



OneGeology Newsletter

In this issue:

- OneGeology-Europe 1
- OneGeology-Europe achievements 1
- OneGeology Operational Management Group (OMG) 3
- OneGeology Steering Group Teleconference 3
- Participation at December 2010 3
- OneGeology Technical Working Group 3
- OneGeology featured in the BGS 175 year anniversary symposium 4
- European Marine Observation and Data Network (EMODNET) 4
- Regional updates 5
- Geoscience Information Network 6
- OneGeology Kids 6
- OneGeology technical update 7

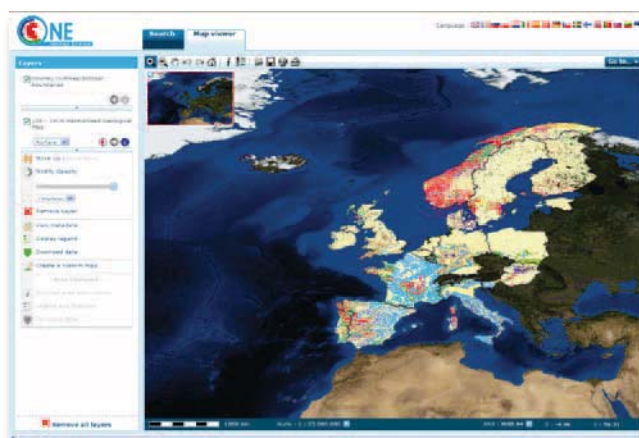


OneGeology-Europe

OneGeology-Europe closing workshop



The OneGeology-Europe project was completed in September 2010 and a closing workshop and final EC review took place in Paris in late October 2010. Two of the key achievements of the project are: the serving of semantically harmonised national geological datasets by 20 countries and a commitment by 20 European Geological Surveys to make this map data available for free download for all users. (www.onegeology-europe.org/).



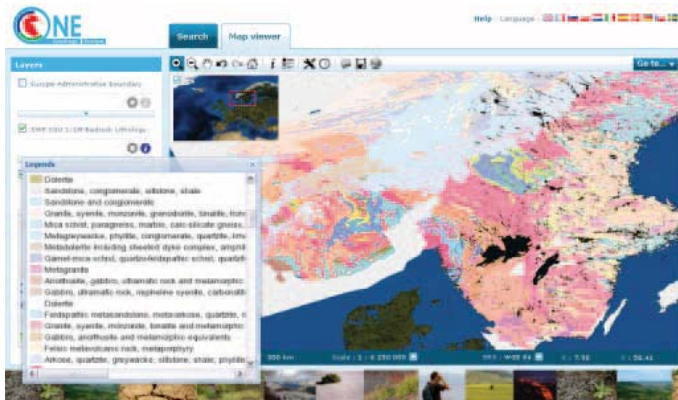
OneGeology-Europe achievements in detail

OneGeology-Europe has worked as a large multinational team and has delivered its contractual products and services but most importantly some key outcomes:-

