



Technical Working Group Meeting 2
BRGM, Orleans
27th – 29th February 2008

Attendees:

Joel Bandibas (Geological Survey of Japan (AIST))
Francis Bertrand (Bureau de Recherches Géologiques et Minières (BRGM))
Eric Boisvert (Commission Géologique du Canada)
Katy Booth (British Geological Survey (BGS))
John Broome (ESS - Geological Survey of Canada)
Mary Carter (Geological Survey of Ireland (GSI))
Daniel Cassard (BRGM - Bureau de Recherches Géologiques et Minières - France)
Carlo Cipolloni (Geological Survey of Italy (APAT))
Tim Duffy (British Geological Survey, Chairman of OneGeology Technical Working Group)
Yuichiro Fusejima (Geological Survey of Japan (AIST))
Ian Jackson (British Geological Survey)
Dominique Janjou (BRGM)
Pierre Lagarde (BRGM)
Willy Lehmann Weng (Geological Survey of Denmark and Greenland (GEUS))
Tomas Lindberg (Sveriges geologiska undersökning (SGU))
Fernando Pérez Cerdán (IGME, Spain)
Dale Percival (Geoscience Australia)
Alistair Ritchie (Geoscience Victoria)
Francois Robida (BRGM Bureau de Recherches Géologiques et Minières - France)
Maciej Rossa (Polish Geological Institute)
Marcus Sen (BGS)
Jeans-Jacques Serrano (BRGM)
Dave Soller (United States Geological Survey)
Urszula Stepien (Polish Geological Institute)
Lars Kristian Stölen (Sveriges geologiska undersökning (SGU))
Shinji Takarada (Geological Survey of Japan (AIST))
Agnès Tellez-Arenas (BRGM)
Harvey Thorleifson (Geological Survey of Minnesota - USA)
Horst-Günter Troppenhagen (Federal Institute for Geosciences and Natural Resources)
Cathy Truffert (BRGM)

Apologies:

Kristine Asch (Federal Institute for Geosciences and Natural Resources - Germany)
Robert Tomas (Czech Geological Survey)
Jan Jellema (Geological Survey of the Netherlands (TNO))

ACTION LIST FROM THESE MINUTES:

- AP1: ACTION BRGM: to save the context to the BRGM server.**
- AP2: ACTION: BRGM to deal with multiple data owners**
- AP3: ACTION: BRGM to change the name of 'Catalogue of Registered Services'**
- AP4: ACTION: BRGM to add KML output capability to Portal client and document use in GoogleEarth and NASA World Wind/Dapple**
- AP5: ACTION: BRGM to look into adding the contents of the getcapabilities 'access constraints' response to the basic view of the Catalogue of Registered Services.**
- AP6: ACTION: ALL to implement in their WMS services the OneGeology WMS service Registry naming conventions documented in section 3.9 Day 2 below:**



AP7: ACTION: ALL to follow the process documented in section 3.11 to “Register your OneGeology WMS Services A step-by-step guide to the process” once the WMS services have been set up

AP8: ACTION: BGS to publish Version 1.1 of WMS cookbook with changes agreed at the meeting

AP9 ACTION: Fernando Perez Cerdan has offered to translate the next version of the cookbook if there is sufficient demand from the Spanish speaking community to make this effort worthwhile.

AP10: Dave Soller to liaise as specified with MapServer director.

AP11: ACTION: Tim Duffy to enact recommendation to setup a 1G technical working group wiki via NERC confluence server.

1. Welcome, introductions and agenda (TD)

Progress on Actions from the previous (Ottawa) meeting are recorded in Appendix A - Actions still relevant are **highlighted**. Decisions of this meeting will be recorded in **bold** type and actions resulting from the meeting are collated at the end of this document.

All applauded the excellent organisation of the Operational Management Group (OMG) meeting and the Technical meeting by the BRGM Team and in particular the work of Dominique Verhelst

2. Summary of progress so far and outstanding actions (e.g. Globalmap).

2.1 TD provided a summary of the situation: the 1:1 million national topographic mapping agencies' Globalmap initiative (www.iscgm.org) stating that approximately 49 countries to date now have data ready for download, and the chief GIS technician for the project at the Geographical Institute for Japan has been introduced to the OneGeology cookbook version 1.0. He will consider serving such data as WMS and technicians at Geological Survey of Japan will keep in contact with him.

3. Progress with Prototype portal

3.1 JJS presented the development and progress of the prototype portal. The BRGM team were praised for their hard work so far.

3.2 The individual constituents of the portal such as a Layer, Service, Registry, Client, etc. were discussed in detail. Metadata provided by the WMS Capabilities were discussed and will include the following:-

For the WMS service:

URL

Title

Contact Information (Organisation)

OnLine resource (provider web site)

Abstract

Keywords

For each layer of a WMS service:

Name

Title

Abstract



Keywords
DataURL
Metadata URL
Style
Legend URL

More information can also be included if desired, for example, Metadata that can be entered when the WMS is registered and may include:-

- Geographic area
- Data owner
- Service provider
- Display WMS URL

The **Validation process** was also discussed. During this process you will be able to test your WMS first (no need for a password at this stage). This will ensure that your WMS conforms to the OneGeology standards and if not, it will flag-up any omissions.

