

OneGeology Operational Management Group Meeting 4

SEGEMAR Buenos Aires

2nd - 3rd July 2009

Attendees:

Name	Country	Representing	Organisation
Alcántara, Pedro	Argentina	SEGEMAR	Servicio Geológico Minero Argentina
Allison, Lee (LA)	USA	AASG, GIN	Arizona Geological Survey
Asato, Gabriel (GA)	Argentina	SEGEMAR (observer)	Servicio Geológico Minero Argentino
Asch, Kristine (KA)	Germany	BGR	Federal Institute for Geosciences and Natural Resources
Booth, Kathryn (KB)	UK	OneGeology Secretariat	British Geological Survey
Broome, John (JB)	Canada	NRC	Natural Resources Canada
Cornejo, Paulo (PC)	Chile	SERNAGEOMIN	Servicio Nacional de Geologia y Mineria
Correa, Martha R (MC)	Ecuador	SGN	Servicio Geológico Nacional
DeBree, Floris (FdB)	Netherlands	TNO	Geological Survey of the Netherlands
Gana, Paulina (PG)	Chile	SERNAGEOMIN	Servicio Nacional de Geologia y Mineria
Goncalvez, Joao Herniques	Brazil	CPRM	Serviço Geológico do Brasil
Jackson, Ian (IJ)	UK	OneGeology	British Geological Survey
Mendia, Jose (JM)	Argentina	SEGEMAR (observer)	Servicio Geológico Minero Argentina
Page, Roberto (RP)	Argentina	IGRM (SEGEMAR)	Servicio Geológico Minero Argentina
Pérez Cerdán, Fernando (FPC)	Spain	IGME	Instituto Geológico y Minero de España
Riccardi, Alberto (AR)	Argentina	IUGS	International Union of Geological Sciences
Robida, Francois (FR)	France	OneGeology	Bureau de Recherches Géologiques et Minières
Schobbenhaus, Carlos (CS)	Brazil	CPRM	Serviço Geológico do Brasil
Simons, Bruce (BS)	Australia	GSV (observer)	GeoScience Victoria
Stepien, Urszula (US)	Poland	PGI	Polish Geological Institute
Munoz Tapia, Santiago (SMT)	Dominican. Republic	SGN	Servicio Geologico Nacional, Direccion General de Mineria
Marin, Graciela (GM)	Argentina	SEGEMAR	Servicio Geológico Minero Argentin
Thorleifson, Harvey (HT)	USA	AASG	Minnesota Geological Survey
van Daalen, Tirza (TvD)	Netherlands	TNO	Geological Survey of the Netherlands



Apologies:

Luca Demicheli (ISPRA - Geological Survey of Italy), Dave Soller (United States Geological Survey), Koji Wakita (Geological Survey of Japan), Cathy Truffert (BRGM), Robert Tomas (EC Joint Research Council)

1. Welcome and Introductions (IJ)

Ian Jackson (OneGeology Executive Secretary) thanked SEGEMAR for hosting and organising the meeting. Alberto Riccardi (President of IUGS) thanked OneGeology for the invitation to this meeting and the opportunity to learn more about the initiative and its progress. He fully supported OneGeology and offered assistance wherever possible. He noted that his understanding of the relationship between CGI and OneGeology (1G) had been helped enormously by his attendance at the OneGeology and CGI meetings.

IJ introduced the agenda and the success criteria for the meeting were agreed as follows;

- To ensure we all understand where OneGeology is at the moment and especially in South America
- To raise, discuss and plan to solve any problems or issues
- To agree on tasks and actions for the next 12 months and who will take responsibility for them.

IJ provided a brief overview of OneGeology to date.

2. Welcome from SEGEMAR

Pedro Alcántara welcomed the attendees to SEGEMAR and Argentina.

3. Agreement of agenda

All agreed the agenda with minor amendments to the schedule

4. Overview of Minutes and Actions from the Oslo meeting (JB)

All actions from the Olso meeting have been completed.

5. Status & progress of OneGeology - Updates

5a. Operational status

IJ provided a brief overview of the current status of the initiative: OneGeology has been an astounding success thanks to the work of a global team. It is successful both technically, in that it is breaking new ground in the way geology is delivered on the web, and in the way that we communicate with the wider community. It has also been successful in raising the profile of geology and its importance to society. 106 countries are currently participating - approximately 75% of the land surface of the world. We are looking to increase the number of countries that are actually serving data. South America set a good example and the region was one of the first to serve data to the portal. In order to initiate and progress the project governance was not prioritised at the



inception of OneGeology. We now recognise the need to establish formal governance in order to sustain the success. A Steering group has now been set up and they met in April in Paris. The remit of the Steering Group is to deal with strategic issues and policy. Details of their business are documented in the papers in agenda item 6. Progress has also been good at the regional level, e.g. GIN, OneGeology-Europe, which will be reported in agenda item 5d.

