance Sheet. The deferred tax position on the accounting Balance sheet and Economic Balance Sheet will require a more advanced approach to determining and evidencing the LAC_{DT} for the various insurers. The existence of a (big) $_{net}$DTL requires a less sophisticated approach as the impact of the LAC_{DT} shock can be absorbed by a reduction in the $_{net}$DTL. Mostly a netDTL is directly related to the fiscal regimes and the manner in which ALM/RM is performed. If a $_{net}$DTA is recognised a more advanced approach is needed to demonstrate the	

possibility to recognise the LAC_{DT}. However, this still does not indicate different or divergent approaches are taken.

When assessing the ability to recognise and evidence the LAC_{DT}, several principles following the Solvency II legislation has to be considered:

- According to Article 102(2) of the Directive 2009/138/EC: The Solvency Capital Requirement shall be calculated on the presumption that the undertaking will pursue its business on a going concern basis. This indicates that if the insurer is able to demonstrate it has sufficient capitalisation to cover the solvency capital requirements, the insurer would still be able to sell insurance products and generate future earnings.
- In Recitals 6 and 8 of the Regulation 2015/35 reference is made to IFRS standards as endorsed principles and guidance regarding the recognition of deferred taxes. This indicates that amongst others IAS 12 has to be used when recognising deferred taxes.
- In the " Guidelines on recognition and valuation of assets and liabilities other than technical provisions", EIOPA stated in section 1.15 that the principles of IFRS have to be followed.
- In Guideline 9 of the same document EIOPA provides guidance as to how assess deferred taxes. Amongst others:
    - " when making projections of taxable profits, these projections are both credible and broadly consistent with the assumptions made for other projected cash flows. In particular, the assumptions underlying the projections should be consistent with those underlying the valuations of technical provisions and assets on the solvency balance sheet."
      This indicates that the (re-) insurer should use for example not deviate from the lapse assumptions, expense assumptions, etc made in projecting the cash inflows and outflows.
- In the Table: Consistency of IFRS Valuation with Article 75 of the Directive, EIOPA states regarding IAS 12 that the Standard is consistent with the Directive and is applicable.

In paragraph 1262 EIOPA indicates "*EIOPA has observed a wide range of judgement*

	involved in the part of LAC_{DT} that relies on projecting the future profits estimated after the bSCR shock loss. Subjectivity in itself is not a problem as valuations for the Solvency II balance sheet and SCR calculations require expert judgement. However, typically expert judgement for the balance sheet valuations and SCR calculations result in a relatively small range of possible outcomes for similar assets and liabilities and risks. With respect to the part of LAC_{DT} that is demonstrated by future profits, supervisors have observed a wide range of assumptions and outcomes for similar undertakings*. " As the Solvency II legislation came into force only in 2016 there is really limited experience on the calculation of the LAC_{DT}. Several NSAs have provided guidance during 2016 or even in 2017 guiding the determination and evidence of underlying the LAC_{DT}; In such a context initial differences can arise. However, these differences will become gradually smaller as (re-) insurers will have to explain their approaches to the various stakeholders and align the assumptions with those assumptions used elsewhere by the (re-)insurer such as the dividend policy, ORSA, budgets, financial statements and mid-term capital planning. In our opinion it is too early to make decisive comments on diverging practices. Additionally, as the LAC_{DT} involves "expert judgment" a clear involvement of the AMSB is needed together with a good supervisory review process between the (re-) insurer and its supervisor. As indicated by EIOPA, the LAC_{DT} depends on the actual risk profile, the duration of assets and liabilities and the fiscal regimes. However, the actual LAC_{DT} also depends on the risk appetite of the (re-)insurer, the characteristics of the (re-) insurer and the approach towards the stakeholders. For example listed insurers would apply a different approach towards recovery measures from mutual insurers, the priorities would be different and the resulting impact on the Solvency position (also after stress) would be different, having again a different impact on future earnings. Therefore a good supervisory review process is needed and not "one size fits all". In the SRP, an alignment with other processes within the (re-)insurer should be sought, minimalizing the expert judgement. In paragraph 1264, EIOPA states that is unclear how EIOPA will proceed in producing	

	"proposals for advice", "opinion", "recommendations" or "guidelines". In our opinion, EIOPA should refrain from additional guidance on top of the current practices applied by NSAs. Currently only one formal calculation (not considering the Day 1 reporting) exists on which the supervisory review process has been performed or is still in process of exchanging views. Following this SRP, inappropriate methodologies or assumption setting will be removed or adjusted. The involvement of senior management, alignment with other processes and the SRP will ensure a proper calculations and evidence of the LAC_{DT}. The LAC_{DT} should be based on the unique characteristics of the (re-)insurer (governance, risk profile/appetite and various policies), factor in the difference of the tax regimes and the resulting consequences and should be in line with the original underlying assumptions of the Solvency II legislation and calibration.	
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17.4.2	**Key principle 1 – Role of compliance with the MCR and SCR after shock loss** We generally agree with Principle 1. This principle indicates that the compliance with MCR and SCR plays a role in the determination of LAC_{DT}. A (re-) insurer that does not meet the MCR and/or the SCR after a shock event, should evidence how the going concern is fulfilled. Which recovery measures within the set periods are required and what is the impact of these measures on future taxable profits, fully in accordance with the Articles 138 and 139 of the Directive 2009/138/EC. We agree with this principle. However, we do not agree that a prescribed formulaic approach as set out is appropriate as it does not reflect the specific circumstances of individual (re-) insurer. Whilst such a formula may be appropriate for smaller undertakings that are not able or willing to reflect specific circumstances, it should not be prescribed in general. In case a formulaic approach is applied as a simplification, it should reflect the own funds after shock including the impact of recovery measures as set out in the recovery plan. **Specific comments regarding principle 1**	

