European Plate Observing System - Norway (EPOS-N): Integrating the Norwegian Solid Earth Data

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The *European Plate Observing System* (EPOS) aims to create a pan-European infrastructure for solid Earth science to support a safe and sustainable society. The main vision of the European Plate Observing System (EPOS) is to address the three basic challenges in Earth Sciences: (i) unravelling the Earth's deformational processes which are part of the Earth system evolution in time, (ii) understanding the geo-hazards and their implications to society, and (iii) contributing to the safe and sustainable use of geo-resources. The mission of EPOS-Norway is therefore in line with the European vision of EPOS. EPOS-Norway project has started in January 2016 and will during the next five years focus on the implementation of the three main components. These are: (i) Developing a Norwegian e-Infrastructure to integrate the Norwegian Solid Earth data from the seismological and geodetic networks, as well as the data from the geological and geophysical data repositories, which is in line with European EPOS, (ii) Improving the monitoring capacity in the Arctic, including Northern Norway and the Arctic islands and (iii) Establishing a national Solid Earth Science Forum providing a constant feedback mechanism for improved integration of multidisciplinary data, as well as training of young scientists for future utilization of all available solid Earth observational data through a single e-infrastructure.

Currently, a list of data, data products, software and services (DDSS) is being prepared. These will be integrated in to the EPOS-N data/web-portal, which will allow users to browse, select and download relevant data for solid Earth science research. In addition, advanced visualization technologies are being implemented which will provide a platform for a possible future ICS-D (distributed components of the Integrated Core Services) for EPOS.

Planning and site selection process for the new instrument installations are well underway as well as the procurement of the required equipment. In total 17 new seismological and geodetic stations will be co-located in selected sites in Northern Norway, Jan Mayen and Svalbard. In addition, a seismic array with 9-nodes will be installed in Bear Island. The planned aeromagnetic survey along the Knipovich Ridge is being conducted this year and data will give new insights to the tectonic development of the ridge systems in the North Atlantic Ocean.