5b. Technical Status

François Robida provided a brief overview of the technical status of OneGeology. Participants serve the data from their own servers using WMS or WFS. Initial data was served through WMS, however, some organisations are now moving to more sophisticated WFS. The data can be used in the portal but also in desktop GIS or other portals. The portal is used to display the data and show all the layers. Cookbooks are available to explain how to serve data using WMS and WFS using GeoSciML. The portal has had 450,000 visits in six months. 55 countries are now serving 140 datasets. This has increased from around 30 countries in Oslo last August. A new version of the portal was launched in early June; this included updates and resolved problems with internet browser compatibility. It is based on open source principles with an improved user interface. Further developments due by the end of 2009 include a catalogue of services to OGC standards. The cook books will also be updated to integrate new WMS WFS tools as well as incorporating user feedback. The Technical Working Group defines standards for OneGeology technical specifications, delivers cookbooks and provides technical support, it meets twice a year and the next meeting will be in Quebec. The Technical Working Group has drawn up ToR's and comments are welcome (copies were distributed). OneGeology believes it is essential to maintain good links with external bodies such as OGC, CGI and IUGS and INSPIRE and SDI (Spatial Data Infrastructure) technical initiatives.

Discussion of operational and technical status;

Carlos Schobbenhaus noted that South America are doing well and 40% of the countries or 75% of the total area are serving data but there is a big gap in Africa. CS enquired about what will happen when all countries are serving data – what next? IJ responded that the contribution of S American countries to OneGeology so early was a big factor in its success. Two possible ways to take OneGeology forward are 1) in harmonising the data internationally (something catalysed by OneGeology in some regions) and 2) in serving higher resolution data e.g. BGS is likely to include 50K data in its offering to OneGeology. Harvey Thorleifson emphasized what a success OneGeology has been but that we should not be complacent and keep working on harmonisation and enrichment of content and detailed mapping. Roberto Page noted that many have still not heard of OneGeology, therefore this should be reflected in the success criteria. We need to measure success by outcomes and who is using the data. Floris de Bree raised the issue of focusing too much on one theme (e.g. geology). Should other themes be introduced? The Success Criteria should also be written with sharpness and relevance. IJ welcomed improvement and sharpening of the Success Criteria and it was agreed to discuss this further in the later agenda item 8d.

5c. OneGeology-Europe

Kristine Asch provided an overview of OneGeology-Europe.



OneGeology-Europe is a European Commission eContentplus funded project (2.66 million Euros), involving 20 participating countries and 29 partners. The project will create geological data specifications for Europe supported and promoted by EuroGeoSurveys, and will work with the drafting team for INSPIRE committees. Data specifications are well progressed. Challenges include defining the vocabularies and defining and implementing use cases. Harvey Thorleifson stated that we should look at regional models and consider what has been successful in each and what we can learn from each other. North America has State meetings, country and tri-country structure. What have been the most significant progress points in Europe and in N America? For example zooming through scales which scales are progressing and how? We should focus on what have been the ingredients of success and what should be the future milestones?

5d. OneGeology - North America (GIN)

Lee Allison provided an update on GIN (Geosciences Information Network), a State geological surveys partnership (i.e. in many ways a OneGeology-US), working very closely with OneGeology-Europe and tremendous collaboration is happening to ensure the two projects are fully compatible. There are thousands of databases in the US but they aren't interoperable and this is a priority. 1:1M data and higher resolution data is the preserve of the state geological surveys in the US so they are taking the lead in this initiative. They will use the same metadata standards and catalogues alongside the UGSG national catalogue so all will be interoperable. GIN is developing lots of collaboration and partnerships. Arizona's 1:1m map is served to OneGeology and they have served 1:24k data also. They are teaching each of the other state survey's to do the same and hope that in the next few years all this data will be available to OneGeology. The Department of Energy have given them \$5m to show Geothermal information for the private sector in the US. A private company which shows oil companies how to view all their internal and external data in one place have added OneGeology as a layer in this system. This is an example of a successful outcome (vide R Page comment). ESRI are developing a data model specifically for geology data and it will be compatible with GIN and OneGeology. US Dept of Energy are making further funds available for this type of initiative.