	In paragraph 1298, EIOPA assumes that the breach is the result of lapses which is a non-evidenced assumption. The LAC_{DT} shock is based on underlying scenarios caused by the risk profile of the (re-) insurer (based on the relative importance in the BSCR*). For example for a well-diversified (re-)insurer, the underlying lapse scenario is not the most damaging scenario. **Key principle 2 – Future profits stemming from new business – projection assumptions** In this section, EIOPA presents principles regarding "future profits stemming from new business" and the "projection horizon of future profits stemming from new business". When assessing new business, EIOPA should differentiate between new businesses which are acquired outside the existing portfolio (new policyholders) and new business stemming from policy renewals in the existing portfolio (current policyholders). The uncertainty of these two categories is different. For renewals, the (re-)insurer has to assess first the impact of the underlying lapse scenario (and relevant other scenarios) and will project future renewals based on the post-shock policyholder base. The future lapse assumptions should be consistent with the lapse assumptions made within the best estimate. The planning/projection horizon for renewals should be consistent with these assumptions. In our opinion, renewals of existing policies from existing policyholders should not be assessed similarly as new business from new customers. **Specific comments regarding principle 2** In paragraphs 1305 and 1307 EIOPA provides statement regarding "optimistic" and "pessimistic" views and characterized these as non- justified following its risk profile and risk appetite. It is very much unclear how EIOPA comes to these statements based on the information provided. Furthermore this statement is based on one data point only. In paragraphs 1308-1313 EIOPA discusses "future profits stemming from new business" and in paragraphs 1314-1325 the "projection horizon of future profits	

	stemming from new business". In considering new business, EIOPA should distinguish between new business from consumers and new business from renewals. The uncertainty of both will be different. The (re-)insurer has to assess first the impact of the underlying lapse scenario before projecting future renewals based on the post-shock policyholder base. The future lapse assumptions should be consistent with the lapse assumptions made within the best estimate. Any resulting business horizon for renewals should be consistent. **Key principle 3 – Future profits stemming from new business – projection horizon of future profits stemming from new business** We agree with the principle that the determination of future profits from new business should reflect the situation after a shock event. We also agree that the uncertainty has increased after a shock event (see the comments on principle 2 where we indicate that the uncertainty is different for renewals and other forms of new business). However, we do not agree that this uncertainty should be addressed by setting arbitrary limitations such as applying a 50% haircut or a limitation to a 5 year time horizon. These limitations do not reflect the actual circumstances of the (re-) insurer. **Specific comments regarding principle 3** In paragraph 1315 EIOPA uses the consequence of the lapse shock. However, following the LAC_{DT}shock the full impact of the lapse scenario is already captured in the economic balance sheet and the own funds. The impact on cost loadings and future earnings over the remaining contract duration is already calculated and incurred. Furthermore, EIOPA should consider the lapse scenario following the underlying scenario e.g. the relative importance of the lapse scenario in the BSCR*. EIOPA uses a cap in their implementation of key principle 3, however no justification is provided regarding this threshold. The proposed cap will increase procyclicality as a negative cycle is prolonged in the LAC_{DT} calculations. EIOPA should differentiate between real new business ,new policyholders and renewals (see also above). Several insurance products sold by insurers are directly related to other legislation.	

	For example, a policyholder who owns a car will have to have a motor insurance policy; in many jurisdictions several insurance is mandatory if a house is owned, etc. Therefore, even in more severe shock scenarios, these insurance would still be sold as seen after the 9/11 event and following the 2008-2010 credit/euro crisis. **Key principle 4 – Future profits stemming from new business – projection horizon of new business sales** We agree with the principle that the horizon over which new business can be projected should reflect the relevant uncertainty. However uncertainty should be expressed within the relevant assumptions, not by arbitrarily limiting the length of the projection horizon. We disagree with the assumption that the period of the projection horizon in a business plan is a relevant period for LACDT. The business plan serves completely a different purpose and is therefore normally restricted to 3 to 5 years. For the determination of LACDT it is necessary to determine taxable profits over a period that corresponds in a way with the run-off of the portfolio. For new business sales a limitation of the projection horizon- dependent on the type of new business - might be reasonable, we strongly disagree with using a business plan horizon as a general principle for determining taxable profits. **Specific comments regarding principle 4** In paragraphs 1321-1325, EIOPA describes in the key principle 4 the "*projection horizon of new business sales*". EIOPA proposes in 4a to limit this to the business planning horizon. However, the new sales are also part of the mid-term capital plan (as part of the ORSA) and this requires a longer horizon than 3 years. New business (sales) is also a feature within the IFRS Impairment testing of Goodwill (if appropriate and recognised on the accounting balance sheet). In these tests, which are also subject to audit, longer business horizons are used (normally up to 10 years). **Key principle 5 – Future profits stemming from return on assets** We agree with the fact that future returns on assets should take into account the shock loss for market risk and ist impact on the economic environment. We also agree that assumptions taken pre-shock and post shock should be consistent with	