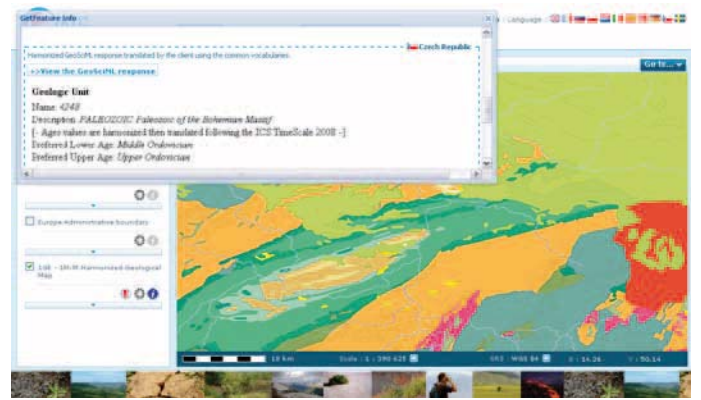
- An interoperable 'Surface Geology' spatial dataset at approximately 1:1 million scale has been made available from the distributed data held by more than 20 European nations on a state-of-the-art multilingual web map portal.
- 1G-E has addressed the legal aspects of data access and licensing. The outcome is a Code of Practice including two model licenses which can be utilised or referenced by interested parties. An additional simple harmonised licence agreed by all data providers was developed to facilitate the free download of the 1:1million 'Surface Geology' spatial dataset.
- A multilingual discovery metadata portal has been developed to facilitate access to the data held in the portal and much more data residing in geological surveys.
- Europe is now leading the world in the development of a multinational geoscience spatial data infrastructure (SDI) and the project is making substantial contribution to the implementation of INSPIRE (metadata, data specifications, services, data sharing, monitoring).
- The project has accelerated the development and deployment of an international interchange standard for geology, GeoSciML.
- 1G-E has progressed the development and harmonisation of geoscientific vocabularies. These achievements are enabling the process of harmonisation of geological data at country borders and the sharing of data both within and outside of the geological community, in Europe and also globally.



Examples of the functionality of the OneGeology-Europe Portal



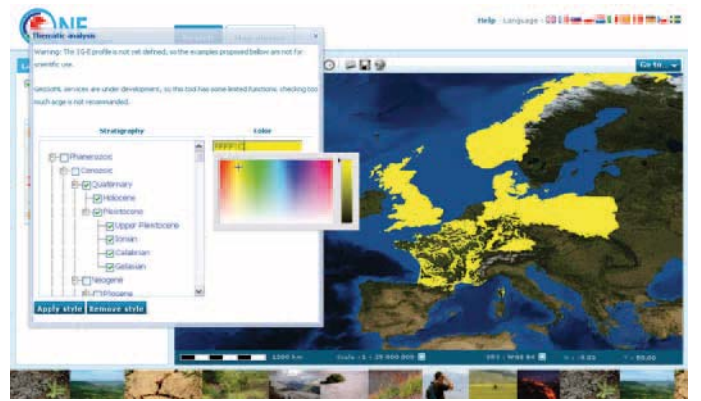
Displaying the legend for the map presented within the portal.



Query of 1:1 million 'Surface Geology' dataset.



Portal: Applied geological dataset (Radon) shown over bedrock – Norway.



Use of the "thematic analysis" option to display Quaternary deposits.



In addition to the scientific and technical achievements of OneGeology-Europe, it has also devoted significant time to outreach. A major part of that was the production of a new book describing the application of geological spatial data across Europe. The book 'One Europe One Geology', has been widely distributed across Europe and the world. It is also available as an eBook at www.onegeology.org/docs/Oneeurope_Onegeology_eBook/index.html





OneGeology Operational Management Group (OMG)

The 2010 meeting of the Operational Management Group took place on Monday 23 August 2010 at the Federal Ministry of Economics and Technology, Berlin, Germany.

The agenda covered current progress of the OneGeology Initiative and updates from participants around the world. Progress was compared to the aims specified in the Success Criteria. Papers detailing the proposed Incorporation of OneGeology were discussed and feedback requested. The implementation of a new 'data provider accreditation scheme' will be rolled-out by a nominated task group. Guest presentations were received from representatives of the YES Network and the Geoparks Network.

Minutes of the meeting and presentations are available on the website www.onegeology.org/meetings/operational_meetings.html

OneGeology Steering Group Teleconference

The Steering Group held a teleconference on 6–7 July 2010. This brief meeting was largely convened to discuss updates on the Incorporation of OneGeology and the primary aims and goals for the initiative in the next 2 years.