Regional Updates

Canada

John Broome provided a brief overview of progress in Canada. Here the geological survey (within ESS/NRC) is contributing the national map and several provinces including Manitoba are contributing their data. NRC are hosting the next OneGeology Technical Working Group meeting. NRC has started a major mapping project of the Arctic region of Canada using new workflows including GeoSciML. This will be provided to OneGeology when complete.

Argentina

SEGEMAR have been working with neighbouring countries and this continues a long tradition in S America. Many products already in existence for example their 1:1m map of S America and a map of mineral resources including GIS and databases. Integrated maps of Chilean and Argentinean Patagonia are being developed. Mapping also involves Bolivia. It was noted that Uruguay wished to attend this OneGeology meeting but could not make it.



Brazil

A presentation on the situation in Brazil (CPRM) and the overall S American situation was given by CS. Brazilian data has been available from early in the OneGeology project. Argentina, Chile, French Guyana and Suriname are also serving data but there remain countries in S America which are only participants (Colombia, Ecuador, Peru and Venezuela). Moreover, Bolivia, Guyana, Paraguay and Uruguay are not yet participating in OneGeology. National geological map scales varies from 1:5M to 1:0.5M in several formats: paper, raster and vector. Maps of Brazil served to the OneGeology Portal are already available in the GeoSciML format. In addition to ongoing CGMW South American projects at 1:5M scale (tectonic and geological maps), there is a project at 1:1M scale in progress under the umbrella of ASGMI-CGMW. The aims are the scientific harmonizing of geological data and the exchange of knowledge of geo-processing technologies between countries (GIS-South America, 1:1M). The South American 1:1M project represents a contribution to OneGeology at a more advanced stage.

Chile

Paulina Gana presented an overview for Chile. Chile has two layers in the portal and their system is based on ArcIMS. This is not based on OGC standards so they have had to learn a new system OGC compliant using the cookbooks). This has involved solving many problems. Technical compliance is most important for them.

Dominican Republic

Santiago Munoz Tapia presented an overview of work in the Dominican Republic. They have a project funded by the EU in thematic maps including geomorphology and mineral resources and geotechnical maps at 1:50K scale. The first geological maps were produced with the help of BGR in the volcanic areas and in the west at 1:100K scale. There are about 35 maps at 1:50K scale, the new project will finish the country at this scale. The maps are hosted by the Spanish Geological Survey and served by WMS to the portal. The data will be available to the OneGeology portal in the next two weeks and will also be available in KML format.

Ecuador

Martha Correa presented an overview for Ecuador. Ecuador are working towards serving their data in the OneGeology portal, they are looking at technology, capacity and training in order to achieve this. They look forward to gaining expertise from such an international project. They are working with Peru at a 1:500K scale to create a map. Ecuador has a 1:1m map in a GIS prepared with the help of BGS. Due to then being part of the Ministry of Resources, approval is needed to serve the data and they are in the middle of a reorganisation which is complicating the matter.

ASGMI

Roberto Page emphasised the difficulties currently experienced by South and Central American countries. The continent does not have the resources of OneGeology-Europe or GIN but the nations would welcome more opportunities for training and technical expertise.



Australia

Bruce Simmons presented an overview of progress in Australia. They are currently delivering 1;1m and 1:2.5m scale data. Geoscience Victoria is using 1:50k WMS and WFS as a test case and the other States are waiting to see how this works and if the portal can handle all the extra detail this entails. Australia has been very active in producing catalogues and progressing the semantic discussions. Finally Australia have been extending the work into the Earth resources domain which they will present to the European group later this year and see how it fits with INSPIRE.

Discussion: Why do some countries not participate?

Guyana, Uruguay, Paraguay and Bolivia are the missing countries in S America. Nations seem willing to join but often there is difficulty locating the right people or the contact people change jobs. SEGEMAR are willing to help assist here. KA - maybe technical cooperation projects which Germany has with Paraguay should be used to introduce OneGeology? JB - Can we narrow down the problem? Is it availability of data, technical issues or IPR? RP - none of these things, it's finding one person in each of the organisations to take responsibility and commit to involvement. Paula Cornejo - these countries think that OneGeology is so far away and they don't know how they can contribute. She suggested we should have an ambassador from OneGeology to each of these countries connected to a technical person or someone who has been there a long time and knows what data they have. Don't go to the head of the survey as they change frequently. Who should be the ambassador? - Not a South American but someone from the technical team who can really help them actually get the data live (others including Chile found it difficult to understand how to do this). FR - Could we do some training advanced and basic GeoSciML? PC - It's difficult for these people to travel so you need to go to them. RP - Spain has training centres. Fernando Perez Cerdan - the key is GeoSciML, I think we need more training, closer contact between technicians and GeoSciML experts. The IFE Spanish centre of international cooperation provides training. The next training course is in Bolivia and they also have other centres around the Spanish speaking world; this is a possible route to achieving our training and wider goals.

