

Science-policy-practice for improved management of compound events and multi-hazard risks

Dimitra Theochari, Minna Keinänen-Toivola (WG2)

The DAMOCLES Stakeholder Workshop in Glasgow (17.-18.1.2023) was used as an opportunity to increase stakeholders understanding of Compound Events, exchange experience and ideas, discuss the difference between compound events and multi-hazard events, identify limitations in modelling compound events and, finally, explore ideas for management of targeted planning for modelling these events. This workshop has been the greatest source of input for us on these topics, and here follow the main findings on the aforementioned topics.

Understanding Compound Events: This topic was addressed in the first session of the workshop specifically focused on the shared understanding of compound and multi-hazard thinking between the two communities, and it was attempted to address any confusion regarding the diverse and overlapping language and terminology within both research communities (for example, the (re)insurance industry uses the term 'peril' where academics would use 'hazard'). A result of this discussion has been identifying the need to develop common terminology that can increase communication and play a pivotal role to successful science-policy-practice interactions.

Limitations to Modelling Compound Events: Throughout the presentations and break-out sessions of the second session a range of limitations were discussed on different core issues: *communication, lack of readiness of stakeholder to embrace research output, and community engagement*. More specifically on the issue of communication consists of missing a communication platform, misunderstanding specific terminology, not get the 'right people' around the table, and the fact that often scientists cannot clearly communicate their limited capabilities. Ideas for moving forward and suggestions for future steps were also discussed and identified.

Enabling targeted planning: This topic was discussed in the third session of the workshop and mainly through the presentations of the RISKKAN, MYRIAD-EU, MEDiate, and CASCADES projects. This breakout session was an opportunity to consider how the multi-hazard and compound events communities can better utilize science-policy-practice interactions to improve the usability and application of research outputs (in practice and policy) going forward. Topics of funding for training schools, conference events, networking and research were discussed, and a series of ideas were collected on how targeted planning can happen in the future.