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WP 6: Roadmap for the integration of databanks and access services from earthquake engineering (SERIES) and seismology (EPOS) research infrastructure

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Main Results

Roadmap for the integration of data banks and access services from the earthquake engineering (SERIES) and seismology (EPOS) research infrastructures proposes the integration of the SERIES databases in the existing EPOS service as a new Thematic Core Service (TCS) and exploring possible interoperability with other TCSs (e.g. Seismology) and with international partners. The first step is to consider the SERIES database as the first service of a new Earthquake Engineering Thematic Core Service (E/ENG TCS) within the EPOS architecture. SERIES will initially provide, through EPOS, integrated access to key data and experimental measures produced in Europe at some of the best facilities for earthquake engineering worldwide. In its mature phase, the integration process will provide an advanced interoperability within the earthquake engineering community itself, with the sibling TCS seismology and other TCSs, and with international partners. This objective will be guaranteed by means of the implementation of new services and tools for improving user accessibility and experience.

The roadmap identifies the cross-discipline needs in earthquake engineering and seismology data assessed through a questionnaire directed to users and stakeholders operating in the two fields. The questionnaire collected information on requirements and use cases for earthquake engineering and seismological data serving as the basis for the developed roadmap. The metadata structures in EPOS and SERIES were compared, followed by a gap analysis and leading to the requirements for the metadata catalogues development for the proposed new E/ENG TCS.

The roadmap puts forward a strategy with different tasks envisaged to be performed in three steps (short-, mid- and long-term). In the short-term, by the end of the SERA project, a pre-operational access service will be provided to selected SERIES datasets in order to allow validation of identified access technologies and involvement of the user community, for further implementation in EPOS. The activities performed in the mid-term will include a review of how the newly developed services and products will be fully compatible with the requirements of EPOS, at the technical, legal, governance and financial levels. Full integration of the earthquake engineering TCS in EPOS will be achieved in the long-term perspective by providing also access to research infrastructures, laboratories and data centres established outside Europe, thus improving the international dimension of EPOS.

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List of Publications

Deliverable 6.5 Roadmap for the integration of data banks and access services from the earthquake engineering (SERIES) and seismology (EPOS) research infrastructures