

Implementing INSPIRE

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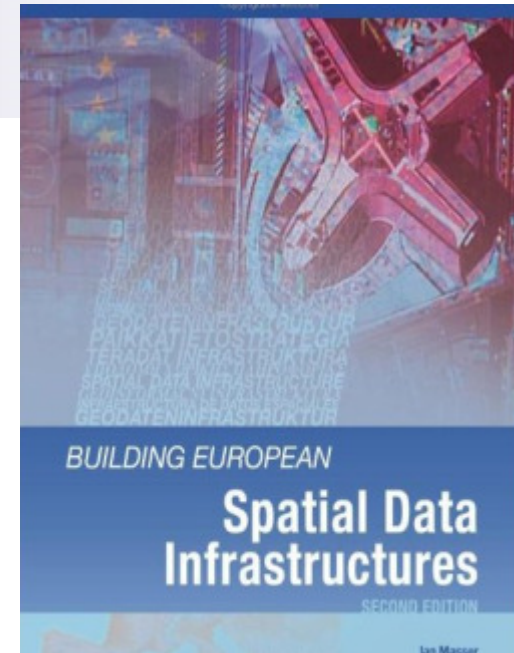


Presentation

- Four main objectives
 - To consider the origins of the INSPIRE Directive
 - To examine the Directive itself
 - To describe the implementing rules that are being developed to implement the provisions of the Directive
 - To evaluate the impacts of INSPIRE

Disclaimer

- My position on INSPIRE
 - Member of AGI's INSPIRE Action Working Group
 - Author of a book on Building European Spatial Data Infrastructures which deals with INSPIRE
 - Involved in several EC funded INSPIRE related initiatives (eg JRC regional SDI workshop, eSDI-NET+ and INSPIRE /NSDI State of Play projects)
- But not formally involved in implementing INSPIRE itself



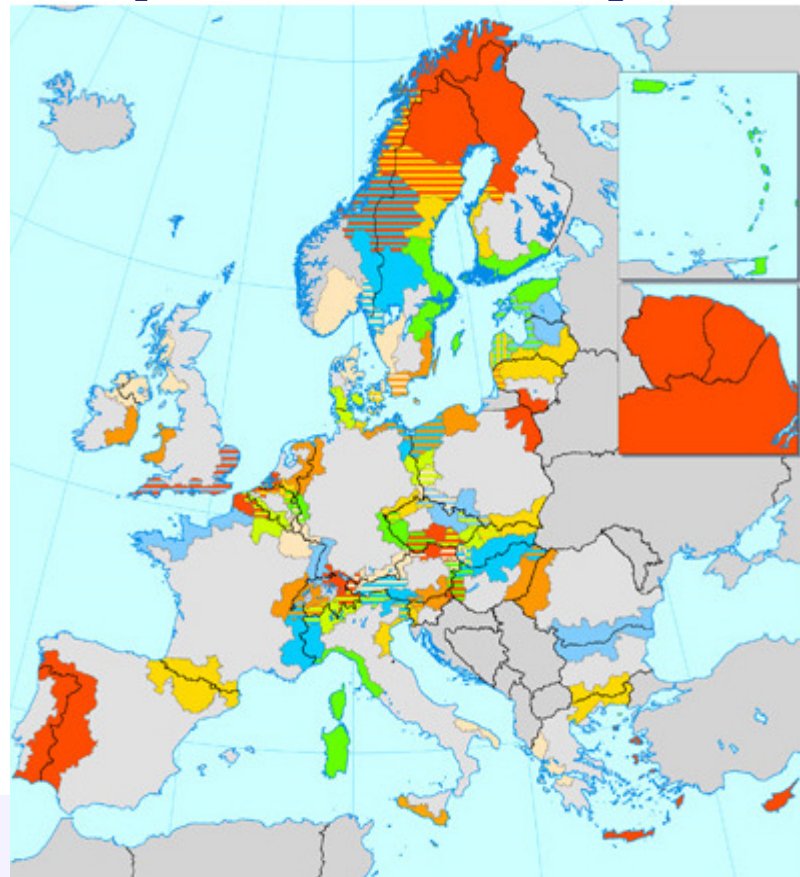
What is INSPIRE?

- INSPIRE = Infrastructure for Spatial Information in Europe
- A legislative framework
 - Commission of the European Communities, (CEC). Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE).
 - All 27 national member states required to transpose its provisions into national legislation within two years, ie by May 15th 2009.
 - Statutory Instrument 2009 No. 3157 of 2009. Environmental Protection: Public Sector Information, The INSPIRE Regulations 2009
 - Scottish Statutory Instrument No. 440 of 2009. Environmental Protection: Public Sector Information, The INSPIRE (Scotland) Regulations 2009

Why INSPIRE?

