

## **FEEDBACK STATEMENT on comments received on the 2023/2024 reassessment exercise of the Nat Cat standard formula**

### **Introduction**

EIOPA conducted a public consultation on the 2023/2024 reassessment exercise of the Nat Cat standard formula, which ran from 3 April 2024 until 20 June 2024. EIOPA received 12 stakeholder responses to the public consultation, of which 9 were public and 3 confidential responses. EIOPA would like to thank all stakeholders for their responses to the public consultation. The input received provided important guidance for EIOPA to finalise the reassessment paper. All comments submitted were given careful consideration by EIOPA. This feedback statement summarises the main responses received and how EIOPA addressed them in the methodological paper. The non-confidential individual responses received and EIOPA's feedback on these responses are published in a separate document.

### **Objective and conclusions**

This discussion paper responds to the Solvency II review which includes a mandate to EIOPA to do a reassessment and, in the case of significant discrepancy, a recalibration in Art. 304c (2). EIOPA has therefore performed a (re)assessment exercise including two steps: (a) (re)assessment of the Nat Cat parameters of the standard formula SF and (b) where material, suggest a recalibration of these parameters.

The paper sets out the (re)assessment where all perils/regions in scope have been analysed and describes the perils/regions to be monitored. The review covers the parameters for country<sup>1</sup> factors, zonal relativities and correlations as well as the country correlations (for the definition of these parameters please see EIOPA's Methodological paper<sup>2</sup>). The 2023/2024 exercise was performed in close collaboration with the EU National Competent Authorities (NCAs) and EIOPA's Technical Expert Network on Catastrophe Risks. In order to collect stakeholder's feedback, 53 questions (for specific perils/regions) were asked in the public consultation.

Overall, the stakeholders welcomed EIOPA's work on the reassessment of the Nat Cat standard formula. A regular reassessment seems appropriate in light of changes in the hazard for example due to climate change but also other changes in the way Nat Cat are insured. With regards to adding "new" perils (wildfires, coastal floods, droughts for crops), it is relevant to study them and pursue investigations on definitions and data gathering. Yet, most stakeholders mentioned that it is too early to ascertain any robust calibration. EIOPA will continue to improve the understanding of these perils and will consider adding new evidence in the SF when available.

### **Main responses received to the discussion paper and how EIOPA addressed them**

#### **Transparency of the reassessment**

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<sup>1</sup> Note that the regions considered in the Standard Formula correspond to countries.

<sup>2</sup> EIOPA, 2021. [Methodological paper on potential inclusion of climate change in the Nat Cat standard formula \(europa.eu\)](https://eiuropa.eu/methodological-paper-on-potential-inclusion-of-climate-change-in-the-nat-cat-standard-formula)

A number of stakeholders mentioned the need to have more transparency when performing the Nat Cat reassessment of the SF. EIOPA has done significant work to provide more information for this exercise on the Nat Cat reassessment as done in previous exercises (i.e., 2017/2018 review of the Nat Cat parameters). EIOPA aims to continue improving the availability of information and understanding related to the reassessment. A possibility envisaged is also to include open-source models as benchmark to provide more open results in the future.

#### Consideration of adaptation measures

Many stakeholders also raised the importance to consider how adaptation measures are influencing Nat Cat risks as EU member states and individuals have implemented measures to adapt to these changes, and this trend is likely to continue. These are fundamental to managing the new emerging risks and, at the same time, and because it is technically sound, a way should be found to recognise the associated risk reduction in the SF. EIOPA has planned to initiate further work on the assessment of the prudential treatment under Solvency II of adaptation measures in Nat Cat insurance<sup>3</sup>.

#### Consideration of limits and deductibles

A number of stakeholders also mentioned the need for more transparency on the implicit modelling of contract limits and deductibles. The 200-year RPL (Gross Loss<sup>4</sup>) was modelled using commercial catastrophe models and corresponding Industry Exposure Databases which consider best-estimates for market deductibles and loss limits on country and area levels. EIOPA wants in the future to improve the consistency and transparency by developing the collection and dissemination of uniform and comprehensive catastrophe risk data such as exposure data which would be used in the next Nat Cat reassessment process.

#### Reassessment/(re)calibration

##### a. Earthquake

Five countries were in scope for the 2023/2024 earthquake reassessment exercise. No stakeholders had comments for the proposal made in the paper for Switzerland, Liechtenstein, Portugal and Italy.

For Romania, most of the stakeholders mentioned the need to correctly account for the PAID scheme in place. The standard formula can not capture in the delegated acts two specific factors for Romania Earthquake (one for PAID exposure and one for the companies offering the additional coverage). The proposal is therefore to have in the delegated acts a factor valid for the companies offering additional coverage. For PAID exposure, a capital add-on could be implemented (Article 37(1)(a) of the Directive) until the review of a partial internal model.

