

Draft Minutes for the 9th OneGeology Technical Working Group Meeting 5th June 2013 2.30-5.30pm

at A. P.Karpinsky Russian Geological Research Institute (FGUP "VSEGEI") 74, Sredny prospect, 199106, St. Petersburg, Russia, VSEGEI

1). Apologies: Jean-Jacques Serrano (BRGM-FR)

Attendees in person:

Tim Duffy (BGS- UK, Co-chair), Francois Tertre (BRGM-FR for Jean-Jacques Serrano co-chair), Ollie Raymond (GA-AU), Mike Craig (GA-AU), Mateus Novak (Geological Survey of Slovenia), Mark Rattenbury (GNS Science-NZ), Carlo Cipolloni (ISPRA-IT), Daniel Cassard (BRGM-FR), Marcus Sen (BGS-UK), Eric Boisvert (GSC-CA), Egor Yuon (VNIIgeosystem-RU, Moscow), Grigory Brekhov (VSEGEI-RU, St Petersburg), Julia Nerucheva (VSEGEI-RU, St Petersburg), Viktor Snezhko (VSEGEI-RU, St Petersburg), Steve Richard (AZGS-USA), Tomas Lindberg (SGU-SW), Juoni Vuollo (GTK-FI), John Laxton (BGS-UK)

And by Skye videoconference for 2 hours including sharing of desktops in both directions:

Dr. TAN Yongjie, Chief Geologist, Research and Development Center of China Geological Survey, Dr. ZHANG Minghua, Division Director, Research and Development Center of China Geological Survey, Mr. JIANG Shijin, Division Director, International Cooperation Division, China Geological Survey, Dr. LIU Rongmei, Project Manager, Research and Development Center of China Geological Survey, Ms. YANG Tiantian, Project Coordinator, International Cooperation Division, China Geological Survey.

- 2). Approval of Minutes of 8th meeting on 15th August 2012 at GNS Science, Wellington, New Zealand http://www.onegeology.org/docs/technical/TWG_Meeting8_minutes.pdf . The minutes were approved without alteration.
- 3). Action points arising from last meeting of 14th August 2012:

AP1 – IJ to find out and inform Onegeology secretariat whether the ESRI grant offer covers regional 1G participants e.g. provincial or state geological surveys as well as national surveys as currently.

Resolved: Tim reported that ESRI WILL accept applications from regional 1G participants, however the extensive suite of software offered will not include the ability to serve Web Feature Services based on GeoSciML as that functionality is only available currently from the add-on package called 'ArcGIS for INSPIRE' and this contains third party software that ESRI cannot offer as part of this grant system.

AP2 - 1GG secretariat to email this Israel Geological survey contact again. It was confirmed that the Israeli survey has not been heard from regarding 1g since 2007. The secretariat will attempt to re-engage with this survey and others following the OneGeology Consortium stakeholders meeting in October 2013 (new AP1).



AP3 - BRGM to finish test configuring eXows for GeoSciML 3.0 services.

Resolved:This action was deemed no longer relevant and to be closed as it was likely to be too much work to create a version of eXows that was fully WFS 2.0 conformant and could serve INSPIRE-like complex schemas such as GeoScIML 3.2, whilst the similarly open source Geoserver WFS 2 software should be fully capable and available by the autumn of 2013.

AP4 - SR will provide draft text for GeoSciML Portrayal cookbook

Resolved: This was done and a nearly ready to publish cookbook in webpage form was approved by the meetings earlier this week. It will be published as soon as the GeoSciML_portrayal query-and-redisplay tool is available on the OneGeology Portal after the St Petersburg meetings (new AP2). The cookbook will only refer to registered OneGeology services that work with the tool and these include the Delaware service and the USGIN USA service currently.

AP5 - BRGM will consider adding GeoSciML Portrayal sld querying in the autumn (~October). See AP4

AP6 – OneGeologyhelp and OneGeologyPortal to consider wording of requirements for left hand side of service URL .

Resolved: The BGS service support team and the BRGM portal support team met in October 25/26th 2012 and considered this issue. They concluded that the wording was already loose enough to accommodate the issue raised and that no change in the wording was required.

AP7 - ALL Feedback on new prototype OneGeology portal client by September 30th 2012 to be emailed to François Robida of BRGM at f.robida@brgm.fr.

Resolved: the meeting on 25/26 October considered all the feedback collated and addressed all the issues raised and accordingly a new portal went into production following the meeting.