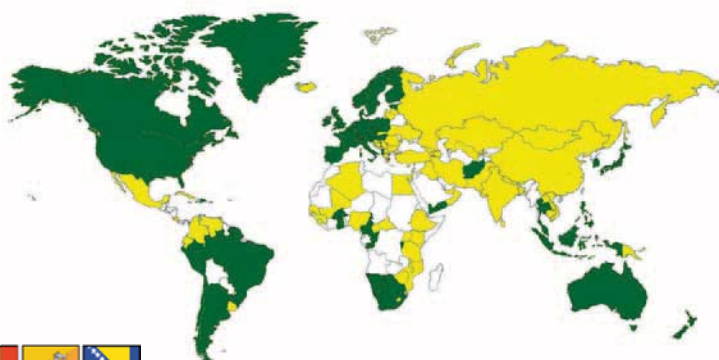
The next meeting of the OneGeology Steering Group will be held in Tokyo, Japan on 5–8 April 2011.

OneGeology Technical Working Group

The 6th Technical Working Group meeting took place on 8 October in Accra, Ghana. The meeting, hosted by the Geological Survey of Ghana was well attended by representatives of African Geological Surveys already involved with the OneGeology and AEGOS projects (www.aegos-project.org/) as well as participation by European Geological Surveys with ISPRA (Italy) getting a special mention for managing to attend. The minutes of the meeting with resulting actions are published on the website at www.onegeology.org/meetings/technical_meetings.html

Participation at December 2010

There are currently 116 nations participating in OneGeology. Data services are increasing regularly, currently there are 49 nations serving 197 data layers.



Legend for the world map:
Green: National data being served
Yellow: Country participating in OneGeology





OneGeology featured in the British Geological Survey 175 year anniversary symposium

The BGS held a one-day science symposium at the Royal Institution in London on 28 September 2010. Guest speakers included Dr Marcia McNutt (Director USGS), Professor Iain Stewart (BBC television science presenter) and Sir David Attenborough (natural history film maker). The OneGeology initiative was presented including a live portal demonstration! An exhibition stand with further information was also there. Much interest and support was received from over 250 VIP participants.

www.bgs.ac.uk/about/BGS175/home.html?src=sfb



Dr Marcia McNutt and Dr Marko Komac at the OneGeology exhibition.



Ian Jackson (OneGeology Executive giving the presentation).

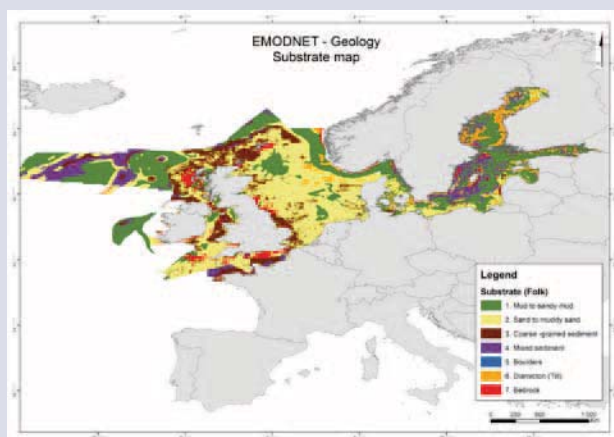
European Marine Observation and Data Network (EMODNET)

The European Marine Strategy Framework Directive has been implemented in order to allow a more holistic and multidisciplinary approach to the management of Europe's seas and oceans. In support of this legislation the European Commission has initiated the European Marine Observation and Data Network (EMODNET) to assemble existing but fragmented and inaccessible marine data and to create interoperable, contiguous and publicly available data layers which encompass whole marine basins.

EMODNET is being created from a network of existing and developing European observation systems linked by a data management structure covering all European coastal waters, shelf seas and surrounding ocean basins. The marine departments of the European Geological Surveys form the partnership of the EMODNET-Geology project, part of a suite of EMODNET pilot studies that also cover marine chemistry, marine biology, marine habitats and hydrography. The project will share methodologies and technologies with One Geology and OneGeology-Europe (1G-E) in order to deliver the EMODNET integrated geological map products through both the OneGeology and OneGeology-Europe portals so providing geoscientific information for the seas around Europe.

