



Building a Roadmap for European Solid Earth Sciences Infrastructure

J. Ludden, D. Giardini, M. Cocco, M. Diament, and J. Lauterjung

British Geological Survey, Nottingham, United Kingdom (jludden@bgs.ac.uk, +44-(0)115-9363226)

Building a Roadmap for European Solid Earth Sciences Infrastructure

John Ludden (BGS-NERC, Nottingham, UK), Domenico Giardini (ETH, Zurich, Switzerland), Massimo Cocco (INGV, Rome, Italy), Michel Diament (INSU, Paris, France); Jorn Lauterjung (GFZ, Potsdam, Germany)

Europe is about to launch a new phase of funding in its Horizon 2020 programme. At the same time in FP7 the EC created a number of infrastructure projects of which the most influential in the solid Earth sector is the European Plate Observing System (EPOS). EPOS thus has a strategic role in driving infrastructure development in Europe. A reflection must be undertaken on how inclusive and representative this role is and how EPOS can complement other infrastructure initiatives.

We propose a series of meetings with the key players in solid Earth infrastructure across Europe to develop a 10 year road map for the development of Earth sciences infrastructure.

The key components of such a road map must include:

In concert with ESA and other partners, satellite observation and the development of earth observing capabilities such as potential field, SAR etc.;

With the Integrated Ocean Discovery Program (IODP 2013-2023), the International Continental Drilling program (ICDP) and other European scientific drilling infrastructure, identify added value in working as a European entity;

With Eurogeosurveys develop links and compliance between data bases and work towards closer relationships between Earth science infrastructure in institutes and surveys;

Consider how EPOS observatories can be better integrated and complementary to other Earth system observatories of the sea-floor, terrestrial critical zone and atmosphere;

Define laboratory and training needs in infrastructure which supersede individual national objectives such as in geochronology, accelerator mass spectrometry, physical properties and large-scale field observatories in applied and fundamental earth sciences.

EPOS will play a key strategic role in this process and will open a full dialogue using ICT tools and geosciences organisations and institutions throughout Europe. This paper will ask the question of the community how best to proceed, and what are the critical timelines for this roadmap.