

# One Geology Newsletter

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## **Operational Management Group** meeting (OMG): Buenos Aires

The Servicio Geológico Minero Argentino (SEGEMAR) hosted the 4th OneGeology Operational Management Meeting on Thursday July 2 and Friday July 3 in Buenos Aires.

The meeting was well attended especially by representatives from the South American surveys. Professor Alberto Riccardi, President of IUGS (International Union of Geological Sciences), attended the meeting saying that he welcomed the opportunity to learn more about the initiative and its progress.

He enthusiastically supports OneGeology and offered assistance wherever possible. OMG discussions concentrated on the results of the Steering Group meeting in April and consequent implementation items. Progress updates

#### Delegates at the 4th Operational Management Group meeting in Buenos Aires.

were provided covering all operational and technical aspects of OneGeology, as well as regional updates such as GIN (Geoscience Information Network) in North America, OneGeology-Europe and progress of the individual South American countries represented at the meeting. The full minutes of the meeting are available at www.onegeology.org/meetings/operational meetings html

The next OMG meeting will be held in 2010 in Berlin.



Professor Alberto Riccardi. President of IUGS re-inforces his support of OneGeology.























# Success criteria to August 2009 — our targets and what we've achieved

Following the August 2008 OMG meeting in Oslo, a series of success criteria were defined in order to monitor our

progress and achievements. The table below summarises our progress against 'operational' criteria to date. The full set of criteria for 2009, 2010 and 2012 can be viewed at www.onegeology.org/misc/downloads.html (For Technical success criteria, see page 5).

#### Operational success criteria.

Success Criteria	Target by August 2009	Achieved
Number of countries participating	110	109
Refreshed the website at least monthly	12 p.a	✓
Held one OMG during the year	1 p.a	July 2009: Buenos Aires
Established a Steering Group	_	✓
Established a governance model	_	✓
Held one Steering Group meeting during the year	1 p.a	April 2009: Paris
Number of presentations/articles and papers	15/10	>20 / >12
Define and clearly communicate IPR policy	_	✓
Produced a policy on high resolution and applied geoscience data	_	Х
Drafted, agreed and communicated a policy on sponsorship and commercialisation	_	In preparation
Registered OneGeology with the GEOSS Earth Observation portals	_	✓
Supply exhibition material for attendees at other conferences e.g. AGU/EGU	_	✓
Number of newsletters issued in year	4 p.a	3
Number of press releases	2 p.a	2
Engage with GEO/GEOSS more specifically (with assistance from UNESCO)	_	✓

## A Royal introduction to OneGeology

HRH the Princess Royal was briefly introduced to the OneGeology project during her visit to the British Geological Survey in June 2009. The Princess was opening the new William Smith Building at the survey.



# OneGeology and SCAR — Scientific Committee on Antarctic Research

OneGeology is increasingly being regarded as a model for global data sharing and cited as an example of good practice by many groups and organisations. One of the groups wishing to learn more about the OneGeology model are the information management and GI members of SCAR. SCAR is an inter-disciplinary committee of the International Council for Science (ICSU). SCAR is charged with the initiating, developing and coordinating high quality international scientific research in the Antarctic region, and on the role of the Antarctic region in the Earth system. (www.scar.org/about)



# **Geoscience Information Network** (GIN) Updates

The US-based Geoscience Information Network is a regional project which is providing input to OneGeology and supports its goals. GIN (organized by a coalition of the US state geological surveys — Association of American State Geologists or AASG, and the US Geological Survey) has been adopted by the US Department of Energy as the basis for the National Geothermal Data System (NGDS). A US\$5 million project run by the Geothermal Data Consortium is commencing to implement GIN as the data discovery, access, and exchange mechanism for the NGDS. Other partners in the Consortium are building desktop applications, portals, and digitizing content for the NGDS. Data from all new federally-funded geothermal projects must be made available through the NGDS.

