Comments to the Discussion Paper on Methodological principles of insurance stress testing **22 July 2019**

Responding to this paper

EIOPA welcomes comments on the "Discussion Paper on Methodological principles of insurance stress testing".

Comments are most helpful if they:

- respond to the question stated, where applicable;
- contain a clear rationale; and
- describe any alternatives EIOPA should consider.

Please send your comments to EIOPA in the provided Template for Comments, by email to <**eiopa.stress.test@eiopa.europa.eu**> by **18 October 2019**. Contributions not provided in the template for comments, or sent to a different email address, or after the deadline will not be considered.

Publication of responses

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Data protection

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Chapter 2		
#	**Question**	**Answer**
Q.1.	What are your views on the presented stress test elements and their relations? Please elaborate on any relevant elements that have not been covered.	We support EIOPA's objective to **set out common methodological and technical principles** to be used for future EIOPA stress tests. Specifying a framework that remains stable over time will significantly reduce the operational burden of conducting future stress test exercises for insurance companies. An essential basis for the establishment of a stress test framework is the definition of objectives pursued by the stress test. The definition of these objectives should have been clarified by EIOPA before publication of the discussion paper. Stress tests should focus on macro impacts. Yet, those macro impacts need to be sourced from individual undertakings' calculations as they are better placed to conduct calculations and incorporate their management actions and going concern capacities. Individual vulnerabilities for micro supervision are much better identified using the ORSA that precisely fulfils this target. Stress Tests and sensitivities should be forward looking to be a useful exercise for both supervisors and insurance undertakings. Solvency is being challenged and scrutinized against various possible risk drivers' evolutions. EIOPA does not question the need to calculate a post-stress SCR in the discussion paper. In our view, the calculation of a post-stress SCR should not be part of a stress test exercise. Assessing the stress after a stress

		requires many hypothetical assumptions. This limits the comparability of the results. Furthermore, the costs of conducting the stress test exercise increase significantly.
Q.2.	What are your views on the different stress test objectives and the advantages and disadvantages mentioned?	Stress Tests should focus on macroprudential issues and potential systemic interlinkages while in between two macroprudential Stress Test exercises, sensitivities could be requested with a micro prudential focus only (already done in ORSAs).
Q.3.	What are your views on combining a micro prudential stress test with a quantitative assessment of post-stress reactions by insurers to provide additional insight in potential second-round effects?	That could be a practical solution.
Q.4.	What are your views on the definition and recalculation of the baseline for stress test purposes? If a recalculation of the baseline would be requested, what would be the estimated additional resources/costs for this?	As a starter, for accuracy, transparency, consistency and comparability reasons we think it is paramount that the baseline scenario should reflect the latest published solvency ratios of contributors to the STs and/or sensitivity analysis. On the same note, STs and/or sensitivity analysis should be anchored to the baseline w/o allowing any item from the baseline to be changed under the stresses being applied. It should be clear that the latest published solvency situation is the starting point of the investigation w/o changing this starting point. Any subsequent change (such as change in perimeter, modelling and/or proxies) should be assessed against the starting point and it should be clearly delivered as a restatement of the starting point item, broken down according to the different causes. Recalculations should therefore be justified in individual cases and due to changes in the structure of the entity or in the estimation models. We clearly oppose a standard recalculation, especially when using simplifications. Existing requirements for simplifications already ensure that their application does not have a distorting effect on the results. There must be a clear link with regulatory reporting values.

Q.5.	What are your views on the different time horizon approaches for stress tests purposes? What would be the most appropriate approach in your view in light of the different stress test objectives? (2.3.2-time horizon)	Ideally longer terms are necessary to appreciate the risk profile of insurers. Nevertheless, multi-year scenarios indeed pose huge operational and conceptional challenges as interactions, paths, order of occurrences and numbers of risk drivers increase and get more complex. There is a limit to the realistic operational calculation and reporting of multiple intertwined scenario constituents. An **instantaneous stress scenario** is clearly preferable to a multi-period stress scenario. Additionally, a **multi-period scenario** would require the harmonisation of a large number of specifications throughout Europe and the comparability of the results would be limited. Instantaneous shocks with specific scenario components stretched out over longer time periods appear a workable solution that should leave room for better consideration of management actions. The short-term bias of Solvency II driven by the 1Y time horizon approach for risk calibration and inducive of distortions of going concern and management actions dynamics is unfortunately largely exacerbated when implementing instantaneous shocks in stress testing. Allowance for management actions is key.
Q.6.	What are your views on the treatment of management actions in the context of a stress test exercise?	Management actions need to be taken into account.
Q.7.	What are your views on requesting post-stress calculations both with and without management actions?	Post-stress calculations should embed routine as well as corrective and future preventive management actions where necessary and to the extent that they are documented in the enterprise risk management system and policies and approved by the AMSB i.e. belong to the endorsed risk management tools. The timing of the implementation of the management actions should be correctly appreciated and implemented accordingly.
Q.8.	Please provide your view on the distinction and different treatment of embedded management actions and reactive post-stress management actions	"Reactive" management actions belong to the continuum of management tools available in the risk management system of the insurance undertaking through changing gears in levels/nature/design according to the situation faced. They are sourced from the approved toolbox by the insurance governance and belong to practical management. We do not

