EPOS - The successful 2018 is over: ready to tackle new challenges

Massimo Cocco

and

Lilli Freda

A successful year for EPOS just ended. After years of intense work for the whole community, in 2018 EPOS achieved two pivotal goals in its roadmap: the status of Landmark in the ESFRI Roadmap and the legal status of European Research Infrastructure Consortium (ERIC). Moreover, the EPOS IP Project is progressing well having validated the first set of services provided by the different thematic communities (TCS) and continuing the implementation and the integration of new services to build the EPOS delivery framework.

EPOS is now entering in a new stage characterised by new challenges: ensure the operation of EPOS ERIC, guarantee a successful conclusion of the EPOS IP Project -that will deliver the first set of validated and tested services in the pre-operational phase-, and finalize the governance of the EPOS delivery framework. The latter is made of the EPOS ERIC governance, which includes the hosting of the Integrated Core Services Central Hub (ICS-C) and the Thematic Core Services (TCS) governance that is under the responsibility of the different scientific communities involved in EPOS.

The next two years of EPOS lifecycle (2019-2020) can be considered as a construction phase representing the transition from the implementation (2015-2019) to the operational (2020 onward) phase. On one hand, the EPOS ERIC has to be made operational by i) establishing the Executive Coordination Office (located at Istituto Nazionale di Geofisica e Vulcanologia in Rome) and the external advisory boards, ii) constituting the legal subject from an administrative point of view, iii) finalising the hosting of the ICS-C, and iv) making the EPOS infrastructure ready for the starting of its operational phase. On the other hand, the EPOS delivery framework has to be finalized by i) completing the governance of the TCS through the signature of consortium agreements, ii) undertaking the signature of service contracts with the service providers identified by the communities as essential components of the TCS, and iii) presenting the new infrastructure to users and stakeholders.

One of the key challenges foreseen in the EPOS IP work plan, is the realization of the so-called TCS-ICS interactions. This includes
performing a set of strategic workshops that, taking full advantages of all the work done so far by the EPOS community, where exploiting the homework done before, are aimed at testing the validated TCS services integrated into the ICS-C, at developing a few use cases to emphasise the added value of integrated use of multidisciplinary data from different TCS, and at validating and integrating new services. These interactions will first involve domain scientists and IT experts from TCS and ICS and subsequently users and external evaluators. These activities are strategic and essential to share skills and experiences in order to build the EPOS infrastructure user- interface and to create awareness on the added value of integrated use of multidisciplinary solid Earth data. Moreover, throughout these interactions, we create a collaborative framework dedicated to check the performance of the EPOS infrastructure before the launch of its operational phase.

It is important to emphasise that the implementation and construction of the EPOS infrastructure is still based on the functional architecture and governance framework designed during the preparatory phase, demonstrating the successful activities undertaken in the design stage. Furthermore, Notably, the EPOS vision and mission remained unchanged during the preparatory and implementation phases, demonstrating to be followed and supported by a quite broad community of solid Earth scientists. It is also worth noting that the IT solutions EPOS is adopting are suitable to make the solid Earth data FAIR (Findable, Accessible, Interoperable and Re-usable); this is allowing us to participate to global challenges with effective good practices and engaging different solid Earth science communities in this emerging undertaking.

EPOS is a surely a high-risk, but, definitively, high-gain endeavour.

EPOS is complex, but it is has been demonstrated to be manageable. Indeed, by maintaining the usual positive attitude and optimistic perspective the community demonstrated so far, we are confident we will address all the forthcoming challenges building this new distributed, multidisciplinary research infrastructure brick by brick.