
EPOS (European Plate Observing System), a long-term plan for the integration of research infrastructures for solid Earth Science in Europe

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R sum 

Understanding the functioning of the Earth as a system is of critical importance for modern society. Natural phenomena and risks such as volcanic eruptions, earthquakes, floods, landslides, tsunamis, weather conditions or global climate change are all manifestations of the dynamics of our planet with societal impacts major. Similarly, human activity (exploitation of natural resources, management of industrial sites, burial, etc.) can have serious consequences for our economy, our safety and the environment.

EPOS (European Plate Observing System, <https://www.epos-ip.org/>) is a long-term project to build a pan-European Infrastructure for Data Integration, Data Products, Services and Facilities in Earth Sciences, from research infrastructures distributed in Europe. The EPOS Integrated and Sustainable Research Platform will provide coordinated access to these data, high-quality harmonized data products, services and facilities from multiple thematic communities in the Earth Sciences. Analysis and modeling tools will also be made available to users thanks to the multidisciplinary expertise of the project's stakeholders. The aim of EPOS is to develop innovative multidisciplinary research for a better understanding of the physical and chemical processes of solid Earth.

The preparatory phase of the project took place between 2010 and 2014, following the inclusion of EPOS in the ESFRI (European Strategic Forum on Research Infrastructures) Roadmap in December 2008. EPOS has entered into its Implementation Phase (IP) in October 2015 for a period of 4 years, before the operational phase (from October 2019). The EPOS-IP project is divided into Thematic Core Services (TCS): seismology, fault observatories, GNSS data and products, volcanological observations, satellite data, geomagnetic observations, anthropogenic risks, geological information and models. Funded by the European Commission's Horizon 2020 program, EPOS-IP started with 46 partners from 23 European countries.

Coordination and facilitation of EPOS at the national level is carried out by the EPOS-France Office, made up of French representatives to the EPOS disciplinary working groups: EPOS-France represents the national community in the EPOS working groups based in particular on the orientations defined in the CNRS-INSU perspectives established with the partner organizations. EPOS-France ensures the dissemination of information from the EPOS project to the national community in each specialty and leads the reflection on the preparation of the national structures in their contribution to EPOS and the conditions of their participation.

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