		think that a selection should be operated among embedded and/or reactive management actions. There is in fact no clear distinction between embedded and reactive management actions depending notably on the starting point of the so called "embedded" actions: the way some feature is or is not automatically modified in a model according to a given situation does not provide a good guidance between what is a "routine" or an "exceptional" management action. Corrective actions can belong to routine and/or exceptional management actions. A given situation and environment at closing date can differ significantly according to different time periods (ranging from "normal" to "crisis conditions") and consequently the "embedded" management actions would be significantly different although completely real. Routine or exceptional actions could have different trigger points according to the risk appetite of insurance undertakings and/or governance issues. In fact, there is a continuum that should be properly reflected in modelling risks and solvency in order to yield meaningful results. One could refer to recovery and resolution to partition between routine and exceptional. Post stress management actions do not necessarily belong to the exceptional category of the management actions of the tool box. Sometimes, the nature of a management action could be a guiding criterion to partition between routine and exceptional.
Q.9.	Which elements in your view can/should be limited in the embedded management actions to enhance the comparability of the post-stress results?	In some cases results could be produced with and without management actions for transparency purposes, but we should keep in mind that the nature of the management actions is often such that not involving them straight in the calculations is purely artificial and even impossible and mostly leads to confusion in interpretations of results and distortions of the true levels of risks.

Q.10.	Please elaborate on the key elements of the technical information that would be required in order to implement potential limitations to embedded actions (content, scope, granularity etc.).	We do not find it appropriate to limit embedded management actions. (see answer to Q8).
Q.11.	Please elaborate on the feasibility (e.g. time and effort needed for the implementation) of the potential limitation to embedded management actions to calculate post stress positions.	-------
Q.12.	What are your views on the 3 possibilities for future EIOPA stress test exercises summarized in Table 2 8?	According to our answer to Q5, we would favour the hybrid instantaneous/stretched over longer term combination (see answer to Q5 for details).
Q.13.	Do you have any further considerations regarding the potential evolution of future EIOPA stress test exercises?	-------
	Do you have general comments, remarks, suggestion on Chapter 2?	We see stress test exercises as macro prudential tools for supervision of global net impacts reflective of actual risks for the sector and potential second round effects. Therefore, it appears necessary to perform them at group level where capital allocation and risk management is steered by governance and where mutualisations, diversifications, risk mitigations and intragroup nettings strike the right balance.

Chapter 3		
#	**Question**	**Answer**
Q.14.	What is your view on the appropriate scope for a stress test exercise? Do you agree with the advantages and disadvantages of the different approaches?	We see stress test exercises as macro prudential tools for supervision of global net impacts reflective of actual risks for the sector and potential second round effects. Therefore, it appears necessary to perform them at group level where capital allocation and risk management is steered by governance and where mutualisation, diversifications, risk mitigations and intragroup nettings strike the right balance. Solo supervision is properly exercised at National level with the 3 pillars of Solvency 2. Sensitivities and stresses are already part of the ORSA process and report.
Q.15.	What are your views on the metrics to be used for defining the scope for solos and groups, respectively?	Metrics are fine.
Q.16.	What are the main challenges (if any) to assess the post-stress position of a synthetic group?	We do not support the concept of a synthetic group. Such an approach would be highly artificial (internal capital and risk management are not exercised at this level and no policies or management actions would be applicable at this level). Additionally, it would be particularly onerous: a brand-new operational process would be required and already the numbers in the baseline would need to be recalculated.
	Do you have general comments, remarks, suggestion on Chapter 3?	

Chapter 4		
#	**Question**	**Answer**
Q.17.	What are your views on the historical versus forward looking approach? Do you envisage additional advantages / disadvantages on top of the ones listed?	See answer to Q1
Q.18.	What is your view on the consistency of the scenarios with the Solvency II framework versus market compatible scenarios for the purpose of a stress test, in particular for the treatment of the RFR parameters?	UFR should remain as it is defined in SII; it is a key item of the framework for a stable anchor to the fair value discounting. It represents a very long-term level of the behaviour of interest rates. A methodology of the review of UFR has been defined by EIOPA in SII after exchanges with the industry and we support it.
Q.19.	What are your views on using single risk factors, single scenarios or combined scenarios for the purpose of a stress test?	The selection of the scenario type (**single risk factor vs. single scenario vs. combined scenario**) mainly depends on the objective of the stress test and the design of the scenario. It should not be subject to a general restriction. Combined scenarios are appropriate in a ST exercise to capture in one glance the interactions and get a holistic view. Conversely, single factors and scenarios should be suited to sensitivity analysis. However, if choosing a combined scenario this must not lead to a duplication of effort by having to show the impact of separate shocks. The downside of combined scenarios (results show effect of combined shocks, but not the effect of separate shocks) must be put up with in this case.
Q.20.	What are your views on having combined scenarios, but allowing the identification of the single shocks in isolation (for instance impact of market and insurance shocks shown separately)?	Not very relevant where interactions happen in reality. Where interactions are unavoidable and indeed reflect what happens in reality, any disentanglement is purely artificial and hence does not produce useful results.

