

# *Gigateway<sup>®</sup> 2005-2006: A Year In Review*

*Authors: Lee West & Robert Turner, AGI*

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2005/2006 was always going to be a challenging year for gigateway, but this did not stop the Information Services Team from pulling together to achieve their goals as this report will now describe.

## Background

Data sharing leads to knowledge. The intervening step in that quest for usable information is what gigateway is all about. Gigateway opens the door to geospatial information sharing. Funded by the Office of the Deputy Prime Minister via NIMSA (National Interest Mapping Services Agreement) and using Internet based browser technology, gigateway allows users to access records which describe the content of sometimes very complex geospatial datasets. These descriptive records are called metadata. Via a single search query, a user of gigateway can initiate a search, which simultaneously searches the metadata databases of several major geospatial data providers, and returns catalogue results within seconds. This process has been enhanced even further via the development of a robust, standards based metadata creation tool called MetaGenie.

The AGI's Information Services Team which manages gigateway is assisted by an enthusiastic and supportive Advisory Group, made up of individuals who have an interest in and commitment to the long term success of the national metadata portal. Some of the group's members have played a part in the service since its establishment as the National Geospatial Data Framework (NGDF). The Advisory Group exists, as its name would suggest, to offer advice to complement the

the overall strategic direction set by ODPM as the fund provider to the Information Services Team and its members come from a variety of different backgrounds.

Participation in gigateway is open to all creators of geospatial data at no cost. Visit [www.gigateway.org.uk](http://www.gigateway.org.uk) to learn more...

## A look back at 2004-2005

Gigateway year 2004-05 was marked by a reorganisation within the AGI's Information Services team. Caroline Brown, who had provided administrative support to the Information Services Team, moved to a different position within the wider AGI team. Theresa Stabb took up the gigateway support role of Information Services Assistant from mid April 2004.

The team underwent further restructuring in the summer of 2004. In order to make more effective use of the limited resources available some staff changes were made and Mark Linehan, Director of the AGI, became more involved with the overall management and strategic direction of the service, whilst Louise Scofield's role of Information Services Officer became more project management oriented.

In December 2004 Mark Linehan resigned from the AGI after five years service as Director. Robert Mann took over this role in January 2005 and has picked up where Mark left off, including the responsibility for gigateway.

MetaGenie Online – the browser based version of the full tool – was developed in the early part of the year and released in July 2004. This allows for even easier publishing of standards compliant metadata via gigateway.

Free training workshops for MetaGenie were held in over 10 different locations around Great Britain and attended by over 350 delegates.

Finally, the website itself underwent somewhat of a facelift to coincide with the UK's premier GIS event – AGI 2004 – with new content, an online user forum area for the exchange of ideas, information pages and the addition of a couple of new metadata nodes: AGI Wales Environmental Data node and the GVAC Higher Education node.

## Highlights of 2005/2006

Unlike previous years, the Operating Plan for 2005/2006, placed far more emphasis on quality of metadata records rather than measuring success in terms of increased web traffic and the quantity of metadata available.

In terms of staff changes, Lee West joined the team and replaced Louise Gibbens (Neé Scofield) as the Information Services Officer. Also, Maureen Nessling joined the team as Information Services Assistant taking up the job of Theresa Stabb who moved on to a full time position in the finance sector in the City.

Gigateway exhibited at AGI2005 where the Stage 1

release of MetaGenie v2.0 was demonstrated. Presentations on gigateway were given at the AGI Northern Ireland event and the IGGI Annual Seminar. Some MetaGenie workshops were provided for users in Belfast and these sessions coincided with the launch of a new node for Northern Ireland, known as 'Mosaic'.

Our users points of view are very important and we presented the findings and conclusions from two surveys that the Information Services Team had carried out. User feedback is invaluable for improving the service.

On the development side, the Gigateway User Forum was upgraded to help those people who were previously unable to access gigateway due to their corporate firewall. Also, MetaGenie Showbox was developed to help users find out the coordinates of a particular country, administration area, place name or postcode. The other important work was the release of the new UK GEMINI XML Schema which was made available for system suppliers and software developers in advance of the final ratification of the ISO 19139 Schema.