The Onegeology Map Servers **Status layer** is a layer that shows the current availability i.e. actually being successfully served status of services registered in the OneGeology Catalogue of Registered Services and can be updated every day.

3.3 A Portal demo was then provided

In the CLIENT:

Click on Add layer – within this function it is possible to order layers according to the choices in the dropdown menu.

There is also extra information (under the layers menu) – e.g. legend, URL, opacity, owner.

The option of whether the layers should be served as opaque or transparent was discussed.

It was decided to recommend that services are not set up with any transparency as default and that where a level of transparency is required in using the service this will be applied by the client requiring it e.g. the OneGeology portal client, NASA World Wind/Dapple etc.

Some layers are only available at a zoomed-in scale, in these cases the maps will not be visible if the user is not zoomed to the appropriate level.

It was decided to recommend that fixed scale visibility rules should not be applied to the basic services that are offered to the OneGeology catalogue to maximise user's ability to combine maps as they wish.

The 'Get feature information' button will return the basic attribute information for that specific polygon.

Help menus are yet to be written – and should be available in various languages e.g. English, French, Japanese. It was thought that it would be reasonably quick to translate and enter into the system.

'save the context' facility is available to allow your recent work and views to be saved for use at a later date. It is currently saved to your local PC.

It was agreed that the preferred option would be to save the context to the BRGM server. This would allow OneGeology to maintain a record of use and provide a better sense of what people are looking for – this was recommended. It was considered very useful to know what people are using the portal for and be able to consider the users wants/needs for the future.

ACTION BRGM: to save the context to the BRGM server.

Lat/long – Original WMS services should be in lat/long data WGS84 datum as the default , they can translate from that to other projections on the fly as required. This is to enable the capability to display more than one SRS efficiently. (The home server would take a much greater length of time to do on the fly.)

Multiple data owners – it is known that this is a requirement and on the 'to do' list.

ACTION: BRGM to deal with multiple data owners

Legends – Separate browser window pops-up were recommended – this is a practical response to handling layers with many different data sets in different languages.

Data URL – quick link to all other data sets available on the home server, i.e. the home page.

Metadata – the aim is to move towards OGC and ISO 19115 compliant standards, e.g. INSPIRE.

All current data should be made conformant to the 1G WMS service aims.
Please include any seabed map data if available.

Currently there is a click button called 'registered services' in the catalogue (top right of the portal screen) – it was agreed to change the name to 'Catalogue of Registered Services'.

ACTION: BRGM to change the name of 'Catalogue of Registered Services'

3.4 NASA whirlwind 'Dapple'

TD provided a brief demo of NASA whirlwind 'Dapple'.

OneGeology conformant WMS can also be viewed using this software.

TD was asked to provide further information for the OneGeology website. This will be done through support by the Portal mapclient for outputting KML as a set of chosen services which can then be applied and used in Dapple and GoogleEarth. This use will be documented on the Portal when the KML output facility is operational.

ACTION: BRGM to add KML output capability to Portal client and document use in GoogleEarth and NASA World Wind/Dapple

3.5 Antarctica coverage

It was noted that BGS is currently digitising a 1:10M scale map of Antarctica from GA and other part areas of Antarctica from BAS and hoped to be able to serve it as a OneGeology service as soon as it becomes available.

3.6 Providing data for other countries - issues

The issue regarding providing other countries data was discussed. e.g. Suriname map – offered to be served by TNO Netherlands. It was confirmed that we must have permission to use the data and from the relevant 'Geological Survey' participant in OneGeology in writing.

White space e.g. Syria was offered by TNO but Syria is not an agreed participant.

A person who feels they have a right to serve this data, that person should encourage that country to join – it is the responsibility of the person with the contact. i.e in this example TNO must obtain written confirmation from Syria/Suriname and the secretariat (i.e. BGS) needs to have that confirmation before anything can be added to the portal.

Until an organisation that represents a country agrees to participate in 1G, we cannot serve data for that data. It can be a simple email saying that we would like to participate in 1G – but we MUST have this.

It was recommended that these issues (data provider/ownership/ IPR/copyright) should be taken to the operational management group for consideration. **DONE.**

3.7 The above discussions and decisions have been summarised in the following tables. The decision or action is highlighted in red.