Q.21.	What is your view on the bucketing approach for market shocks? Does a bucketing approach reduce the operational burden for the application of the shocks?	We agree with EIOPA's remarks about the additional and sometimes not meaningful complexity added by the granular approach. Having said that, the bucketing approach would soften the operational burden if it is aligned with the current structure of the Solvency II framework. For instance, a bucketing based on ratings remains close to shocks currently applied while volatility bucketing would create the need for tracking additional information.
Q.22.	What is your view on the possible approaches to climate stress testing?	Given the complexity for dealing appropriately with the long-term climate risk, we favour to keep a scope limited to short term risk for Stress Test Exercises, as it has always been done in the past with previous Stress Tests. The Stress Tests design may not be adequate in order to evaluate such long-term patterns. A separate and deeper study would be more helpful. It is likely that such a study on long term trends is not deemed to be repeated every two years as it is the case for the stress tests.
Q.23.	What would be appropriate metrics to assess transition risk in assets?	Transition risk is one of the risks that would decrease market value if it happens (and part of it according to current consensus on climate change may already somehow be factored in current market values). Therefore, transition risk is captured in the more general shocks tested in the exercise and suited to multiple origins (financial markets, economic downturn, geopolitical events, ...). If the transition risk was to be more specifically measured it would concern only the most exposed part of the portfolio and for shocks less important than the general market shocks. Given the additional operational burden of splitting the assets along their transition exposure and the fact that more severe risks are measured differently, the need to specifically target transition risk is highly questionable.
Q.24.	What level of granularity would be needed in your view (i.e. industry level, underlying technology level, asset level)? Please distinguish between different asset categories if possible (i.e. equities, government bonds, corporate bonds, real estate)	In our opinion, equities are the most sensitive to transition risk and they should be split by industry. However, we underline that this sectoral identification will be burdensome and will not add much information about the risks taken by undertakings.

Q.25.	How could climate related shocks be calibrated (please distinguish between physical risks and transition risks in your answer)? What data sources could be considered?	Physical risks are the core matter of P&C insurers and are therefore long dated continuously monitored information. One cannot elaborate on evolutions that have not been observed yet as erroneous conclusions could easily be drawn. Additionally, contracts are almost always annual and new tariffs are calculated based on updated knowledge of risks. Both physical and transitional risks related to climate are very long-term potential risks that do not fit the stress test exercise. See also answer to Q22.
Q.26.	Do you have any further considerations on the inclusion of climate related risks in EIOPA's stress testing framework?	see Q25 and Q22
	Do you have general comments, remarks, suggestion on Chapter 4?	

Chapter 5		
#	**Question**	**Answer**
Q.27.	What are your views on the calibration and application of the shocks to fixed income assets? Do you think that the proposed specifications are sufficiently detailed? If not please provide suggestion on how to improve the guidance.	The proposed application remains close to the standard formula and we favour such an approach. The **bucketing approach for market shocks** is a reasonable proposal. Stresses at country level can be appropriate in some cases (e.g. Brexit scenario), but in most cases huge differences between stresses at country level cannot be justified.
Q.28.	With regard to the derivation of the shocks to different maturities do you have different solutions to propose?	The proposed application remains close to the standard formula and we favour such an approach.
Q.29.	What are your views on the shocks to equities?	Shocks to equity should be aligned to the granularity of data already available for undertakings in order to lighten the operational burden and to avoid proxies for companies unable to add a new level of information in due time.
Q.30.	What are your views on treating Equity unlisted [R0120] according to the shocks prescribed to listed equities? Do you consider the approximation reasonable?	Yes
Q.31.	What are your views on the shocks to real estate?	No comment
Q.32.	What are your views on the treatment of property, plant and equipment held for own use?	No comment

Q.33.	Are RMBS yields the proper index to treat Loans and mortgages ([R0230])? Is an additional granularity needed to treat the sub-items of the loan and mortgages category (i.e. Loans on policies, Loans and mortgages to individuals, Other loans and mortgages)? If yes, please provide suggestions for fitting indices.	No comment
Q.34.	Do you envisage potential constraints in the application of a look-through approach?	No comment
Q.35.	What is your view on the shocks to type 1 Exposures? Do you consider the shocks to counterparties sufficiently specified? If not please provide indication on how to improve the specification.	The insurance industry regularly explains that the approach retained in the standard formula for counterparty default risk (type 1 exposure) is too complex given its relative final impact on all risks faced by insurers (and as shown by its low proportion in the total SCR). This approach of stressing both the probability of default and the LGD would be very burdensome and would require a process even more complex than under the full annual SCR computation. Hence, we prefer a simplified approach such as a stress directly applicable to the level of the type 1 SCR total capital charge.
Q.36.	What are your views on the calibration and application of the mortality/longevity shocks?	No comment
Q.37.	Can you suggest any time-series to be used to calibrate the shock to lapse?	Lapse data were collected by supervisors during the financial crisis. Supervisors could leverage the data already gathered to calibrate the shocks. We note that such a review of available data is very appropriate and would give the opportunity to challenge the mass lapse risk, the level of which has been overestimated in the original setup of Solvency 2 and set to a 40% level that seems completely out of range.
Q.38.	What are your views on the described approaches to the application of the lapse shocks?	Any deviation from the standard formula is likely to demand extra work on the databases, the models and the reporting and will require proxies in the calculation or deviation from the industrialized process. These deviations should be carefully considered taking into account the expected advantages in the light of the likely downgraded process.