	assumptions taken in the measurement of the technical provisions regarding cost/expense assumptions, lapse assumptions etc. In the projections the own principles on the capital adequacy policy and dividend policy should be taken into considerations to reflect the interest of all stakeholders of the (re-) insurer. However, we disagree with the possible implementation to reflect the uncertainty. The manner to deal with uncertainties is not to reduce the excess returns to the forward rates. (Re-) insurers should be able to evidence the excess returns in the post-shock area. Normally one would assume these shocks not the exceed the pre-shock excess returns. Historic evidence shows that also after extreme events the excess returns are higher than the forward rates. In a going concern, setting the excess returns at the forward rates is too extreme and not reflective of the actual economic circumstances (based on the underlying scenarios). Many (re-) insurers who have an internal model for market risk have reflected the long data series and the derived total returns in their assumption setting within that internal model. Reducing uncertainty is to require consistency of this assumption setting with other processes within the (re-) insurer and ask for a well-designed governance procedure and transparency towards the supervisor. **Key principle 6 – Future profits stemming from return on assets in excess of technical provisions – projection horizon** A fundamental presumption under the LAC_{DT} (and Solvency II, see Article 101 (2) of Directive 2009/138/EC) is that of going concern. It is inconsistent with that article to assume that a (re-) insuer has only have 5 years of own funds which generate a return. Allowing the reflection of future returns on own funds over a projection horizon that is related to the technical provisions is more appropriate as it reflects uncertainty in an entity specific manner and this approach will be applicable for (re-) insurers that have different characteristics in a similar manner. We are of the opinion that the alternative proposal in paragraph 1340 is more consistent with this approach.	

	However, a (re-) insurer should be allowed to have a different horizon based on the arguments and evidence presented in the supervisory review process. We believe that post-shock run-off patterns of technical provisions, related levels of own funds and investments, and LAC_{DT} should be aligned. Arbitrary interventions should be avoided as this conflicts with the alignment and consistency. It is also important to realise that instantaneous shock losses under Solvency II are different from the actual emergence of losses under the relevant tax regime in a jurisdiction. The time horizons under fiscal regimes is in many cases much longer. **Key principle 7 – Future management actions** Regarding the future management actions (FMA) we understand that any increase of uncertainty from incorporating potential management actions is undesirable. Uncertainties should be incorporated in the FMA by assessing the relevant sources of uncertainty. In the supervisory review process the (re-) insurer should demonstrate how uncertainties have been dealt with. If the evidence provided is unsatisfactory or unconvincing the supervsior could as part of the supervisory review process apply a haircut to the expected results of the FMA. EIOPA should not disqualify any FMA beforehand. **Specific comments regarding principle 7** Recapitalisation from external sources should remain available to be used as one of the measures for recovery provided the (re-) insurer can demonstrate an appropriate level of realism based on its financial reputation, market position, historical evidence and/or other suitable substantiation or the availability of contractual agreements. The recapitalisation should be assessed in the light of the underlying scenarios and the impact on the capital markets.	
17.4.3	In paragraph 1349, EIOPA disqualifies de-risking. However, we are of the opinion that de-risking is a relevant measure and should be able to be used as a possible measure. The de-risking measures should not be read in conjunction with the formulaic approach taken by EIOPA in key principle 1 (see also earlier remarks). In	

	this instances EIOPA tries to mitigate the linear effects of applying such a formula by restricting measures which normally are a valid option. For non-listed solo entities de-risking is one of the most available measures to be taken to recover. Naturally, de-risking should be reflected in the projection of the future earnings. **Key principle 8 – Role of the system of governance** We agree that there should be a solid system of governance in the LAC_{DT} calculation. We do not agree that it should be specifically the Actuarial Function who should play a role in the validation of the assumptions and calculations. This could also be done by the Risk Management Function or the Internal Audit Function. **Key principle 9 – Supervisory reporting and disclosure** We consider transparency as a contribution to a level playing field. However, careful consideration should be given to certain disclosures in the solvency and financial condition report. Many aspects of the LAC_{DT} projection would imply confidential and highly competitive sensitive data.	
18.1	**Risk Margin** <u>Call for Advice</u> In the European Commission Call for Advice of 18 of July 2016, EIOPA has been asked to '*assess if the methods and assumptions applied in the calculation of the risk margin continue to be appropriate, in view of a changed market environment. In particular, EIOPA is asked to review the cost-of-capital rate*'. We believe that by that mandate given, EIOPA should also have reviewed some of the main issues regarding the nature of the risk margin itself, these being that: • the risk margin does not reflect properly the cost of residual non-hedgeable risks of the run-off business. • the current way of calculating the risk margin includes elements that can be considered as holding two times the necessary funds for certain risks. There are examples across of the EU of risk margins amounting up to 70% of the total SCR. • In a low interest rate environment, the risk margin increases to such a level	

