SERA Progress and EPOS Integration

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SERA, "Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe", a Horizon 2020-supported programme aiming to reduce the risk posed by natural and anthropogenic earthquakes is celebrating its second birthday!

SERA validates virtual access to data and products from the EPOS Seismology, Near-Fault Observatories and Anthropogenic Hazards TCS (Thematic Core Services). It offers the first large-scale transnational access (TA) to a coherent set of big research infrastructures, enabling to test one of the planned service modes of EPOS. In the scope of SERA TA, three calls for proposals have already been conducted so far and 44 projects have been selected. Find a description of all of them here.

The efforts of SERA in collaboration with EPOS and other partners will lead to an updated European Seismic Hazard reference model for consideration in the ongoing revision of the Eurocode 8 and to a first comprehensive framework for seismic risk modeling at European scale. A first version of the European exposure model developed in SERA JRA4 was used in GEM’s global seismic risk model that was released at the end of last year. It can be accessed here. Further, SERA expands the access to seismological observations and assists in connecting infrastructures and communities in the fields of deep seismic sounding, experimental earthquake engineering and site characterization, thereby facilitating collaboration and innovations in the respective areas. It contributes to the enlargement of the seismological service catalogue of EPOS by adding new components on earthquake engineering at the end of the EPOS implementation phase.

Additionally, a proposal for SERA+ was now submitted as a response to the call INFRAIA-01-2018-2019 “Research Infrastructures for Earthquake Hazard”. Its overall objective is to improve the provision of access to data, services and research infrastructures for earthquake hazard, and deliver solutions based on innovative R&D in seismology and earthquake engineering, aiming at reducing the exposure of our society to the risk posed by natural and anthropogenic earthquakes. To this end, SERA+, if funded, will offer transnational access to the best European experimental facilities in
earthquake engineering as well as to key laboratories in the US, China, and Korea. It will also offer virtual access to the main providers of seismological data and products in Europe and the US, and consolidates the construction and validation of EPOS by developing and testing key services in seismology, anthropogenic hazards, and earthquake engineering. You can read more about SERA+ here.

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