OneGeology Rules for WMS Capabilities elements:

| Capabilities | M/O | Comments |
|-------------------------------|-----|--|
| A. For the WMS Service | | |
| 1. WMS URL | M | URL to request the WMS > agreed |
| 2. Title | M | For users. Naming conventions necessary (see next slide) > Country or Souverain? |
| 3. Contact Information | M | Organisation name, contact email > agreed |
| 4. OnLine Resource | O | URL to provide general information about organisation, services, data, etc. > agreed |
| 5. Abstract | M | Service description > propose add to registered services (catalogue) list. Agreed to be mandatory, agreed not in the layer-specific TOC as it doesn't fit as a service. Name this TOC the 'service layer details' |
| 6. Keywords | O | > To help find layers once there are too many – on the service and the catalogue. Need to define the keywords and produce a constrained list. Keywords will not necessarily be used by a geologist so must bear in mind a wider audience. Maybe need more than 1 tool. Keywords optional, those proving should provide examples of use. They will not be used by any search engine before Aug 6th. |
| B. For each layer | | |
| 1. Name | M | Internal use, to « call » the layer. Should represent the features: « GeologicUnits » Agree mandatory. > put name of provider before the layer. Use _ i.e. each layer will be BGS: lithology BRGM: name. |
| 2. Title | M | For users. Naming conventions necessary (see next slide) |
| 3. Abstract | M | Data description > agree mandatory. Provide in the layer details/visible in the service layer details in the client and should contain....a paragraph that describes what the layer is. Should appear as apop-up (not in catalogue) in order of title: service layer abstract, owner, etc..... (no limit on text) |
| 4. Keywords | M | > thought more important to search the layer rather than the service. Between now and August the keyword is fixed as 1 word only and that is 'OneGeology'. |
| 5. DataURL | O | URL to provide more information about the data displayed in the layer > agreed |
| 6. MetadataURL | O | URL to provide metadata described in a standard way (e.g. ISO19115, FGDC, ...) > Will accept any metadata but encourage/ideally it should be core ISO19115 compliant. FR recommends that the profile must be defined. |
| 7. Style | M | Could be « default » if there is no specific style > the legend tag is inside the style. Propose that it is a default tag as a constant. Can allow different legends per style if wanted. Decided earlier that legends will be separate therefore this is not needed..?? Propose that there MUST be « default » style, can allow other styles (but not encouraged) |
| 8. LegendURL | M | URL to provide the legend (picture) |

OneGeology Rules for elements to define when the WMS is registered:

| Element | M/O | Comments |
|--|-----|---|
| >are part of an extension, not included in the capabilities. Needed for search engine metadata | | |
| A. For the WMS Service | | |
| Display the WMS URL? | M | Do you want to display the WMS URL in the portal? > A tick box that is always ticked i.e. fixed to always = yes |
| B. For each layer | | |
| Geographic area | M | Country name. For Europe ? Africa ? >choice dropdown list from ISO country names list. How do you handle multiple countries? Invent extras e.g. east/SE Asia. There is a box to add your own. Please use ISO 3 letter codes where possible, if not, use a max 6 letters. |
| Data owner | M | >Choice from dropdown list. Is it possible to have more than 1 data owner listed? If it is a compiled map then there is 1 data owner e.g. BGR. Change name to 'data publisher'? The Ireland data has 2 data owners. The owner reserves the right to provide access to the data. |
| Service provider | M | >Choice from dropdown list. |
| Default opacity | M | >agreed mandatory at 100%. |

3.8 Access constraints section – it was recommend that each provider should make a copyright statement and the BSG exemplar WMS service has given an example Access Constraints section from the get capabilities metadata in the catalogue in a clearly defined place.

ACTION: BRGM to look into adding the contents of the getcapabilities 'access constraints' response to the basic view of the Catalogue of Registered Services.

3.9 Logos are provided by the data provider/owner. So the owners are responsible for the content for their copyright statement.

The logo will appear in the catalogue of registered services, similarly it will be in registry process by august. There will be a column in the registry that will contain the uploaded logo of the data owner in the service. If there is more than one ID in the service, there may be a combined logo. The catalogue of registered services will also contain an organisation column of the owner of the data of the service. We have learnt that organisations that officially participate are not nation states but are institutions within a country. The flags currently show the area covered by the map rather than the owner country.

IJ proposed that those maps that have group coverage and those that are single are shown separately. Agreed.

Day 2

Discussion continued regarding the naming conventions for the Registry. These were currently:

| Element | Comments |
|--------------------------------|---|
| A. For the WMS | |
| Title>seen on the screen | For users. Naming conventions necessary |
| <i>Example</i> | BGS 1:625K Bedrock and Superficial Geology |
| B. For each layer | |
| Name | Internal use, to « call » the layer. Should represent the features (some WMS software require a namespace with the layer name, example: « |
| <i>Example</i> | GeologicUnits, Bedrock_Lithology, Structures |
| Title Title>seen on the screen | For users. Naming conventions necessary |
| <i>Example</i> | BGS Bedrock Lithostratigraphy |
| | |

Scale in the Service Title or in the Layer Title ?

- a service may provide several layers at different scales
- the service title does not appear in the layers list of the portal
- >take scale out of the URL
- >service level name is currently fixed. Possibly remove the scale from the service title. Agreed.
- >allow scale in the service layer title.
- 4 elements should be present:- area, scale, etc. i.e. put approx. geographic extent at the start of the service layer title.