ACTION 4.1: IJ and FR, in discussion with RP and FPC - put forward a strategy on how to address the participation issue, with training as a central part of this strategy.

6. Overview and results of the Steering Group meeting

IJ provided an overview of the recent Steering group meeting, outlining the 6 continent model that has been adopted and the representatives, (see paper 4.6 of the agenda papers for further details).

The South American representative was unable to attend. Participants from the South American countries agreed to discuss this issue further outside this meeting.

ACTION 4.2: All S American delegates - discuss the representation on the Steering Group and let IJ know the outcome

The Steering Group had a forthright discussion on governance and recommended OneGeology become incorporated as a not for profit organisation (such as IYPE). They also recommended there should be an additional separate funding foundation. On a separate issue, an offer has been made by ESRI to provide free/discounted software. This offer and its conditions will be refined and copied



to the OMG and then to the Steering Group. The next meeting of the Steering Group will be in New Zealand in April 2010.

(Day Two)

7) Introduction and review of Day 1

JB gave an overview of the previous day's discussions and progress and outlined the agenda for day two.

8) Discussion and Implementation items

a) Future governance of OneGeology

IJ provided an overview of the issues. The future governance is very important for the sustainability of OneGeology. The Operational Management Group is equivalent to an executive, they are not fixed and representation is voluntary. The Steering Group had recommended that OneGeology becomes incorporated (similar to IYPE) with a separate funding foundation. The secretariat was now working on defining the options for these fully. This will be circulated to the Operational Management Group for their approval prior to submission to the SG RP asked how long will OneGeology last? Is it a fixed term project or an ongoing initiative? IJ responded that the aspiration is that OneGeology is a sustained and an ongoing venture. It has a valid remit which should be continually reviewed and updated to maintain momentum.

ACTION 4.3 (Steering Group action also): IJ - define the options for incorporation and circulate to OMG for comment prior to outlining options for Steering Group.

It was commented that OneGeology must maintain good connections with IUGS without being tied to the same agenda. It was recommended that OneGeology takes a watching brief on the progress of ICOGS but should remain clear of political problems that ICOGS may have.

The process of incorporation needs to take place but care is need in its formulation so that it allows flexibility and does not prevent participation of willing nations through over-complicated or an overly formal sign-up procedure. The natural tensions in the aims of "institutionalisation" and flexibility were acknowledged.

Funding and Sponsorship

This is a difficult issue with good arguments and strongly held views on both sides. OneGeology has already received an initial offer of "free/discounted" software and training from ESRI. Once ESRI have finalised their offer IJ will circulate to the OMG for comment.

ACTION 4.4: IJ - finalise ESRI offer with them and circulate to OMG for comment prior to outlining options for Steering Group

b) Relationships with other bodies

JB summarised his paper and emphasised the importance of establishing relationships with other organisations and ensuring synergies are promulgated. He outlined the current relationships OneGeology has made and the necessity to allay fears that OneGeology will overlap with their core



missions. That both UNESCO and CGMW are represented as ex-efficio members of the Steering Group is an excellent development. In relation to questions on marine data, Kristine Asch noted her links with IODP and will attempt to assist in improving the inclusion of offshore geology. KA will attempt to follow up these links with her key contact in IODP, Chris Jenkins.

ACTION 4.5: KA – contact Chris Jenkins to attempt to get more offshore (ocean) data into OneGeology

Francois Robida is now on the Board of the Open GeoSpatial Consortium (OGC) and is the OneGeology contact with OGC; he will follow up further links.

ACTION 4.6: FR – maintain links with OGC and keep OMG informed of significant developments

The communication channels between regional coalitions and the Steering Group representatives needs to be clarified with the Steering Group representatives.

ACTION 4.7: IJ – seek clarification from Steering Group members as to how they are conducting their communication (in/out) within their regions/continents.

JB agreed to update the 'relationships with associated external bodies' paper and produce a diagrammatic portrayal of OneGeology and its relationships. These should be published, possibly in the IUGS news bulletin and Episodes. Alberto Riccardi agreed to review this paper.

ACTION 4.8: JB – produce paper and diagrammatic representation of OneGeology relationships

c) Intellectual Property Rights (IPR)

JB introduced the paper 4/8b. Lee Allison queried how the data retains information on ownership once it has been downloaded. JB stated that it is up to each country to attribute their data to include this. Floris de Bree stated that in the Netherlands a new law for subsurface data is currently being constructed which may be helpful and he will forward this to OneGeology for information when it is available.