US DOE made an additional US\$20 million available and is currently reviewing proposals to deploy the NGDS nationwide and fully populate it with data relevant to geothermal exploration and development. This will de facto implement GIN as a national data network and create the cyberinfrastructure to form a virtual national data repository.

Among the growing number of GIN partners is Microsoft Research, which timed the public release of their SciScope (www.sciscope.codeplex.com) geospatial data portal with the GIN submission of the NGDS funding proposal.

GIN launched two new websites: US GIN (www. usgin.org) is the primary program site and US GIN Lab (www.lab.usgin.org) is a specialised technical site aimed at developers and programmers.

## Forthcoming events relevant to OneGeology

Please email onegeology@bgs.ac.uk with details of events (meetings, conferences, or exhibitions) that could be included on this page.

Date		Country	City	Event	Attending			
October	8–9 October 2009	Turkey	Istanbul	3rd GEO European Projects Workshop	lan Jackson is presenting OneGeology-Europe			
	18–21 October 2009	USA	Portland	Geological Society of America annual meeting	lan Jackson is presenting OneGeology at keynote and technical sessions			
	26–30 October	Africa	Kampala	AfricasGIS 2009	Francis Bertrand (BRGM) will be presenting OneGeology			
	23 October–1 November 2009	Italy	Genoa	Festival della Scienza	17:00 29 October 2009 — OneGeology-Europe Awareness Seminar 30 October 2009 is the formal European Union review of their €2.6M grant to OneGeology-Europe. The 1GE Operational Management Group will attend to provide progress information to the EU panel and answer their questions			
	25–28 October 2009	China	Beijing	Yes Congress 2009	Chloe Wrighton (BGS) will present OneGeology at the first world Congress for Young Earth-Scientists			
November	19–22 November 2009	Lisbon	Portugal	Planet Earth Lisbon Event (IYPE)				
December	14–18 December 2009	USA	San Francisco	Fruits of IYPE – Implementing Long Term Activities (U12), IYPE wrap-up session at the American Geophysical Union (AGU) Conference	John Broome has been invited to make a presentation. IYPE and CGMW will be participating in the exhibition			
February 2010	15-16 February 2010	France	Paris	CGMW General Assembly	lan Jackson will present OneGeology progress			
April 2010	15–16 April 2010	New Zealand	Wellington	OneGeology Steering Group meeting				
July 2010	4–8 July 2010	Australia	Canberra	The biannual Australian Earth Sciences Convention	Possibility of a OneGeology display/poster/ presentation at the convention			

Full details are also available and updated regularly at www.onegeology.org/misc/diary.html

## **Participation at September 2009**





There are currently 111 nations participating in OneGeology. The most recent countries to participate in OneGeology include —



Georgia



Macedonia



Iraq



Andorra



Costa Rica

We warmly welcome them and look forward to seeing their data on the portal soon.



# OneGeology at the National Data Repository Meeting (NDR9)

NDR recently held their 9th global conference in Delhi, India 31 August – 3 September. The event is one of a series of global meetings promoting the collaboration of regulatory agencies and industry on oil and natural gas data management. OneGeology was invited to present its model for international data sharing. There were 200 attendees at the meeting from 27 nations. The audience included representatives from oil and gas service companies who also showed keen interest in OneGeology to increase the accessibility of data they needed. (www.energistics.org/posc/NDR\_Work\_Group.asp)

## **OneGeology Steering Group**

Steering group members have recently agreed that an IUGS representative should be invited as an ex-efficio member along with existing ex-efficio members UNESCO and CGMW. The OneGeology Steering Group have specifically invited Dr Riccardi, President IUGS, to join the Group.

# **OneGeology regional news**

#### Japan

Dr Koji Wakita of the Geological Survey of Japan made a presentation entitled 'OneGeology — Making Geological Map Data for the Earth Accessible' at the Annual Meeting of Geological Society of Japan on 5 September at Okayama. Dr Wakita has also submitted a paper with the same title to the Japanese journal 'Chishitsu (Geological) News', a publication aimed at the general public. It will be published in December 2009.