Q.39.	What are the main theoretical and operational issues you envisage in the application of the "standard formula" approach?	The Standard formula is a good starting point; its design was well thought out and is well understood and shared in the market by undertakings as well as supervisors. Yet we had a strong reservation towards the calibration of the mass lapse risk which has been largely overstated due to the lack of available data when Solvency II was first implemented.
Q.40.	What are the main theoretical and operational issues you envisage in the application of the classification approach based on product characteristics (option 1 in the classification approach)?	No artificial segmentation of the ways risks are managed should be induced. Diversification and mutualisation where they exist should be properly reflected in STs and/or sensitivity analysis in order to avoid distortions of appreciations of true levels of risks and to avoid wrong incentives in business models where those issues are profoundly embedded and underly the whole concept of insurance.
Q.41.	Does the proposed classification approach based on product characteristics fits your liability portfolio? If not please suggest a different classification.	For undertakings with pooled assets, the bucketing should not be applicable as it is not reflective of the way the ALM is exercised and produces results which do not reflect experience. In such a case, an ill-suited approach will only produce erroneous risk assessments.
Q.42.	What are the main theoretical and operational issues you envisage in the application of the classification approach based on guaranteed rate / penalties (option 2 in the classification approach)?	As pointed out in paragraph 189, we do not see empirical evidence for pure rationale economic behaviour and the option 2 is far too simplistic to account for the variety of situations and behaviours encountered in various product types. We are strongly opposed to this option.
Q.43.	Is the technical rate a proper reference to assess the level of the guarantee? If not do you have other suggestions?	The technical interest rate is one component that may switch from the ultimate biting item among options and guarantees depending on market, legal and contract conditions.
Q.44.	What are proper thresholds to be applied to the technical rate?	The RFR at 5 years maturity is very debatable. For very liquid products, one could argue that the 1-year maturity is the best comparison and the one used by policyholders as a benchmark.
Q.45.	What is in your view a proper criterion to classify the penalties?	No comment

Q.46.	Do you have other suggestion to classify the life portfolio in the light of a lapse shock?	The life portfolio should remain classified according to homogeneous risk groups.
Q.47.	What are your views on the calibration and application of the life expense shock? What data sources could be used to calibrate the shocks?	No comment
Q.48.	What are your views on other life risk shocks, in particular regarding morbidity and disability shocks, revision shocks and/or pandemic shocks in a stress test? What data sources could be used to calibrate the shocks?	No comment
Q.49.	What is your view on the Scenario based approach versus the Standard formula based approach?	We view the standard formula as a very good starting point to calibrate stress tests and derive a return period providing information on the severity of the stress tests undertaken. This is necessary to achieve credibility in the communication of the results. An infinite number of stresses and scenarios could be generated and it does not help to propagate output results of such exercises with no link to a known context of the drivers of risks as conceived in the standard formula. Under new designs, one could easily create strong bias and heterogeneity among the participants or the markets.
Q.50.	What is your view on the approach to the application of the Shocks: A) claim disbursement; B) full reserve presented on the claim disbursement?	The choice in the approach depends on the goal set for the ST Exercise. Approach A) can produce interesting indications about the insurer's ability to rapidly pay claims with an impact on the P&L (losses or gains when selling assets). Approach B) will provide more information on the impact on the insurer's solvency position with a post stress SCR recalculation

Q.51.	What is your view on the options presented on the treatment of the reinsurance recoverable?	see Q50
Q.52.	Do you have suggestions on the treatment of the post-stress DTA/DTL and on potential controls to be applied?	We think it is paramount that the stress test results produce meaningful and economic results consistent with the starting point. Tax represents an economic item embedded in the prudential balance sheet valuation. Be it before or after stress, the approach must remain economic and bring about relevant net impacts. Depending on local jurisdictions and/or insurers' situations, this item can be moderate or stronger, but it must be taken into account if material according to the rules defined in Solvency II for LAC DT.
Q.53.	Do you consider the information provided sufficient for a revaluation of the post stress position on derivatives? If not please provide indications on the missing information.	No comment
Q.54.	What are your views on the general approach to simplifications and the materiality criteria?	We welcome the fact that EIOPA takes into account the challenges in ST exercises and recognizes the need for simplifications. However, the use of simplifications should not result in a large number of additional requirements, eventually involving an increase of the operational burden. Materiality should always remain a meaningful guide for proper prioritisation of focus and efforts to trigger any work and communication. In order to avoid inconsistent views in Europe, we would favour a clear stance from EIOPA with precise thresholds shared among NSAs.
Q.55.	What are your views on the proposed simplifications for the post-stress LACDT? Do you agree with the rough assessment of the post-stress LACDT with the pre-stress net DTL? If not please provide different approach to identify potential miscalculations of the LACDT	Please see Q52
Q.56.	What are your views on the possible simplifications for the use of regression techniques post-stress? In your answer please clearly	No comment

	distinguish between theoretical principles and the viable (in terms of feasibility) solutions in the context of a Stress Test exercise.	
Q.57.	In case of a scaling approach what are the proper parameters to estimate the post-stress loss distributions?	No comment
Q.58.	In case of a full recalibration of the regression techniques against stressed conditions what are the parameters you may need as an input? Would the addition of other price categories in the list of asset shocks and the volatility surface reassessment under stressed situation be enough to re-calibrate your different tools?	No comment
Q.59.	What are your views on the extra resources required to achieve a full and complete recalibration? Please quantify the amount of days involved and how important the expert judgement is.	No comment
Q.60.	What are your views on the proposed simplifications for the use of LTG and transitional measures post-stress?	No comment
Q.61.	What are your views on the proposed simplifications for the calculation of the post-stress risk margin?	We welcome any proposal to simplify the calculation of the post-stress risk margin. Nevertheless, given that the impacts are of a secondary nature, we prefer to use simplification No. 4 based on the ratio "Risk margin / Technical provisions" before stress.
Q.62.	What are your views on the group consolidated based approach? Do you agree with the drawbacks presented on the group consolidated based approach? If not can you provide ideas on how to allow a proper validation of the results?	No comment
Q.63.	What would be in your view a proper approach to define model points? (please provide concrete examples)	No comment

Q.64.	What would be in your view a proper approach to validate the best estimate produced via model points? (please provide concrete examples)	No comment
Q.65.	Do you envisage any other approach to simplify the consolidation at group level?	No comment
	Do you have general comments, remarks, suggestion on Chapter 5?	

