



## **EPOS-Spain Institutions and Research Infrastructures**

Josep Gallart and EPOS-Spain Working Group

Institute of Earth Sciences \, Earth Structure and Dynamics, Barcelone, Spain (jgallart@ija.csic.es)

Spain will participate in EPOS via a consortium of institutions that will see the CSIC (Consejo Superior de Investigaciones Científicas, High Research Council) as managing body, via its Earth Sciences Institute of Barcelona. Presently, the Earth observation infrastructure in Spain is distributed among a large number of centres and groups linked to institutions and universities, as well as several regional bodies. These resources are hence dispersed, fragmented and heterogeneous, and the data they generate have been managed in a very independent manner, impeding an extensive, appropriate use of them by the scientific and technological communities. The need for a transversal structure integrating every single observational structure and for setting up complete, immediate-access databases, has been clearly identified both by the scientific policy-managing sectors and by the scientific community itself. Therefore, the framework offered by EPOS is a unique opportunity to optimize on the existing resources and make them more profitable.

The Spanish consortium will be composed of more than a dozen of groups. Many of them have already been integrated in the large scale 'Topo-Iberia' research project (Spanish Consolider-Ingenio call), which focuses in achieving relevant structural constraints on the deep structure of Iberia by combining new multidisciplinary geophysical and geological datasets. An instrumental platform named IberArray, composed by high quality seismic, GPS and MT portable networks has been built up for this purpose in the project, to be complemented with the analogous, permanent infrastructures. Corresponding databases are being developed and updated.

These institutions integrated in Topo-Iberia, and subsequently to be part of EPOS, are: Institute of Earth Sciences CSIC Barcelona (coordinating institution); Universities of Madrid, Barcelona, Granada, Oviedo, Autonomous of Barcelona, Jaen and Cadiz; Royal Navy Observatory (ROA) and Geological and Mining Institute of Spain (IGME). Another two relevant institutions integrated in EPOS are the National Geographical Institute (IGN) and the Catalan Geological Institute (IGC). Moreover, to be involved also are researchers from: Geosciences Institute of Madrid (IGEO), Andalusian Institute of Geophysics, Universities of Almeria, Salamanca and Alicante; Ebro Observatory. Infrastructures managed by these centres range from national and regional seismic networks (short period, broad band, accelerometers) to GPS-geodetic networks, prospection arrays, volcanological monitoring arrays, magnetotelluric instrumentation, geophysical observatories (including marine and satellite systems), geochronological laboratories, etc., as well as cartographical, geological and geophysical databases.