

Discussion Paper: Methodology on potential inclusion of climate change in the nat cat standard formula

Fields marked with * are mandatory.

Responding to the paper

EIOPA welcomes comments on the discussion paper: Methodology on potential inclusion of climate change in the nat cat standard formula.

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 using the EU Survey tool **by Friday, 26 February 2021, 23:59 CET** by responding to the questions below.

Contributions not provided using the EU Survey tool or submitted after the deadline will not be processed.

Publication of responses

Contributions received will be published on EIOPA's public website unless you request otherwise in the respective field in the survey below. A standard confidentiality statement in an email message will not be treated as a request for non-disclosure.

Please note that EIOPA is subject to Regulation (EC) No 1049/2001 regarding public access to documents [1] and EIOPA's rules on public access to documents[2].

Contributions will be made available at the end of the public consultation period.

Data protection

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[1] Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents (OJ L 145, 31.5.2001, p. 43).

[2] [Public Access to Documents](#)

[3] Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45 /2001 and Decision No 1247/2002/EC (OJ L 295, 21.11.2018, p. 39).

About the respondent

* Please indicate the desired disclosure level of the responses you are submitting.

- Public
 Confidential

* Stakeholder name

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Questions to Stakeholders

Q1: Do you agree with the definition of the perils?

- Yes
 No

Please explain.

Hail is characterized by the fall of disjointed logs more or less round of ice (hailstones) whose diameter can vary from a few millimeters to about twenty centimeters in the most extreme cases. While this peril happens during wild storm, the effects are specifics.
Windstorm currently covers a large number of perils which are not linked to the same underlying phenomena.

Q2: Do you think that it should be clarified that the peril currently named “Hail” in the SF refers to “Convective Storm”?

- Yes
- No

Please explain.

As stated in the previous comment, hail is a specific peril.

Q3: Do you think that the peril currently named “Hail” in the SF should be renamed as “Convective Storm”?

- Yes
- No

Please explain.

When you have some hails, you have as well some tornadoes... In addition, it would fit with the definition of the cat modelling agent making easier the potential comparisons

Q4: Do you think that it should be clarified that the peril currently named “Windstorm” in the SF refers to “Cyclonic storm”?

- Yes
- No

Please explain.

The French Institut des actuaires believes that this peril could be split into two types of perils: cyclones and extra-tropical cyclones. The origin of those perils are different and therefore should not be part of the same definition. For cat modelers, there are two different models as well.

Q5: Do you think that the peril currently named “Windstorm” in the SF should be renamed “Cyclonic storm”?

- Yes
- No

Please explain.

To avoid confusion as most catastrophe modelling tools treat them separately.

Q6: Do you agree with the risks identified where there is a high confidence level on the current and short-term impact of climate change in Europe?

- Yes
- No

Please explain.

No comment

Q7: Do you agree to refer to a 1.5°C warming scenario for short-term (5-10 years) projection of climate change?

- Yes
- No

Please explain. If no, would you suggest an alternative scenario?

More 10 years horizon than 5 years.

Q8: Do you agree to take into account adaptation measures when assessing weather-related risks?

- Yes
- No

Please explain.

Mitigation measures (objective of action on the factors of climate change despite a significant level of uncertainty) and measures to adapt to the consequences of change (objective of maintaining equivalent living conditions despite climate change) should be taken into account.
Insurers and reinsurers should be more proactive on this to motivate citizens, cities and states to invest in such these measures

Q9: Do you agree that in light of climate change, it is necessary to explicitly consider climate change in the recalibration of the Nat Cat SF for certain perils/regions as identified in Part 3?

- Yes
- No

Please explain.

Models are not calibrated each and every year, it is important to include the potential impact of climate change in the next 5 to 10 years.
It is important to explicitly point out the quantum in the parameters' calibration attributed to climate change. Since these factors involve country granularity and cross impacts it is more transparent and flexible to mention explicitly as explained in Part 3 the country and the peril impacted by climate change.
However a cost / benefit analysis must be run with FCA and undertakings in this consultation to check the feasibility of the inclusion of such explicit variable.

Q10: Do you agree that for relevant perils/regions where climate change is expected to have an impact, Nat Cat models explicitly considering climate change should be used if available?