	that is hard to justify economically. As a result, long-term maturity insurance products get overly expensive causing issues for those who need that insurance cover.	
18.2		
18.3		
18.4.1		
18.4.2	ANALYSIS Size of the Risk Margin The size of the risk margin for some type of products is very significant and unrealistically high as acknowledged by EIOPA in this Consultation Paper. We support any proposal to allow the consideration of management actions for those products. General approach to the review of the CoC rate We believe that there are several elements regarding the CoC rate proposal from EIOPA that should be re-considered before closing the subject and sending their advice to the European Commission. EIOPA indicates that CoC rate should be equal to the cost of holding equity (ERP, the equity risk premium) and that it should be modelled according to the CAPM and that the CoC rate should be in the range of 6% to 8% as a result. EIOPA also makes a reference to a CRO forum study which indicates that the equity risk premium (=CoC rate) should be an average 7,5% to 10% However, we note that: • In the risk margin there is no future business (only the run-off). It is therefore relevant to analyze what is the difference between new business and the run-off cost of equity premium as the reference data includes both. As a rough estimate, we understand that the cost of equity risk premium for new business is between 5 to 8 percent higher than for the run-off as there are loads of different risks for the business that are not yet in the books. In any case, this parameter can be estimated and verified from the M&A data from the insurance sector. This shows that the value of the equity risk premium should be lower than the one put forward	

by EIOPA and that the amount of the difference may be quite substantial.

- As the reference undertaking would have no market risk this should be taken into account when setting the CoC rate. Market risk represents more than half of total capital requirements and this risk is surely included in the observed 7.5% to 10% cost of equity. If such risk is not considered in the assumed run-off of the reference undertaking, the equity risk premiums should therefore be lowered accordingly.

We believe that the formula provided in paragraph 1411 is not correct. The formula should be corrected as follows:

CoC = Cost of Equity – r_f = β * ERP

The formula would therefore be aligned with the paragraph 1412 (*The Cost of Capital is therefore driven by the cost of equity, i.e by the ERP and the beta from the insurance sector).*

Equity risk premium

The methodology used by EIOPA to derive the ERPs should be revisited

We find that the computations performed by the EIOPA are not documented in such a way that the industry is able to reproduce and challenge the figures listed in this Consultation Paper. In particular we find no mention of:

- Whether arithmetic average or geometric average is used. The discussion in the literature is well documented with a very strong impact, the arithmetic average being almost 50% higher than the geometric average, corresponding to half the variance of the returns as strongly emphasized in Damodaran study and explained below.
- (*Historical return model)* We deplore the lack of transparency, in paragraph 1421, when EIOPA uses the 9.24% from the CRO Forum. First, this figure is a dollar based return, not appropriate for the European market. Next, no indication is given about the conversion to dollar before 1999 after when the euro currency

started its existence. Last, this figure mentioned by the CRO Forum is not used: CRO Forum explicitly states that since the returns are dollar denominated they use the US ERP of 7.81%.

- We do not understand why paragraph 1410 explains that the weight of debt is nil while paragraph 1438 expresses the need to consider levered betas accounting for the capital structure of the company. The first paragraph increases the cost of capital and second one increases the betas.

There is a specific methodological point about the interest rate maturity

According to Article 77 (5) of the Directive, *the risk margin shall be calculated by determining the cost of providing an amount of eligible own funds equal to the Solvency Capital Requirement necessary to support the insurance and reinsurance obligations over the lifetime thereof*. Hence there is a direct link between the risk margin and the horizon of the liabilities.

We would like to pinpoint that computing an ERP over the 1- month interest rate is flawed since an undertaking would ask for a risk premium over a bond whose maturity is close to the duration of the insurance obligations. Choosing a short-term interest rate inflates unduly the ERP. As a matter of fact, the work of Damodaran quoted explicitly by EIOPA states that *"the use of this models to get expected returns over long periods (such as five or ten years) suggests that the estimation period may be much longer than a year. In this context, the argument for geometric average premiums becomes stronger"*.

Beta factor

The beta parameter in the CoC rate should be low. EIOPA estimates the required rate of return for investors buying securities issued by insurance undertakings. The rate of return that investors require for such securities largely depends on the market risk on insurance undertaking balance sheets, thus the hedgeable risk that undertakings today prefer not to hedge. Insurance company stocks and bonds have a high beta

	because of the their hedgeable/market risks. The reference undertaking has a low beta because of the remaining non-hedgeable/insurance risks. The beta factors are computed on the basis of a weighted average of the *betas for the 66 listed EEA insurance and reinsurance companies and groups*. We note that those betas are derived exclusively from listed companies whereas non-listed companies are excluded, namely mutuals and insurance subsidiaries of non-insurance groups. The sample used to derive these statistics is therefore biased or at the very least incomplete. Further adjustments About the further adjustments made by EIOPA, the need to adjust the CAPM estimation of the CoC by some elements such as franchise value or tax effects is indicated in paragraph 1441. EIOPA explains that on the basis of expert judgement an adjustment for the combination of all aspects has been made. EIOPA has applied a 20% adjustment but it has not provided any indication as to how this figure has been obtained. CoC rate **Overall appreciation needs to be checked.** We find that compared to the various figures published by researchers, EIOPA estimates are clearly at the top of the range. Several inconsistencies let us believe that more work is needed on this topic. Moreover, we would like to stress out that ERP is a crucial parameter for undertakings when performing their own risk and solvency assessment. The figures proposed by EIOPA could be seen as an incentive for companies to raise the ERPs the put in their model as market standards are far below the figures discussed by EIOPA.	
18.4.3	EIOPA's advice We believe that there is some confusion with respect to what the cost-of-capital reflects. We believe that the risk margin should reflect the **cost of residual non-hedgable risks of the run-off business** and is related to e.g. double taxation and	