The above decisions (including a slight change made by BGS/BGRM after the meeting when it was discovered that service layer names had a 20 character limit in MapServer and to suit the needs of the developing Catalogue of Registered Services) are recorded here in the final statement that was placed on the www.onegeology.org website:

OneGeology WMS service Registry naming conventions:

1 For the WMS service URL:

example = [http://ogc.bgs.ac.uk/cgi-bin/ BGS_Bedrock_and_Superficial_Geology/wms](http://ogc.bgs.ac.uk/cgi-bin/BGS_Bedrock_and_Superficial_Geology/wms)

structure = .../ organisation_theme/wms

Note that within this structure the URL elements to the left of /cgi-bin/ are likely to indicate the server of the data e.g. ogc.bgs.ac.uk shows it is BGS that owns this URL. The first part of the URL depends on the technical architecture and rules of the service providers. The second



part, when possible (because it can depend on the WMS software capabilities), should have the same structure as the service title. The OneGeology Registry of services cannot be too strict about the left hand side of this rule as this naming could be partially out of the control of OneGeology service providers but the principle is one completely separate WMS service for each 'country' being served and a completely separate service if the same 'country' is being served in one or more different languages e.g. English and French services from the BRGM.

A second same data but different language service from a OneGeology Participant follows the principle that you only need to label a service when it is having a specific non-default language e.g. if the BRGM served it's first default service in French i.e. the contents of the getcapabilities response and legends were in French, and it decided to contribute to the OneGeology target aim of (everyone ultimately) providing an English service also then it would use the Optional ISO 2 letter language code (see http://en.wikipedia.org/wiki/List_of_ISO_639-1_codes, use 3 letter code only if 2 letter code does not exist) to differentiate between the default service and the second language service. Place this code AFTER the organisation code e.g. default BRGM service might be .../BRGM_Formations_Géologiques... and the second English language service would then be .../BRGM_EN_Geological_Formations... We do not recommend that you include the language code for your default service – this will be obvious from the associated metadata and a great number of the OneGeology services will be in English anyway i.e. specify the language in the url (and the service layer names and service layer titles below) only if it is different from your default.

2 For the WMS service itself:

The title should have the service provider name and the dataset's themes

No scale (because a same service can provide layers with various scales)

No geographic area (because a same service can provide layers for various areas)

Examples :

BGS Bedrock and Superficial geology

BRGM Formations Géologiques

If the service is setup for a specific area, we can accept this area information in the title.

- Name: OGC:WMS

- Title: example = «BGS Bedrock and Superficial geology»
- Abstract
- Keywords – the Keyword “OneGeology” should be present to be able to search for services and layers with this keyword
- OnlineResource: a link to the provider web site
- Contact Information with at least: Contact, Organization, Country, Contact Electronic Mail Address

3 For each layer:

Layer Titles:

This title should show information (more or less a kind of metadata):

- geographic area

- data provider

- scale

- theme (we decided not to call this FeatureType that is too much linked with GeoSciML, but GeoSciML partners could/should use GeoSciML FeatureTypes)

Examples :

GBR BGS 1:625K Bedrock Lithostratigraphy

FRA BRGM 1:1M Formations géologiques - France Continentale

FRA BRGM 1:1M Formations géologiques - Guyanne

The geographic area should use the ISO code (GBR, FRA, ...) but it does not exist for "regional" maps (Europe, Africa, ...) so a word could be used instead of the ISO code (It is required to have the area in the title, but the format could be more flexible to get a good "readability" for the user of the layer list)

Layer Names:



To simplify the rules for the user and to avoid name duplication in the registry, this name must have the same structure as the title (we only delete the first part of the scale as the ":" cannot be used, and replace spaces by "_"):

Examples:

FRA_BRGM_1M_GeologicUnits

GBR_BGS_625K_Lithostratigraphy

World_CGMW_25M_GeologicUnits

Europe_BGR_5M_Lithostratigraphy

The provider is responsible to guarantee that there is no layer name duplication in all the layers he provides (the same kind of requirement we have for urn administration in GeoSciML)

For GeoSciML (OneGeology level 2) partners, the theme should represent the GeoSciML FeatureType.

- Name: example = «GBR_BGS_625k_BA» (*see below*)
- Title: example = “GBR BGS 1:625k Bedrock Age” (*see below*)
- Abstract
- Keywords -- the Keyword “OneGeology” should be present to be able to search for services and layers with this keyword
- DataURL (with Format and OnlineResource) — optional
- LegendURL (with Format and OnlineResource)
- MetadataURL (with Format and OnlineResource) — optional

The layer name should have the following components separated by underscore characters:

- ISO 3 letter country code (see http://en.wikipedia.org/wiki/ISO_3166-1_alpha-3) or short geographic name such as “World” or “Europe” for areas not corresponding to a



country. (You should still use a single country code even if your data coverage spills over somewhat into neighbouring countries.)

