

FLOODS PROVE NEED FOR MAPPING INVESTMENT

Free Licensed Geo-data

An editorial in October GIM International challenged Ordnance Survey policy of charging for data to sustain investment. In response the author points out that OS strives to ensure data is freely available by having appropriate licences in place. Prices are charged to support investment in the collection and maintenance of quality data. An example of the benefits of such data was the response to England's severe summer floods.<P>

Ordnance Survey (OS) is a national mapping agency totally funded by customer revenue rather than the taxpayer. Its income is derived through licensing data and direct sales of paper maps. Success in these areas offers a sustainable funding model for investment, which in turn allows OS to encourage widespread licensing and create high-quality, accurate information. Experience from around the world, including Great Britain's own history between the world wars, shows that under-investment can lead to severe deterioration in the quality of national mapping.

Summer Floods

The benefits of having available well-maintained and detailed mapping were clearly illustrated during the 2007 summer floods that affected large parts of central and southern England. National mapping must be capable of meeting the challenge in the event of such an emergency. As water levels rose in South Yorkshire the OS 24/7 emergency mapping team responded immediately to a request from emergency planners for digital map data to help them decide whether or not to evacuate hundreds of people. The team used highly detailed, spatial, address and height data to identify properties within specific height bands around a large dam, offering the planners a sound basis for determining flood risk and priorities.

Evacuation Planning

A few weeks later water utility contractors requested street-level data across the flood-stricken Severn region to help map the locations of nearly a thousand fresh water bowzers distributed by a fleet of tanker drivers. Pinpointing and sharing the temporary positions of the bowzers was crucial for delivering refills and managing transport logistics. OS mapping provided the basis for overlays of aerial images and road-traffic information as various agencies and incident-response crews tried to assess the extent of current and potential flooding and decide on optimal rescue routes. One key scenario was evacuation planning in relation to a power station in Gloucester.

Sustaining Quality

Under its emergency mapping scheme OS provides an immediate combination of mapping and expertise in response to civil emergencies such as flood, fire, contamination leaks, disease outbreak and searches for missing persons. Co-ordinators and volunteers work closely with emergency services and other agencies to ensure that the most appropriate data is supplied as quickly as possible and completely free of charge. The scheme works purely thanks to the strength and reach of OS as Great Britain's national mapping agency. Government, business and individuals in all walks of life rely on accurate and up-to-date geographic information. Sustaining the quality of that information is vital for the national infrastructure and entails substantial investment to cover the costs of data collection and maintenance.

Geographical Framework

One of the key differences between OS and other cartographic sources, be they commercial or user generated, is the responsibility to provide a nationally consistent and authoritative view. Collecting and maintaining the underpinning geographical framework to which other kinds of information can be associated helps with land registration and management, civil contingency, transport planning, health care, utility services and many other activities. Private-sector partners of OS help stimulate the competitive market for all kinds of products, including in-car satellite navigation systems, desktop mapping systems, web directories, travel guides and GPS kits.

Free of Charge

A considerable amount of OS information is available licensed and free of charge to the end user. This includes GPS survey control data vital for the construction industry, utilities and national infrastructure projects. More than 32,000 staff and students at institutes of further education and universities have free access to downloadable OS mapping, while every Year-7 school pupil in Great Britain has the chance to receive a free OS Explorer map. Around four million children have benefited from this school initiative in the past five years. Other examples of free products include downloadable map extracts from the Get-a-map service and an election maps website offering useful information for parliamentary and council candidates, party workers and teachers. Many local authority websites and free-to-air services offered by private-sector companies also embed OS information.

Web 2.0

OS is embracing the web 2.0 environment through "explore", a new outdoor exploration portal. This site is aimed at outdoor enthusiasts and holidaymakers keen to generate and share route information over the web. Research shows that the vast majority of the general public do not feel comfortable using digital mapping for outdoor exploration and "explore" is intended as an entry point for people to learn

more about it. OS is also planning to launch a web 2.0 platform for non-commercial developers, pending work to achieve technical realisation and accommodation within its licensing framework. In particular, OS is keen to ensure partners have a genuine role to play in the project.

Concluding Remarks

Underpinning all these examples, and not least the emergency mapping scheme, is quality information. This needs investment, as the costs of data collection and maintenance are high. Although access may often be free at the point of use, this does not mean there is zero cost involved. As this summer's flooding in Great Britain showed, when it really matters you need quality information you can rely on.

<https://www.gim-international.com/content/article/free-licensed-geo-data>
