



## **EPOS Multi-scale laboratories Data Services & Trans-national access program**

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The EPOS (European Plate Observing System) Thematic Core Service Multi-scale laboratories (TCS MSL) represents a community of European solid Earth sciences laboratories including high temperature and pressure experimental facilities, electron microscopy, micro-beam analysis, analogue tectonic and geodynamic modelling, paleomagnetism and analytical laboratories.

Laboratory facilities are an integral part of Earth Science research. The diversity of methods employed in such infrastructures reflects the multi-scale nature of the Earth system and is essential for the understanding of its evolution, for the assessment of geo-hazards and for the sustainable exploitation of geo-resources.

The participant and collaborating institutions (Utrecht University, GFZ-Potsdam, Roma TRE University, INGV, NERC, CSIC-ICTJA, CNRS, LMU, C4G-UBI, ETH, IGG-CNR) are organised in a Consortium, open for new partners.

The TCS MSL is working on the development of 1) a data publication platform, that will provide harmonised solid Earth science laboratory data to users through the EPOS interface, and 2) a Trans-national access (TNA) pilot program to the participating laboratory facilities.

The TCS MSL data publication platform allows solid Earth science laboratory researchers to publish datasets with metadata and data description, essential for data re-use and discovery. The dataset, a is assigned a DOI, thus is made citable, trackable and is stored for long-term in a repository.

In 2017 and 2018 the TCS MSL launched two pilot TNA call for proposals. Researchers and research teams can apply for physical access to laboratories or remote services (e.g., sample analysis). Access to laboratories is at the moment supported by national funding or in-kind contribution from the TCS MSL Consortium members. Based on the EPOS Data policy & TNA General principles, access to the laboratories installation is regulated by common rules and a transparent policy, including procedures and mechanisms for application, negotiation, proposal evaluation, user feedback, use of laboratory facilities and data curation.

The TCS MSL pilot program for Trans-national access to EPOS laboratories will serve as a base to refine the EPOS wide TNA principles and to set up an EPOS brokering service, where information on each facility offering access will be available for the user, together with call for proposals advertisement.

Access to EPOS Multi-scale laboratories is a unique opportunity to create new synergy, collaboration and innovation, in a framework of trans-national access rules.