#### Slovenia

Dr Marko Komac (Director Geological Survey of Slovenia) was invited to give a short presentation at a special event, dedicated to the 100th anniversary of Croatian Geological Survey on 11 September. His presentation focussed on: 'OneGeology as a tool for cross-border geohazard assessment'.

#### China

Fraser Taylor (International Steering Committee for Global Mapping (ISCGM)) gave a keynote address on Global Map with reference to OneGeology at the Digital Earth in Action meeting in Beijing, 9–12 September.

#### Ireland

Mary Carter (GSI) will give a presentation on OneGeology and OneGeology-Europe at IRLOGI GIS Ireland 2009 Guinness Storehouse, Wednesday 14 October.

(IRLOGI is the umbrella organisation for the geographical information industry in Ireland)

Full listings of events related to OneGeology are now available on the website 'Diary' page [www.onegeology.org/misc/diary.html]. See also page 3 of this newsletter. Please let us know if you are attending an event in your region.

# **Technical Working Group (TWG)**

The TWG have now released their approved Terms of Reference. available at www.onegeology.org/docs/ technical/TechnicalWorkingGroupTOR FINAL08 09.pdf and requested formalisation of membership of the group. Formal members will be expected to contribute and work towards the continued technical development of the OneGeology web services and portal technology, GeoSciML. The TWG held their recent meeting in Quebec city, Canada on 25 September 2009. The successful meeting was well attended (including contributors calling in from as far as Buenos Aires) and discussion concentrated on: the content of a new WMS cookbook for WMS 1.3 compliance; enhanced ESRI WMS software advice; contents of the new WFS cookbook; and new metadata catalogue for the OneGeology Registry. Further details (and the minutes) will be available at www. onegeology.org/meetings/technical meetings.html

As a method of monitoring progress, the OneGeology Operational Management Group set up a series of 'success criteria' following the August 2008 meeting in Oslo. The table (right) indicates the technical success and how well OneGeology is progressing to meet its targets.

#### Technical success criteria.

Success Criteria	By August 2009	Targets achieved	Comments		
Number of countries serving a WMS	55	41			
Developed the technology, systems and documentation to serve a WFS	-	<b>√</b>	Cookbook available and WFS services being provided		
Developed a new front end to the portal	_	<b>√</b>			
Number of countries serving a WFS	10	6			
Number of third parties integrating OneGeology WMS/ WFS into their web sites or web services	2	3			
Held at least one TWG meeting per year	1	1	Jan 09: Copenhagen		



## **OneGeology-Europe**

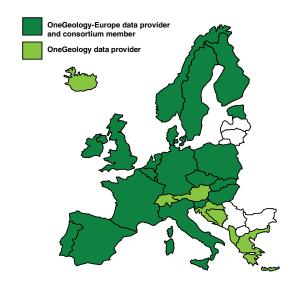
OneGeology-Europe is an EC funded project which aims to build a geoscience spatial data infrastructure for Europe. The major objectives of the project include:

- Making existing digital geological spatial data more easily discoverable, accessible and usable
- Making a significant contribution to the progress of INSPIRE — i.e. develop systems and protocols to better enable the discovery, viewing, downloading and sharing of core European spatial geological data
- Enabling the Groundwater and Soils directives, GMES, GEOSS and SEIS to deliver
- Demonstrating best practice examples of the delivery and application of geological spatial data in the public and private sectors and share the best practice

OneGeology-Europe is progressing rapidly and has now completed a Gap Analysis user needs report; a data audit and review of multilingual metadata profiles; a data model and schema (plus mark-up languages) has been derived;

many workshops have been held and a prototype portal has been developed. OneGeology-Europe data specifications Version 1 have been distributed for consultation and further discussion took place at the OneGeology Technical Working Group meeting in Quebec, 25 September 2009.

As well as the technical developments, OneGeology-Europe is also reviewing existing legal frameworks, communication strategies and has developed a website www.onegeology-europe.org/home



OneGeology-Europe: countries involved and providing data.