Chapter 6		
#	**Question**	**Answer**
Q.66.	What is your view on the overall approach of validation and the different types of validations?	To the extent possible, validations (in particular: Level 0, Level 1) used by EIOPA should be provided to insurance companies. Insurance companies can identify and adjust potential inconsistencies within the stress test specification or results before submission. Thus, it is possible to avoid resubmissions within a short time span.
Q.67.	What is your view on the approach used for the validation of the Best Estimate under stressed situation using cash flow values and their evolution under stressed situation? Which additional parameters would you suggest to improve the framework?	No comment
Q.68.	What is your view on a common approach for the Risk Margin estimation even used in Baseline calculations? Which drawback would you envisage if a "Base RM" is used as a control variable?	No comment
Q.69.	Do you have any further considerations on validations which could improve the level playing field?	Clear starting point (baseline, see answer to Q4) with restatements for initial changes (perimeter, modelling, proxies). Documentation of management actions.
	Do you have general comments, remarks, suggestion on Chapter 6?	

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Q.2.	What are your views on the different stress test objectives and the advantages and disadvantages mentioned?	Stress Tests should focus on macroprudential issues and potential systemic interlinkages while in between two macroprudential Stress Test exercises, sensitivities could be requested with a micro prudential focus only (already done in ORSAs).
Q.3.	What are your views on combining a micro prudential stress test with a quantitative assessment of post-stress reactions by insurers to provide additional insight in potential second-round effects?	That could be a practical solution.
Q.4.	What are your views on the definition and recalculation of the baseline for stress test purposes? If a recalculation of the baseline would be requested, what would be the estimated additional resources/costs for this?	As a starter, for accuracy, transparency, consistency and comparability reasons we think it is paramount that the baseline scenario should reflect the latest published solvency ratios of contributors to the STs and/or sensitivity analysis. On the same note, STs and/or sensitivity analysis should be anchored to the baseline w/o allowing any item from the baseline to be changed under the stresses being applied. It should be clear that the latest published solvency situation is the starting point of the investigation w/o changing this starting point. Any subsequent change (such as change in perimeter, modelling and/or proxies) should be assessed against the starting point and it should be clearly delivered as a restatement of the starting point item, broken down according to the different causes. Recalculations should therefore be justified in individual cases and due to changes in the structure of the entity or in the estimation models. We clearly oppose a standard recalculation, especially when using simplifications. Existing requirements for simplifications already ensure that their application does not have a distorting effect on the results. There must be a clear link with regulatory reporting values.

Q.5.	What are your views on the different time horizon approaches for stress tests purposes? What would be the most appropriate approach in your view in light of the different stress test objectives? (2.3.2-time horizon)	Ideally longer terms are necessary to appreciate the risk profile of insurers. Nevertheless, multi-year scenarios indeed pose huge operational and conceptional challenges as interactions, paths, order of occurrences and numbers of risk drivers increase and get more complex. There is a limit to the realistic operational calculation and reporting of multiple intertwined scenario constituents. An **instantaneous stress scenario** is clearly preferable to a multi-period stress scenario. Additionally, a **multi-period scenario** would require the harmonisation of a large number of specifications throughout Europe and the comparability of the results would be limited. Instantaneous shocks with specific scenario components stretched out over longer time periods appear a workable solution that should leave room for better consideration of management actions. The short-term bias of Solvency II driven by the 1Y time horizon approach for risk calibration and inducive of distortions of going concern and management actions dynamics is unfortunately largely exacerbated when implementing instantaneous shocks in stress testing. Allowance for management actions is key.
Q.6.	What are your views on the treatment of management actions in the context of a stress test exercise?	Management actions need to be taken into account.
Q.7.	What are your views on requesting post-stress calculations both with and without management actions?	Post-stress calculations should embed routine as well as corrective and future preventive management actions where necessary and to the extent that they are documented in the enterprise risk management system and policies and approved by the AMSB i.e. belong to the endorsed risk management tools. The timing of the implementation of the management actions should be correctly appreciated and implemented accordingly.
Q.8.	Please provide your view on the distinction and different treatment of embedded management actions and reactive post-stress management actions	"Reactive" management actions belong to the continuum of management tools available in the risk management system of the insurance undertaking through changing gears in levels/nature/design according to the situation faced. They are sourced from the approved toolbox by the insurance governance and belong to practical management. We do not

		think that a selection should be operated among embedded and/or reactive management actions. There is in fact no clear distinction between embedded and reactive management actions depending notably on the starting point of the so called "embedded" actions: the way some feature is or is not automatically modified in a model according to a given situation does not provide a good guidance between what is a "routine" or an "exceptional" management action. Corrective actions can belong to routine and/or exceptional management actions. A given situation and environment at closing date can differ significantly according to different time periods (ranging from "normal" to "crisis conditions") and consequently the "embedded" management actions would be significantly different although completely real. Routine or exceptional actions could have different trigger points according to the risk appetite of insurance undertakings and/or governance issues. In fact, there is a continuum that should be properly reflected in modelling risks and solvency in order to yield meaningful results. One could refer to recovery and resolution to partition between routine and exceptional. Post stress management actions do not necessarily belong to the exceptional category of the management actions of the tool box. Sometimes, the nature of a management action could be a guiding criterion to partition between routine and exceptional.
Q.9.	Which elements in your view can/should be limited in the embedded management actions to enhance the comparability of the post-stress results?	In some cases results could be produced with and without management actions for transparency purposes, but we should keep in mind that the nature of the management actions is often such that not involving them straight in the calculations is purely artificial and even impossible and mostly leads to confusion in interpretations of results and distortions of the true levels of risks.

