

Open Data User Group (ODUG)
Her Majesty's Land Registry INSPIRE Index Polygons Dataset and Index Map
July 2013

Name of datasets: HMLR INSPIRE Index Polygons Dataset and HMLR Index Map

Summary

HMLR DATA and OPEN DATA

- Over about 2.5 years up to February 2004 HMLR created a vectorised digital **Index Map** to the title maps held in the registry at a cost of £20.6m. The Index Map is a dataset used internally for Land Registration purposes and consists of HMLR's property extent polygons (defined independently by HMLR as part of drawing up a Property Title Register), the Ordnance Survey MasterMap product (used for comparison) and address data held in HMLR's property gazetteer.
- Land Registry and Ordnance Survey work in close partnership with each other. By referring to Ordnance Survey mapping, Land Registry is able to create boundary information relative to information on Ordnance Survey topographic maps.
- Land Registry's primary function is to provide an accurate register of land and property ownership. HMLR provides on-line and manual search services, on a fee paid basis, so the public can identify registered titles and confirm legal property ownership.
- HMLR's business model is to create a sustainable revenue model for its non-statutory data and services. These services cannot be funded by income from statutory services. HMLR makes a range of core reference data sets available, for free, under the Open Government License (OGL). This includes Transaction Data – available since 30 January 2012 and Price Paid Data – initially released from 23 March 2012 and recently updated in response to data user community requests to include Historic Paid Data which is now available back to 2009 with further historic releases scheduled for later this year.
- HMLR has recently published an inventory of the data it holds stating that this is 'an important step towards maximising awareness, accessibility and reuse of our data.' HMLR is committed to releasing as much data as possible in an open and usable format.

INSPIRE

- The EU INSPIRE Regulations regulate the publishing of spatial datasets to given technical standards. INSPIRE makes a clear distinction that metadata and view services should be provided free of charge.
- Under the INSPIRE terms and conditions the data should be available for download. Access to the data should not be refused.
- Rather than using a Title Number or Address, as used to identify land parcels on the Index MAP, HMLR has created a new unique identifier for each freehold parcel of land (the Land Registry-INSPIRE ID) and built these into its standard registration services to deliver a 'best approximation' of a cadastral dataset as required by INSPIRE. This is the **HMLR INSPIRE Index Polygons Dataset**.

- In November 2011 HMLR released a viewable version of the INSPIRE Index Polygons Dataset. In June 2012 HMLR announced that the associated download service would be made available on 3rd December 2012. To-date neither the INSPIRE Index Polygons Dataset, nor the Index Map has been made available. No download service has been launched due to differing opinions between the Land Registry and Ordnance Survey as to the appropriate licensing terms.
- Under the EU INSPIRE Regulations the release of a cadastral dataset of polygons is obligatory. The regulations have been transposed into UK law. The delay in launching a downloadable dataset means that the UK is currently in breach of its INSPIRE obligations¹, even though HMLR has a potential solution available and ready to go – the **HMLR INSPIRE Index Polygons Dataset**.
- Opinion is divided as to whether the full **HMLR Index Map** falls under INSPIRE cadastres, and therefore under the INSPIRE regulations, and should be made available for download.

THE INDEX POLYGONS DATASET

- ODUG has received several data requests for the HMLR INSPIRE Index Polygons Dataset, with evidence that it can be used for the development of new and innovative online products and services. In one instance a small business has invested heavily in the development of new solutions on the expectation that the dataset would be made available for download, as promised, in December 2012.
- The view service for the HMLR INSPIRE Index Polygons Service² is a Web Mapping Service which allows individual polygons to be viewed. The view service is overlaid with an Ordnance Survey copyright statement, which does not make it clear that this is applicable to the underlying map, rather than the polygons.
- Until recently the product description for the Index Polygons Dataset stated that “The public can access the data by means of purchasing the data and/or service from Land Registry. Information on prices and terms of use can be found by calling or emailing HMLR.” Recently the website has been changed to signpost individual/small-scale users to the HMLR ‘Find a Property Service’ where single deeds and property boundary information can be purchased.
- ODUG understands that HMLR is not providing commercial terms for the bulk purchase of the Index Polygons Dataset as they wish to provide the data as part of their Open Data programme, in line with their overall data strategy, but that this action is currently being blocked by the Ordnance Survey.
- HMLR have recently published a Full Dataset Inventory³ which lists all the electronic data that has been obtained or recorded for the purpose of enabling HMLR to carry out its statutory functions. The inventory statement states which datasets are available under the Open Government License (OGL).

