

IRSG

INSURANCE AND REINSURANCE STAKEHOLDER GROUP

**Advice on consultation paper on
Application guidance on running
climate change materiality
assessment and using climate change
scenarios in the ORSA
(EIOPA-BoS-21/567)**

IRSG-22-11
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1. DO YOU AGREE THAT THE FIRST TWO CHAPTERS PROVIDE A CLEAR PICTURE ON THE INCLUSION OF CLIMATE RISK SCENARIOS IN THE ORSA TO A HIGH-LEVEL READER?

Yes.

Chapters 1 and 2 provide a clear overview of some possible ways to meet EIOPA's expectations set out in its April 2021 Opinion. The IRSG appreciates that EIOPA makes it clear that other approaches are possible (*"The undertakings should not restrict themselves to the aspects covered in this application guidance. Due to specific portfolios, undertakings might want to explore other alternatives to look at climate change risks."*). We also appreciate that the paper clearly states that the guidance provided is not binding and would not be used as a supervisory convergence tool. We believe however that this statement could be further highlighted in other key sections of the paper to avoid any ambiguities (when it comes to the ORSA structure, process and methodology).

Building a framework to derive meaningful climate scenario analysis is a *long-term* endeavor but one that the insurance industry is ready to tackle, as highlighted in the CRO Forum report *Mind the Sustainability Gap* (November 2021). Climate change can exacerbate the risks communities and economic activities are facing and insurers, in their role of risk managers, are particularly well placed to assess this trend and assess the related risks and perils. The IRSG sees this consultation paper, which contains an extensive gathering of information and ideas, as another inspirational source to kick start this process.

The IRSG welcome any EIOPA effort to support the preparedness of insurers for assessing the impacts of climate change risks whenever it does not lead to prescriptiveness and standardization. It is well established that a diversity of risk modelling tools is beneficial to the resilience to climate change risk and to financial stability. For instance, T. Heinrich has shown that model homogeneity in Solvency II "create a systemic fragility to the errors in these models" and that to address this risk "it would be valuable for regulators to incentivize model diversity"¹. EIOPA should more explicitly value and promote diversity in the way to assess and model climate risks.

¹ T. Heinrich (et al), "A simulation of the insurance industry: the problem of model homogeneity", Journal of Economic Interaction and Coordination, Oxford University, 2021. The paper focuses in particular on the case of CAT models.

However, the IRSG believes that EIOPA's consultation paper falls short of providing a compelling demonstration that the ORSA would *always* be the best tool and best reporting instrument to operate an insurer's climate scenario analysis framework. The IRSG would like to stress the following:

- The ORSA should remain an *actionable* tool allowing the senior management and the Board of Directors of a firm to consider risk, solvency, capital and return consistently within the context of the Company's strategy, risk appetite and business horizon.
- This means preserving the full meaning of the "O" in the ORSA. A company own view of the risks is essential for business steering. It is welcome that the EIOPA provide examples and good practices in terms of adverse scenarios assessment, however companies should have the flexibility to define their own scenarios. This is also a relevant consideration from the perspective of the proportionality principle.
- This means preserving the alignment of the time horizon of the ORSA on the strategic and business planning time horizon (i.e. 3 to 5 years). Some climate change risks may materialize quicker than others and if they can have a potential material impact over the business planning horizon they need to be considered in the ORSA. On the other hand, the long-term impact of climate change scenario (i.e. >5 years) would necessarily include strong limitations which would prevent most companies to use them in the business decision-making process. This seems in contradiction with the purpose of the ORSA.

In short, the IRSG agrees that material climate change risks, assessed on the basis of companies own framework and which may materialise within the time horizon of the strategy and business planning, need to be considered in the ORSA. Longer-term impact of climate change risks (>5 years) could be therefore analysed separately from which the main conclusions could be included in the ORSA is they prove decision-useful. The IRSG believes that EIOPA would provide an helpful and proportionate guidance to the market in reflecting this.

We would also like to refer to our earlier responses to EIOPA's consultations on similar topics that are still highly relevant and contains a lot of up-to-date information:

- IRSG advice on supervision of the use of climate change risk scenarios in ORSA ([link](#))
- IRSG advice on Stress Testing ([link](#))

Where some of the key findings were:

- *The IRSG is of the opinion that ORSA should remain solely as the company's own analysis, as it currently is, albeit potentially with additional supports, background materials and tools as outlined above relating to risks associated with climate change. No separate regulatory treatment is needed in the context of the ORSA, as the process should already cover all relevant risks for the ORSA timeframe.*
- *We also consider that any additional macro-prudential assessments of climate risk impacts which are deemed necessary should be assessed in other ways than via new ORSA requirements.*
- *We consider that quantitative climate change scenario analysis should only be included in the ORSA where climate risk is material and the needed reliability can be reached.*

Qualitative assessment should be used to judge whether the needed level of significance is reached for the need for quantitative scenarios, taking into account geographical specificities related to climate change risk, level of uncertainty on scenarios, and reflecting the undertaking's individual risk situation.

