



Reflections from the interface between seismological research and earthquake risk reduction

S. Sargeant

British Geological Survey, United Kingdom (slsa@bgs.ac.uk)

Scientific understanding of earthquakes and their attendant hazards is vital for the development of effective earthquake risk reduction strategies. Within the global disaster reduction policy framework (the Hyogo Framework for Action, overseen by the UN International Strategy for Disaster Reduction), the anticipated role of science and scientists is clear, with respect to risk assessment, loss estimation, space-based observation, early warning and forecasting. The importance of information sharing and cooperation, cross-disciplinary networks and developing technical and institutional capacity for effective disaster management is also highlighted. In practice, the degree to which seismological information is successfully delivered to and applied by individuals, groups or organisations working to manage or reduce the risk from earthquakes is variable. The challenge for scientists is to provide fit-for-purpose information that can be integrated simply into decision-making and risk reduction activities at all levels of governance and at different geographic scales, often by a non-technical audience (i.e. people without any seismological/earthquake engineering training). The interface between seismological research and earthquake risk reduction (defined here in terms of both the relationship between the science and its application, and the scientist and other risk stakeholders) is complex. This complexity is a function of a range of issues that arise relating to communication, multidisciplinary working, politics, organisational practices, inter-organisational collaboration, working practices, sectoral cultures, individual and organisational values, worldviews and expectations. These factors can present significant obstacles to scientific information being incorporated into the decision-making process. The purpose of this paper is to present some personal reflections on the nature of the interface between the worlds of seismological research and risk reduction, and the implications for scientists and information delivery.