The EPOS Pilot Operational Phase: EPOS POP

Massimo Cocco
EPOS ERIC Executive Director

The EPOS Research Infrastructure (EPOS RI) has completed its Implementation Phase (2015-2019) achieving a cornerstone in its lifecycle and it is currently facing the transition from the Implementation to the Operational Phase.

This peculiar stage of the lifecycle of the EPOS RI has been named “EPOS Pilot Operational Phase” (EPOS POP) and it will last three years (2020-2022). This three-years transition requires a dedicated, strategic plan and it will be coordinated and governed by EPOS ERIC. Overall, the EPOS ERIC Strategic Plan 2020-2022 is designed to address two overarching goals: the building of the EPOS Delivery Framework and the strengthening of its sustainability. To fully accomplish these goals during the EPOS POP, the following specific objectives have to be addressed:

1. Finalization of the ICS-C Hosting for operation
2. Establishment of the TCS Governance and Coordination
3. Enabling TCS Data and Service provision
4. Implementation and establishment of TNA provision and coordination
5. IT development of the TCS-ICS delivery system
6. Fostering Sponsored Research activities.

Addressing these specific objectives requires the undertaking of key activities and the adoption of effective tools to ensure a successful construction through a sustainable approach. This approach has to manage legal, governance and technical issues in a financially viable context. The interconnection among legal, governance, financial and technical aspects have characterized the whole EPOS Implementation Phase and it requires to be refined and properly considered also during this Pilot Operational Phase. Indeed, during this particular stage of the EPOS RI, it is vital to strengthen both the financial viability and the EPOS ERIC guidance of the EPOS Delivery Framework.

The EPOS SP project, just funded by the European Commission, is an essential component of the Strategic Plan 2020-2022 because it provides fundamental contributions to the sustainability of the EPOS Delivery Framework. The project is designed to allow the exploitation of achievements by EPOS ERIC to maximize the impact on the EPOS long-term sustainability. Indeed, the ultimate EPOS ambition is to build and operate its Delivery Framework in a fully sustainable way. The EPOS Delivery Framework can be defined as a...
truly international, federated framework encompassing the data and service provision integrated within the TCS and made interoperable with the central hub of the Integrated Core Services (ICS-C), the novel e-infrastructure for promoting FAIR data management. The TCS-ICS federated system is the skeleton of the EPOS Delivery Framework and represents the solution for integrating distributed infrastructures via shared standards for data and metadata, which will allow researchers unprecedented opportunities to use and analyze multidisciplinary solid Earth science data, generate new FAIR data products and lay the ground for widespread application of advanced data analysis methods in the Earth sciences.

The EPOS ERIC Strategic Plan for the EPOS POP requires a delivery plan and a service activation roadmap to move toward the full operation of the delivery framework. To this aim, a Service Delivery Plan for the three years duration of the EPOS POP has been designed to share and adopt a timeline and a prioritization of key activities necessary to achieve all the specific objectives listed above and, consequently, the two overarching goals characterizing the strategic planning. The EPOS ERIC Strategic Plan 2020-2022 and the Service Delivery Plan organize the EPOS Pilot Operational Phase and represent a call for action for the whole EPOS community and for the EPOS ERIC General Assembly to ensure financial viability to the EPOS Delivery Framework.

Based on community best practices and on the achieved innovation in data science provided by the TCS and ICS, the EPOS 2020–2022 Strategic Plan is an unprecedented effort for building the EPOS Delivery Framework by strengthening the federated approach and by making available integrated data in the solid Earth sciences.

EPOS is uniquely placed to drive the transformation of the European solid Earth science data landscape into a long-term, standards-based pan-European research infrastructure.