financial distress. EIOPA, however, estimates the required rate of return for investors buying securities issued by insurance undertakings. The rate of return that investors require for such securities largely depends on the market risk on insurance undertakings balance sheets, thus the hedgeable risk that the undertakings today prefer not to hedge. Insurance companies stocks and bonds have a **high beta because of the companies' hedgeable/market risks, not because of their low beta non-hedgeable/insurance risks.**

If EIOPA decides to stay within the given framework of analysis, then at least **the estimates of beta and equity risk premium should be updated** as indicated in our previous paragraph**.** The most important change would be to acknowledge the **low beta of** insurance risks, or more precisely that **residual non-hedgeable risks most likely are**. The estimate of the equity risk premium would also need to be updated.

Further topics: Risk Margin and LTGA Measures

The error in the risk margin comes from the choice to discount risk margin at the risk free rate. If a firm discounts its risk margin at the risk free rate, the firm considers that there is no volatility risk. If there is no volatility risk there is no SCR. And if there is no SCR there is no risk margin.

We share the views of Waszink that it is not the calibration of the Cost of Capital rate the most important issue but rather the risk free discount rate in the underlying formula.

Further Topics: Risk Margin and Scenario-based calculations

According to Article 83(1)(a) of the Delegated Regulation, the risk margin should be assumed to be unchanged in the scenario based calculation of the standard formula: "*the scenario does not change the amount of the risk margin included in technical provisions*". However, for many scenario-based calculations (e.g. the mass lapse stress) it is likely that the risk margin would be substantially affected. We would therefore recommend EIOPA to consider **the possibility of allowing the risk margin to change in the scenario-based calculations of the SCR standard**

	formula. Further Topics: Group Risk Margin We would like to reiterate that the calculation of the group risk margin should allow for intra-group transactions. Article 340 of the Delegated Regulation indicates that the consolidated risk margin should be calculated based on "consolidated data". According to the Regulation, intra-group transactions are eliminated from the "consolidated data". However, EIOPA has indicated that for the calculation of the group loss absorbing capacity of deferred taxes (LAC_{DT}) the formula in the EIOPA guidelines is to be interpreted gross of intra-group transactions. EIOPA has stated similarly in their response to a question on the risk margin and the MCR calculation; the consolidated risk margin should be calculated as the simple sum of the risk margin of the participating undertaking and the proportional shares of the risk margin of related undertakings, which means that the risk margin should be gross of intra-group transactions. The statement of EIOPA in page 272 by which the risk margin allows for intra-group transactions reflected in the risk margin of those solo undertakings is not correct. Not eliminating the intra-group transactions from the group calculations for the risk margin leads to a risk margin which is not related to the best estimate on the balance sheet. **We call on EIOPA to remove this arbitrary calculation of the risk margin at group level.**	
19.1	**Comparison of own funds in insurance and banking sectors**	
19.2		
19.2.1		
19.2.2		
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19.2.4		
19.2.5		
19.2.6		

19.3		
19.4.1		
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19.4.4		
19.5.1		
19.5.2		
19.5.3		
19.5.4		
19.6.1		
19.6.2		
19.6.3		
19.6.4		
19.7		
20.1	**Capital instruments only eligible as tier 1 up to 20% of total tier 1**	
20.2		
20.3	EIOPA states in this section related to the comments received that "*No respondents were in favour of removing the 20% limit*". This is not exact as AMICE submitted comments regarding the need to remove the 20% sub-tier limit for subordinated mutual members accounts.	
20.4.1		
20.4.2	We would like to reiterate that many mutual insurers have, over the years, built up significant equity through 'mutual member accounts', i.e cash available on its balance sheet. These mutual member accounts are treated, in accordance with the current framework as Tier 1 capital. However, Article 82 (3) of the Delegated Regulation limits its amount: only 20% of Tier 1 own funds of the type mutual members' accounts can be taken into account provided that at least 50% of the	

	capital requirements (SCR) is covered by Tier 1 own funds. This means that for a solvent mutual, the majority of its capital disappears. This leads to erroneous situations in which a mutual suddenly cannot count the funds it has in its books as solvency capital, not even as Tier 2 or Tier 3 because of the other limits set in Article 82 (1)(c). The transitional measures foreseen in Omnibus II for subordinated debt are not applicable to mutual member accounts. **We call on EIOPA to reconsider its position and to remove the 20% sub-tier limit for subordinated mutual members accounts.**	
20.4.3		
20.4.4		
21.1	**Impact assessment**	
21.2		
21.3		
21.4		

