



A Geologic Baseline and research infrastructure as part EPOS

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Vision: To establish and integrate geological base as support for the entire EPOS project; this should include base topographic data, geological data, geophysical layers and specialist layers such as fault distributions, quaternary features and neotectonic features. The working group will champion the creation and integration of geological observatories focussed on environmental processes and deep drilling to provide 3d control on geological data. It will also integrate the infrastructure required to collect, refresh and maintain these data for EPOS and, thus, make it available to the European research community.

Description: All disciplines in Earth Sciences are concerned with the study of the Earth, with different methods, at different resolution and scale, and with different targets and purpose. Besides these differences, all these subjects ultimately rely on and generate geological information. Thus, comprehensive and easily accessible geological base information is essential for leading research in Earth Sciences in Europe as part of EPOS. This working group will: i) building on the OneGeology Europe project integrate existing data and products into the EPOS data dissemination framework and define important geological information and topics that require assimilation; ii) integrate geological research infrastructure that will be used by EPOS, such as facilities and equipment for in-situ geological observation and sampling (e.g., drill rigs including logging and testing equipment); iii) evaluate the potential to integrate analogue geological base information, such as the long-term storage of samples and other geological material (e.g. drill core archive, topical collections) and their availability to the research community. iv) extend this approach to data acquisition by the integration of observatories that perform in-situ measurements on and monitoring of geological processes (e.g. land slides, hydrogeology, permafrost, coastal and basin erosion monitoring systems) into EPOS.