



OneGeology - The most appropriate model to achieve access to up-to-date geoscience data using a distributed data system

Marko Komac (1), Tim Duffy (2), Francois Robida (3), Matt Harrison (2), and Lee Allison (4)

(1) OneGeology (m.komac@telemach.net), (2) BGS - British Geological Survey, UK (mharr@bgs.ac.uk), (3) BRGM - Bureau de Recherches Géologiques et Minières, France (f.robida@brgm.fr), (4) Arizona Geological Survey, USA (lee.allison@azgs.az.gov)

OneGeology is an initiative of Geological Survey Organisations (GSO) around the globe that dates back to Brighton, UK in 2007. Since then OneGeology has been a leader in developing geological online map data using a new international standard – a geological exchange language known as the ‘GeoSciML’ (currently version 3.2 exists, which enables instant interoperability of the data). Increased use of this new language allows geological data to be shared and integrated across the planet with other organisations. One of very important goals of OneGeology was a transfer of valuable know-how to the developing world, hence shortening the digital learning curve. In autumn 2013 OneGeology was transformed into a Consortium with a clearly defined governance structure, making its structure more official, its operability more flexible and its membership more open where in addition to GSO also to other type of organisations that manage geoscience data can join and contribute. The next stage of the OneGeology initiative will hence be focused into increasing the openness and richness of that data from individual countries to create a multi-thematic global geological data resource on the rocks beneath our feet. Authoritative information on hazards and minerals will help to prevent natural disasters, explore for resources (water, minerals and energy) and identify risks to human health on a planetary scale. With this new stage also renewed OneGeology objectives were defined and these are 1) to be the provider of geosciences data globally, 2) to ensure exchange of know-how and skills so all can participate, and 3) to use the global profile of 1G to increase awareness of the geosciences and their relevance among professional and general public. We live in a digital world that enables prompt access to vast amounts of open access data. Understanding our world, the geology beneath our feet and environmental challenges related to geology calls for accessibility of geoscience data and OneGeology Portal (portal.onegeology.org) is the place to find them.