¹ See Annex B and <http://inspire.jrc.ec.europa.eu/index.cfm/pageid/44>

² <http://data.gov.uk/dataset/hm-land-registry-inspire-index-polygons>

³ <http://www.landregistry.gov.uk/market-trend-data/dataset-inventory> or <http://data.gov.uk/dataset/land-registry-dataset-inventory>

- To be of full benefit to data users the INSPIRE Index Polygons Dataset requires a location reference to be available for each polygon. Grid references would be available from the polygon boundary data (if it were available for download), address data can be added by the end user subject to general address data licensing terms.
- However, **the potential need for a user to have third party licensing in place for the commercial use of associated datasets should not be used as a reason to prevent the delivery of the raw INSPIRE Index Polygons Dataset as Open Data by HMLR.** This release would also fulfil of the UK's EU INSPIRE commitments.

THE FULL INDEX MAP

- There are many applications for the full **HMLR Index Map** if it were available as a free open data dataset, including:
 - Contributing significantly to economic growth by allowing third parties to assemble comprehensive products showing land availability and ownership;
 - Innovators could also take advantage of other aspects of this data to deliver new applications into any sector with an interest in providing products and services based on land and property;
 - It would also have valuable use in demographic research applications.
- The release of the Index Map as open data without restrictions on commercial reuse is also being blocked by Ordnance Survey who, who wish to apply more restrictive licence terms. In this instance, Ordnance Survey has a stronger argument since the full Index Map includes addressing elements of their MasterMap product.

THIRD-PARTY LICENSING RESTRICTIONS

- ODUG argues that the potential need for users to obtain third-party licenses for the commercial re-use of data should not prevent HMLR from releasing their own Open Data. Nor should HMLR be required to manage or monitor a third-party licensing regime.
- ODUG has discussed the availability of on-demand polygon-level web-based licensing with Ordnance Survey, who suggested that there were web-based services available which would support access to individual polygons and that there should be no barrier to entry for small businesses wishing to make use of the Index Map data.
- ODUG has looked into this and discovered that the licensing terms are not as straightforward as described above. The most similar usable services are from OS resellers and are area based, requiring a minimum area to be purchased. The costs are orders of magnitude away from the business requirements of the online click-through services/applications that developers want to build.
- Costs aside this is also a strong example of how Ordnance Surveys licensing terms, prohibiting the use of derived data (even from their own Open Data portfolio) stifle growth and innovation by restricting the flow of data and derived data through the data research, development and product/service supply chain. This is true both for public and private sector applications of OS data. The OS licensing terms should be revised in a way which opens up the market and maximises all the opportunities available for new data products and services based on Open Data.

ODUG RECOMMENDATIONS

- 1. The Land Registry (HMLR) INSPIRE Index Polygons Dataset should be immediately released as Open Data, under the Open Government License as part of HMLR's commitment to releasing data in an open and usable format, also to fulfil the UK's INSPIRE Cadastral Polygon commitment. HMLR should make this data available free of charge.**
- 2. The Index Map, including title numbers and addresses (where available) should be released by HMLR for re-use under an Open Government Licence (OGL) on a bulk file transfer site and through an API to allow the simple download of sub-sets of the map and change data. We understand that HMLR could develop this solution but that its delivery would be blocked by current Ordnance Survey (OS) licensing restrictions.**
- 3. The licensing terms and conditions for commercial use of the Ordnance Survey data associated with the Index Map data should be clarified and revised to deliver a cost-effective solution for the development and delivery of new products and services, based on the Index Map, by companies of all sizes. OS's commercial derived data restrictions should be relaxed as part of this initiative. The restriction on passing on subsets of OS address information, where the address is the most useful spatial locator for third party data, is particularly restrictive and onerous.**