##### b. Windstorms

No comments or overall approvals were provided for Poland, Czechia, Ireland, Denmark, Portugal and Iceland. The stakeholders mentioned that the update of the parameters for the three French ultramarine territories seems a bit too harsh. The new factors were set to respect a logic agreed during the discussions with EIOPA's cat risk expert network where Martinique risk is lower than Guadeloupe which is itself lower than Saint Martin. Accounting for IRMA was also in the nature of revising tail risk for some Caribbean models and thus windstorm

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<sup>3</sup> Reference is made to chapter 3 of the "Prudential treatment of sustainability risks" paper.

<sup>4</sup> Loss to the insurer after limits and deductibles and co-insurance are applied, but before any forms of reinsurance.

factors for French ultramarine territories. Initial model outputs were suggesting even higher factors, a moderate approach has been followed to avoid overshooting.

In addition, one stakeholder commented on Norway windstorm and mentioned that the factor for Norway windstorm is currently too high. This information was unfortunately not provided in the initial call for evidence EIOPA had run to define the scope of the 2023/2024 reassessment exercise. EIOPA has nevertheless checked with the Cat Risk Expert Network and corresponding cat models. The current factor seems indeed to be on the conservative side, but one model was even providing a larger factor. EIOPA will therefore not consider the recalibration for this exercise. However, EIOPA has a mandate to perform this reassessment regularly and will consider this for the next exercise.

c. Flood

Sixteen countries were in scope for the 2023/2024 flood (re)assessment exercise. No stakeholders had comments for the proposal made in the paper for France, Luxembourg, Italy, Belgium, Czech, Malta, Portugal and Lichtenstein. The Nordic countries of Denmark, Finland, Norway and Sweden received in total nine questions of which five were mostly proposals for corrections on typing. In addition, for Denmark it was questioned whether the country factor, deemed high included even the coastal flood. For Finland the level of the country factor was also considered to be high, and a number of technical points were raised to contest the result. For Norway it was pointed out that the data was not sufficient to verify the country factor. As the contestations were mostly based on historical observations instead of forward-looking stochastic simulations used in the calibration, or on comparisons to the existing Windstorm factors not reassessed on this round, the results received are proposed to be kept as such. This is supported also by the fact that the Nordic country factors are in line with each other and in part of the countries the comments allow for the scale of the factors. For the more detailed comments the answers are provided for in the word-file. For the Netherlands, the stakeholders mentioned that it is premature to include calibrations for NL flood risks given the uncertainty regarding the possible future public-private scheme. The latest developments on the national public-private scheme in the Netherlands are taken into account in the paper now. However, the proposed new country factor for flood risk in NL is still valid, because the secondary flood and pluvial have a higher market penetration in NL. The proposed country factor is considered conservative and falls within the range of the three (shadow) model vendors that take both non-primary fluvial and pluvial floods into account.

For Romania, most of the stakeholders mentioned the need to correctly account for the PAID scheme in place. The standard formula can not capture in the delegated acts two specific factors for Romania Flood (one for PAID exposure and one for the companies offering the additional coverage). The proposal is therefore to have in the delegated acts a factor valid for the companies offering additional coverage. For PAID exposure, a capital add-on could be implemented (Article 37(1)(a) of the Directive) until the approval of a partial internal model. Some comments also discussed the new calibration of the zonal weights. For Romania, it was decided to recalibrate the entire zonal weights to move from administrative regions to CRESTA zones and as PAID exposure is taken out of the Standard Formula. For example, for Ireland a discussion took place to better understand the reasoning behind the values of certain zonal weights. In the next exercise, EIOPA might consider to perform further work on the zonal weights for all countries and also provide further explanations on their calibration. Finally, a stakeholder also mentioned that the factors for Poland would be too high. EIOPA has

contacted two suppliers of catastrophe models with whom it cooperates and both have confirmed that the flood parameter for Poland is not overestimated. Both modelers have shown that this parameter is slightly higher than the current 0.16% in the standard formula. Therefore, there is no basis for changing the flood parameter for Poland. The next nat cat reassessment study will provide the opportunity to fully reanalyze the parameters. At the moment, there is no basis for changing it.

d. Hail

Eight countries and the motor factor were in scope for the 2023/2024 hail reassessment exercise. No stakeholder had comments for the proposal made in the paper for Italy, Belgium and Poland. For France, two stakeholders mentioned that a recalibration of regional parameters seems appropriate to better reflect the risk. For Germany, three stakeholders commented that raising the motor factor was reasonable, but raising the country factor for hail was not justified. The proposal here is to keep both proposals anyway, since the proposed motor factor is still too low for Germany, hail risk for motor business is considered to be the driving hail risk for the majority of undertakings and hail is the main peril affected by climate change. For Luxembourg, only one stakeholder provided a comment which mentioned that the considered factor is inappropriately high. Analyses performed by EIOPA however show that the country factor for Luxembourg has been calibrated such that it results very similar to that of the surrounding zones in the bordering countries.

