



Two decades of seismic risk communication in Europe: where did we head to?

Gemma Musacchio¹, Angela Saraò², **Susanna Falsaperla**³, and Anna Scolobig^{4,5}

¹Istituto Nazionale di Geofisica e Vulcanologia (INGV), Milan, Italy (gemma.musacchio@ingv.it)

²Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS), Trieste, Italy (asarao@ogs.it)

³Osservatorio Etneo, Istituto Nazionale di Geofisica e Vulcanologia (INGV), Catania, Italy (susanna.falsaperla@ingv.it)

⁴Institute for Environmental Sciences, University of Geneva, Geneva, Switzerland

⁵Equity and Justice Group, International Institute for Applied Systems Analysis, Vienna, Austria (Anna.Scolobig@unige.ch)

Understanding what are the main characteristics of seismic risk communication practice and research is essential to depict best practices and gaps that can provide insights for future improvements. Towards this task, and focussing on the European framework, a scoping review based on the analysis of scholarly literature databases, was conducted. It reveals that, over the last 20 years, seismic risk communication has been a research topic of increasing interest, trying to keep up with current risk communication trends and yet mostly under-researched. Recommendations from international disaster risk reduction frameworks show up also through the increasing interest on the communication of seismic risk in Europe. However, it appears to be practiced in an uneven way in the different European countries and not necessarily linked to the level of hazard.

It mostly occurs in the pre-crisis phase of the disaster lifecycle when risk awareness and capacity to cope with hazards can be effectively built.

An increasingly proactive, with an emphasis on a bottom-up strategy that relies on youths to build the resilience of future generations is another key issue of the communication of seismic risk in the last 2 decades.

Social media have had an increasing impact to provide timely and actionable information in times of crisis and to engage citizens, in the pre-crisis and post-disaster phase.

Our data highlights that the future agenda for the communication of seismic risk should be set on building trust with the public, tailoring communication to its needs. Actions are even more necessary to curb the spread of fake news and its negative impact on disaster management and build the communication practices on a theoretical background