- Optional ISO 2 letter language code (see http://en.wikipedia.org/wiki/List_of_ISO_639-1_codes, use 3 letter code only if 2 letter code does not exist) for your non-default language service layers if you are providing more than one language service.
- Organization initials
- Scale in a form such as “500k” or “1M”. Rather than using decimal points as in 1.5M use 1500k.
- Theme code. For the most common themes we have created standard codes below, if you have other types of data please create your own 2 or 3 letter code. If you think other participants might serve the same type of data you could post a message on the OneGeology forum for discussion of an agreed code. These codes rather than full textual strings are required because we have discovered that MapServer has a 20 character maximum limit on service names. We have also found that some non-Mapserver WMS services from ESRI, including the newer ArcGIS 9.2 Server WMS functions do not allow the specification of service layer names at all – the software auto-names layers 0,1,2... and we have discussed at a senior level in ESRI-USA if this can be worked around. It cannot for the time being apparently and this will be dealt with in the OneGeology Registry through the use of auto-generated unique id's for each registered service layer, this is necessary as in a Catalogue like that for OneGeology one cannot have two layers having the same name i.e. both being named layer name 0. This would occur with just two different geological surveys using ArcGIS 9.2 Server WMS to contribute to OneGeology :
 - BA – Bedrock Age
 - BLT – Bedrock Lithology
 - BLS – Bedrock Lithostratigraphy
 - SLT – Superficial Lithology
 - SLS – Superficial Lithostratigraphy

The layer Title has similar components expressed in a slightly more readable form and separated by spaces rather than underscore characters.

- ISO 3 letter country code, exactly same as layer name.
- Optional ISO 2 letter language code, exactly same as layer name.
- Organization initials, exactly same as layer name
- Scale in a form such as “1:500k” or “1:1M”. Decimal points such as in 1:1.5M are acceptable here.
- Theme. Use descriptive phrase in the service language. For English services the layers will most commonly be “Bedrock Age”, “Bedrock Lithology” etc. as above.

3.10 Feature type issue

Put to the right hand side of the layer name. Rewrite cookbook to give the list of names available chronstratigraphic, lithostratigraphic, etc. and note that others can be added if necessary. Replace term ‘feature type’ with ‘theme’. Agreed. **ACTION: TD/MS (Done later in meeting)**

3.11 The registering process

The original system involved participants emailing the secretariat who would check lists and email the portal and applicant with a username and password. A revised protocol for registration of WMS services was discussed and agreed as follows, and shown in the diagram below and has been expressed like this on the website www.onegeology.org:

Register your OneGeology WMS Services A step-by-step guide to the process

Introduction

To fully participate in OneGeology you will need to register your WMS services in the Portal. Your organisation will have already registered its participation with the OneGeology secretariat. You will need to fill in the short [‘buddy’ form](#).

