



OneGeology – improving access to geoscience globally

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The OneGeology concept originated in early 2006. With the potential stimulus of the International Year of Planet Earth (IYPE) very much in mind, the challenge was: could we use IYPE to begin the creation of an interoperable digital geological dataset of the planet? Fourteen months later on the concept was unanimously endorsed by 83 representatives of the international geoscience community at a meeting in Brighton, UK, and goals were set to for a global launch at the 33rd IGC in Oslo in August 2008. The goals that the Brighton meeting agreed for OneGeology were deceptively simple. They were to:

- improve the accessibility of geological map data
- exchange know-how and skills so that all nations could participate
- accelerate interoperability in the geosciences and the take up of a new “standard” (GeoSciML)

At the time of writing (January 2010) there are 113 countries participating in OneGeology, more than 40 of which are serving data using a web map portal and protocols, registries and technology to “harvest” and serve data from around the world.

An essential part of the development of OneGeology has been the exchange of know-how and provision of guidance and support so that any geological survey can participate and serve their data. The team have also moved forward and raised the profile of a crucial data model and interoperability standard – GeoSciML, which will allow geoscience data to be shared across the globe. OneGeology is coordinated through a two-part “hub” - a Secretariat based at the British Geological Survey (BGS), and the portal technology and servers provided by the French geological survey (BRGM). The “hub” is guided and supported by two international groups – the Operational Management Group (OMG) and the Technical Working Group (TWG). A Steering Group to provide strategic guidance for OneGeology and comprising geological survey directors representing the six continents was formed at the end of 2008. The Steering Group are now looking at options to incorporate Onegeology and consolidate its governance and sustainability.

Two regional initiatives have been spawned which are strongly linked to OneGeology. OneGeology-Europe and the US project Geoscience Information Network (GIN) are progressing OneGeology goals in Europe and the USA. Additionally, in south-east Asia, CCOP members are making sure that OneGeology goals are progressed in their region. Each of these initiatives reinforces the other. A set of Success Criteria for the next 3 years, up to the 34 IGC in Brisbane, are providing new goals for the OneGeology work programme. Within these major aims are increasing the number of participants, increasing the number of those participants serving data, and increasing the number of participants moving from a web map service to a web feature service, which will offer significantly improved functionality.

Communication and outreach have always been a priority for OneGeology; nonetheless the volume of global media coverage the project has received has been astounding. A dynamic website with rich and regularly updated content is a strong factor in that outreach. The audiences for these presentations range from geoscientists, to informatics and spatial data specialists, to environmental scientists, politicians and not least the general public.

OneGeology has proved to be a project that has much broader appeal (and thus more opportunity to communicate the relevance of geology to society) than was ever envisaged. This external appeal has served to strengthen geoscience interest in the project, which has in turn given a higher profile and impetus to the interoperability standards OneGeology uses.