Getting Started

Initial Guidance to Data Providers and Publishers

Guide 1: UK Location

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uk location

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Change Summary

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UK Location

This first guide in the series "Getting Started" is for those unfamiliar with the UK Location Strategy, INSPIRE and the UK Location Blueprint, who would like a brief introduction to the key business drivers, goals and objectives and approach being adopted.

UK Location Strategy and INSPIRE

The overall strategy for UK Location is set out in "Place matters: the Location Strategy for the United Kingdom".

The strategy was developed in recognition that "everything happens somewhere" and that if we can understand more about the nature of place, where events happen, and the impact on the people and assets at that location, we can better plan, manage risk and use resources.

It recognised that too few government-owned datasets which incorporate location can be easily assembled and analysed with reliability, that there is too much duplication, too little re-use and too few linkages across datasets, required to support policy development and implementation.

The objective of the Location Strategy is to maximise the value to the public, government, UK business and industry of location information, by providing a consistent framework for its publishing, discovery, evaluation, access and re-use.

The EU INSPIRE Directive (2007) defines the legal framework for the establishment and operation of an infrastructure for spatial information in Europe. This is to enable the formulation, implementation, monitoring and evaluation of Community environmental policies at all levels – European, national and local – and to provide public information.

INSPIRE compliments the UK Location Strategy by providing the regulatory and standards environment for the framework envisaged by the UK Location Strategy. The manifestation of this framework is the **UK Location Information Infrastructure**, or "UK Location".

UK Location

UK Location is a regulated and coordinated environment for the web publishing of location information, such that it can be discovered, viewed, evaluated and accessed for data sharing and re-use, directly over the Internet, using Web Services.[1]

Web Services

Web services enable data and information to be published and accessed directly over the Internet, in the same way as people access web pages and complete documents, but in a form that allows it to be read and processed by a machine. What happens next has almost infinite possibilities, from displaying the data in a form that can be viewed by humans and combined with other data, through to highly complex data processing and transformations, in support of a business application.

Web services create the opportunity to easily move data and information around, enabling it to be easily shared and re-used.

The publishing of location information on the Internet is sometimes referred to as the **Geoweb**. INSPIRE uses the term **Network Services** to refer to the overall end-to-end service, both the hosted service and the client interaction with that service.

To give you a sense of the Geoweb, try this simple exercise:

In your web search application, type: "inurl:REQUEST=GetCapabilities". All these returns relate to machine readable geospatial web services published and accessible over the Internet.

Who will use UK Location?

UK Location is intended to be used by a wide range of data users, directly or through end user applications, developed by the public or private sector, or by citizens.

As Data Providers, the most immediate re-users of your data are likely to be people building end user applications, using the data directly as part of a business process, or as part of a research project.

As a Data Provider your organisation may also be a data user, re-using data published by others. Here lies one of the major indirect benefits of UK Location to you – *where you give a little and gain a lot.*

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[1] Known more generally as a National Spatial Data Infrastructure (NSDI).

Why is it being created?

The 'information economy' is becoming increasingly important. A key component of this economy is location – everything happens somewhere. A large amount of location information originates in the public sector. Much of this information is locked away, difficult to discover and even harder to access. UK Location will unlock this data, so that it can be easily discovered, combined, shared and re-used across a wealth of applications.

This improved access and interoperability will provide significant economic benefits by helping to:

- reduce public sector costs

- improve public sector service delivery through placed-based planning and programming

- encourage innovation in the delivery of public services

- support the delivery of public services by community and third sector organisations

- support evidence and placed-based public sector policy development *and*

- encourage commercial exploitation of public sector data, to the benefit of the UK economy

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Workplace Expectations of Generation Y

The potential application of location information is well illustrated by its use by today's students. Traditionally, geospatial information was predominately used by those studying geography. Geographic Information historically required specialised systems and knowledge. Today, due to the Geoweb, the use of location information by students is much wider. These students are leaving university and college with an expectation that they will have good access to location information in their working lives.

Examples of the potential power that can be unleashed through the harmonisation of location information, around a set of common standards and data specifications, and its open publication, can be found in the 'Case Studies' section of the UK Location web site.

Below is just one example of something that can be done today, with difficulty, but which should become much easier in the future, through the existence of UK Location (see box).

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Case Study: The Economic Impacts of Wind Farms on Scottish Tourism

http://www.scotland.gov.uk/Publications/2008/03/07113554/0

In March 2008 the Scottish Government published a study into the economic impact of wind farms on Scottish tourism. This study involved combining a wide range of data, from a diverse range of sources, including geospatial data.