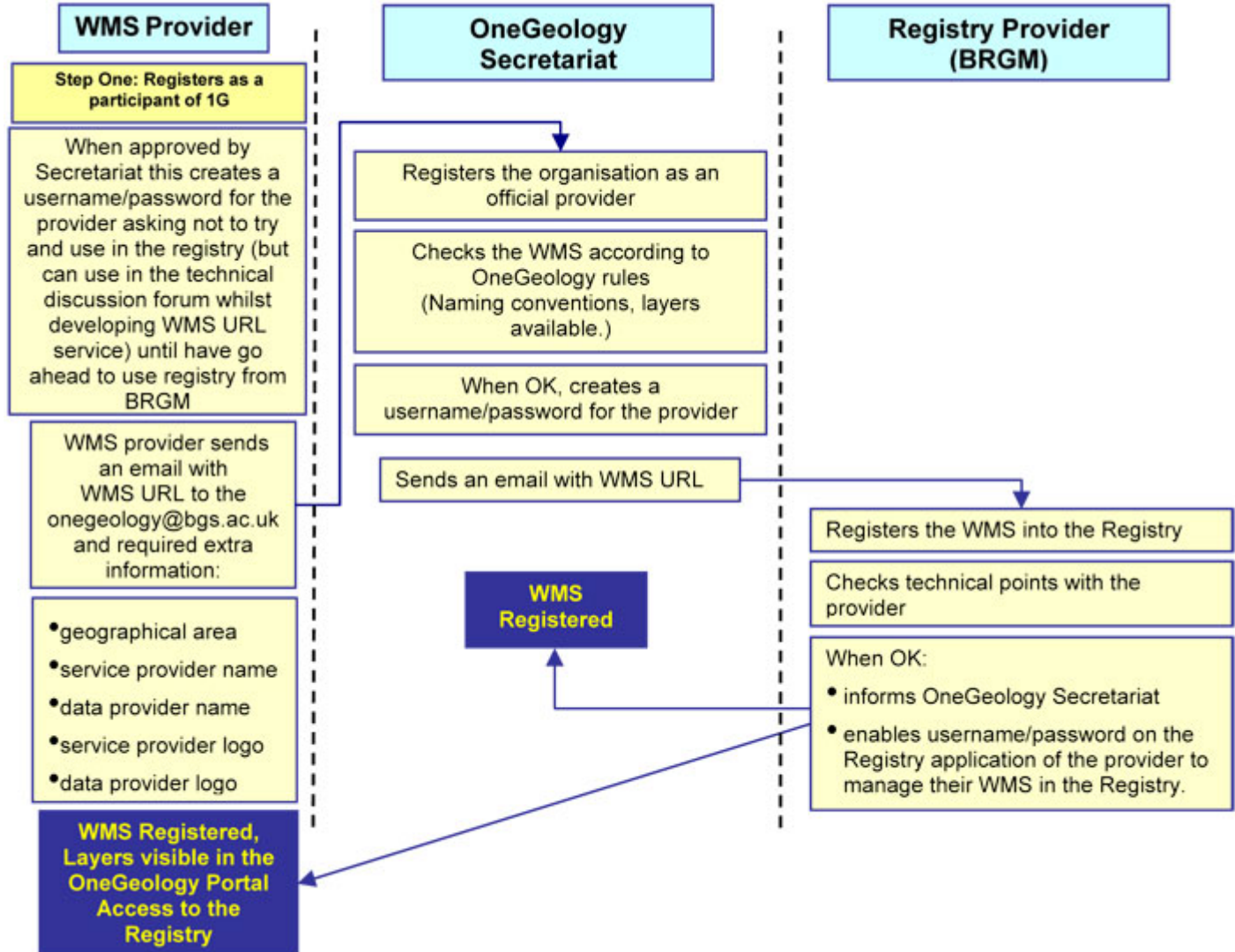
The Complete Registration Process

1. Complete the online [‘buddy’ form](#) after reading the latest [‘Cookbook’](#) to understand the different technical options available to you as a Geological Survey, so that you can choose the appropriate choice for your organisation in the buddy form. The reader will ideally be the survey’s web applications installer and a geoscientist who can provide the digital data to be served. .
2. Once you have completed the ‘buddy’ form, you will be allocated a password; this will allow you to use the discussion forum to place queries about setting up WMS’ and receive answers from the OneGeology technical community. This password will also be used in the future for editing your OneGeology registered services in the Portal. At this stage you will either use the cookbook and provided Mapserver software to set up a draft WMS service, or used your own WMS software to do this, or provided another perhaps neighbouring Geological Survey with your data if they have agreed to serve the WMS of your data for you - as a ‘buddy’.



3. Email onegeology@bgs.ac.uk with your draft URL of your proposed WMS service. Include in this email the
 - a. name of the geographical area e.g. United Kingdom or France (usually the Country name, but can be a specific geographical or geological area),
 - b. the name of the data provider,
 - c. the name of the service provider
4. The OneGeology secretariat will check that they have written confirmation that the server provider owns the right to serve the proposed data and/or has permission from the data provider to serve that data.
5. The secretariat will check the proposed WMS according to the OneGeology naming rules [see the latest ['Cookbook'](#)]
6. Once the naming rules are accepted the secretariat will contact BRGM (Portal) with the WMS URL.
7. BRGM will enter the service in the 'Catalogue of Registered Services' and will check any technical points with the service provider.
8. When the service is fit for registration BRGM will email the OneGeology secretariat and the service provider and enable the password for use within the Portal. Service providers will then be able to use the 'Edit your Registered Service' button on the Portal to make any final tunings or layer changes.

Your OneGeology WMS Service will now be officially registered and its layers are now visible in the Portal (e.g. in the "add layers" button). You can now add and remove other layers as you wish. As the reference information stored in the registry comes from your service directly it is highly recommended if you need to make major changes to your WMS service, to modify your WMS service first and then ask the BRGM registry (email: onegeologyportal@brgm.fr) to be updated. This 'Edit your Registered Service' option is currently offered only to simplify minor updates after you have already had your service registered by the BRGM portal managers. If you have any queries please contact onegeologyhelp@bgs.ac.uk or use the [discussion forum on the website](#).



3.12 Passwords

The issue and use of OneGeology passwords was discussed. Concern was expressed that the initial password allocations, with access to discussion forum etc, cannot be used for the portal registry as information might be added before it has been checked by BRGM. People will need to use the user forum before they get the access to the registry. Suggest either have 2 passwords or remove the need for the user forum password. It was agreed that the current passwords remain and that BRGM only allow access to the portal registry once the check process is complete and a service is formally registered by them.

It was recommended that the Operational Management Group need to discuss the funded effort to man the discussion forum, fully moderate the service, etc. This is currently covered by the team at BGS.

BRGM agreed to set up an email address: `onegeologyportal@bgrm.fr`

Secretariat will email this address with the URL details etc of the provider. To be set up ASAP. **ACTION: BRGM to set up onegeologyportal email address (done above).**

4. Use of the Cookbook

- 4.1 Try to load the New Zealand data, had problem due to http port use:-
Cookbook should recommend that the service be available on 'http port 80' (default standard for http). Some Latin America countries have asked for translation of the cookbook into Spanish.

V1.1 – Fernando Perez Cerdan has offered to translate the next version of the cookbook if there is sufficient demand to make this effort worthwhile. Shinji and others from the Geological Survey of Japan will try to provide a Linux MapServer installation

methodology chapter for a future version of the WMS cookbook if they develop this and time to document it becomes available.