AP8 - Could Tasmania be moved under Australia (administratively, not tectonically)

Resolved: It can be but Ollie reported that the service was shortly to be retired and replaced.

AP9 - Portal to allow displaying services in more than one (currently WGS84) projection? Suggest to include EPSG: 900913 ("Google" projection, de facto maps near top and bottom of globe 'maps of the web' standard) and polar projections EPSG:3031 (Antarctic Polar Stereographic) and 3995(Arctic Polar Stereographic) for highest latitude data. Requested new projection functionality in new client.

Resolved:

Pascal Perrier (BRGM-FR) had placed a projection changing tool on the 1GG development portal site with the agreed limited projection list (with a couple of useful additions) and it was working. However if a service did not declare in its getcapabilities that it supported the chosen-from-pick-list projection a wms failure error message is displayed across the map in an untidy manner. It was agreed that the tool would be improved to analyse the declared SRS' in the service level getcapabilities list and if a non-declared projection was requested of a layer then that layer would be



greyed out or similar (as is done with other such limitations in the portal) and the raw error message would therefore not be generated.

Francois raised two concerns:

1). that services based on Geoserver software used to declare 2000+ SRS (i.e. all technically supported without ability to limit the projections declared and expected to be supported) and analysing and handling such a response 'in-memory' could cause problems. BGS service support promised to check all existing Geoserver services and request any to upgrade to more modern versions of Geoserver that are known not to have this problem. In fact there are just 5 Geoserver WMS services currently in the portal and only one of them is based on very old Geoserver software (services served from Belgium) that responds incorrectly in this way.

ACTION: BGS to contact Belgium and get that service upgraded and to make the wms cookbook explicitly point out this issue when recommending the half dozen projections to be declared by a WMS and so to work with this tool (new AP3).

2). Francois reported that there was a 'problem with the data/projection' when one of the arctic or Antarctic specific new projections was requested. A neat white hole like 'the ozone hole' appeared on the backdrop Bluemarble based WMS underneath the projected geological wms service in these areas. The meeting tested this and concluded that it was NOT in fact due to missing data in the Bluemarble data used to create the backdrop WMS – but that this was due to a display artefact of looking at the backdrop in those areas at typical 1gg scales within the portal view i.e. you would get this effect whatever backdrop dataset was being used if you used a raster dataset for the whole planet as the source. The meeting concluded that the only solution was for the portal to automatically move to an arctic area and Antarctic area specific backdrop whenever someone was wishing to seriously view these areas. Mark Rattenbury identified the licence-free and specifically created for such purpose LIMA project dataset (source: Landsat/USGS) for the Antarctic with which he was familiar and guessed there may be a similar dataset for the arctic.

Action: BGS to provide Francois with suitable datasets for him to create area specific backdrops wms' (he wished to serve his own wms' for backdrops rather than use other offered services) and he would make the portal switch to these at a suitable point/projection similar to the similar automatic layer displaying functionality . (new Ap4).

AP10 - China Geological Survey – new action point for 1:1 million map to go up as WMS: Yang Tiantian of Division of International cooperation.

Resolved: This was discussed at length with the 5 CGS staff attending by skype and it was concluded:

That CGS would indeed be offering a 1:1 Million WMS based on the CAGS created dataset. The dataset layers provided in the WMS would be at least the OneGeology target lithology and age layers. It was hoped that the service should be published by summer 2014 (new AP5).

Ap11 - Geological Survey of India: Director-General Mr. A. Sundaramoorthy and Director Technical Mr Gurrit Singh Jaggi will name shortly two contacts to take forward serving a 1:2 million (or possibly 1: 1 million map) and then a 1:50,0000 new map.

Resolved: The contacts have been provided and BGS requested to host the new service for India until the IT reorganisation process called OCBIS completes – the latter will allow India to serve it won Onegeology Services. The All-India map will go live in the OneGeology portal this month (it did) and will make a significant contribution to the currently missing pieces of Asia.



Ap12 - SEAMIC: Ethiopia and Kenya up now – Uganda to follow shortly then Tanzania and Sudan Angola (and Mozambique?) to follow?

Could SEAMIC be a buddy for Malawi Geological Survey (stated at IGC34 that they wished to join)? Action SEAMIC to get UGANDA service up as soon as possible as data available and SEAMIC staff trained and to consider buddying these future services from them.

Partly resolved: Uganda service is live on the OneGeology portal and SEAMIC are in discussions with Sudan and Angola (new AP6).