Q.10.	Please elaborate on the key elements of the technical information that would be required in order to implement potential limitations to embedded actions (content, scope, granularity etc.).	We do not find it appropriate to limit embedded management actions. (see answer to Q8).
Q.11.	Please elaborate on the feasibility (e.g. time and effort needed for the implementation) of the potential limitation to embedded management actions to calculate post stress positions.	-------
Q.12.	What are your views on the 3 possibilities for future EIOPA stress test exercises summarized in Table 2 8?	According to our answer to Q5, we would favour the hybrid instantaneous/stretched over longer term combination (see answer to Q5 for details).
Q.13.	Do you have any further considerations regarding the potential evolution of future EIOPA stress test exercises?	-------
	Do you have general comments, remarks, suggestion on Chapter 2?	We see stress test exercises as macro prudential tools for supervision of global net impacts reflective of actual risks for the sector and potential second round effects. Therefore, it appears necessary to perform them at group level where capital allocation and risk management is steered by governance and where mutualisations, diversifications, risk mitigations and intragroup nettings strike the right balance.

Chapter 3		
#	**Question**	**Answer**
Q.14.	What is your view on the appropriate scope for a stress test exercise? Do you agree with the advantages and disadvantages of the different approaches?	We see stress test exercises as macro prudential tools for supervision of global net impacts reflective of actual risks for the sector and potential second round effects. Therefore, it appears necessary to perform them at group level where capital allocation and risk management is steered by governance and where mutualisation, diversifications, risk mitigations and intragroup nettings strike the right balance. Solo supervision is properly exercised at National level with the 3 pillars of Solvency 2. Sensitivities and stresses are already part of the ORSA process and report.
Q.15.	What are your views on the metrics to be used for defining the scope for solos and groups, respectively?	Metrics are fine.
Q.16.	What are the main challenges (if any) to assess the post-stress position of a synthetic group?	We do not support the concept of a synthetic group. Such an approach would be highly artificial (internal capital and risk management are not exercised at this level and no policies or management actions would be applicable at this level). Additionally, it would be particularly onerous: a brand-new operational process would be required and already the numbers in the baseline would need to be recalculated.
	Do you have general comments, remarks, suggestion on Chapter 3?	

Chapter 4		
#	**Question**	**Answer**
Q.17.	What are your views on the historical versus forward looking approach? Do you envisage additional advantages / disadvantages on top of the ones listed?	See answer to Q1
Q.18.	What is your view on the consistency of the scenarios with the Solvency II framework versus market compatible scenarios for the purpose of a stress test, in particular for the treatment of the RFR parameters?	UFR should remain as it is defined in SII; it is a key item of the framework for a stable anchor to the fair value discounting. It represents a very long-term level of the behaviour of interest rates. A methodology of the review of UFR has been defined by EIOPA in SII after exchanges with the industry and we support it.
Q.19.	What are your views on using single risk factors, single scenarios or combined scenarios for the purpose of a stress test?	The selection of the scenario type (**single risk factor vs. single scenario vs. combined scenario**) mainly depends on the objective of the stress test and the design of the scenario. It should not be subject to a general restriction. Combined scenarios are appropriate in a ST exercise to capture in one glance the interactions and get a holistic view. Conversely, single factors and scenarios should be suited to sensitivity analysis. However, if choosing a combined scenario this must not lead to a duplication of effort by having to show the impact of separate shocks. The downside of combined scenarios (results show effect of combined shocks, but not the effect of separate shocks) must be put up with in this case.
Q.20.	What are your views on having combined scenarios, but allowing the identification of the single shocks in isolation (for instance impact of market and insurance shocks shown separately)?	Not very relevant where interactions happen in reality. Where interactions are unavoidable and indeed reflect what happens in reality, any disentanglement is purely artificial and hence does not produce useful results.

Q.21.	What is your view on the bucketing approach for market shocks? Does a bucketing approach reduce the operational burden for the application of the shocks?	We agree with EIOPA's remarks about the additional and sometimes not meaningful complexity added by the granular approach. Having said that, the bucketing approach would soften the operational burden if it is aligned with the current structure of the Solvency II framework. For instance, a bucketing based on ratings remains close to shocks currently applied while volatility bucketing would create the need for tracking additional information.
Q.22.	What is your view on the possible approaches to climate stress testing?	Given the complexity for dealing appropriately with the long-term climate risk, we favour to keep a scope limited to short term risk for Stress Test Exercises, as it has always been done in the past with previous Stress Tests. The Stress Tests design may not be adequate in order to evaluate such long-term patterns. A separate and deeper study would be more helpful. It is likely that such a study on long term trends is not deemed to be repeated every two years as it is the case for the stress tests.
Q.23.	What would be appropriate metrics to assess transition risk in assets?	Transition risk is one of the risks that would decrease market value if it happens (and part of it according to current consensus on climate change may already somehow be factored in current market values). Therefore, transition risk is captured in the more general shocks tested in the exercise and suited to multiple origins (financial markets, economic downturn, geopolitical events, ...). If the transition risk was to be more specifically measured it would concern only the most exposed part of the portfolio and for shocks less important than the general market shocks. Given the additional operational burden of splitting the assets along their transition exposure and the fact that more severe risks are measured differently, the need to specifically target transition risk is highly questionable.
Q.24.	What level of granularity would be needed in your view (i.e. industry level, underlying technology level, asset level)? Please distinguish between different asset categories if possible (i.e. equities, government bonds, corporate bonds, real estate)	In our opinion, equities are the most sensitive to transition risk and they should be split by industry. However, we underline that this sectoral identification will be burdensome and will not add much information about the risks taken by undertakings.

