

Update on INSPIRE Directive: Transport Perspective

Briefing Paper for the Public Transport Coordination Group (PTIC)

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Abstract

This note updates PTIC on the INSPIRE Directive, including the scope of INSPIRE, the location requirements for UK public authorities and the implications there are for transport following the adoption of INSPIRE.

Actions Required

- ▶ Note the importance, current status and potential impact of the INSPIRE Directive
- ▶ PTIC to comment on INSPIRE requirements for public authorities and the transport network infrastructure

Introduction to INSPIRE and its transposition into UK law

The 'Infrastructure for Spatial Information in the EC' Directive (2007)¹, together with the subsequently adopted Implementation Rules, defines a legal framework for the establishment of common standards and infrastructure for geographically referenced datasets throughout the EU. The aim was to unlock location data, avoid duplication, and create commonality and interoperability for pan-EU environmental policy purposes. The potential implications are in fact much wider.

INSPIRE requirements have been transposed into UK law by the following statutory instruments:

- ▶ INSPIRE Regulations SI 2009 No.31572 for England, Wales and Northern Ireland,
- ▶ The INSPIRE (Scotland) Regulations 2009 SSI 2009 No. 440 for Scotland,
- ▶ Environment (Infrastructure for Spatial Information) Regulations 2010 No.13 of 2010 for Gibraltar.

UK Public Authorities that own relevant location datasets are now required by law to publish them according to the standards and timetable laid down in the Regulations.

UK Location

In the UK, the strategy for location-based information was set by the Nov 2008 report "Place Matters: the Location Strategy for the United Kingdom."³

INSPIRE complements the UK strategy by providing the legal framework and technical specifications for the implementation of the infrastructure it envisages.

The manifestation of this strategy is the UK Location programme, a DEFRA-led, pan-government initiative to implement the requirements both of the UK strategy and INSPIRE.

UK Location has established a technical infrastructure (UK Location Information Infrastructure) which will give data-providers access to common tools and a UK Geo-portal (based on the data.gov.uk platform) to assist compliant publishing of data. UK Location will centrally feed the EU-wide INSPIRE Geoportal⁴ that is in the process of being created.

UK Location has also produced some useful "Getting Started" guides⁵, written in plain English, which are essential reading for interested parties.

An important point to note is that compliance with INSPIRE ensures compliance with UK Location, as the two are complementary.

Scope of the Directive

INSPIRE applies to geographically referenced location data that:

- ▶ relates to an area where an EU state exercises jurisdiction
- ▶ is held by public authorities
- ▶ conforms to one of 34 INSPIRE data themes.

¹ [INSPIRE Directive](http://inspire.jrc.ec.europa.eu/index.cfm/pageid/3): <http://inspire.jrc.ec.europa.eu/index.cfm/pageid/3>

² [INSPIRE Regulations SI 2009 No.3157](http://www.legislation.gov.uk/uksi/2009/3157/pdfs/ukxi_20093157_en.pdf): http://www.legislation.gov.uk/uksi/2009/3157/pdfs/ukxi_20093157_en.pdf

³ [Place Matters: the Location Strategy for the United Kingdom](http://www.communities.gov.uk/documents/communities/pdf/locationstrategy.pdf): <http://www.communities.gov.uk/documents/communities/pdf/locationstrategy.pdf>

⁴ [INSPIRE Geo-portal](http://www.inspire-geoportal.eu/index.cfm): <http://www.inspire-geoportal.eu/index.cfm>

⁵ [UK Location Getting Started Guides](http://location.defra.gov.uk/resources/getting-started/): <http://location.defra.gov.uk/resources/getting-started/>

Organisations in Scope

"Public Authority" means any level of government organisation above parish council level or equivalent. Clearly this will include all central government departments, but also Local Authorities, devolved institutions, NDPBs and Agencies.

Data in Scope

Electronically held information that identifies the physical location (typically stored in the form of co-ordinates and topology) of natural or constructed features of the earth.

The compulsory elements of the Regulations only apply to data which specifically relates to one of the 34 "Spatial Data Themes"⁶ referred to in Annex I, II and III of the INSPIRE Directive. That notwithstanding, public authorities and others are encouraged to publish to UKLII any location information they feel would be of use to the wider community. Any datasets published voluntarily must, however, also conform to the standards set out by INSPIRE, although not to the stipulated timetable.

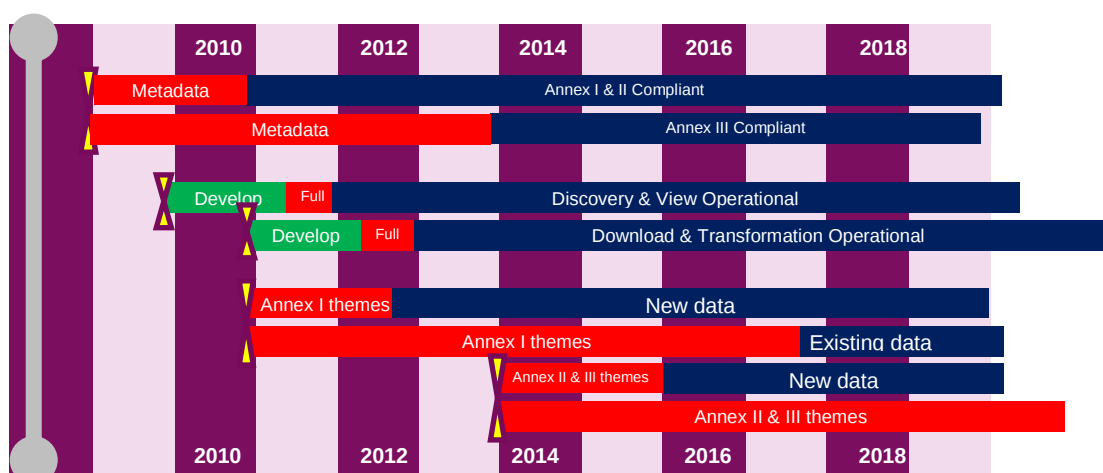
Requirements

The INSPIRE/UK Location requirements for public authorities fall into two phases:

