H2020 TURNkey Project Awarded

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A consortium of 21 European partners from academia, research institutes and industry had been awarded by the EC with 8 Million Euros to perform the H2020 project “Towards more Earthquake-resilient Urban Societies through a Multi-sensor-based Information System enabling Earthquake Forecasting, Early Warning and Rapid Response Actions (TURNkey)”.

TURNkey aims to make significant advances in the fields of Operational Earthquake Forecasting (OEF), Earthquake Early Warning (EEW) and the Rapid Response to Earthquakes (RRE), particularly when applying these systems in practice in Europe. The project will develop a flexible, extendable, robust and easy-to-use OEF/EEW/RRE system based on low-cost multi-sensor units and a cloud-based computer platform, which can be distributed as a fully operational TURNkey product to public authorities (including search-and-rescue teams) and private companies (including operators of critical infrastructure). These developments will contribute to improved seismic resilience before, during and after a damaging earthquake and hence a reduction in losses.

The project’s outcomes will be demonstrated in six European Testbeds (TBs) with different hazard, vulnerability and exposure characteristics, spatial extents and monitoring networks as well as in two roaming TBs, one based on crowdsourcing and one for temporary installations. The six geographically-focused TBs are: the city of Bucharest (Romania), the Pyrenees mountain range (France), the towns of Hveragerdi and Husavik (Iceland), the cities of Patras and Aigio (Greece), the maritime port of Gioia Tauro (Southern Italy), and the Groningen province (Netherlands), which is affected by induced seismicity.

The TURNkey consortium comprises a strong multi-disciplinary team of experts (geophysicists, seismologists, geologists, engineers, disaster risk managers, sociologists, information technologists and computer programmers) from 21 partner institutions in 10 European countries. The TURNkey project will be supported by major public and private stakeholders in the six geographically-focused TBs and will be advised and reviewed by a group of international experts. TURNkey will build directly on previous and ongoing projects funded by the European Commission and national agencies that address topics related to OEF, EEW and RRE.
The Turnkey partners are NORSAR (project coordinator, Norway), Deltares, (Netherlands), KNMI (Netherlands), BRGM (France); EMSC (France), University of Iceland (Iceland), EUCENTRE (Italy), University of Strathclyde (United Kingdom), University of Weimar (Germany), University of Alicante (Spain), Anglia Ruskin University (United Kingdom), University of Bergamo (Italy), University College London (United Kingdom), INFP, (Romania), YETITMOVES (Italy), Gempa (Germany), NOA (Greece), Nutcracker (United Kingdom), BETA 80 (Italy), Síminn (Iceland) and University of Patras (Greece).

The kick-off meeting of the project is planned in Oslo for 13 and 14 June 2019.