Q.25.	How could climate related shocks be calibrated (please distinguish between physical risks and transition risks in your answer)? What data sources could be considered?	Physical risks are the core matter of P&C insurers and are therefore long dated continuously monitored information. One cannot elaborate on evolutions that have not been observed yet as erroneous conclusions could easily be drawn. Additionally, contracts are almost always annual and new tariffs are calculated based on updated knowledge of risks. Both physical and transitional risks related to climate are very long-term potential risks that do not fit the stress test exercise. See also answer to Q22.
Q.26.	Do you have any further considerations on the inclusion of climate related risks in EIOPA's stress testing framework?	see Q25 and Q22
	Do you have general comments, remarks, suggestion on Chapter 4?	

Chapter 5		
#	**Question**	**Answer**
Q.27.	What are your views on the calibration and application of the shocks to fixed income assets? Do you think that the proposed specifications are sufficiently detailed? If not please provide suggestion on how to improve the guidance.	The proposed application remains close to the standard formula and we favour such an approach. The **bucketing approach for market shocks** is a reasonable proposal. Stresses at country level can be appropriate in some cases (e.g. Brexit scenario), but in most cases huge differences between stresses at country level cannot be justified.
Q.28.	With regard to the derivation of the shocks to different maturities do you have different solutions to propose?	The proposed application remains close to the standard formula and we favour such an approach.
Q.29.	What are your views on the shocks to equities?	Shocks to equity should be aligned to the granularity of data already available for undertakings in order to lighten the operational burden and to avoid proxies for companies unable to add a new level of information in due time.
Q.30.	What are your views on treating Equity unlisted [R0120] according to the shocks prescribed to listed equities? Do you consider the approximation reasonable?	Yes
Q.31.	What are your views on the shocks to real estate?	No comment
Q.32.	What are your views on the treatment of property, plant and equipment held for own use?	No comment

Q.33.	Are RMBS yields the proper index to treat Loans and mortgages ([R0230])? Is an additional granularity needed to treat the sub-items of the loan and mortgages category (i.e. Loans on policies, Loans and mortgages to individuals, Other loans and mortgages)? If yes, please provide suggestions for fitting indices.	No comment
Q.34.	Do you envisage potential constraints in the application of a look-through approach?	No comment
Q.35.	What is your view on the shocks to type 1 Exposures? Do you consider the shocks to counterparties sufficiently specified? If not please provide indication on how to improve the specification.	The insurance industry regularly explains that the approach retained in the standard formula for counterparty default risk (type 1 exposure) is too complex given its relative final impact on all risks faced by insurers (and as shown by its low proportion in the total SCR). This approach of stressing both the probability of default and the LGD would be very burdensome and would require a process even more complex than under the full annual SCR computation. Hence, we prefer a simplified approach such as a stress directly applicable to the level of the type 1 SCR total capital charge.
Q.36.	What are your views on the calibration and application of the mortality/longevity shocks?	No comment
Q.37.	Can you suggest any time-series to be used to calibrate the shock to lapse?	Lapse data were collected by supervisors during the financial crisis. Supervisors could leverage the data already gathered to calibrate the shocks. We note that such a review of available data is very appropriate and would give the opportunity to challenge the mass lapse risk, the level of which has been overestimated in the original setup of Solvency 2 and set to a 40% level that seems completely out of range.
Q.38.	What are your views on the described approaches to the application of the lapse shocks?	Any deviation from the standard formula is likely to demand extra work on the databases, the models and the reporting and will require proxies in the calculation or deviation from the industrialized process. These deviations should be carefully considered taking into account the expected advantages in the light of the likely downgraded process.

Q.39.	What are the main theoretical and operational issues you envisage in the application of the "standard formula" approach?	The Standard formula is a good starting point; its design was well thought out and is well understood and shared in the market by undertakings as well as supervisors. Yet we had a strong reservation towards the calibration of the mass lapse risk which has been largely overstated due to the lack of available data when Solvency II was first implemented.
Q.40.	What are the main theoretical and operational issues you envisage in the application of the classification approach based on product characteristics (option 1 in the classification approach)?	No artificial segmentation of the ways risks are managed should be induced. Diversification and mutualisation where they exist should be properly reflected in STs and/or sensitivity analysis in order to avoid distortions of appreciations of true levels of risks and to avoid wrong incentives in business models where those issues are profoundly embedded and underly the whole concept of insurance.
Q.41.	Does the proposed classification approach based on product characteristics fits your liability portfolio? If not please suggest a different classification.	For undertakings with pooled assets, the bucketing should not be applicable as it is not reflective of the way the ALM is exercised and produces results which do not reflect experience. In such a case, an ill-suited approach will only produce erroneous risk assessments.
Q.42.	What are the main theoretical and operational issues you envisage in the application of the classification approach based on guaranteed rate / penalties (option 2 in the classification approach)?	As pointed out in paragraph 189, we do not see empirical evidence for pure rationale economic behaviour and the option 2 is far too simplistic to account for the variety of situations and behaviours encountered in various product types. We are strongly opposed to this option.
Q.43.	Is the technical rate a proper reference to assess the level of the guarantee? If not do you have other suggestions?	The technical interest rate is one component that may switch from the ultimate biting item among options and guarantees depending on market, legal and contract conditions.
Q.44.	What are proper thresholds to be applied to the technical rate?	The RFR at 5 years maturity is very debatable. For very liquid products, one could argue that the 1-year maturity is the best comparison and the one used by policyholders as a benchmark.
Q.45.	What is in your view a proper criterion to classify the penalties?	No comment

