Collaborative Geospatial Data

Jeni Tennison[1] & Stuart Harrison[2] from the Open Data Institute

Geospatial data is incredibly valuable because it is the underlying data for so much information. It's the glue that can bind together multiple different datasets, and make the dream of a truly linked web of data come true.

There are two challenges with maximising the utility of geospatial data:

1. Geospatial information is maintained across many different organisations, including official mapping agencies, local governments, utility and transport companies, or local groups such as conservation charities. Each organisation brings its own lens to geospatial data. Bringing this data together can provide new insights and richer understanding of our environment.
2. Because geospatial data is so useful, many organisations sell access to it or make it available under restrictive licences. This is particularly evident within the UK in the restricted access provided to fundamental geospatial data assets such as the Postcode Address File and MasterMap, but it also applies to satellite imagery and map data across the world.

OpenStreetMap is one solution to these problems. It provides both a convening point for the range of stakeholders who have geospatial data, and a collaborative mechanism to recreate locked down geospatial data. It is also a linked data resource, in that each node and way within OpenStreetMap has its own identifier. For example, Google Campus, the location for the Linking Geospatial Data Workshop, has the identifier:

http://www.openstreetmap.org/way/157901333

However, OpenStreetMap it is not an entire solution for collaborative geospatial data:

- It isn't appropriate to use OpenStreetMap for temporary information, such as the events taking place in a particular area.
- While it's possible to get hold of various cuts of OpenStreetMap data, it does not provide direct access to data from the identifiers that it uses for nodes or ways (ie it is not part of the linked data web).
- OpenStreetMap uses a viral share-alike licence which means some potential commercial users are not prepared to use it.
- It is questionable whether storing all geospatial data in one centralised service is the best fit with a distributed web architecture.

At ODI, and depending on funding, we are intending to pursue two projects during this year that

[1] jeni@theodi.org
[2] stuart.harrison@theodi.org

will investigate the scope for collaboratively building geospatial data assets around particular themes. These are:

- Open Green Spaces: a catalogue of green spaces within the UK that supports community involvement and reuse.
- Open Addresses: an open address register for the UK, created from a combination of existing open data and crowd sourcing.

Our talk will outline these and similar projects and the architectural and governance options for building linked geospatial data assets through a collaborative process.