- Border region strategies
 - Large proportion of population live in border regions
 - Local policing, emergency services and transport cross national borders
- River basin management
 - Danube and Rhine account for majority of European land area
- Need for greater data harmonisation
- Considerable variations between countries in SDI development

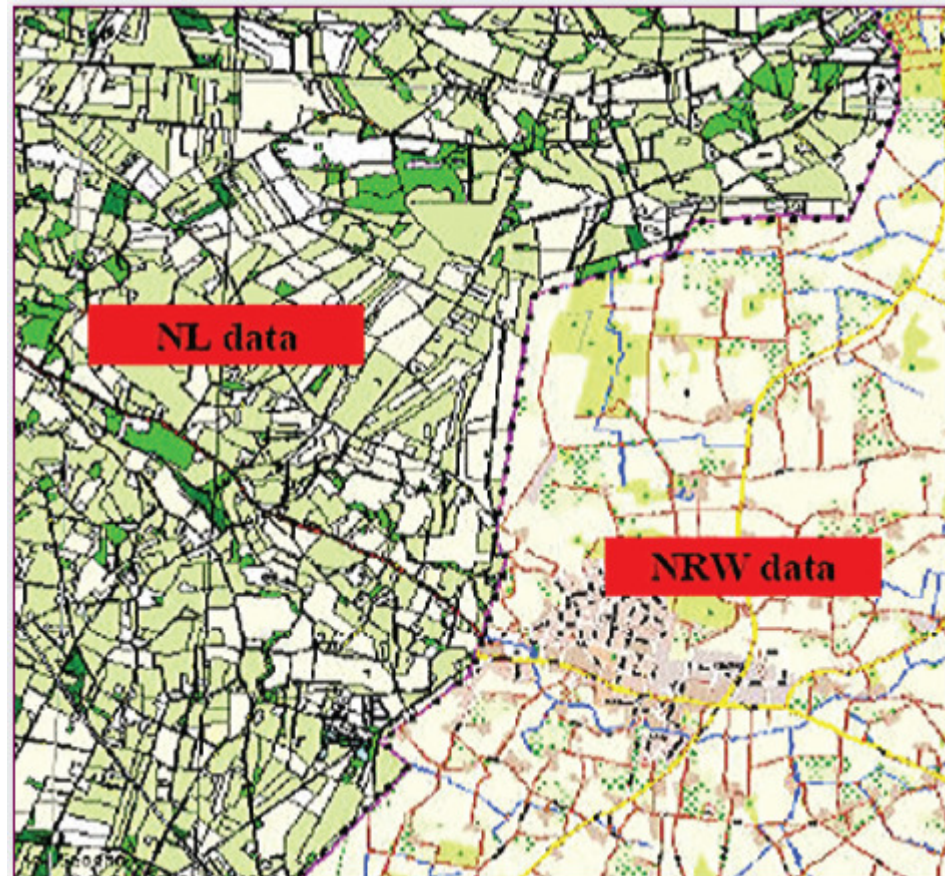
Cross-border programmes under the European Territorial Cooperation Objective



Why INSPIRE? Environment knows no borders



Anomalous cross border data



INSPIRE principles

- Data should be collected only once and kept where it can be maintained most effectively.
- It should be possible to combine seamless spatial information from different sources across Europe and share it with many users and applications.
- It should be possible for information collected at one level/scale to be shared with all levels/scales; detailed for thorough investigations, general for strategic purposes.
- Geographic information needed for good governance at all levels should be readily and transparently available.
- Easy to find what geographic information is available, how it can be used to meet a particular need, and under which conditions it can be acquired and used.

The INSPIRE Directive

- **Basic principles**
 - Need for coordination of information required for environmental decision making
 - Applies primarily to spatial data held by public authorities
 - Does not set requirements for the collection of new data
 - Promotes network services to facilitate data sharing
- **Five main themes**
 - Metadata
 - Interoperability of spatial data sets and services
 - Network services
 - Data sharing
 - Monitoring and reporting

INSPIRE data requirements

Annex I

- Coordinate reference systems
- Geographical grid systems
- Geographical names
- Administrative units
- Addresses
- Cadastral parcels
- Transport networks
- Hydrography
- Protected sites

Annex II

- Elevation
- Land cover
- Orthoimagery
- Geology

Annex III

- Statistical units
- Buildings
- Soil
- Land use
- Human health and safety
- Utilities and government service
- Environmental monitoring facilities
- Production and industrial facilities
- Agriculture and aquaculture facilities
- Population distribution - demography
- Area management/restriction/regulation zones and reporting units
- Natural risk zones
- Atmospheric conditions
- Meteorological geographical features
- Oceanographic geographical features
- Sea regions
- Bio-geographical regions
- Habitats and biotopes
- Species distribution
- Energy resources
- Mineral resources

