An International Platform on Earthquake Early Warning Systems under the aegis of UNESCO

Jair Torres¹, Margherita Fanchiotti¹, *Richard Allen²

1. United Nations Educational, Scientific and Cultural Organization, Paris, France, 2. University of California, Berkeley, USA

The Sendai Framework for Disaster Risk Reduction 2015-2030 recognizes the need to "substantially increase the availability of, and access to, multi-hazard early warning systems and disaster risk information and assessments to the people by 2030" as one of its global targets (target "g"). While considerable progress has been made in recent decades, early warning systems continue to be less developed for geo-hazards and significant challenges remain in advancing the development of these systems for specific hazards, particularly for sudden onset hazards such as earthquakes. An earthquake early warning system helps in disseminating timely information about potentially catastrophic earthquake hazards to the public, emergency managers and the private sector to provide enough time to implement automatized emergency measures. In recent years, earthquake early warning systems have been developed independently in few countries. Provided that, in many instances, the development of such a system still requires further testing, increased density coverage in seismic observation stations, regional coordination, and further scientific understanding, there is a strong need to enhance the technical and operational capacities required for these systems and to further understand their implications for policy. In an effort to address this gap, in December 2015, UNESCO launched the "International Platform on Earthquake Early Warning Systems". The main objective of the Platform is to assess the current state of the art in the development and implementation of earthquake early warning systems worldwide, and to foster dialogue and international cooperation for capacity building around these systems. Here we will discuss the opportunities and challenges for the establishment of earthquake early warning systems around the world, as well as the aim, objectives and expected contributions of this newly established Platform.

Keywords: Earthquake, Early Warning, Geo-hazards