ACTION 4.9: FdB - circulate new Netherlands law to OMG when available

IJ noted that there is advice available on the OneGeology website outlining how to protect your IPR. FPC agreed to translate this into Spanish and make it available.

Action 4.10: FPC - translate OneGeology IPR advice into Spanish and make it available to OneGeology secretariat for inclusion on the website.

d) Success Criteria

FR went through the current list of Success Criteria. All were asked to keep the OneGeology secretariat up to date on their regional activities, papers conferences, etc. Please email <u>onegeology@bgs.ac.uk</u> with updates.

ACTION 4.11: All – provide OneGeology secretariat with information on regional activities, papers conferences, etc



LA is the information editor for EOS and as such, formally invited participants, particularly the South American delegates, to submit articles. LA offered to take responsibility for OneGeology exhibitions in the US through the affiliation with GIN.

ACTION 4.12: LA – ensure OneGeology has a presence at as many US conferences and exhibitions as possible

RP emphasised the need for more explicit criteria. He suggested that these might include: evidence of institutionalisation established in each nation; linking with other organisations; numbers of real end user; success in funding OneGeology. BS suggested that extra criteria for including federations/states. The question of whether OneGeology should extend into other themes such as mineral resources was raised, along with the associated question of whether we have the capacity to do this successfully. Tirza van Daalen suggested that by 2012 OneGeology will have a number of thematic datasets and this should be included in the plan/success criteria. KA noted that including thematic data (e.g. hydrogeology data is not straightforward, we would need to involve this part of the scientific community first – not a rapid task. TvD agreed to lead the drafting of a discussion paper addressing Success Criteria #19 –i.e. a policy on high resolution and thematic data.

ACTION 4.13: TvD - draft a discussion paper addressing Success Criteria #19 –i.e. a policy on high resolution and thematic data. (FPC and LA agreed to assist)

JB and KA agreed to assist IJ in drafting success criteria 20 – 'policy on sponsorship and commercialisation'.

ACTION 4.14: IJ - draft a discussion paper addressing sponsorship and funding (JB, TvD and KA agreed to assist). This relates to Success Criteria 20 and 22.

ACTION 4.15: RP - draft a new Success Criterion addressing satisfying end user needs

Urszula Stepien requested that, to be consistent, an additional success criterion is added for the TWG – to hold 2 meetings per year and that a metadata profile is prepared. US suggested that a common metadata profile for OneGeology is prepared, in accordance with the metadata profile created for OneGeology-Europe. She stated that ISO 19115 contains many useful components that could be used to describe IPR, usage, access and help to solve problems with differences in the participant country's law.

ACTION 4.16: IJ – contact TWG chairs to ask that an additional Success Criterion is defined for TWG

e) OneGeology at conferences, meetings and exhibitions

HT provided an update on OneGeology activities to date, including production of publicity materials, presence at events and website upkeep. KA provided examples of how BGR have taken OneGeology information and customised it for their country and language. All were encouraged to do similarly. KA and FR agreed to take on the organisation of the OneGeology symposium for 34IGC and will ensure its inclusion in the information symposium being taken forward by BS.

ACTION 4.17: KA and FR - develop a proposal for a OneGeology sub-symposium/session within the 34 IGC information symposium and circulate it to the OMG



ACTION 4.18: Katy Booth - Circulate a request for events update in all regions/countries. (Templates for promotional materials can be provided)

All to ask for assistance for events if necessary

9. AOB

It was noted that the next TWG meeting will take place in Québec on 25th September 2009. It is an open meeting and all are welcome but participants will need to have a certain level of technical knowledge if they wish to participate. It is not a training event. NSF are developing training material for GeoSciML over the next few months. This will be provided for OneGeology use. Gabriel Asato raised concerns about GeoSciML. It was agreed to discuss issues further with FR and FPC outside this meeting and ask for an agenda item to be included in the next TWG meeting. All were reminded that they are welcome to forward any comments to Tim/François if they are unable to attend the meeting.

ACTION 4.19: LA - provide NSF funded GeoSciML training materials to OneGeology

10. Review of actions

The actions from the meeting were briefly reviewed and agreed. Full details will be released with the notes.

11. Next meeting

The Geological Survey of China has offered to host the next meeting in Beijing but this needs to be confirmed (IJ). If the Chinese offer does not proceed a fallback location will be arranged (possibly Berlin). KA offered to organise the next OMG; TvD offered to assist.

ACTION 4.20: IJ -contact China GS to confirm their willingness to host next meeting (or not).

ACTION 4.21: KA and TvD organise next OMG

K A Booth

Final version incorporating amendments at 18th August 2009