- *Quantitative stresses can be applied when looking at the business impact in a short-term period and we find many of the ideas presented quite reasonable. Anyway we strongly support exploring long-term impacts to the business model only on a qualitative basis*
- *Quantitative scenarios in the ORSA should generally be aligned with a company's strategic planning time horizon, as this is the horizon to which companies tend to apply rigorous analysis and governance, and over which projected outcomes are likely to be most realistic.*
- *The IRSG encourages EIOPA to continue to engage with firms on this important topic in order to facilitate the design and development of meaningful climate-related scenario analysis adapted to the insurance sector's specific needs and its role in the economy and wider society. One effective way to do this could be to create a forum where supervisors and industry representatives along with other key stakeholders on this topic could exchange views on good industry practices.*

Finally, we would especially bring out couple of detailed points regarding the chapter 2:

Time horizon: The figure 4 is not in line with the accompanying text p.15 which says that long-term corresponds to 10+ years. We can agree with the text, less so with the figure 4. In addition, the report is silent on the challenges associated with time horizons longer than the business plan. Business decisions need to be based on highly reliable projections, thus limiting the time horizons. Extending the time horizons may be feasible but to the detriment of reliability and therefore the objective shifts from informing business decisions to raising awareness. The CRO Forum's 2021 report Mind the Sustainability Gap contains interesting developments on the question of the time horizons in its Annex 1 – Climate Scenario Analysis which EIOPA report could refer to.

Materiality assessment: the probability of occurrence referred to in p.17 and shown in Figure 5 can be derived for risks where a probabilistic model exists, such as for some CAT risks. However, transition risks as defined p.14, such as legal risks or market sentiment or technology risks, cannot be modelled in a distribution. Instead of probability of occurrence the text should refer to likelihood and acknowledge that this is based on expert judgment. The longer the time horizon, the more subjective and random becomes this judgment to the point where the assessment is no longer decision-useful. It would be helpful that the report acknowledges this point.

Proportionality: EIOPA should include a reference to the EC proposals in the context of the 2020 review, indeed, the Directive foresees an exemption for Low Risk Profile Undertakings (LRPU) from specifying climate change scenarios and the requirement to assess their impact on the business of the undertaking. The approach/examples presented in the paper seem to be too complex and

excessive for SMEs (non LRPJ), against this background it would be helpful if EIOPA could include a simplified approach for these undertakings.

Relevance on the quantification: It seems that the sheer level of uncertainty attached to quantifying the impact of scenarios on companies' business questions the objective of such project: the results are more akin to the objective of raising awareness than the objective of taking management actions. The "So what?" typical underlying question at Board meeting would probably remain unanswered if the quantitative output does not meet the standards in terms of reliability to support informed decision. The IRSG brought out this concern on its advice on stress testing in 2020 (above). Certain business decisions on investment policies or underwriting should benefit already from qualitative assessments and its highly important that any analysis should bring light into short and medium term business decisions and risks.

Therefore, we insist on the importance of remaining meaningful and operational under ORSAs which is a tool dedicated to the own risk management of (re)insurance undertakings. Under ORSAs (re)insurance undertakings identify, assess and challenge their entity specific risk drivers. Each specific risk profile requires a specific treatment. As risk experts, insurers are particularly well placed to inform about the risk drivers of their risk profile and to connect that to climate when suited (a common case for P&C insurers).

Model dependence: Overall, promoting diversity in the way to assess and model climate risks should be an essential role of EIOPA. Every existing method to quantify climate risks are extremely model-dependent and it's only by crossing views and trying different techniques and databases that a better understanding of the risks can emerge. There is a risk that EIOPA's application paper has actually a negative impact on the diversity in assessing and modelling climate risks if the guidance is perceived as the supervisor-proofed way to address EIOPA opinion.

2. DO THE EXAMPLES IN “CHAPTER 3 – MATERIALITY ASSESSMENT” ADDRESS THE MAIN TRANSITION AND PHYSICAL RISKS TO WHICH UNDERTAKINGS MAY BE EXPOSED?

Yes.

The IRSG finds it useful that there is a lot of comprehensive examples which is certainly informative but at the same time it's very hard to build the overall picture or take these examples into the ORSA process. The structure and formatting on the examples do not make for an easy reading. We congratulate EIOPA on the effort to make this Opinion more concrete but also question which type of firms would really benefit from this section. The work by using dummy undertakings makes it more understandable and generic but won't be meaningfully translated in real world firms. Also Insurers need to go any business specific analysis in a Lines of business and risk category level by looking both customer and (possible) investor aspects which would be a hard task by using these examples. The examples are not being built in a level that would meet these basic business needs.