- Yes
- No

Please explain.

Indeed if the vendors models already include the potential impact of climate change, these models should be used however (and this is the next question), we are not aware of any modules trying to integrate it at the moment.

Q11: Are you aware of models, which would explicitly consider climate change which could be used to perform the Nat Cat SF parameters' calibration?

- Yes
- No

Please explain. If yes, please provide information about models.

There are some regularly used models by Meteorologists such as CMIP 5 but is not fully available and require meteorology knowledge hence a price to pay to handle properly.

Q12: Do you think that new countries should be considered in the SF in light of climate change?

- Yes
- No

If yes, please explain which ones, why and provide sources of data/studies.

In order to be prudent all countries that have been impacted in the last decade with a high severity and penetration should consider being included - Coastal flood should be added in France since there have been many occurrences in the last 3 years.

Q13: For new perils, EIOPA has focused on wildfire. Do you see additional “new” perils which could be of relevance for the SF?

- Yes
 No

If yes, which ones?

In addition to wildfire and drought we should also take into account heatwave increase in frequency and severity, however there is currently no vendors models.

Q14: Do you think that wildfire could potentially be material enough for the insurance sector to be considered in the SF?

- Yes
 No

Please explain.

The example given is Portugal with a few major events but some events took place in Greece and in northern Europe countries (Finland...) as well. Drought is one of the driver of such potential issue as well as building of houses nearby forests.

Q15: Are you aware of models or data which could be used for the calibration of parameters for wildfire risk in Europe?

- Yes
 No

Please describe the data and/or models.

Some models exist in the US but to our knowledge not in Europe.
We have identified a few data sources :
- <https://www.preventionweb.net/news/view/73721>
- <http://www.drias-climat.fr/>
- <https://cerfacs.fr/en/wildland-fire-propagation/?cn-reloaded=1>

Q16: For new lobs, EIOPA has focused on agricultural insurance and NDBI. Do see additional lobs, which could be of relevance for the SF?

- Yes
- No

Please explain. If yes, please provide lobs names.

Q17: Do you think that crop insurance could potentially be material enough for the insurance sector to be considered in the SF?

- Yes
- No

Please explain.

Crops can be impacted by several natural disasters like drought and hail and therefore should be included in the scope especially because some insurance companies are heavily exposed to this specific LoB in limited territories.

This will increasingly be covered by parametric insurance.

Q18: Do you think that adding a loading factor is the right approach to capture climate change?

- Yes
- No

Please explain.

Entities with sufficient knowledge about this risk could use an internal estimated capital approved by the regulator, and therefore not be hit by a loading factor.

Q19: Do you think that revaluating the correlation matrices is the right approach to capture climate change?

- Yes
- No

Please explain.

Correlations are very important but we could end up with an over parametrisation if the correlation matrix has a too fine resolution (LoB, Cresta level).

Q20: Do you agree that there is a need to formalise an approach to re-assess current Nat Cat SCR parameters on a regular basis?

- Yes
- No

Please explain. If yes, how often should this take place? Who should participate to such a reassessment? What should be the parameters considered?

Insurers will need to discuss with climate change scientists, model vendors, FCA in order to reassess current Nat Cat SCR parameter on a regular basis.

Q21: Do you agree that regular recalibration is needed but under the condition that the changes are material in order to not include artificial volatility?

- Yes
- No

Please explain.

Changes needs to take into account the period of return of high severity claims. However this should be monitored since frequency may also increase so the materiality threshold will require a big scrutiny.

Q22: Do you agree that any recalibration should take in account adaptation measures in a future calibration?

- Yes
- No

Please explain. If yes, do you have any insights on how this can be done?

Adaptation measures should be taken into account by the vendor models. However, it is nearly impossible for them to take this into account every year like building of roads, parkings... Recalibration should reflect risk as much as possible without any overestimation.

* Q23: Do you have any other comments on the draft Opinion?

- Yes
- No

If yes, please provide these other comments.

Generally speaking, it could be interesting to investigate topics related to ecological transition from the perspective of the insurer's place as an economic selector of polluting or green companies.

Contact

[Contact Form](#)