## **Spotlight on OneGeology and GEO**

**The Global Earth Observing System of Systems, GEOSS**, is being built over a ten year period from 2005–2015 by the Inter-governmental Group on Earth Observations, GEO. The GEOSS is designed to provide all of the Earth Observations that society will need in order to manage a range of environmental issues in nine Societal Benefit Areas over the coming years. These include natural disasters, water and energy resources, ecosystems, agriculture and biodiversity, health, the weather and climate change.

**GEO's formal members are 80 countries**, world wide, and GEO also has a large number of Participating Organisations, such as EuroGeoSurveys, space and UN agencies and some major international science initiatives such as the World Climate Research Programme. As GEO works by bringing together all existing systems — hence, a 'system of systems' — it only develops new systems where any gap is identified in current provision. Bringing existing systems together means that many of the challenges facing GEO relate to interoperability and data sharing principles and technical solutions — something very familiar to OneGeology partners. So, there is a good fit between the two initiatives.

How can OneGeology contribute to GEO?, GEO has initiated a Task in its Work Plan for 2009–2011 on the generation of some Global Datasets. OneGeology is one of these, alongside a new Global Digital Elevation Model that is being built from ASTER satellite data by GEO Members, and several others. GEO always looks to existing systems first and so, in looking for a global geological dataset, OneGeology was the natural partner. OneGeology now has the status of a Sub-Task under the GEO Global Datasets Task: DA-09-03c to be precise, for those who want to look for OneGeology in the GEO Work Plan.

As a Global Datasets Sub-Task, OneGeology reports on progress to the GEO Architecture and Data Committee, ADC. There are helpful, natural links to GEO through OneGeology partners and for example the USGS are Co-Chair of the ADC. BGS and EGS both have representatives on the GEO Science and Technology Committee and BGR sits on its Capacity Building Committee. So OneGeology was represented at both the Spring and Autumn 2009 rounds of the GEO committee meetings. Given that geological data do not appear explicitly in any one of the GEO Societal Benefit Areas, but are implicit in several such as Disasters and Energy, this cross-cutting representation at a high level is important to our visibility.

The September 2009 ADC meeting featured a presentation on each global dataset, including OneGeology. ADC agendas of interest at the moment include the GEO Common Infrastructure, which currently features three pilot registries, clearing houses and web portals. These are about to be rationalised into one system, although it may retain multiple web portals. OneGeology will register itself in this system by the end of 2009, hopefully in time for this to be reported at the GEO Plenary in Washington this November. Also of interest are the GEO Data Sharing Principles, which are set to be agreed at the Washington Plenary. As OneGeology is already following INSPIRE standards, the principles fit smoothly alongside what OneGeology is already doing.

**OneGeology also has a link through the EC**, who are a GEO Member and of course fund OneGeology Europe. So, OneGeology Europe is represented at the half-yearly meetings of all of the EC's GEO-related Projects. The next meeting in Istanbul this October will be taking a closer look at GEO's global datasets and so a OneGeology presentation is scheduled.

What are the benefits to OneGeology of linking into GEO?, GEO is a political process mandated by the G8 and overseen via Ministerial level Summits every few years; the next GEO Ministerial is in China in 2010, at which Ministers are expected to sign off an action plan to implement the data sharing principles, amongst other things. So, by contributing our global geological dataset into GEO, we get exposure at the highest levels of international political and scientific cooperation. It's worth noting that GEO's first Ministerial Summit was chaired by Colin Powell when he was US Secretary of State; those since have all been chaired at a similar level, and have been addressed by figures such as the Prime Minister of Japan. G8 and GEO Summit declarations all make commitments in some form to a continued and sustained effort to build the GEOSS. That the geological surveys are seen to be making a distinct, valuable and appropriate contribution to this process can only be a good thing for our science and our community.

