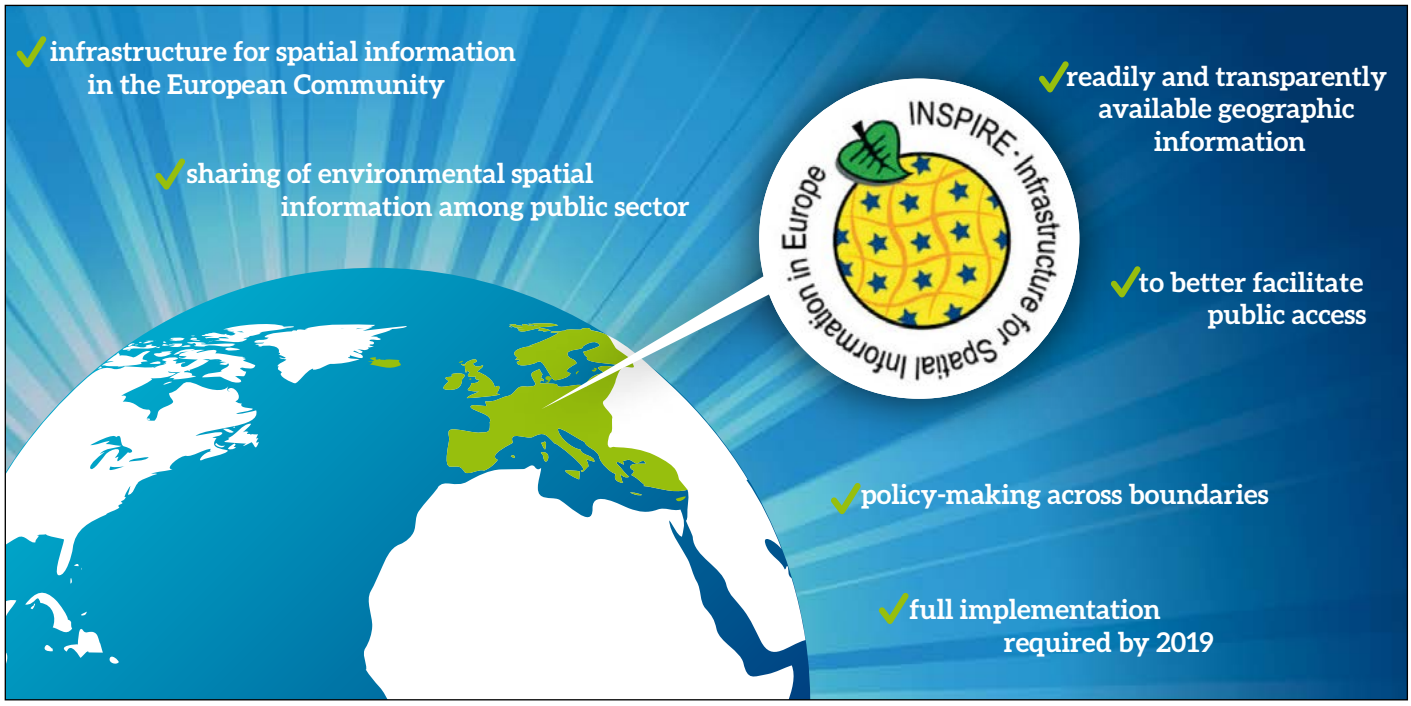
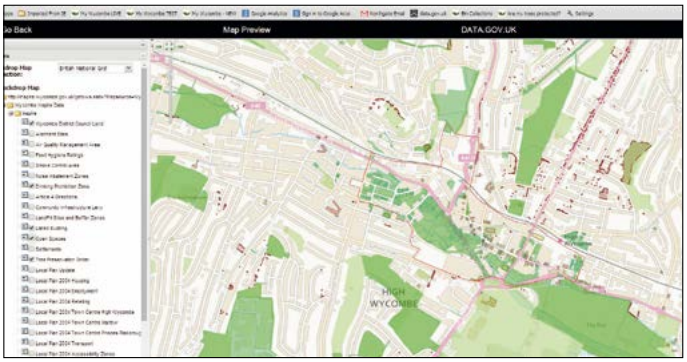
Get INSPIREd with iShare – Wycombe District Council (WDC) case study



This is a solution for the discovery, view and download of Annex III data under the INSPIRE Directive, facilitated through iShare. INSPIRE is an EU Directive that seeks to provide decision makers with consistent evidence and spatial data about the environment which is comparable across Europe.