We also believe that even though both transitional and physical risks are well defined in the paper and are aligned with the common ideas on how these risks can be grouped, there's still several other aspects to include to make it more useful for insurers to really be able to make any analysis useful. For instance, the development of risks in time, interactions on different risks, the societal and geographical aspects in both the transition and the physical risks and the political risk which seems to be inherent in many of the different risks.

Finally, we would also remind that insurers have a lot of different options to deal with the changing environment. Both pricing and insurance cover can be adjusted, different ways of transferring risk can be used (e.g. re-insurance and market-based solutions) and product lines can be launched and ended. So understanding different risk categories might be useful but it is also highly useful to understand the full set of different options to use when the operating environment changes.

3. DO YOU CONSIDER THE SCENARIO ANALYSES PROPOSED IN “CHAPTER 3 – CLIMATE CHANGE SCENARIOS” EASY TO APPLY FOR SMALL AND MID-SIZED INSURERS?

No.

The IRSG finds that there is a lot of clear examples that will help SME's in the work. Anyway the overall set of examples make the overall picture difficult to handle and insurers might have difficulties to build something coherent from this.

The ORSA process is intended to enable consideration of all risks impacting on an undertaking. The extent of analysis set out here is likely to be disproportionate in the context of an “all risks” exercise, and would more properly be reflected in distinct consideration of climate change risk.

The IRSG advises against introducing spurious accuracy to scenarios which are incorporated in the ORSA. The only thing which can be known is that scenarios will certainly evolve differently from those included in the ORSA. For that reason, the key to creating scenarios is to identify directional trends in key variables to which an institution is exposed and to apply orders of magnitude of variation which are unlikely but credible. Prescription of significant processes to identify scenarios runs the risk of introducing spurious accuracy for little if any benefit.

For this reason, the IRSG is also opposed to the requirement for two long-term climate scenarios.

4. IS THERE ANY RELEVANT ASPECT NOT COVERED BY THE PREVIOUS QUESTIONS, WITH A PARTICULAR FOCUS ON ALTERNATIVE METHODOLOGIES / APPROACHES?

Yes.

The IRSG considers that the qualitative assessment of relevance to the business, and of impacts and actions of climate change events, is a key step in the climate change related considerations in the ORSA. This phase should also consider whether the potential outcomes which may follow on climate related events would already be largely addressed under one or more existing generic scenarios. To the extent that this would clearly be the case, the detailed quantitative climate change scenario assessment may be largely superfluous.

For unit-linked business without guarantees, the impact of asset value reductions which would be felt in climate change scenarios could be expected to be equal and opposite on asset and liability sides of the balance sheet. The impact on solvency for such business would be second order, and the impact of climate change could be expected to be effectively addressed under broad asset value reduction scenarios.

In assessing materiality, undertakings should consider the right to change or reprice premiums on a regular basis, as well as other risk mitigating techniques which can be activated. Undertakings may also consider that climate change risks are well covered by their existing ERM and ORSA (e.g. by business volume or counterparty scenarios) and therefore forcing them to include additional quantitative climate change analysis may be unnecessary and disproportionate.

We believe that working with climate scenarios as such (with temperature or GHG emissions as all-in factoring indicators) is a daunting task in many respect beyond the reach of robustness and certainty that supervisory tool boxes and (re)insurance undertakings enterprise risk management seek for reliance. Edward Lorenz already stated in 1972 that the flapping of a butterfly's wing in Brazil can cause a tornado in Texas. Infinitesimal variations between two initial situations could lead to unfathomable final situations. With the growing interconnectedness, interactions and complexity of the world (technology, science, events, choices, communication), the smallest change can lead to major disruptions of entire systems, the modelling and prospective approaches of which become useless, impractical and illusory. In order to be prepared for the unforeseen one needs to allow for it. Therefore, we insist on the importance of remaining meaningful and

operational under ORSAs which are a tool dedicated to the own risk management of (re)insurance undertakings. Under ORSAs (re)insurance undertakings identify, assess and challenge their entity specific risk drivers. Each specific risk profile requires a specific treatment. The number of variables underlying climate are certainly close to infinite, even more so when coupled with social, economic, technological, political situations and choices. It cannot be wise to rely on one or a couple of climate scenarios and think it provides a reliable work to inform upon. Additionally, all of this is still leaving an intimidating task to convert high-level all factored-in scenarios into applicable input for the actual risk drivers of an insurer's risk profile.