For the Netherlands, EIOPA received only one stakeholder response which commented that there could be some overlapping with the new flood component with regard to flooding from heavy rainfall and stated that for some insurers (especially those who cover flooding due to rainfall but not from secondary dykes) the SF SCR Flood could potentially be too high. However, model vendors generally do not include rainy showers among the subperil of the severe convective storm (SCS) so no double counting issue is envisaged, especially in 1-in-200-year scenarios.

For Norway, stakeholder agreed with EIOPA's conclusion of hail not being material for Norway. For the motor factor, five stakeholders did not have any comments on the suggested increase. EIOPA received only one comment which stated that the factor reflects the increased vulnerability of motor insurance to hail, but that insurers which focus on motor may face a material increase in the SCR. As stated in the Consultation Paper, all modelled results suggest that a motor factor of 5 is too low, on average the models suggest a motor factor equal to 15. The proposed new factor of 10 is seen as a reasonable balance between modelling results (and variations observed between countries) and the current factor.

e. Subsidence

Three countries were in scope for the 2023/2024 subsidence reassessment exercise. No stakeholder had comments for the proposal made in the paper for United Kingdom. For France, two stakeholders provided comments that considered the review of the factor as premature due to National schemes and historical data uncertainties; discussions held by EIOPA and ACPR were conducted with the National scheme provider, CCR, and model vendors to make sure the new factor was appropriate. For Belgium, two stakeholders commented that the proposed country and zonal factors should be lowered due to limited historical claims. Differences between Belgium and France risks were also reminded. EIOPA calibrated the risk for subsidence Belgium based on the model for Belgium of one of the members of EIOPA

NATCAT expert network. The specific geology and the building mix in Belgium was taken into account. The analysis also included a risk map for all the Belgian territory and a cross-country comparison with France: comparison with the border regions and other areas in France with similar level of risks.

#### New emerging perils

##### a. Wildfire

Stakeholders share the view that, due to climate change, wildfire risk may increase in frequency and intensity and become relevant for the (re)insurance sector in the future. However, they pointed out that there is not enough evidence yet to include it in the SF because of both the low materiality for the (re)insurance sector and the unavailability of wildfire models for Europe, that would make very difficult the calibration of the SF parameters for this peril. EIOPA shares this view and thus proposes to keep monitoring the peril until evidence of a materiality for the insurance sector emerges and new models for wildfire risk in Europe are made available.

Several respondents mentioned that the treatment of wildfire risk in SF could bring to a possible issue of double counting, as damages to properties are already included in the Fire risk sub-module of the Man-made catastrophe risk sub-module. The proposal is to thoroughly analyse this issue whenever the introduction of the wildfire peril in the standard formula may become necessary.

Finally, two stakeholders pointed out that wildfires can only occur locally in forest areas or in the immediate vicinity and thus the use of CRESTA zones may be unsuitable for modelling purposes, as it would not represent the adequate granularity. This consideration however is relevant also for other perils (e.g. flood): although these limitations should be recognized, it should be considered that the use of CRESTA zones has the advantage to limit complexity in the standard formula.

Supervisors indicated that a new module would need to be created for wildfires.

##### b. Coastal flood

Several stakeholders mentioned that there is not enough evidence yet to include coastal flood in the SF. One stakeholder mentioned that it seems sensible to consider coastal flood for exposed member states.

On the question as to how coastal flood could be integrated in the SF, the views were split. A view preferred including coastal flood in the flood peril, while another view preferred including it as a new peril, another stakeholder preferred an approach similar to the UK to include coastal flood within the windstorm risk.

Supervisors indicated that coastal flood should be added in the flood module. It is proposed to further discuss and assess the topic in the future.

##### c. Droughts

Stakeholders highlighted the important differences between countries and regions for this risk; if drought is considered here by EIOPA at European level, national experiences would certainly need to be taken into account as for the other perils if further developments occur. If drought risk were to be included in Solvency 2, stakeholders suggested to assess it independently from other nat cat risks, and only considering crop insurance businesses. One stakeholder also reminded that any double counting should be avoided.

Supervisors indicated that crop insurance would need to be considered separately from the other LoBs.