21.5	**Volume measure for premium risk** **Option 1: no change** Option 1 leaves the gap for which the current definition of the premium volume has been criticized, which is highly questionable in terms of risk. It also over calibrates risk factors for exposures beyond N+1 (instead of capturing the 99.5th quantile of the underwriting risk on a 1-year term horizon as applicable to N+1 subsequent premium exposures it is summing subsequent 99.5th quantiles, which clearly overestimates the return period) **Option 2: filling in the gap** Option 2 does not consider multiyear contract properly (strong overstatement of factors applicable to FP-existing) and still overstates the factors applicable to FP-future for both annual and multi-year contracts, since the UR1 part of the risk can be accommodated by the new tariffs associated with new business.	
21.6	**Recalibration of mortality and longevity risks** The selected option is **Option 2 - define stresses per age group**. It has been proven that younger persons would need to have higher stresses given that they benefit more from future mortality improvements than older persons. It appears that more granular stresses per age would provide for a more risk-sensitive and sensible SCR calculation. We believe that EIOPA overestimates the costs of Option 2 by indicating that different stresses would have to be developed not only per age group but also per gender, per different socio-economic factors etc. The industry proposal is limited to stresses per age group and residual maturity of the insurance contract.	
21.7	**Health catastrophe risk**	
21.7.1		
21.7.2	<u>Accident concentration risk simplification</u> We support **Option 1 – no change** for the same reasons indicated by EIOPA. We believe that the most sensible approach is to allow companies to apply the simplification that best fits their risk profile. We would be in favour of listing both simplifications in the EIOPA Guidelines (i.e allow undertakings to take the largest	

	policy and to perform the calculation on an event that hits the headquarters of the undertaking).	
21.7.3	Pandemic risk simplification We support **Option 1 – no change**. We do not believe it is necessary to prescribe any simplification on the pandemic risk sub-module. We would support the use of average values for numbers for medical consultations and number of days at hospital. There is no need to set out maximal unit claim costs as indicated in this Consultation Paper; Some clarification may be provided in the EIOPA guidelines, however this should not be harmonised in the Delegated Regulation as there are significant differences across jurisdictions. We welcome the proposal for NSAs to provide this information at a national level on a voluntary basis.	
21.8		
21.8.1	**Fire risk simplification** We welcome the simplification put forward by EIOPA. However, we still believe that a simplification which would not require firms to geocode their insurance portfolios would have to be provided. We would therefore favour **Option 4 - Using the largest exposure measure with an adjustment for conflagration**.	
21.8.2		
21.8.3		
21.9		
21.10	**Interest rate risk** Our preferred option is **Option 1 – no change**. We question the timing, the piece meal approach and the need for the change of the interest rate risk sub-module. In order to acknowledge the concerns regarding the downward shock, we would like to propose to refer back to the original CEIOPS's proposal which was submitted to the European Commission in its first advice; The size of the shock is too large and we would prefer CEIOPS's initial calibration at 100 basis points.	

21.11	**Market risk concentration** Regarding the options presented by EIOPA, we would favour **Option 1 – no change**. The CQS is used multiple times in the formula for market concentration risk, first to determine the threshold and secondly to determine the risk factor. In the second option, only a reference to the risk factor is made.	
21.12		
21.13	**Unrated debt** **Policy issue 1: internal assessment process** We would favour **Option 1.1** and **1.3 jointly**: - Option 1.1 – Implementing criteria based on financial ratios of the borrower. - Option 1.3 – Extend risk management requirements for insurer benefiting from the specific treatment. However the administrative burden should not be such that smaller insurers are not able to apply this option.	
21.14	**Unlisted equity** We would favour **Option 1 – Beta method**. However, another option would be to compare the unlisted equity with listed peers. If the characteristics are roughly similar the same treatment could apply.	
21.15		
21.16		
21.17	**Simplification of the look-through approach** Our preferred solution is **Option 2**; We would support the carve-out for assets corresponding to unit-linked products.	
21.18	**Look-through approach at group level** We would support **Option 2**: applying the look-through for related CIUs at group level where it has already been applied at solo level.	
21.19	**Loss absorbing capacity of deferred taxes**	

	No options are being provided.	
21.20	**Risk Margin** As indicated in our comments to section 18, if EIOPA decides to stay within the given framework of analysis, then at least **the estimates of beta and equity risk premium should be updated.** EIOPA should consider the full methodology to derive the risk margin.We would not indicate any preference for the historic return model or the dividend discount model. The most important change would be to acknowledge the **low beta of** insurance risks, or more precisely that **residual non-hedgeable risks most likely are**. The estimate of the equity risk premium would also need to be updated.	
21.21	**Capital instruments only eligible as Tier 1 up to 20% of total Tier 1** **Policy issue 1: Removing the 20% limit rT1 instruments** We would favour **Option 1.1: removing the 20% limit.** We call on EIOPA to reconsider its position and to remove the 20% sub-tier limit for subordinated mutual members accounts.	
22		
23		
24		
25	**Annex to chapter 1 – Weights used in the method 2** The table indicates a significant number of countries submitting data for HWC. We believe that some of the countries quoted do not operate on that LoB. We would suggest EIOPA to review the data base and to review the results provided if needed.	
26	**Annex to chapter 5 – Identification of largest man-made catastrophe exposures** The changes proposed by EIOPA can quite significantly increase the operational burden of the computations. The proposed change would introduce a discrepancy across the sub-modules of the catastrophe risk modules since the reasoning gross of	

