

EGU22-12597

<https://doi.org/10.5194/egusphere-egu22-12597>

EGU General Assembly 2022

© Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.



## Good practices in disaster risk and crisis management for civil protection purposes: an integrated multi-hazard risk approach

Andrea Prota<sup>1,5</sup>, Mauro Dolce<sup>2</sup>, Claudia Morsut<sup>3</sup>, Domingos Xavier Viegas<sup>4</sup>, Miguel Almeida<sup>4</sup>, Chiara Casarotti<sup>1,6</sup>, Daniela Di Bucci<sup>2</sup>, **Francesca Giuliani**<sup>1,7</sup>, Maria Polese<sup>1,5</sup>, and Nicola Rebora<sup>1,7</sup>

<sup>1</sup>CI3R – Italian Centre for Research on Risk Reduction, via Properzio 5, 00193 Rome, Italy

<sup>2</sup>ICPD – Department of Civil Protection, Presidency of the Council of Ministers, Via Ulpiano, 11, 00193 Rome, Italy

<sup>3</sup>UiS – University of Stavanger, 4036 Stavanger, P.O. box 8600, Norway

<sup>4</sup>ADAI – Association for the Development of Industrial Aerodynamics, Rua Pedro Hispano n°12, 3030 - 289 Coimbra, Portugal

<sup>5</sup>ReLUIIS – Network of the University Laboratories of Seismic Engineering, Via Claudio, 21 – 80125 Naples, Italy

<sup>6</sup>EUCENTRE – European Centre for Training and Research in Earthquake Engineering, Via A. Ferrata, 1 – Pavia, Italy

<sup>7</sup>CIMA Research Foundation, International Centre on Environmental Monitoring, University Campus - Armando Magliotto, 2 - 17100 Savona, Italy

The last years have demonstrated the complex interplay and impacts that hazards can have on people's lives, livelihoods and health, especially when multiple adverse events occur at the same time. The Sendai Framework for Disaster Risk Reduction 2015–2030 provides a solid foundation for disaster risk management (DRM) by specifically calling for multi-hazard and solution-driven research to address gaps, obstacles and interdependencies of disaster risks. However, most of the practices in DRM still adopt a single-hazard approach, which may not be sufficient for addressing the social, economic, educational, and environmental challenges of multi-hazard risk scenarios. Besides, questions remain about whether disaster risk is actually treated in a science-policy context, as demanded in the Sendai Framework, thus operating in the overlapping space of scientific research, political decision-making and public action. The large number of actors involved in, and affected by, multi-risk disasters make it harder to transfer knowledge into risk management decisions and set a two-way process for communicating such decisions and for collecting feedback from stakeholders. To face these challenges, the project ROADMAP (European observatory on disaster risk and crisis management best practices) aims to establish a European "Doctrine on disaster risk and crisis management", funded on the cooperation among the scientific community and the DRM authorities. The project is developed by diverse specialized institutions from Italy (The Consortium Italian Centre for Risk Reduction "CI3R" and the Italian Civil Protection Department "ICPD"), Portugal (Association for the Development of Industrial Aerodynamics "ADAI") and Norway (University of Stavanger). To achieve its goal, the project is identifying good practices in multi-hazard risk scenarios, by singling out the experiences in EU Member States and beyond the EU borders. Emphasis is given to the cumulative hazards that countries have had to face over the past two years, characterized by the spread of a global health emergency induced by the COVID-19 pandemic. Good practices are selected accounting for their capacity to produce results

in the diverse DRM phases, as they stand out in terms of effectiveness, reach, feasibility, sustainability, and transferability. Such practices are not intended as static instruments, but rather as a guidance to be adapted if the needs of the users change and/or conditions in the application field evolve. This contribution will present the preliminary results of the research project and discuss how to create an efficient multi-hazard disaster management, focusing on a solution explorer platform collecting the good practices. When analysed closely it becomes apparent that there is a need for reinforcing actions dealing with multi-hazard disasters and for documenting successful stories and lessons learned within a bottom-up approach. By and large, it is envisaged that ROADMAP will contribute to increase access to information on DRM and disaster risk reduction (DRR) by systematically collecting, reviewing and analysing past and ongoing experiences and making them readily available and usable to communities and practitioners. The provision of good-practice guidance about a broad range of structural and non-structural risk management measures enables sharing information on how to overcome the obstacles and increasing the understanding of DRM solutions.