Achievements

- OneGeology has been a profound success for the geosciences
- It has more than delivered on all of its original goals
- It has raised the level of geological survey information delivery across the world
- It has spawned many projects and initiatives across the world such as OneGeology-EU and GIN in the USA
- It has made geology a global leader in the field of spatial data infrastructure (SDI) and an exemplar of a scientific community working together
- 138 organisations from 117 nations are now participating
- It provides 250 data services from 54 surveys
- It has productive partnerships with global geological mapping initiatives like the CGMW.
- OneGeology data is used by researchers, education, industry, and international agencies
- Workshops and courses have been held on several continents
- There has been massive media attention and public interest
- OneGeology has been acknowledged as the IYPE and IUGS flagship initiative
- The project has developed partnerships with Geoparks, UNESCO, YES and OneG4kids
- OneGeology was recognised by the Geospatial World Forum in 2012 for the Excellence in Geospatial Standards Implementation

Current status

- There are 119 members, 13 principal members and 2 Associate Members (IUGS, CCOP)
- OneGeology is formally supported by UNESCO, IUGS, ICSU, GEO
- Officially recognised as being the global model for open geo-data sharing

Objectives

- To be the provider of geoscience data globally
- To ensure an exchange of know-how and skills so all can participate
- To develop the skills to create digital geological spatial data and make it web accessible across the world
- To develop partnerships with UNESCO, CGMW,YES, IUGS
- To use the global profile of OneGeology to increase awareness of the geosciences and their relevance in contemporary society

OGC—The OGC (Open Geospatial Consortium) is an international not for profit organisation committed to making quality open standards for the global geospatial community. These standards are made through a consensus process and are freely available for anyone to use to improve sharing of the world's geospatial data.

WMS—The Web Map Service Interface Standard (WMS) provides a simple HTTP interface for requesting geo-registered map images from one or more distributed geospatial databases.

WCS—The Web Coverage Service Interface Standard (WCS) offers multi-dimensional coverage data for access over the Internet.

WFS—The Web Feature Service Interface Standard (WFS) provides a simple HTTP interface for data access and manipulation operations on geographic features.

GeoSciML — Geoscience Markup Language is a model of geological features commonly described and portrayed in geological maps, cross sections, geological reports and databases.

ERML—EarthResourceML is an XML-based data transfer standard for the exchange of digital information for mineral occurrences, mines and mining activity.



Background

- OneGeology was initiated in 2007 by geological survey organisations from around the globe
- It is primarily a voluntary initiative, and became a consortium in 2013

Why?

- Data providers want to share their geoscience data
- End-users want the reliable access to geoscience data in one place with regular updates

Technical facts

- OneGeology is based on interoperability principles and open standards
- Data is stored on distributed servers and may be used in any client with access to the internet
- Participants deliver geoscience data through standard OGC web service (WMS/WFS/ WCS)
- The metadata is collected into a catalogue of services which is managed centrally
- An internet portal and catalogue allows users to discover, view, zoom, pan, interrogate and download data
- The portal can display and aggregate all the maps
- The data can be viewed in Google applications
- Cookbooks, online help and buddy system are available so all nations can serve their data.

If you would like any support or technical guidance please contact onegeologyhelp@bgs.ac.uk

Types of membership to OneGeology

Principal membership

Participating and thus data services publishing members who pay the membership fees become Principal Members. In addition to the rights provided to all members, Principal Members vote on governance and financial issues and may access a number of free or reduced cost registrations to OneGeology conferences and meetings, as determined by the Board.

Associate membership

Non-profit, academic, or government organizations that support the objectives of OneGeology may become Associate Members. Associate members may provide data services but are not mandated to do so. Associate Members will be eligible to receive all OneGeology correspondence and participate in OneGeology activities within the limits of the OneGeology Brighton Accord and terms of reference for operation.

Corporate membership

Commercial entities are very welcome and may become Corporate Members, eligible to receive all OneGeology correspondence and participate in OneGeology activities within the limits of the OneGeology Accord and terms of reference for operation. The fees for Corporate Membership are not fixed and need to be agreed with the Board. Corporate Members are eligible to send up to four representatives to attend an exclusive annual technical and strategic review of emerging technologies and deployments in the OneGeology consortium.

Membership benefits

- Access to the world's leading digital data management technology and resources.
- Membership helps members adopt and comply with emerging technical designs and standards. Membership also provides opportunities to interact and work directly with the leading organisations and individuals in the digital geoscience data world
- Access to the expertise and experience of international geoscientists and informatics experts
- Eligibility to participate in working groups and committees
- Members will help drive the direction of geoscience cyber infrastructure to clearly define the problems, establish the solution criteria, and set priorities
- Membership in OneGeology is non-lapsing but resignation is effective with 30 days of written notice to the administration.

For more information contact onegeology@bgs.ac.uk