Guidelines for improving the quality of metadata, compliant to the NGDF standard, were released. Later on in the year these guidelines were superseded by the UK GEMINI compliant guidelines for creating metadata to coincide with the release of MetaGenie v2.0.

To finish the year on a high the desktop and online versions of MetaGenie v2.0 were released from Snowflake Software to the AGI, although general release to the public occurred at the beginning of May 2006.

## MetaGenie v2.0

Our popular metadata editing tool, MetaGenie, has been redeveloped, in association with Snowflake Software, to be compliant to the UK GEMINI profile and was released as MetaGenie v2.0 towards the end of the year. This new release supersedes the previous version which was compliant to the NGDF standard. The opportunity to redeveloped MetaGenie will also allow for the new software to incorporate a number of changes suggested by users, and feedback from our metadata fundamental workshops which were held across the country in 2004. The new version of the tool will also allow flexibility to import data in users' own XML formats and convert them to the GEMINI profile.

The new software is freely available to download from the gigateway website. MetaGenie v2.0 was previously expected for delivery in July last year, but the delay was caused by the extra work that was required to incorporate the changes in the UK GEMINI Schema following some amendments between the early draft and final draft of ISO 19139. ISO 19139 should be finalised later this year and we do not expect there to be any major changes that could disrupt the development work of MetaGenie v2.0.

## ShowBox

Good quality geographic metadata need to contain geographic coordinates, to enable the data to be more easily found using a map-based search. It also allows the geographic area that the data relates to to be more accurately described. MetaGenie Showbox is a new tool

to obtain geographic coordinates using a simple map-based interface. It also allows you to enter place-names or counties and obtain a bounding box.

To find a placename, administrative area or postcode area, enter its name and click on the arrow. You can also use the map to interactively locate it, by using the mouse to draw a box on the map, or selecting a zoom level from the scale on the right of the map and using the pan buttons.

We hope this tool, used in conjunction with the existing MetaGenie tools, will make the process of creating metadata even easier.

## Mosaic Project, Northern Ireland

Although NIMSA did not make financial provision for the service to be extended outside Great Britain's borders, gigateway sees metadata from Northern Ireland as absolutely essential for the service to become a truly UK wide national GI metadata portal. To this end, we are pleased to report that a new node on gigateway, called 'Mosaic' was launched in June and forms part of the Mosaic Project – the brand name for the implementation of the Geographical Information (GI) Strategy for Northern Ireland - that is being coordinated by Ordnance Survey Northern Ireland. Prior to the launch of the node the Information Services Team were in Belfast to assist data providers from Northern Ireland and help deliver a small number of metadata training sessions.

## Key National Dataset Providers

We are delighted to say that Information Services Team exceeded their target with successfully obtaining updated or new metadata from the following key national dataset providers:- English Heritage, English Nature, National Assembly for Wales, Royal Mail, Registers of Scotland, Intelligent Addressing/Improvement and Development Agency (IDeA), DNA Scotland, Scottish Assessors' Association, Electoral Commission, Infoterra/Bluesky International, Scottish Natural Heritage, Countryside Council for Wales and Getmapping.

## Gigateway User Forum Upgraded

Improvements have been made to the Gigateway User Forum which will now help people who have been unable to access the forums through their corporate firewall.

## Publicity

With the growth in the number of readers of the gigateway newsletter, currently over 3800 individuals, we have continued to produce and disseminate the monthly e-Newsletter. This method of informing our readership about the latest news and developments has again proved to be an efficient and cost effective way of communicating with users.

If you would like to receive the gigateway newsletter in the future please contact [info@gigateway.org.uk](mailto:info@gigateway.org.uk).

In addition to a couple of publications about gigateway in GIS Professional, the Information Services Team gave presentations at the Annual IGGI Seminar and the AGI Northern Ireland event. The key event of the year was exhibiting at AGI2005. Gigateway leaflets were included in delegate packs at AGI events.

## Online User Survey

The Information Services Team recently created two separate questionnaires to seek comments and input from as wide a cross section of GI users as possible. The aim of both surveys was to find out about their experience of using gigateway and decide on ways in which the service could be improved.

The first of these questionnaires was completed in February 2005 and the second one was completed in July 2005. Further details of the results from these questionnaires are available on the gigateway website.

