

Message from Expert Groups

Interview with Dr. Gerardo Herrera

Chairman of the Earth Observation and Geohazards Expert Group (EOEG)

You have just been appointed Chair of the EGS Earth Observation Expert Group (EOEG). You are inheriting the challenging work initiated by Prof. Stuart Marsh. What will be the main actions you intend to pursue in this new role?

Following the work started by Professor Stuart Marsh I would like to help increasing Earth Observation and Geohazards activities of the European Geological Surveys (EGS) within the Group of Earth Observation (GEO) and Global Monitoring for Environment and Security (Copernicus). EOEG members now have a strong GEO and Copernicus portfolio of projects that address geohazards, also achieving a breakthrough for minerals tasks in GEO. Through these projects remote sensing data has been used to map and monitor geohazards like flooding, subsidence, landslides, volcanoes and earthquakes at a European level. EOEG members played a key role combining remote sensing data and geological expertise to deliver high level products for the definition of the risk associated to geohazards. The forthcoming launch of the ESA Sentinel missions has to certainly give the opportunity to systematically extend the activities of mapping, monitoring and forecasting in wide areas of the planet never or just occasionally covered beforehand. Taking into account EGS strengths gained in Earth Observation and Geohazards and the cross group collaboration capabilities, the EOEG could work towards

the implementation of specific Geohazard exploitation platforms where remote sensing technology and innovative geo-scientific knowledge are combined to monitor geohazards, providing usable tools and products embracing all the disaster cycle phases including prevention, preparedness, response, and recovery.

In January 2014 the GEO Ministerial Summit will take place. Also this time EGS will be present with a very high-level delegation. What will be the main position EGS will bring there?

Maybe it is too early for me to say just been appointed chair of the EOEG in December 2013. However, from the EOEG perspective I believe that a Geo-hydrological Risk Exploitation Platform targeting geo-hydrological hazards (flooding, landslide, subsidence, etc.) is necessary to complement the Global Earth Observing System of Systems (GEOSS) SuperSites Exploitation Platform (SSEP), which mainly targets earthquakes and volcanos.

In terms of a new focus, minerals represent a growing opportunity within GEO and Copernicus related activities that the EOEG will actively push forward through the EGS point of contact for minerals in GEO.

Earth Observation Expert Group

EOEG from its creation in December 2009 exists to increase the quality, efficiency and cost-effectiveness of EGS members' science delivery and to capitalise on European and International Earth Observation (EO) science opportunities. It's doing this by ensuring that members share their EO expertise and research, utilise state-of-the-art in-situ, airborne and satellite EO techniques and datasets, and pool their EO expertise, experience, resources and facilities to pursue opportunities related to the Global Monitoring for Environment and Security program (Copernicus) and the FP7 SPACE and ENVIRONMENT Themes. Several EOEG members have played a key role in relevant EU funded projects, where the combination of Earth Observation data, in situ data and geological expertise permitted to deliver high level products for the definition of the risk associated to geohazards. Through the execution of these projects EuroGeoSurveys is helping GEO to create a Global Earth Observing System of Systems.

In 2013, several EOEG members have played a key role in a growing portfolio of EU funded projects where new GMES services have been developed. Four of the five GEO related FP7 and GMES were concluded in 2013. EO-Miners (www.eo-miners.eu) targets monitoring mineral resources exploration and mining, observing their impact on the

environment and society. Subcoast (www.subcoast.eu) provides a service for monitoring and forecasting subsidence hazards in coastal areas that can influence on flood risk around Europe. Doris (www.doris-project.eu) fulfils the gap in GMES Emergency services for detecting, mapping, monitoring and forecasting landslides. Firstly, Terrafirma (www.terrafirma.eu.com) and then PanGeo (www.pangeoproject.eu), for which EGS has federated the geological survey input from the EU27, provide a Geohazard Information Service for 52 urban areas across Europe. The geohazard information in each city combines InSAR derived ground motion and geological information, being accessible through PanGeo webservices via open access.

The 2013 was a year of changes for Earth Observation Expert Group (EOEG), changes in chairmanship, changing topics, and ready to face new challenges. During EOEG meeting held in Brussels on the 7th of February, following the National Delegates meeting recommendations, it was decided that the Expert Group would be renamed into Earth Observation and Geohazards Expert Group trying to embrace more members from both Earth Observation and Geohazards communities. In June 2013, two new positions (deputy Chairs) were created to assist the EOEG Chair, Stuart Marsh (BGS, UK): Deputy Chair