At a more basic level, the goal of OneGeology is to make web-accessible the best available geological map data worldwide. We can take advantage of the GEO Common Infrastructure to help increase the visibility and availability of our data. In addition, sharing similar challenges means that GEO and OneGeology can learn valuable lessons from each other to mutual benefit. The relationship is in its early stages, but the potential is high and the overheads low — we are contributing based on what we would already be doing. GEO presents a winwin opportunity for OneGeology, which is now well placed to take full advantage.

Prof. Stuart Marsh, Head of Spatial Geoscience Technologies, British Geological Survey, UK.





Country	Participating in OneGeology	Serving WMS data to the OneGeology Portal	Serving WFS data to the OneGeology Portal	Country	Participating in OneGeology	Serving WMS data to the OneGeology Portal	Serving WFS data to the OneGeology Portal	Country	Participating in OneGeology	Serving WMS data to the OneGeology Portal	Serving WFS data to the OneGeology Portal
Afghanistan	<u></u>	<u></u>		Gambia	<u></u>			Oman	<u></u>		
Albania	<b>©</b>	<b>©</b>		Georgia	<u> </u>			Pakistan	<b>©</b>		
Algeria	☺			Germany	☺	©		Papua New Guinea	<u></u>		
Andorra	$\odot$			Ghana	<u></u>	$\odot$		Peru	<b>©</b>		
Argentina	<b>©</b>	$\odot$		Greece	<u></u>			Philippines	<b>©</b>	<b>©</b>	
Armenia	$\odot$			Guinea	☺			Poland	$\odot$	$\odot$	
Australia	$\odot$	$\odot$	<u> </u>	Hong Kong	☺			Portugal	$\odot$		
Austria	$\odot$	$\odot$		Hungary	☺	$\odot$		Romania	$\odot$		
Bangladesh	<b>©</b>			Iceland	<b>©</b>			Russian Federation	<b>©</b>		
Belgium	<b>©</b>			India	<b>©</b>			Rwanda	©	$\odot$	
Bhutan	$\odot$			Indonesia	<u></u>	$\odot$		Senegal	$\odot$		
Bosnia and Herzegovina	$\odot$			Iran	$\odot$			Sierra Leone	$\odot$		
Botswana	$\odot$	$\odot$		Iraq	$\odot$			Singapore	<u> </u>		
Brazil	<b>©</b>	$\odot$	<u> </u>	Ireland	<u> </u>	<b>©</b>		Slovakia	<b>©</b>		
Bulgaria	$\odot$			Israel	$\odot$			Slovenia	$\odot$	$\odot$	
Burkina Faso	$\odot$			Italy	$\odot$	$\odot$		South Africa	$\odot$	<u></u>	
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Cambodia	<u> </u>			Kazakhstan	$\odot$			Spain	<u> </u>	©	
Cameroon	<u> </u>	$\odot$		Kenya	<u> </u>			Sri Lanka	<u> </u>		
Canada	$\odot$	$\odot$	<u> </u>	Kosovo	$\odot$			Suriname	<u> </u>	$\odot$	
Central African Republic	©			Latvia	©			Sweden	©	©	©
Chile	$\odot$	$\odot$		Lesotho	$\odot$			Switzerland	$\odot$	$\odot$	
China	$\odot$			Lithuania	$\odot$			Tanzania	$\odot$		
Colombia	$\odot$			Luxembourg	$\odot$			Thailand	<u></u>	$\odot$	
Congo	$\odot$	$\odot$		Macedonia	$\odot$			Timor-Leste	$\odot$		
Costa Rica	$\odot$			Malawi	$\odot$			Turkey	$\odot$		
Croatia	$\odot$			Malaysia	<u></u>			Uganda	$\odot$		
Cyprus	$\odot$			Mali	$\odot$			Ukraine	$\odot$		
Czech Republic	$\odot$	$\odot$		Mexico	$\odot$			United Arab Emirates	$\odot$		
Denmark (Greenland)	$\odot$	$\odot$		Mongolia	©			United Kingdom	$\odot$	<b>©</b>	©
Dominican Republic	$\odot$			Mozambique	©			United States	$\odot$	<b>©</b>	
Ecuador	$\odot$			Namibia	$\odot$	<b>©</b>		Uzbekistan	$\odot$		
Egypt	$\odot$			Nepal	$\odot$			Vanuatu	$\odot$		
Estonia	$\odot$	$\odot$		Netherlands	$\odot$	☺		Venezuela	$\odot$		
Ethiopia	$\odot$			New Zealand	©	<b>©</b>		Vietnam	$\odot$		
Finland	<b>©</b>			Nigeria	<u></u>			Yemen	©	$\odot$	
France	$\odot$	$\odot$	<b>©</b>	Norway	<b>©</b>	<b>©</b>		Zimbabwe	<b>©</b>		
		l .	hle nlease					TOTAL	110	41	6