5. Buddy coordination

5.1 Lots of people have informally offered to or asked for help to serve data. Argentina have been doing this already. A form is now available on the web to attempt to collect this information. Need to follow up by direct email.

Suggest that take web page and convert to a personalised email one to one, there are many variables to cover.

Recommendation: Technical working group to ask Operational management group look into this issue. Need to know the number of offers of hosting and numbers of those needing help.

The questions are difficult to answer by any one person because neither the manager nor the technical person alone can answer this question. Therefore it needs to be a series of dialogues by individual email. New members do not know any detail, they just say they will be involved.

Personal negotiation needed, op management will take this away.

ACTION: Operational Management Group

7. Preparations for Level 2 WFS cookbook (cookbook number 2) and services.

7.1 May have first draft of the second cookbook 'How to Map your data to GeoSciML' by August 6th, Oslo. If people wish to trial for us, please do. should have up to 10 OneGeology Level 2 WFS services by the August launch from the GeoSciML Testbed 3 participant geological surveys..

7.2 **Feature types** included should be lithostratigraphic unit, chronostratigraphic, lithologic unit, geologic unit

-lithodemic units will be expressed as lithologic units.

All feature types should be explicit. Include granite as lithologic.

Refer to flow diagram on page 5 of cookbook.

Summary: The query profile for the 'Level 2 GeoSciML data download' capability on the OneGeology Portal requires a boundary box and needs to ask the following:-

Request = get feature & type name =

GSML: geologic unit

GSML: lithostratigraphic unit

GSML: lithologic unit

GSML: chronostratigraphic unit

BBOX= Ymin, Xmin, Xmax, Ymax

SRS= EPSG: 4326

BRGM/client will count the number of map features, if too many will contact the provider and ask to amend. Failing this, will imply a max features limit....not practical.

Projection: lat/long

Version 1.1 services in line with the testbed services. Namespace = GSML.

We have agreed a single tool, query will return how many asked for, max features is dependant upon the server, probably c. 10,000.

The max features figure for each supplied WFS URL will be supplied at that time for use in the registry and for the download tool.

(Note: since the meeting, the BRGM portal developers have proposed that the Level 2 WFS conformant services for OneGeology should be demonstrated by the more reliable and service performance risk-free [for OneGeology 'launch' purposes] simple ability to apply a tool to a WMS polygon and return its associated GeoSciML in full GeoSciML form. This should still be based on an underlying WFS and the link between the rendered WMS visible and the WFS to use for this response will be made in the Catalogue. This 'single polygon' response will considerably lessen the need to restrict returned max features and mean that WFS services should be able to respond reliably quickly).

8. Recommendations from the Technical Working Group to the Operational Management Group

8.1 Recommendation to OMG: We request the approval of the OMG for this approval and registration of participant web services *process*

8.2 Recommendation to OMG: Request that OMG arrange for individual targeted follow up letters to each participant (many of whom we know from Brighton meeting both offered to serve other countries' data and/or produce their own service)

(Note: both these recommendations were agreed by the OMG on 1st march 2008).

9. Next technical working group meeting

- 9.1 The next meeting must be between 6th and 9th August. Aims of the meeting: to finalise the technology of WFS2 and look ahead to 2009. Look at and source solutions for the cookbook problems. Numbers going to be at IGC are limited therefore should the meeting be held elsewhere to obtain higher attendance? Geoinformatics meeting is to be held in Boston. **It was agreed to have an early evening meeting c. 3 hours at Oslo – book a meeting room on the morning (9.00-12.00 noon) of the launch day -6th August as the only time when attendees will not have session to attend.** Opening ceremony is 1800hr with a plenary at 1700hr.
- 9.2 Re the 1G Europe funding, money will be available to fund the people available who are working on specific work packages. These will mainly be WP5 and WP6 but these won't be starting until at least August.

10 . Cookbook Post August 6th (cookbook number 3)

Once cookbook number 2 'How to Map your data to GeoSciML' has been published in August work can begin – based on the experience gained in the GeoSciML Testbed 3 task group (work finishes August 10th) on the final 'How to serve your data as a GeoSciML WFS'.

It is likely to include chapters on:

Open source software = MapServer, GeoServer, Degree.

Translation software = Cocoon.

Currently developing GeoServer and GeoSciML is still evolving, it is being funded in order to be able to support this development in the long term.

WMS Level one found opensource software readily available.

The writing of, and the technology for, is still developing for Level 2 WFS cookbook. Possibly available by Autumn 2008. The Cocoon translation layer could be used here also. Could also use a fixed Java solution for OneGeology Level 2 services based on MapServer.

Friday 29th February 2008

The day was used as a demonstration of the cookbook and as a workshop for dealing with the issues raised by any particular survey's attempt to create a WMS. Many improvements to the cookbook were suggested, discussed and approved for inclusion in the next WMS cookbook version 1.1.

Internet mapping framework – www.moxomedia.com

One of 6 of the top packages for OGC software which will probably be used on top of ArcGIS. Many organisations will want to use ArcIMS for the next few years.

