Top TIPS from IT team: what is the Granularity Database?

Jan Michalek
Xiaoliang Wang
Kuvvet Atakan
UiB, Norway

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 comprehensive spread-sheet called the DDSS Master Table. There are 10 work packages (WP8-WP17) within EPOS-IP that together make up the Thematic Core Services (TCS). Each of these TCSs have declared a list of DDSS elements that are in the process of being implemented.

Currently, there are 368 DDSS elements in the DDSS Master Table. These DDSS elements are of different maturity and 165 were declared by TCS groups by M36 (Oct 2018) to be ready for implementation, which means that the data are well described with metadata, following the standards specific for their domain.

Currently out of these 165, 103 distinct DDSS elements are now implemented in Integrated Core Services (ICS) Metadata Catalog, with web services allowing their access. There have been two rounds of metadata implementation already. In the first round, the top-priority DDSS elements (46) were selected from each TCS as web services for the first phase of implementation to ICS in May 2017. In the second round, 103 DDSS elements were implemented by October 2018. 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 10 TCSs of EPOS provide DDSS, while hundreds of people and organizations participate in the development of the EPOS project. Managing such comprehensive information - e.g. which TCS provides what data or service, and which organizations and persons relate to certain data or services, is complicated and challenging. In order to manage this information both efficiently and systematically, we have developed a new web application called the Granularity Database (GRDB). With the GRDB web application, participants from the different TCSs can view and update information related to their persons, institutions or DDSS provisions. The web application
can provide an overview of all the DDSS elements, and in addition, users can view and/or update information about entities such as Country, Work Package, DDSS Element, WebService, Service Provider, Person, Organization and Consortium. The following functions are optionally available on the page of each entity:

- view related item information
- update the item information
- load and update item information from an Excel file
- add items
- view item statistics

The Granularity Database is successor of the DDSS Master Table and allows browsing of the existing EPOS metadata entities and to check/update their internal connection to DDSS elements and Service Providers. GRDB is an internal EPOS tool which has a web interface for checking the content and linkage online. The internal structure of the GRDB is compatible with ICS CERIF database, and the metadata records will be synchronized with central CERIF repository.

The GRDB web service is currently being tested internally by members of the EPOS IT Team in WP6&7, and the envisaged time for publishing this tool (to selected EPOS users) is during late autumn 2018.