Q.46.	Do you have other suggestion to classify the life portfolio in the light of a lapse shock?	The life portfolio should remain classified according to homogeneous risk groups.
Q.47.	What are your views on the calibration and application of the life expense shock? What data sources could be used to calibrate the shocks?	No comment
Q.48.	What are your views on other life risk shocks, in particular regarding morbidity and disability shocks, revision shocks and/or pandemic shocks in a stress test? What data sources could be used to calibrate the shocks?	No comment
Q.49.	What is your view on the Scenario based approach versus the Standard formula based approach?	We view the standard formula as a very good starting point to calibrate stress tests and derive a return period providing information on the severity of the stress tests undertaken. This is necessary to achieve credibility in the communication of the results. An infinite number of stresses and scenarios could be generated and it does not help to propagate output results of such exercises with no link to a known context of the drivers of risks as conceived in the standard formula. Under new designs, one could easily create strong bias and heterogeneity among the participants or the markets.
Q.50.	What is your view on the approach to the application of the Shocks: A) claim disbursement; B) full reserve presented on the claim disbursement?	The choice in the approach depends on the goal set for the ST Exercise. Approach A) can produce interesting indications about the insurer's ability to rapidly pay claims with an impact on the P&L (losses or gains when selling assets). Approach B) will provide more information on the impact on the insurer's solvency position with a post stress SCR recalculation

Q.51.	What is your view on the options presented on the treatment of the reinsurance recoverable?	see Q50
Q.52.	Do you have suggestions on the treatment of the post-stress DTA/DTL and on potential controls to be applied?	We think it is paramount that the stress test results produce meaningful and economic results consistent with the starting point. Tax represents an economic item embedded in the prudential balance sheet valuation. Be it before or after stress, the approach must remain economic and bring about relevant net impacts. Depending on local jurisdictions and/or insurers' situations, this item can be moderate or stronger, but it must be taken into account if material according to the rules defined in Solvency II for LAC DT.
Q.53.	Do you consider the information provided sufficient for a revaluation of the post stress position on derivatives? If not please provide indications on the missing information.	No comment
Q.54.	What are your views on the general approach to simplifications and the materiality criteria?	We welcome the fact that EIOPA takes into account the challenges in ST exercises and recognizes the need for simplifications. However, the use of simplifications should not result in a large number of additional requirements, eventually involving an increase of the operational burden. Materiality should always remain a meaningful guide for proper prioritisation of focus and efforts to trigger any work and communication. In order to avoid inconsistent views in Europe, we would favour a clear stance from EIOPA with precise thresholds shared among NSAs.
Q.55.	What are your views on the proposed simplifications for the post-stress LACDT? Do you agree with the rough assessment of the post-stress LACDT with the pre-stress net DTL? If not please provide different approach to identify potential miscalculations of the LACDT	Please see Q52
Q.56.	What are your views on the possible simplifications for the use of regression techniques post-stress? In your answer please clearly	No comment

	distinguish between theoretical principles and the viable (in terms of feasibility) solutions in the context of a Stress Test exercise.	
Q.57.	In case of a scaling approach what are the proper parameters to estimate the post-stress loss distributions?	No comment
Q.58.	In case of a full recalibration of the regression techniques against stressed conditions what are the parameters you may need as an input? Would the addition of other price categories in the list of asset shocks and the volatility surface reassessment under stressed situation be enough to re-calibrate your different tools?	No comment
Q.59.	What are your views on the extra resources required to achieve a full and complete recalibration? Please quantify the amount of days involved and how important the expert judgement is.	No comment
Q.60.	What are your views on the proposed simplifications for the use of LTG and transitional measures post-stress?	No comment
Q.61.	What are your views on the proposed simplifications for the calculation of the post-stress risk margin?	We welcome any proposal to simplify the calculation of the post-stress risk margin. Nevertheless, given that the impacts are of a secondary nature, we prefer to use simplification No. 4 based on the ratio "Risk margin / Technical provisions" before stress.
Q.62.	What are your views on the group consolidated based approach? Do you agree with the drawbacks presented on the group consolidated based approach? If not can you provide ideas on how to allow a proper validation of the results?	No comment
Q.63.	What would be in your view a proper approach to define model points? (please provide concrete examples)	No comment

Q.64.	What would be in your view a proper approach to validate the best estimate produced via model points? (please provide concrete examples)	No comment
Q.65.	Do you envisage any other approach to simplify the consolidation at group level?	No comment
	Do you have general comments, remarks, suggestion on Chapter 5?	

Chapter 6		
#	**Question**	**Answer**
Q.66.	What is your view on the overall approach of validation and the different types of validations?	To the extent possible, validations (in particular: Level 0, Level 1) used by EIOPA should be provided to insurance companies. Insurance companies can identify and adjust potential inconsistencies within the stress test specification or results before submission. Thus, it is possible to avoid resubmissions within a short time span.
Q.67.	What is your view on the approach used for the validation of the Best Estimate under stressed situation using cash flow values and their evolution under stressed situation? Which additional parameters would you suggest to improve the framework?	No comment
Q.68.	What is your view on a common approach for the Risk Margin estimation even used in Baseline calculations? Which drawback would you envisage if a "Base RM" is used as a control variable?	No comment
Q.69.	Do you have any further considerations on validations which could improve the level playing field?	Clear starting point (baseline, see answer to Q4) with restatements for initial changes (perimeter, modelling, proxies). Documentation of management actions.
	Do you have general comments, remarks, suggestion on Chapter 6?	