EPOS-IP – DDSS Master Table and Granularity Database

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The European Plate Observing System (EPOS) is a European project about building a pan-European infrastructure for accessing solid Earth science data. Implementation phase of the EPOS project (EPOS-IP – EU Horison2020 – InfraDev Programme – Project no. 676564) started in 2015. The ambitious plan of geoscientific data integration started in 2002 already with a Conception Phase and continued by an EPOS-PP (Preparatory Phase, 2010-2014) where about 20 partners joined the project. The current EPOS-IP project includes 47 partners plus 6 associate partners from 25 countries from all over Europe and several international organizations. However, the community contributing to the EPOS integration plan is larger than the official partnership of EPOS-IP project, because more countries are represented by the international organizations and because there are several research institutions involved within each country.

The list of Data, Data Products, Services and Software (DDSS) provided by individual institutions, consortia or organizations, which will become part of the EPOS system, are currently collected in a spread-sheet called DDSS Master Table (DDSS MT). A new tool is being developed, called Granularity Database (GRDB), which will take over the role of the DDSS MT. The GRDB tool has a web interface which allows authorized users to update information about entities such as persons, organizations and service providers and their mutual relations. GRDB will provide updates to the central metadata database and ensure synchronization with the metadata structure of CERIF (Common European Research Information Format).

There are 10 work packages (WP8-WP17) creating the Thematic Core Services (TCS) always grouped by a specific topic: Seismology, Near Fault Observatories, GNSS Data and Products, Volcano Observations, Satellite Data, Geomagnetic Observations, Anthropogenic Hazards, Geological Information and Modelling, Multi-scale laboratories and Geo-Energy Test Beds for Low Carbon Energy. Each group declared a list of DDSS elements which are about to be implemented. Currently there are about 370 DDSS elements in the DDSS Master Table. These DDSS elements are of different maturity and about 119 (by Oct 2018) were already implemented, mostly as web services, into the Integrated Core Services (ICS) system. The DDSS elements differ by its complexity as well. The DDSS Master Table serves as an overview of the DDSS elements and includes most of the important information needed for further implementation and is continuously updated as the project evolves. The presentation is showing statistics describing the current status of DDSS Master Table and complexity of the organizational structure at the TCS level as well as the new GRDB tool and its connection to the ICS architecture.