General solution that will work with any service/client that is OGC compliant.

- tell it where to get the legend, saved locally, so get client will point to a static file the WMS URL will point to the local static file and be able to show the map and know where to get the static legend. If it doesn't work, it means that it isn't compliant.
- **Recommend do a diagram to show this – ACTION: Alistair**
- **This will be put as a generic solution on the help forum.**

Does IMF Moximedia open GIS version sitting as a sever layer on top of an ARCIMS web mapping service allow such a multi-tiered service to respond to the get legend graphic request? (Note: later answer – no Moximedia IMF does not). Checking whether there is a use for the client on top of ARCIMS, and if so, can you get this/how much does it cost.

Send Ireland the EAP file/generic solution ACTION: Eric (done).

>Fernando

Getfeatureinfo doesn't work using ArcGIS Server. A few people have had similar problem.

Dave to speak with people from MapServer (in next 2 months). See step by step instruction for installing MS4W (MapServer for Windows) page 16 of cookbook.

V2.2.6 has problems with certain (correct missing text in cookbook – p17).....

Recommend downloading MS4W V2.2.5.

Q1 to director of Mapserver (steve Lime?): on the mapserver downloads page [http://maptools.org/dl/ms4w/ms4w_2.2.5.zip], the version 1G recommends is not there. We are relying on this in the cookbooks, please let us know where the UR link is to this, or can we move it to a 1G server so we can still use it.

Q2: what are the future planned intentions to support WFS in particular complex feature capabilities e.g. are you moving towards handling backend queries, etc.

ACTION: Dave Soller to liaise as specified with MapServer director.

Parameters: Arcmap as a client to various services. Get feature info requests includes a format of the image. This is not required so not included so don't respond to get feature info. i.e. different interpretations of standards can cause problems.

NASA World Wind currently don't have a get feature capability but have talked to and they are going to add in a new version. There are also add-ons that may support getfeatureinfo capabilities.

Google earth OGC intentions are unknown. KML downloads are possible.

WMS in Google Earth (GE).

GE wouldn't acknowledge transparency of superficial layers because have it had less than 16 classes. Add dummy classes that there are over 16 classes to overcome this problem. **Tim to add this info to the help forum. ACTION: Tim Duffy (Note this was added to the new cookbook).**

CGI website & Twiki's

Any benefit from setting up a 1G Twiki? BGS not quite ready to host external twiki just yet. NERC encourages us to set this up using their hosted Twiki system 'Confluence' as this is for international collaboration and thus they will support it. 1G Europe may want a wiki. Are using a wiki to develop GeoSciML. For 1G it would only be for technical development e.g. the cookbooks and associated technologies, for the technical working group members. 10 people present thought it would be beneficial.

Would focus only in the 1G issues and work in parallel with the GSML wiki. Concern thought that it would create too much overlap. If have a 1G twiki, it should be much simpler than the GSML.

User forum will still be used for already sussed answers to problems.

Recommend setup a 1G technical working group wiki via NERC server. ACTION: Tim.

10. Cookbook issues

- 10.1 Cookbook V1.0 was worked through systematically, discussing and highlighting any changes or additions as necessary. These will all be implemented in V1.1. the main issues are noted below.
- 10.2 Tim to add to section 1.1 to make clearer.
Have to rely on a basic capability of people to serve the data – web installer and geoscientist to provide the data.
If used to using WMS, still need to use cookbook to make sure they are configured in the 1G conformant conventions. Feedback = easy to use/follow the naming conventions. **Tim will also summarise at the start so people do not miss it.**
- 10.3 1G expects there to be a legend. As Eric suggested create a fix to a static legend.
- 10.4 Would welcome comments on improvements to chapter 2, needs improving. Add GRASS open source software to section 2.2 for georeferencing a map.
- 10.5 Cookbook chapter 3.1 Esri shapefiles for vector data.
Add to 3.2 possible to set up Mapserver on many websites, will refer to mapserver website. Already compiled versions for different options. Make sure that no-one else is hosting precompiled MapServer versions.
See edits 3.2
Check all spellings of MapServer.
- 10.6 Appendix 3
At the beginning of the tag, they shouldn't be deleted, need the closing tag to be included also. Instead of cutting out sections, could include the whole thing – no Please just insert any missing closing tags.

P19
Add single column to catalogue re language code for each service. Action: BRGM will think about further.
2 letter language code, not 3.
Add an e.g. into this para about the language code also – p19.
In inspire, in future will have a parameter to call the WMS.

ftp site
page 21: insert> make a copy of the directory and rename the copy appropriately for your service
possibly make more implicit that the name should be http.....

page22: need to rewrite paragraph:- Reviewing the statement that set up the exemplar service to make sure that we don't remove the old service.

Re page 23: Dave's Alaska dataset, extent (default = lat/long) needs to be tested using the Alaskan coordinates.

Delete the commented out bits – Marcus (when editing notepad version with your info)

To think about, please provide feedback:- Thickness of fault lines??