If you notice an error in this table please contact onegeology@bgs.ac.uk and we will correct it.



#### **GSA Portland**

The 2009 Geological Society of America annual meeting will be held on 18-21 October 2009, in Portland, Oregon, USA.

lan Jackson has been invited to present OneGeology at keynote and technical sessions. Oral Presentations include:

ONEGEOLOGY — MAKING GEOLOGY ACCESSIBLE 1.45pm 18 October: Session No 53 www.gsa.confex.com/gsa/2009AM/finalprogram/ abstract\_159391.htm

ONEGEOLOGY — A DISTRIBUTED MODEL FOR GLOBAL **GEOLOGICAL DATA:** 2pm, 19 October: Session No 144 www.gsa.confex.com/gsa/2009AM/finalprogram/

abstract 160154.htm

There will also be an OneGeology exhibition stand at the event. Full details of the meeting can be viewed at www.geosociety.org/meetings/2009/

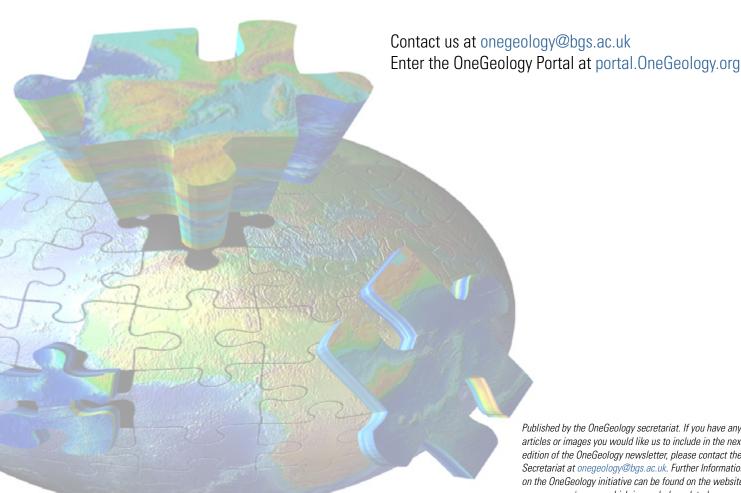


#### AGU San Francisco, California, USA, 14-18 December 2009

OneGeology will be presented at the AGU (American Geophysical Union) as part of the 'Fruits of IYPE' session. The AGU Fall Meeting is expected to draw a crowd of over 16 000 geophysicists and geoscientists from around the world. It provides an opportunity for researchers, teachers, students, and consultants to present and review the latest issues affecting the Earth, the planets, and their environments in space. This meeting will cover topics in all areas of Earth and space sciences.

John Broome (Natural Resources Canada) will present 'OneGeology: Making the World's Geological Map Data Accessible Online' in the session The Fruits of IYPE — Implementing Long-Term Activities (U12).

Further details are available at www.agu.org/meetings/fm09/



Published by the OneGeology secretariat. If you have any articles or images you would like us to include in the next edition of the OneGeology newsletter, please contact the Secretariat at onegeology@bgs.ac.uk. Further Information on the OneGeology initiative can be found on the website, www.onegeology.org which is regularly updated.