This is a good example of the re-use of location information. But as illustrated by the study, a significant bulk of the work involved when re-using data is associated with the processing of the base data, to get it to the point where it can be applied to the given business application. The purpose of UK Location is to greatly simplify this process, saving time and money, through publishing data to a common set of standards and using easily accessible web services.

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What are the main parts of UK Location?

A good way to view UK Location is as a 'social system'. This has a number of parts which interact to create economic and social value through the sharing and re-use of location information.
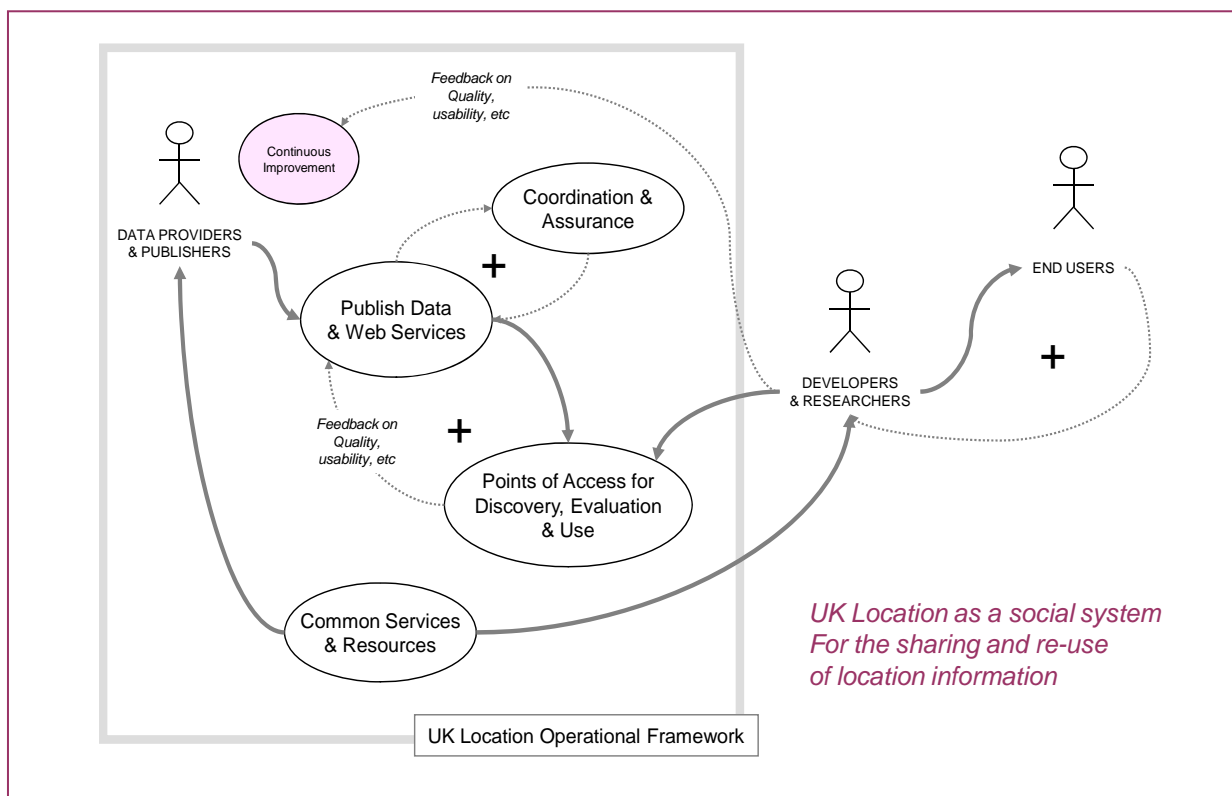
The system is underpinned by a set of business services, which are in turn supported by the application of information technology.

The parts that make up the wider 'social system' of UK Location are:

- **data providers and publishers**, who publish the data and associated web services that enable this data to be discovered, evaluated, accessed and exploited

- **a network,** the internet, that distributes the published data and services to the data users

- a set of **common services and resources**, that support the publishing of location information, its discovery, evaluation and use, including its integration with other forms of data

- an **operational framework**, that sets out the policies, standards and operational processes for the publishing of location information

- the **coordination and assurance** of the data and services that are published

- **developers and researchers**, who use the published location information as part of an end user application, or piece of work

- **end users**, who use the location information in their workspace or at home, through the applications that have been developed.

But UK Location is much more than the sum of its parts. Key to its success will be the establishment of a range of feedback loops (identified in the diagram on the previous page by the + symbol), that link data providers to data users and improve the utility of the published data over time, and thereby the delivery of value, both to the data provider (through improved data) and data user.

A more detailed description of this system view of UK Location can be found in UK Location Conceptual Model and UK Location Blueprint, both available on the UK Location Web Site.