	RI is the basis of other sub-modules. Moreover, this approach can overstate the 99.5% VaR of a specific entity distribution of loss on own funds, trying to chase the worst net of the reinsurance case. COUNTERPARTY DEFAULT RISK We had indicated to EIOPA that computing fire risk on the basis of the 5 largest exposures net of facultative reinsurance would have an impact on the risk mitigation effect in the counterparty default risk module. If the risk mitigation is to be computed on the basis of the Gross SCR net of facultative and SCR net of all reinsurance, we are making the assumption that there are no counterparty default risk in facultative reinsurance. However, if EIOPA insists in going down this route and requiring insurers to compute the fire risk sub-module on a net basis we would support this approach as it avoids having to recalculate the Gross SCR.	
27	**Annex to chapter 5 - Fire risk simplification** We believe that the simplification chosen by EIOPA should be formulated in EIOPA's advice to the European Commission in order to avoid a misleading interpretation: The resulting formula would be $\mathbf{SCR_{fire} = max\ (SCR_{firei}, SCR_{firec}, SCR_{firer})}$ Where $\mathbf{SCR_{firei}} = \max(E_{1i}, E_{2i}, E_{3i}, E_{4i}, E_{5i})$ $\mathbf{SCR_{firec}} = \max(E_{1c}, E_{2c}, E_{3c}, E_{4c}, E_{5c})$ $\mathbf{SCR_{firer}} = \max(\Theta, E_{1r}, E_{2r}, E_{3r}, E_{4r}, E_{5r})$ $\mathbf{E_{xi}}$ = Total exposure (building, content and business interruption) within 200m radius of xth largest industrial exposure. $\mathbf{E_{xc}}$ = Total exposure (building, content and business interruption) within	

200m radius of xth largest commercial exposure.

$\mathbf{E_{xr}}$ = Total exposure (building, content and business interruption) within 200m radius of xth largest residential exposure.

$\mathbf{\Theta} = \bar{SI} \times 500 \times max(5\%, undertaking's\ market\ share(\%))$

$\bar{SI}$ Average sum insured of insurer's portfolio

UNDERPIN FACTOR

We welcome the introduction of the underpin factor for the residential exposures. However, the calibration of the underpin factor is overly conservative. It assumes a minimum market share for residential exposures of 5% which will increase significantly the capital requirements for fire risk:

$\Theta = \bar{SI} \times 500 \times max(5\%, undertaking's\ market\ share(\%))$

$\bar{SI}$ Average sum insured of insurer's portfolio

Example

We provide an example to illustrate our concerns:

Average sum insured = 250 000 Euros
Number of houses = 500 (parameter in the formula)
undertaking's market share = 0,08%

Θ (underpin factor) = $\bar{SI} \times 500 \times max(5\%, undertaking's\ market\ share(\%))$
Θ (underpin factor) = 250 000 x 500 x max (5%;0,08%) = 6 250 000 Euros

For a small company, this calibration would significantly increase the capital requirements even for a portfolio which is heavily concentrated in a city or region. The level of prudence is already included in the assumption of 500 homes affected; There is no need to add another level of prudence by setting out a minimum

threshold of 5%. The home insurance market can be considered as very competitive as there are loads of players operating in the market. Hence, a 5% market share already represents a large insurer (inside the TOP10 in most jurisdictions across Europe for example). By considering which is the real market share of the small players in the jurisdictions where they operate and given that small players are the ones targeted at in this simplification (i.e large players have the tools for geocoding), we would suggest the formula to be amended as follows:

$\Theta = \overline{SI} \times 500 \times max(\sout{5\%}\ 1\%, undertaking's\ market\ share(\%))$

Where $\overline{SI}$: Average sum insured of insurer's portfolio.

NUMBER OF EXPOSURES TO BE CALCULATED

As acknowledged by EIOPA, some undertakings are manually assessing their exposure and this is one of the main reasons why a simplified formula is needed. However, we believe that the simplification proposed should be further simplified.

Our proposal consist of restricting the calculation requirements to the 200m radius around the largest **three (and not five) exposures per industrial and commercial risk types** as doing the manual calculation 6 times (3 exposures x industrial and commercial risk) would already be a quite burdensome exercise.

Regarding residential risk, the underpin factor should be sufficient to assess the exposure. Indeed, there is no need to search the 3 or 5 largest exposures because in general, these risks are sufficiently homogeneous and no big differences should appear between the different circles. This additional simplification may be less sensitive to risk but it would decrease significantly the operational burden of the computations (proportionality criteria).