Annex A – Benefits of Open Data Release of HMLR INSPIRE Index Polygons Dataset

Benefits of data release

- Three data requests have been submitted to ODUG for this dataset. One of these is from an SME that expects, via access to the INSPIRE Index Polygons Dataset, to be able to facilitate a data business with a short-term turnover in the low millions. This one SME anticipates creating at least 20 new jobs within 12 months. The revenue and job creation potential would increase significantly if the full Index Map data was made available.
- The Index Map can be used by property consultants, developers, infrastructure companies, utility companies and Local Authorities to view the extent of specific registered titles. The HMLR Annual Report and Accounts for 2011/12 include sales of Index Map data of less than £ 5m (the revenue from Index Map data sales is not separately itemised). The take up of the data at its current price is very low, because these markets are very price sensitive, so almost none of the potential benefits identified by Land Registry themselves are being fully realised. These are to:
 - Keep records of owned property and land data robust and up-to-date
 - Manage assets and liabilities
 - Inform planning or policy decisions
 - Gain a spatial understanding of the registered assets within a portfolio
 - Identify ownership patterns within areas of interest
 - Store and re-use spatial data alongside other datasets.
- Aside from developers other principal beneficiaries of an open release of this data would include Local Authorities, the Statutory Undertakers with rights to carry out certain development and highway works (generally utility companies); the Social Housing Sector and the property industry.
- In particular if Local Authorities worked directly with the property industry the data would facilitate local registers of property assets and property searches to help speed up investment decisions, significantly increasing the efficiency of the processes leading to site identification and inward investment. At the moment it is common for house builders to advertise that they are seeking new sites. If the Land Registry Index Map was available more effective search and advertising services could be developed, contributing to accelerated economic growth. Given the potential size of this market these benefits are anticipated to be worth £100ms per annum (realised through improved information flows, and more quick and efficient decision-making in the market).
- In the United States where cadastral parcels are recorded by cities and counties much of the data is available as open data, though some municipalities charge for the data. Anecdotal evidence suggests that those municipalities that make ownership and valuation data, as well as land availability data, available free of charge have a much better record of attracting inward investment than those which charge for the data.

Annex B – INSPIRE chronology and related comments

The INSPIRE project is an EU Directive that commenced in 2007 and was ratified in UK law in 2009. The regulations unequivocally state that they are binding all EU members. The overall UK project coordinator is DEFRA but all government departments and agencies are bound by the legislation. Both HMLR & the Ordnance Survey (OS) are fully signed up to the INSPIRE directive. Under the INSPIRE regulations the UK is mandated to publish both the spatial polygons and addresses to given standards.

Her Majesty's Land Registry (HMLR), to comply with the INSPIRE Directive, has produced a polygon layer in a shape file format that can be downloaded. A Unique ID is attached to each polygon which relates to the "address" held on HMLR database, see "find a property service" on the HMLR web site⁴. This data is stored in an enterprise data warehouse as confirmed on Wednesday, 30th January 2013 in a workshop given by HMLR at their Croydon head office.

ODUG understands that HMLR is ready to deliver their INSPIRE Index Polygons Dataset, having invested more than £1m in the development of the website and data and could do so very quickly. The release of this data is currently being impeded by Ordnance Survey (OS) because of their derived data licensing restrictions.

As a result of not releasing downloadable version of the INSPIRE data in December 2012⁵ the UK does not meet INSPIRE compliance and is potentially open to fines from the EU, although ODUG understands that no such fines have yet been levied.

Chronology in 2012/3

- 28th February 2012 – through data.gov.uk – HMLR released the Web Mapping Service (WMS) layer of the INSPIRE index layer which is viewable, though with heavy copyright statements across it. This does not deliver a useable dataset.
- June 2012 – HMLR volunteered that the downloadable service would be available on Monday 3rd December 2012.
- In October 2012 prospective users of the INSPIRE s dataset were made aware that OS were claiming ownership of the addresses, and imposing restrictions on HMLR's committed data release.
- HMLR have confirmed that they have had the data & the website instantly available to release since November 2012.
- In November 2012, prospective users of the INSPIRE Index Polygons Dataset were informed that OS had blocked the release of the data.
- In December 2012 the HMLR Executive Board agreed that the download facility would be free, whilst previously the mooted price had been 10p per polygon. This was reconfirmed in writing in January 2013.
- HMLR proposed that this data should be released under Open Government Licence (OGL) but prospective users suspect that OS wish to put in place a much more restrictive licence so

⁴ <http://www.landregistry.gov.uk/public/online-services>

⁵ <http://inspire.jrc.ec.europa.eu/index.cfm/pageid/44>

that no bulk data download of addresses will be available making the dataset virtually useless.

- On 28th December 2012, HMLR breached an EU INSPIRE milestone, by not releasing the data they have available. The UK can now be fined on a daily basis. HMLR have acknowledged in writing they may have to pay the fines, although the OS have caused the delay.
- A further INSPIRE deadline of 19th April 2013 requires spatial data to be available throughout the community. If a potential user requests this data it has to be made available within 20 days. Prospective users of the INSPIRE Index Polygons Dataset do not believe that HMLR have committed to this milestone.