INSPIRE Implementation

- Elements of three Commission Directorates
 - DG Environment acts as an overall legislative and policy co-ordinator
 - Eurostat acts as the overall implementation co-ordinator
 - The Joint Research Centre (JRC) acts as the overall technical co-ordinator
- With the help of
 - 221 Legally Mandated Organisations (LMOs) are all the Member States' public authorities, institutions and bodies who already have or will get a legal mandate to set up and run one or some of the components of national and regional SDIs (eg Ordnance Survey)
 - 405 Spatial data interest communities (SDICs) bundle the human expertise of users, producers and transformers of spatial information, technical competence, financial resources and policies (eg AGI)

INSPIRE implementation process

- Drafting teams prepare implementing rules for
 - Metadata
 - Network services
 - Data and service sharing
 - Monitoring and reporting
- Thematic working groups assist in the drafting of technical specification for the themes covered in the annexes of the INSPIRE directive
- Draft implementing rules submitted to INSPIRE Committee prior to their formal approval by the Commission

INSPIRE adoption road map

- Milestones

- 15 May 2007 **Entry** into force of the INSPIRE Directive
- 3 Dec 2008 **Adoption** of INSPIRE **metadata** regulation 1205/2008
- 5 June 2009 **Adoption** of Committee Decision regarding **monitoring and reporting**
- 19 Oct 2009 **Adoption** of INSPIRE regulation 276/2009 for **network services (discovery and view)**
- 29 Mar 2010 **Adoption** of INSPIRE regulation 268/2010 regarding **access to data sets and services**
- 23 Nov 2010 **Adoption** of amendment to INSPIRE regulation 276/2009 for **download and data transformation services**
- 23 Nov 2010 **Adoption** of INSPIRE regulation 1089/2010 regarding the **interoperability of spatial data sets for Annex I spatial data themes**
- May 2012 **Submission** for opinion of INSPIRE Committee of IR for the **interoperability of spatial data sets for Annex II and III spatial data themes**
- June 2012 **Submission** for opinion of INSPIRE Committee of IR for services **allowing spatial data services to be invoked**

INSPIRE implementation road map

- Milestones

- 15 May 2010 **Implementation** of provisions for monitoring and reporting
- 03 Dec 2010 **Metadata available** for spatial data sets and services corresponding to Annex I and II
- 30 Jun 2011 The EC establishes and runs **a geo portal at Community level**
- 19 Oct 2011 Implementation of Regulation as regards the access to spatial data sets and services
- 09 Nov 2011 Discovery and view services **operational**
- 23 Nov 2012 Implementation of Regulation regarding interoperability of spatial data sets and services for newly collected and extensively restructured Annex I spatial data sets
- Dec 2012 Transformation services **operational**
- Dec 2012 Download services **operational**
- 19 Apr 2013 Implementation of Regulation as regards the access to spatial data sets and services of the Member States
- 03 Dec 2013 Metadata available for spatial data corresponding to Annex III
- Dec 2014 Newly collected and extensively restructured Annex II and III spatial data sets **available**
- 30 May 2019 Other Annex II and III spatial data sets **available**

The current state of affairs

- INSPIRE at the crossroads
 - Legislative framework in place
 - At the European Union level
 - At the member state level
 - Implementing rules and regulations agreed apart from Annex II and III data and invoke services
 - Key dates for implementation between now and 2019 agreed

Implementing INSPIRE

- Shift now from Commission to member states
- Varying degrees of readiness
 - Between countries
 - Between central and sub national levels of public authorities in countries
- Consolidation of European GI Community
 - Common vision
 - Shared tasks

INSPIRE outcomes

- Potential benefits for environmental policy making and implementation
 - Benefits exceed costs by at least 6 to 1
- New approach to monitoring and reporting
 - Cuts down overlaps and redundancies and reduces administrative burden
- A foundation for a broader cross-sectoral tool that can be extended to other policy domains

Outstanding issues

- INSPIRE is a ground breaking initiative
- BUT
 - 27 different member states
 - At different stages of economic development
 - Long time scale
 - Current road map leads to 2020
 - Large number of stake holders
 - More than 130,000 municipalities in Europe
 - Differential distribution of costs
 - Heaviest costs incurred at sub national level (but also greatest benefits?)

Further information

- INSPIRE website

<http://inspire.jrc.ec.europa.eu/>