INSPIRE sets out the common technical standards for publishing spatial data such as addresses, transport networks, land use, protected areas and risk zones. 34 data themes[1] are defined under INSPIRE which are grouped into annexes of the regulations. There are three annexes altogether and two have already been implemented.



GeoNetwork – discover and view via Data.gov.uk

Under the INSPIRE Directive local authorities are required to:

- Make data discoverable, by creating INSPIRE standard compliant metadata and publishing it through a discovery service which in the UK is data.gov.uk
- Publish data through INSPIRE standards compliant web services to be able to view and download the data
- Transform data to comply with a series of INSPIRE data specifications[2]
- Put in place policies to enable data sharing between public bodies including the EU.

Project drivers

To secure funding for this project WDC had to draw up a business case in addition to the overriding requirement to comply with the directive. Implementing INSPIRE falls in line with

1 A full list of the data themes can be found here: http://www.local.gov.uk/web/guest/local-government-intelligence/-/journal_content/56/10180/2833786/ARTICLE

2 http://www.local.gov.uk/web/guest/local-government-intelligence/-/journal_content/56/10180/2833786/ARTICLE

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WDC's wider 'Self-Service' project of which iShare is an integral part. Government, businesses and members of the public can easily self-serve to access these spatial data sets. INSPIRE implementation also supports the Council's 'Transparency' policy providing access to spatial data and enhancing the council's ability to meet Freedom of Information requests. Finally whilst developing the business case for their INSPIRE project WDC found that most of the spatial data required under Annex III of the directive was already available. 40 spatial datasets were identified for publication.

"Wycombe Council already had a comprehensive GIS and web mapping information service in place, in part facilitated by iShare and we prepared a business case in early 2013 to support the INSPIRE implementation. We were able to identify what was needed to meet the requirements relatively easily, and agreement to proceed was given."

Graham Walters, Spatial Information Management Team Leader at WDC.

How Astun helped

WDC's existing iShare infrastructure provided some of the core capability required for this project in terms of view and download services via WMS and WFS. On this project the major part of Astun's role was in helping to prepare the metadata and installing and configuring GeoNetwork[3] to manage the metadata catalogue.

Geonetwork metadata in view mode

Once Astun and WDC had collectively understood the 55 page UK Location Metadata Editor Guide the team set about the task of creating the INSPIRE compliant metadata. This work was carried out over a 3-4 week period. For speed it was decided to use the original iShare MapServer .map file which was duplicated, stripped of unnecessary layers and new layers added to become the new INSPIRE .map file. This was done using iShare's Studio map editor. At the start this looked straight forward but this task proved to be both tricky and painstaking reported Graham Walters:

"The main challenges for the project arose when we attempted to create the required XML schema using the new metadata entries. Although there is comprehensive documentation available, the task was complicated and it was only when you actually start to create the metadata and the associated syntax, that you really learn what you need to know."

Although GeoNetwork has its own validation routines which highlight errors in syntax neither these or the INSPIRE documentation clearly showed how certain fields needed to be completed. Sometimes it was easier to look at how data had been published by other authorities, to establish the correct syntax to use.

"It's only when you request Data.gov.uk to 'harvest' the data from the files that you know exactly what the remaining problems and the errors are. Then you can determine what extra needs to be done to get the files accepted and the data registered," ***said Graham Walters.***

To correct the errors the team needed to work through each file and make the appropriate amendments. Most of the errors identified were relevant to all the XML files but, unfortunately, there was no way to resolve these in one go and so each file had to be attended to and further cross checking of the files was essential.

If other datasets are identified as qualifying under Annex III, WDC are in a good position to add the data to the internal system, create the new metadata and XML files, and request harvest by data.gov.uk. It will be interesting to track the use being made of the services, and how many FOI requests can be directed towards these services.

In summary Astun simplifies the whole process by helping you to understand the themes and indicative datasets you need to make available and then helps you create the MapServer .map file using the Studio map editor adding the extra data as required. Astun installs and configures GeoNetwork and then creates the metadata from the .map file. We then help you fill in any remaining metadata before finally configuring the view, and download services. Astun ensures that your metadata is fully compliant with INSPIRE and incorporates full UK Location Programme compatibility.

Astun can provide an alternative hosted GeoNetwork installation as part of Astun Cloud Services – based on the UK Location Programme Online Metadata Editor, but with a number of enhancements and fixes.

The full list of all INSPIRE spatial datasets published by Wycombe Council is available here:
http://data.gov.uk/dataset/wycombe-inspire-data

3 http://geonetwork-opensource.org