

To: Sustainability WG, Solvency II WG  
From: Prudential Team  
cc:  
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Subject: EIOPA event on opening the world of catastrophe models

## Summary

Last week, on 16 May, the European Insurance and Occupational Pensions Authority (EIOPA) hosted an event on "Opening the world of catastrophe models" ([link](#)). During this event, EIOPA presented the CLIMADA-app as well as other initiatives that promote open-source approaches.

In the meantime, EIOPA has published the presentations, of which members will find an overview and a short description below.

- **EIOPA introduction and CLIMADA app** ([here](#)) – it is a user interface/free software which is intended to facilitate the use of the open-source cat model CLIMADA. The model can be redistributed and/or modified.
- **Presentation on the open-source model CLIMADA** ([here](#)), which provides more further details on the CLIMADA app.
- **Presentation on IAIS work on climate risk and relevance of NatCat models** ([here](#)), highlighted the need for the IAIS to use NatCat Models, and shared that ideally these models would have global coverage, as well as cover all main perils and risk drivers, have a global exposure database, provide a view on modelling uncertainty, be easy to use, transparent, inexpensive to run, and could be adjusted to perform sensitivity analysis on alternative set of assumptions.
- The **Insurance Development Forum (IDF) open risk presentation** ([here](#)), focused on the risk modelling strategy, which consists of Global Risk Modelling Alliance (GRMA) - an expert team to work with countries with a grant fund to fill critical model and data gaps and - and IDF-Oasis technical development programme - consisting of an open-source risk modelling platform and tools, and open data standards.
- **The presentation on enhancing risk assessments for improved country risk financing strategies** ([here](#)), in which the Deutsche Gesellschaft für Internationale Zusammenarbeit (giz) showed a new framework, the Economics of Climate Adaptation (ECA) Framework, which is powered by CLIMADA and evaluates and suggests optimal climate adaptation measures through weighing the costs and benefits of the different options. In addition, the Enhancing Risks Assessments (ERA) project was presented, which has the objective of providing enhanced risk assessments to the Governments in Egypt and Thailand, informing their adaptation and risk financing strategies.
- **Presentation on NGO Climate Analytics** ([here](#)) provided more detail on their Inter-Sectoral Impact Model Intercomparison Project (ISIMIP), which was created to conduct research on climate impacts on multiple sectors and across the globe. It has been a pioneering project because it has relied on common experimental protocols and common input datasets, as such allowing to compare results across impact modelling groups. It also explores sectoral impacts from both the climate and human forcings (land use, water management, etc.).

- **Presentation on NGFS Scenarios** ([here](#)), in which the Network for Greening the Financial System presented its 6 main scenarios, covering 3 main categories - Orderly scenarios assume climate policies are introduced early and gradually, both physical and transition risks are relatively subdued, disorderly scenarios explore higher transition risk due to policies being delayed or divergent across countries/sectors, resulting in higher carbon prices, and Hot House World scenarios assume that some climate policies are implemented in some jurisdiction, but global efforts are insufficient, resulting in severe physical risk with irreversible impacts.
- The **Global Earthquake Model** (GEM) presentation ([here](#)) gave a general overview of the project (sponsors, vision, etc.) and explained how the general modelling framework is divided into three main components of risk - hazard (likelihood, probability or chance of a destructive phenomenon), exposure (the location, attributes and values of assets that are important to communities), and vulnerability (the likelihood that assets will be damaged when exposed to a hazard event).
- **Presentation on Oasis Loss Modelling Framework** ([here](#)), which aims at providing open-source software and an open framework for model and software development, improving risk assessment through better models, transparency, performance, and innovation, and establishing a commercially vibrant community of providers and users of Oasis software, models, data, and tools. They also provided further background on their Open Data Standards (ODS), which consist of a model agnostic and designed to help solve interoperability problems while improving efficiency and transparency, especially with data transfer and cross-model analytics.
- The **Risk Data Hub** was presented ([here](#)), and according to the **European Commission**, it is a GIS web platform of EU wide risk data and methodologies for disaster risk assessment. It was emphasised that it is more than a data repository, it is a call for collaboration. The goal is to have open-source data, transparent methodology and openly available software architecture.
- The **ACPR and Banque de France** presentation ([here](#)) aimed at sharing the interest to supervisors of open-source NatCat and Climate Change modelling. These might provide context to help supervisors assess the internal models of supervised entities and help supervisors monitor the evolution of NatCat risk, in light of climate change.

For more information you may consult all presentations [here](#).