EMODNET-Geology will adopt those standards implemented in OneGeology-Europe including the use of GeoSciML as well as other open web service technologies including OGC, WMS, WFS etc. EMODNET-Geology will have a distributed map service with each of the work packages delivering a specified layer which will include seafloor geology, seabed sediments, mineral resources and geological events such as submarine slides and earthquakes.

Further information about the EMODNET project can be found at: www.ec.europa.eu/maritimeaffairs/eu-marine-observation-data-network-mission_en.html





Regional updates

Our regular roundup of previous and forthcoming events in the global regions. Please let us know of news in your area — email onegeology@bgs.ac.uk

OneGeology in Europe

Presentations on Onegeology-Europe have been given at the Slovenian Geological Congress (15 September 2010), and at the CBGA conference (24 September 2010). Mirka Trajanova (GeoZS national representative) presented both OneGeology and OneGeology-Europe projects at the CBGA Secretariat meeting on 22 September in Thessaloniki.

OneGeology in South & Central America

A selection of forthcoming events in Latin America include:

- 45th Congreso Brasileiro de Geología, Belém, **Brasil**, del 26/09 al 01/10/2010;
- XV Congreso Peruano de Geología, Cuzco, **Perú**, del 27 de septiembre al 1º de octubre de 2010
- XVIII Congreso Geológico Argentino, Neuquén, **Argentina**, del 2 al 6 de mayo de 2011
- XIII Congreso Colombiano de Geología, agosto 29 a septiembre 2 de 2011, Medellín, **Colombia**
- XIV Congreso Latinoamericano de Geología. agosto 29 a septiembre 2 de 2011, Medellín, **Colombia**

OneGeology training courses in Latin America

As reported in previous newsletters, the first OneGeology training course was held in Columbia in April 2010. 24 participants from ten countries of South America, Central America and the Caribbean attended the 5 day event, most of them from national Geological Surveys and affiliated organisations.

The course was conducted by the IGME (Spain); SEGEMAR (Argentina) and CPRM (Brasil) contributed with several lectures. Also INGEMET (Peru) gave a lecture. The course contents included basic concepts of interoperability and Spatial Data Infrastructures, Html, Xml, and map services. The OGC WMS standard, web servers and clients for geographic information, GIS services on ArcGis, Mapserver and Geoserver.

Future plans

The course was hugely successful and the need for further courses emerged. It was clear that a specific OneGeology Latin American working group should be set up. This working group will be the core for the next training courses. A second edition of the basic course, focussing on Web Map Services (WMS), will be run. In addition, an advanced course on GeoSciML and vocabularies would help countries to serve OneGeology level 2 (WFS) data. Content and funding possibilities are being investigated.

OneGeology in North America

CGMW (Commission for the Geological Map of the World) will have a booth at AGU in San Francisco 13–17 December 2010 where OneGeology flyers and information will be available. OneGeology was presented in a geoinformatics session at the GSA conference in Denver in November 2010.

OneGeology in Africa

Johannesburg, South Africa

OneGeology will be taking part in CAG23 (Colloquium of African Geology) in South Africa 8–14 January 2011. OneGeology is holding a joint 'super-workshop' with AEGOS and GIRAF on the 8–9 January and Ian Jackson is scheduled to give one of the keynote presentations of the conference. Further information is available at www.cag23.co.za/workshops.php and on the OneGeology website www.onegeology.org/docs/CAG23.pdf



Burkina Faso

Tim Duffy, co-chair of the OneGeology Technical Working Group has been liaising with staff from the Burkina Faso Geological Survey to serve the latest WMS for Africa. This service is seen live streaming from the BGS' buddy web server in the UK to the PC desktop at the Geological survey in Ouagadougou using local broadband internet infrastructure. Current and further implementation of good broadband services are becoming increasingly available affordably around the African continent. This means that with the potential increase of supply of web server infrastructure, through projects such as the EU's MSSP and AEGOS, increasingly WMS services will be served from within Africa. These can be served either by the national Geological Surveys themselves or by using local 'buddies' such as CGS and SEAMIC.