AP13 - Tomas Lindberg of SGU is willing to do an inventory of the existing services during september 2012 to identify potential problems regarding this issue.

Resolved: Tomas provided the review and the production OneGeology portal has adjusted the way it harvests service layer url's from the offered WMS services so that Sweden and others can provide a single web service that offers both OneGeology and non-OneGeology WMS'.

4). The implemented changes to the 1GG portal including WMS and WFS query client tools - still some improvements to come?

The details for the SLD query and re-display support in the portal and documentation for GeoSciML_portrayal WMS (as an advanced form of 3 star WMS) was agreed at the St Petersburg meetings this week. The query for a 5 star full GeoSciML query in the OneGeology context including what was a useful query to implement was also discussed at length and as part of progress an improved version of GeoSciML was required to be published – it was to be called GeoSciML 3.2. Once it was published the portal could be set up to provide this query (newAP7).

5). The necessary improvements to 1GG WMS and WFS services and vocabulary use to take advantage of these client improvements and therefore new ability to apply for 5 star 1GG accreditation

Largely through the work of the IGN (French National Mapping Agency) and some focussed testing by BGS, the Geoserver open source and free software was becoming capable this summer to serve GeoSciML 3.2 WFS 2.0 and be INSPIRE compliant. So that all OneGeology participants will have the option, without needing to purchase more commercial software, to serve 5 star OneGeology WFS'.

6). Support for GeoSciML_Portrayal WMS and GeoSciML 3.1 WFS including cookbooks and web check services.

Cookbook additions for GeoscimL_Portrayal WMS are being worked on as are cookbooks for how to map your data to GeoSciML 3.2 and how to use open source and free Geoserver software to serve GeoSciML 3.2 that will work with the portal WFS query client. Check services for WMS conformance to OneGeology requirements are already in use by the BGS support desk and more will be developed with the aim to have a WFS one also after Geoserver 2.4 is published probably in October.

7). Have all OneGeology-Europe tested technical advancements now effectively been incorporated within the services and capabilities of OneGeology Global so that (suitably) upgraded OneGeology-Europe services can now be considered the same as OneGeology-Global ones?



It was concluded that once the OneGeology global portal supports the new GeoSciML_portryal WMS SLD query relying upon the CGI age and lithology URI based and web-resolvable vocabularies (both the latter vocabularies designed and approved by CGI to be super-sets of the dictionaries used by the OneGeology-Europe project) then all the advanced interoperable web service functionality that was designed and experimented with in the OneGeology-europe project was now implementable with OneGeology approved web services and the OneGeology portal. This also includes accepting INSPIRE WMS and WFS services from the (27) European OneGeology participants.

8). Any Other Business

Eric Boisvert of GSC reported that whilst GSC could not yet offer to formally join the OneGeology consortium for administrative reasons they continue to be serious in their on-going commitment to support OneGeology and provide suitable web services

9). Date and Venue of next meeting: This is usual would be in approximately a year's time according to who invites to host the meeting and/or in conjunction with other related international delegate attracting meetings such as here in St Petersburg with the OGC GeoSciML team. If the criterion of which part of the world is active in OneGeology but has never yet had a formal visit from the OneGeology TWG were asked? - the answer would be that the meeting would ideally receive an invitation from (South) America.

New action points arising from this meeting:

AP1: It was confirmed that the Israeli survey has not been heard from regarding 1g since 2007. The secretariat will attempt to re-engage with this survey and others following the OneGeology Consortium stakeholders meeting in October 2013

AP2: BGS/BRGM/AZGS to finish GeoSciML_Portrayal cookbook and make the SLD query portrayal tool live in the production OneGeology client.

AP3: BGS to contact Belgium and get that service upgraded and to make the wms cookbook explicitly point out this issue when recommending the half dozen projections to be declared by a WMS and so to work with this tool.

AP4: BGS to provide Francois with suitable datasets for him to create area specific backdrops wms' for the problematic arctic and ant-arctic areas and BRGM to implement the multi-projection functionality such that it would be improved to analyse the declared SRS' in the service level getcapabilities list and if a non-declared projection was requested of a layer then that layer would be greyed out or similar (as is done with other such limitations in the portal) and the raw error message would therefore not be generated.

AP5: China Geological survey to publish OneGeology 1:1 Million WMS by summer 2014.

AP6: SEAMIC to progress discussions with Sudan and Angola.



AP7: BRGM to implement the agreed GeoSciML 3.2 age and lithology queries with the existing statistics tool. BGS to provide exemplar test services for this.