Our proposed formula would be the following:

$SCR_{fire} = max\ (SCR_{firei}, SCR_{firec}, SCR_{firer})$

Where

	SCR_{firei} = max(E_{1i}, E_{2i}, E_{3i}) **SCR_{firec}** = max(E_{1c}, E_{2c}, E_{3c}) **SCR_{firer}** = Θ **E_{xi}** = Total exposure (building, content and business interruption) within 200m radius of xth largest industrial exposure. **E_{xc}** = Total exposure (building, content and business interruption) within 200m radius of xth largest commercial exposure. ADDITIONAL SIMPLIFICATION FIRE RISK SUB-MODULE The simplification provided below had been disregarded by EIOPA but we believe, however, that further analysis is needed about the suitability of it. The simplification below is factor-based and it would not require the use of geocoding which have been one the big demands from small players and insurers who are not materially exposed to this risk. The proposal is as follows: **$SCR_{fire} = SI_{largest\_exposure} + \alpha_i \cdot$ Expo_Ptf** Where $SI_{largest\_exposure}$ = undertaking's largest exposure Expo_Ptf = undertaking's total exposure, excluding the largest exposure, in the postal code area where $SI_{largest\_exposure}$ is located α_i = factor to represent damage rate in postal code i It was proposed to have three damage rate factors (α_1, α_2 and α_3) which would broadly be representative of building density. The α_i factor can be easily calibrated with available data about the density in different regions. An average value could be then derived from that data.	
28	**Annex to chapter 6 – Natural Catastrophe risk simplification: mathematical formation and quantitative results** As indicated in our previous comments and in exchanges with EIOPA, the non-life	

	catastrophe risk sub-module is one of the most complex sub-modules in the SCR standard formula given the request to allocate the sum insured across a significant number of Cresta zones. Moreover, the non-life catastrophe risk sub-module is one of the few sub-modules of the Standard Formula where no simplification has been provided. We therefore welcome EIOPA's proposal to provide a simplification so that insurers do not have to allocate the sum insured across the different Cresta zones. We also welcome that the proposed simplification would be allowed for both regionally concentrated and well diversified insurers. However, Option 5 by which firms would allocate the undertaking's exposure to the Cresta zone with the highest risk weight in the region is very conservative and would hardly be used by undertakings. We would rather support **Option 3 – Use of risk factor for the region and applying a prudency factor for the undertaking's exposure**. The level of prudency would have to be agreed between the supervisory authority and the undertaking.	
29		
30	**Annex to chapter 6 – Spanish windstorm country factor recalibration** We would support the amended country factor as put forward by EIOPA. This change is supported by the Spanish industry.	
31	**Annex to chapter 6 – Example of model information** EIOPA has committed to increase the transparency regarding the calibration of the country factors, zonal calibrations and correlation matrices. Documentation should therefore be provided for each of the factors subject to the EIOPA's recalibration exercise. The documentation exercise should cover the windstorm scenarios and flood scenarios already re-calibrated (i.e Germany, Hungary, Slovenia, Finland and Sweden Windstorm and Germany and Hungary Flood) and those added as part of the holistic recalibration exercise launched in December 2017: - Windstorm scenarios: country factors for **Austria** (AT), **Belgium** (BE), Czech Republic (CZ), **Switzerland** (CH), **Denmark** (DK), **France** (FR), **Ireland** (IE), **Luxembourg** (LU), **the Netherlands** (NL), Norway (NO), **Poland** (PL), and **United Kingdom** (UK);	

	- Flood scenarios: country factors: **Austria** (AT), **Belgium** (BE), **Bulgaria** (BG), Czech Republic (CZ), **Switzerland** (CH), **Denmark** (DK), **France** (FR), **Italy** (IT), **Poland** (PL), Romania (RO), **Slovakia** (SK), **Slovenia** (SI), and **United Kingdom** (UK); - Re-assessment/re-calibration of the **cross-country aggregation matrix** for Windstorm and Flood. - **Windstorm scenarios**: **Baltic scenarios** which have been included in order to cover consistently the whole Nordic part of the EU (i.e Latvia, Lithuania and Estonia are likely to be correlated with Finland and Poland). Despite the fact that these additional scenario calibrations would just be used for consistency checks but will not become part of the set of WS scenarios in the Delegated Regulation, documentation of the outcome of the exercise will have to be provided.	
32	No comments	
33	No comments	
34	**Annex to chapter 13 – Derivation of a simplification for the risk mitigating effect of reinsurance arrangement** We welcome EIOPA's effort to adapt the simplification in the calculation of the "risk mitigating effect from reinsurance in non-life underwriting risk" within the counterparty default risk module. This is a very useful simplification which reduces the workload during the SCR calculations.	
35	**Annex to chapter 18 – Relative size of the risk margin** We welcome the information provided regarding the size of the risk margin at the end of the first, second and third quarter of 2016. However, the impact of the risk margin should be analysed by type of product and not by line of business. There are certain products for which the risk margin does not work. <u>Annex 36</u> EIOPA presents an overview of the relative size of the risk margin versus various	

| | parameters. In their analysis they assess Q1, Q2 and Q3. However, in this analysis EIOPA forgets the fact that many insurers compute the risk margin by using the allowed simplification for intermediate calculations as put forward by EIOPA's own guidelines. Should the risk margin be calculated by using the annual approach a more sensitivity result to interest rates would have depicted. Additionally, we would suggest EIOPA produces another graph showing the size of the risk margin versus the SCR and own funds. | |
| 36 | | |