## AGI2005

AGI2005, the AGI's Annual Conference and GI vendors exhibition, was a particularly important event for gigateway, not only because the Information Services Team are part of the wider AGI staff, but also because this event represents the whole GI industry and is therefore unique.

A small VIP reception for key national dataset holders was held on the gigateway exhibition stand, designed to increase awareness of the service amongst key decision makers in the world of GI.

The team demonstrated the Stage 1 release of MetaGenie v2.0. This release showed users how easy it is to create UK GEMINI profile compliant metadata.

In order for gigateway to provide a reliable service and for organisations to make full and proper use of their own information resources, high quality standardised metadata is a must. There are three recognised levels of metadata: discovery, exploration and exploitation. Gigateway is concerned with encouraging organisations to create and publish discovery level metadata for their geospatial datasets. This is the minimum amount of information that needs to be provided to convey to the enquirer the nature and content of the data resource. This falls into broad categories to answer the what, why, when, who, where and how questions about geospatial data.

## ISO 19115/19139 & UK GEMINI

Until very recently, there has been no universally adopted international standard for the creation of discovery level geospatial metadata. However, it is hoped that ISO 19115 will go some way in pulling together the various disparate national initiatives that exist. Implementation of this new standard is currently waiting on the completion of its accompanying XML schema, ISO 19139. This is now nearing its final release and is thought to be in a stable enough state to release a UK GEMINI schema.

UK GEMINI is the UK's profile (or standard) based on the wider ISO standard. Co-managed and launched by the AGI and the e-Government Unit at the Cabinet Office (e-GU), the profile enables organisations to create, for any given resource, a single set of metadata that is compliant with both national and international

standards, specifically ISO 19115 and the national eGMS. The basis for the profile is ISO 19115 and was devised with input from the AGI, the E-GU, members of the academic community and via public consultation. Gigateway's metadata creation software, MetaGenie, has been re-versioned to output GEMINI compliant XML and HTML files. A translation tool is also available to ensure that records complying with the old NGDF standard do not have to be laboriously re-created. Any 'tweaking' will be minimal and it is therefore wise to start creating and validating metadata records immediately.

## UK GEMINI XML Schema available

The new UK GEMINI XML Schema was released at the end of 2005; just over one year after the UK GEMINI Profile was launched at AGI2004. The schema is available to system suppliers or software developers who are reminded that the schema is still subject to change, particularly prior to the final ratification of the ISO 19139 schema which should happen by the end of the year. Although this may mean that the ISO 19139 schema will be updated we do not expect there to be any major changes.

## New Guidelines for creating UK GEMINI compliant metadata

The Information Services Team has produced some metadata creation guidelines that are intended to help users produce good quality UK GEMINI compliant metadata records. The new guidelines supersede the NGDF compliant guidelines that were published last year. These new guidelines aim to complement MetaGenie v2.0 by describing the valid entries for each field and by giving plenty of examples. There is a large section dedicated to writing clear and concise abstracts as this is often the first place that users go to when they are trying to decide on which datasets to use.

## The future of gigateway

The AGI has been invited by Ordnance Survey managing the contract on behalf of the Office of the Deputy Prime Minister (ODPM) to continue operating the gigateway national metadata service for a further year until the end of March 2007 whilst ODPM carry out an open procurement exercise to determine the future shape and operation of a metadata service beyond the current arrangements.

This 1 year extension period is very welcome and comes at an interesting time as a national metadata service will be essential under the proposed EU 'INSPIRE' Directive (INfrastructure for SPatial InfoRmation in Europe) that is expected to come into force next year and will help stimulate the UK and other countries in Europe to build a National Spatial Data Infrastructure (NSDI).

The AGI believes that ensuring the continued operation and further development of the national GI metadata service is very important, especially in regard to building a NSDI. The AGI would encourage all individuals and organisations to continue supporting the service and providing UK GEMINI compliant metadata by using the new version of MetaGenie v2.0 which is now available to download from the gigateway website.

## New Team Structure and contact details

There were some staff changes at the end of March due to the 1 year extension period or 'Care and Maintenance' phase where there will be reduced funding for the gigateway project.



Robert Turner will now be the coordinator and main contact for the gigateway and he should be the first point of contact for any enquiries.

[Robert.Turner@agi.org.uk](mailto:Robert.Turner@agi.org.uk)  
+44 (0)20 7017 8491