Phase One: publishing data in the format it is now

Phase Two: publishing data contained in the INSPIRE Annexes, in a manner that complies with INSPIRE data specifications

Timetable



The above diagram was produced by UK Location, and is an approximation

⁶ [INSPIRE Directive](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:108:0001:0014:EN:PDF) see page 11:
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:108:0001:0014:EN:PDF>

Phase One – publishing data ‘as is’

Phase One requires the following four network services⁷ to be produced:

- ▶ **Discovery Service** – compliant metadata⁸ describing the data and the services
- ▶ **View Service** – a map representation of your data
- ▶ **Download Service** – allowing the retrieval of the dataset itself
- ▶ **Transformation Service** – allowing your dataset to be converted to another INSPIRE specified co-ordinate system.

If a data provider chooses to publish data not required by INSPIRE, only the Discovery and View Services are compulsory.

Dec 2010	Compliant discovery metadata must be created for INSPIRE Annex I and II datasets
May 2011	View Services (maps) must be published to UKLII for INSPIRE Annex I&II datasets
Nov 2011	View Services must comply with INSPIRE Quality of Service requirements
Jun 2012	Download Services for INSPIRE Annex I&II datasets must be published to UKLII
Dec 2013	Discovery metadata, view services and download Services must be published for INSPIRE Annex III datasets

Phase Two – publishing data in a manner that complies with INSPIRE Data Specifications

The timing requirements of when data will be required to conform with INSPIRE data specifications differentiates between new (or extensively modified datasets) and those that are already extant.

The milestones are:

Jun 2012	New INSPIRE Annex I compliant data available
Jan 2015	New INSPIRE Annex II&III compliant data available
Jun 2017	All INSPIRE Annex I data is compliant
May 2019	All INSPIRE Annex II&III data is compliant

Standards and Specifications

Data specification guidelines have now been published for all Annex I datasets⁹. These have been compiled following feedback received from registered data providers and spatial data interest groups during the consultation process, and are expressed in UML. They are based on the ISO 19100 series of standards, but are in some cases more demanding.

The UK standard for metadata (which is the most pressing requirement) is GEMINI², which is now INSPIRE compliant.

⁷ [INSPIRE Network Services Regulation](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:274:0009:0018:EN:PDF) :

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:274:0009:0018:EN:PDF>

⁸ [INSPIRE Metadata Regulation](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:326:0012:0030:EN:PDF) :

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:326:0012:0030:EN:PDF>, [INSPIRE Metadata Technical Guidelines](http://inspire.jrc.ec.europa.eu/documents/Metadata/INSPIRE_MD_IR_and_ISO_v1_2_20100616.pdf):

http://inspire.jrc.ec.europa.eu/documents/Metadata/INSPIRE_MD_IR_and_ISO_v1_2_20100616.pdf

⁹ [INSPIRE Data Specifications](http://inspire.jrc.ec.europa.eu/index.cfm/pageid/2) : <http://inspire.jrc.ec.europa.eu/index.cfm/pageid/2>

Implications for Transport

Requirements

The “Transport” network infrastructure that is referenced by INSPIRE is split into four high-level categories:

- ▶ Rail (including tracks and their uses, stations, bridges, tunnels etc. Importantly “rail” includes all rail types including underground, tramways, cable cars etc.)
- ▶ Road (including types, lanes, restrictions, speed limits, toll plazas etc.)
- ▶ Water (ports, internal waterways, ferry links etc.)
- ▶ Air (airports, heliports, air corridors etc.)

To date, Ordnance Survey has been the focus for this theme, given the expansive location information it holds. INSPIRE specifically precludes the need to publish duplicate information – so where there exist two datasets covering the same features, the “original” or most comprehensive, would be required. It is highly possible that there will be incidences where the best dataset for describing particular assets is held by an organisation within the DfT family, or the wider transport community. If this were the case, the responsible public body would be duty-bound to make the datasets available, or in the case of privately-owned data, to attempt to gain the owners’ permission to make the datasets available.

Examples of envisaged affected datasets could include road infrastructure information held by Highways Agency or Local Authorities, rail infrastructure information privately owned by Network Rail or held by London Underground Limited, aviation infrastructure information held by Civil Aviation Authority.

It is worth noting that the imminent publication of the Department’s Information Asset Register will make it far easier to identify where relevant datasets exist.

It may also be that it would be desirable to include some extant datasets in UK Location that are relevant but not compulsory. An example could be the NaPTAN database, which although not in scope, contains useful location-based information. In these cases, it would be necessary only for INSPIRE-compliant metadata to be created, and a View Service to be made available. No further action is mandatory for optional datasets.

PTIC

The Public Transport Information Coordination Group (PTIC) is a community enterprise, created and operated collaboratively by ATCO, RTIG and Traveline, with the active participation of DfT Transport Direct.

Its purpose is to provide coordination on UK activities relating to the compilation and presentation of public transport information, whether to the public or for operational purposes.

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