Tim Duffy, (co-chair of the OneGeology Technical Working Group) and Ignace Dabone – OneGeology technical contact at the Burkina Faso Geological Survey, Ouagadougou. This latest WMS service is now available in the OneGeology Portal.





GIN Geoscience Information Network

The Geoscience Information Network (GIN) is a major US project which links in to OneGeology. It now has all 50 U.S. states represented in the State Geothermal Data project to deploy the system nationwide and populate it with large amounts of data and maps from state geological surveys as part of the U.S. Department of Energy funded National Geothermal Data System (NGDS). GIN is managed by the Arizona Geological Survey on behalf of the Association of American State Geologists (AASG).

GIN is partnering with the U.S. Western Regional Partnership (www.wrpinfo.org) to facilitate data integration among 15 federal agencies and 5 western states. WRP is building a central GIS repository of an estimated 10,000 data sets and layers of land management, natural resources, and environment information to use in making coordinated decisions about issues that cross jurisdictional and state boundaries. GIN will initially link the WRP repository as a

node into the National Geothermal Data System. Eventually, GIN hopes to link each participating agency into the network via live web services.

The Governor of Arizona has approved GIN as a data integration framework for state agencies and demonstration projects are being developed with State Parks and Game & Fish departments. Talks are underway with the U.S. National Science Foundation funded DataONE (www.dataone.org) project to link the emerging academic network of 70 000 environmental data sets with the GIN. GIN-NGDS demonstrations were given at the Geothermal Resources Council annual meeting and expo in Sacramento, California in October, followed immediately by similar demos at the Geological Society of America annual meeting in Denver.



The OneGeology-kids web pages are continuing to improve. Further information and pages have been very kindly provided by OneGeology participants. These are currently being compiled and will be seen on the web site soon. There is a page where you can send us your images of geology to add to the web site and also a section where you can send us a question or tell us about geology near you.

www.onegeology.org/eXtra/kids/home.html

Please send us your links to local/national Rock Clubs.





OneGeology technical update

New Cookbook, new rules

The recently released new WMS Cookbook, now available as a set of regularly updated web pages www.onegeology.org/wmsCookbook/home.html, has clarified the rules regarding service URLs, service titles, and layer names and titles. Would all service providers please review these to check they conform?

For service titles and service URLs (which are based on the service title) the formatting rules in summary are:

[Service Provider Organization code] then [Data Owner Organization code] (optional if data owner and service provider are the same) then [ISO 639 language code] (optional if service is in default language, or if one service is provided and that service is in English) then [Service Theme].

We suggest that you should provide a language code if you specify the service theme in English but supply the service in your native (non-English) language.

For more information and examples see: www.onegeology.org/wmsCookbook/2_2.html (service titles) and www.onegeology.org/wmsCookbook/2_3.html (service URLs).

For layer names and titles the format in summary is:

[Geographical extent] of the data in the layer, then [Data owner organization] (not service provider), then [Language code] (if non-default as per service naming conventions), then [Scale], then [Theme].

For more information and examples see pages www.onegeology.org/wmsCookbook/2_5.html though to www.onegeology.org/wmsCookbook/2_5_7.html

Information on using 'Quantum GIS' will be added to the Cookbook

Information on how to use the Free and Open-sourced 'Quantum GIS' to both consume OneGeology services and create the mapfiles required to serve data using MapServer will be added to the Cookbook soon.

If you have any technical enquiries, please contact onegeologyhelp@bgs.ac.uk

Forthcoming newsletters



If you have any articles or images you would like to include in the next edition of the newsletter, please contact the secretariat at onegeology@bgs.ac.uk

If you would like more information on participating in OneGeology, registering or serving your data, please contact onegeology@bgs.ac.uk. For any technical enquiries, contact onegeologyhelp@bgs.ac.uk

