



A geospatially-enabled nation



Colin Bray, chief executive and chief survey officer at Ordnance Survey Ireland (OSi), outlines how the National Mapping Agency's geospatial data is supporting the implementation of government policy.

Data lies at the heart of government, it informs and drives public policy and is central to the delivery of public services. Knowing when and where things happen is important for the planning, targeting and delivery of services and geospatial data is an important element in the overall government data ecosystem. Geospatial data relates to the geographic location and characteristics of natural or constructed features and boundaries on, above or below the earth's surface and can be delivered as both digital and paper mapping, imagery and reference systems.

The recently published Public Service Data Strategy¹ recognises that government, through its many activities, is actively investing in the collection and applied use of geospatial data. This strategy, together with the eGovernment Strategy, National Statistics Board's Strategy and the Public Service 2020 framework sets out a vision of how government can better serve its citizens and businesses by building on good data management practices and adopting a more consistent and uniform approach to data across the whole of government. As technology evolves and our 'location enabled' society advances at

considerable pace, how geospatial information is integrated into this overall government data ecosystem is critical.

OSi is the national mapping agency, founded in 1824, and its role is to ensure the availability of trusted, authoritative and timely state geospatial information to meet the evolving needs of citizens, business and policy makers. According to Bray: 'OSi is playing an active role in the development and implementation of government's key data strategies and is focused on collaboration and innovation to enhance and develop the value of geospatial information to society as a

whole. We have a vision for a geospatially-enabled nation that shares, integrates and uses a wide range of data to achieve social, economic and environmental benefits.”

To achieve this aim, OSi has focused on strengthening and further modernising their approach to best in class geospatial data capture, management and distribution to ensure that a single source of digital geography is accessible and understood across the public sector. Their national mapping data and services are widely used across public sector organisations and academia who have access through the government’s National Mapping Agreement (NMA). This data is also used as the framework for many other sectors who rely on OSi data including utilities, banking, legal and infrastructure organisations.

OSi maintains a set of over 50 million unique geographic identifiers (UGIs) for every object stored in its database such as land parcels, buildings, road segments, etc. This authoritative geospatial reference data is no longer just used for mapping and visualisation, but also for enabling the integration of other data sources for analysis and modelling. It is used by a variety of audiences, communities, customers, and agencies, in modern formats that were never used before including as linked open data. The development of 5G, the Internet of Things (IoT) and autonomous vehicles are expected to drive increased demand for geographic information in the years to come. OSi continues to develop its own data strategy by integrating geographical information with other technologies to ensure it satisfies these expected demands.

A key element of the current OSi strategy is developing a more open national data infrastructure that combines accuracy with accessibility. In order to make their data easier to find, share and use, OSi provides a web-based platform called GeoHive² which is free-to-use and offers geospatial services including the capability where users can save and share their own map. GeoHive combines OSi mapping with authoritative layers of data from multiple public sector bodies and presents them seamlessly to the end user in a single view. Since its initial launch, GeoHive has been further developed to deliver new ways of sharing data to allow the same



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information to be presented to different audiences, with different views, known as ‘MicroHives’. The most recent of these include a MicroHive for the Dublin Housing Observatory³. This is just one example of how greater access to information can be delivered to decision makers and how reliable trusted evidence can be used to support policy making.

Geospatial data also plays a role in helping Ireland implement significant international policies and achieve agreed targets. Increasingly public policy will be influenced by the need to deliver on the United Nations (UN) 2030 Agenda for Sustainable Development adopted by member states in 2015. As part of this agenda, the UN General Assembly identified 17 Sustainable Development Goals (SDGs), 169 targets, and 232 global indicators which focus on five key elements; people, planet, peace, prosperity and partnership. With these goals in mind, OSi has collaborated with the Central Statistics Office (CSO) to link geography and statistics by producing indicators that help monitor Ireland’s performance towards achieving the 17 sustainable development goals by making them available on GeoHive. Ireland’s SDG data hub⁴ is a location-based platform that supports collaboration among data producers and users, and facilitates interoperability across a wide range of data and sources

and was developed by OSi in partnership with the geographic information systems company, Esri Ireland.

By delivering high-quality data about SDG indicators in a timely, usable, open, and actionable manner, Ireland’s SDG Hub supports the making of data-driven decisions, drive progress on policy initiatives, and contribute to positive change. According to Bray: “The GeoHive platform helps to promote the value of the sustainable development goals, and engages with the citizen and public-sector bodies to encourage their participation in furthering progress on the Goals. It is also useful for the academic sector and non-governmental organisations to understand the challenges in our world.”

Understanding changes that are occurring within location and our environment, are essential to many decisions we make. Geospatial data, is now recognised for the importance it plays in national policy and it is through the applied use of data that we can develop a truly ‘smart’ society.

Colin Bray
chief executive officer
Ordnance Survey Ireland
T: 01 802 5300
E: colin.bray@osi.ie
W: www.osi.ie

2: <https://geohive.ie/>
3: <https://siromaps.geohive.ie/dho/>
4: <http://irelandsdg.geohive.ie/>

