



The Infrastructure for Spatial Information in the EU INSPIRE Directive 2007/2/EC - State of Play -

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EEA- DG Environment – Joint Research Centre



Why INSPIRE ?

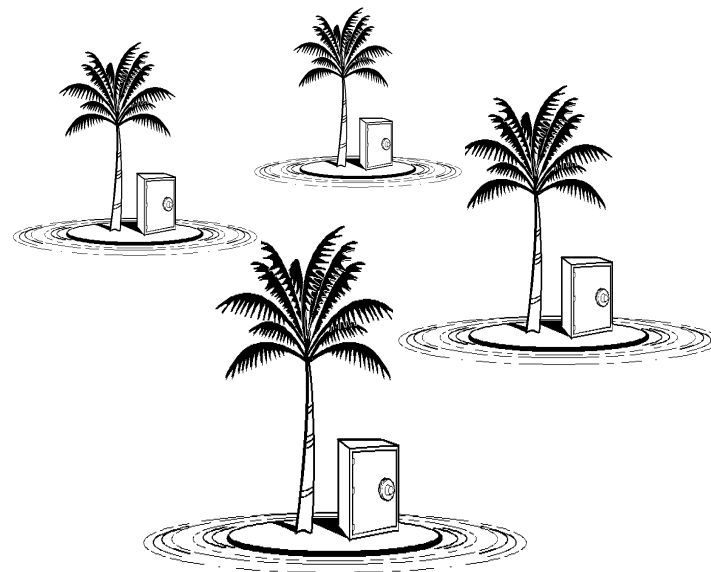
2002



Policy Needs

- **Better information** needed to support policies
- Improvement of existing **information flows**
- **Differentiation across regions** to be considered
- Revision of approach to reporting and monitoring, moving to concept of **sharing of information**

But ... EU has islands of information & data of different standards and quality...





Status 2002

Response



Situation in Europe

1. Data policy restrictions

- pricing, copyright, access rights, licensing policy

2. Lack of co-ordination

- across borders and between levels of government

3. Lack of standards

- incompatible information and information systems

4. Existing data not re-usable

- fragmentation of information, redundancy, inability to integrate

5. Missing data

6. Data quality

- Not comparable, not timely available, ...

NOT
INSPIRE

**July 2004 - EC Proposal
COM(2004) 516 for a Directive
establishing an infrastructure
for spatial information in the
Community – INSPIRE**

**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)**

**Entry into Force on
15 May 2007**

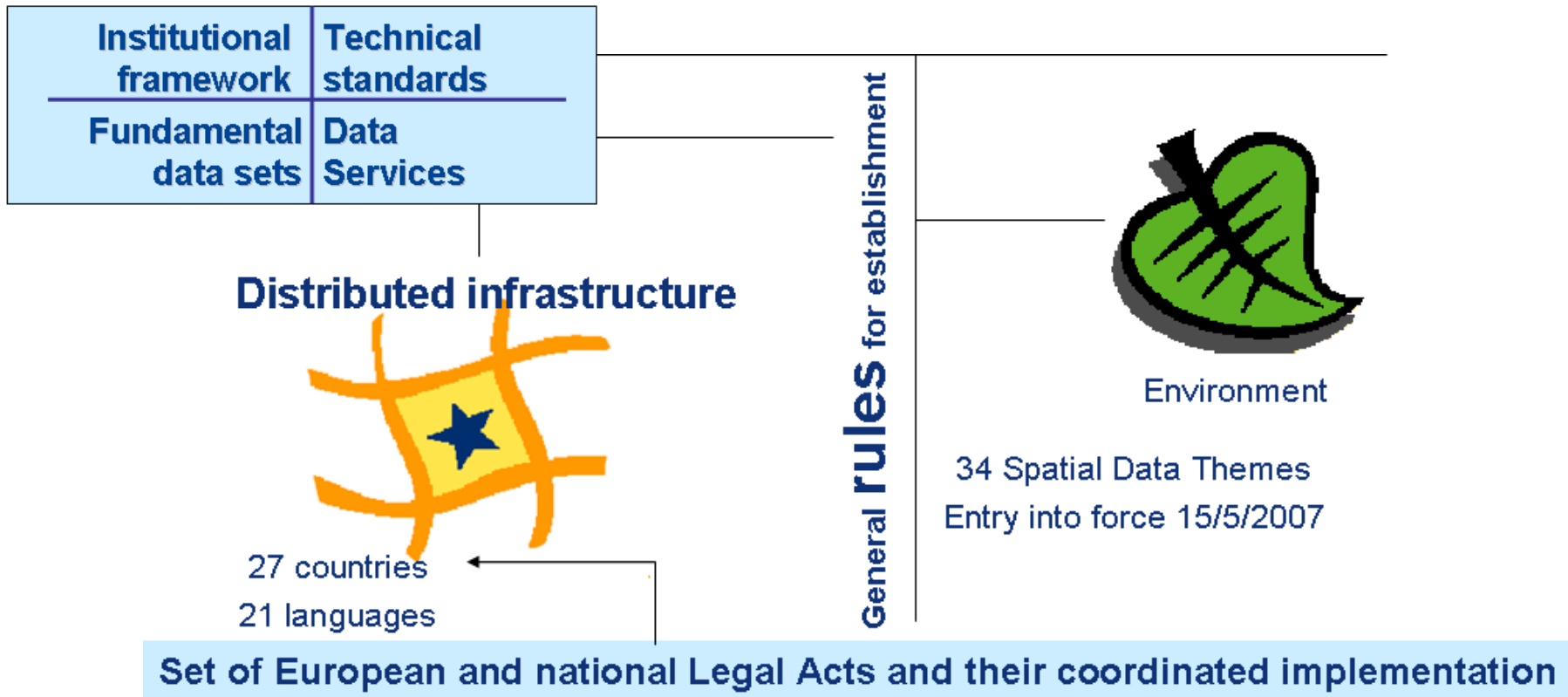
**Transposed in National Law by
15 May 2009**



What is INSPIRE?



“Infrastructure for Spatial Information in the European Community”

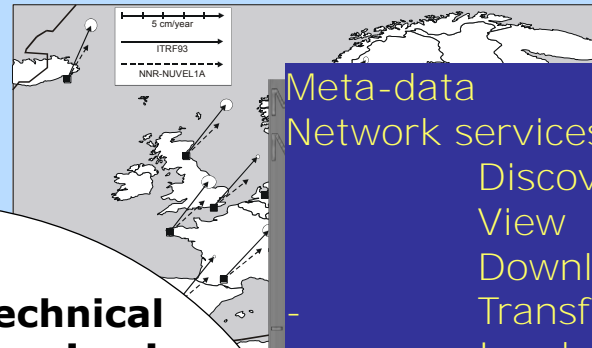
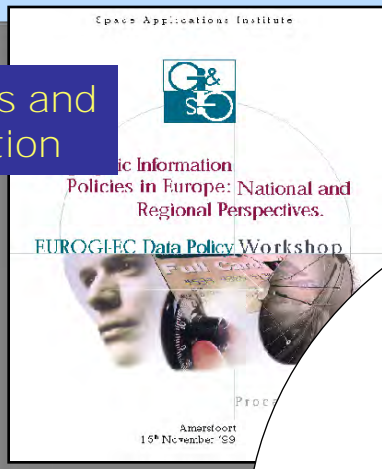


INSPIRE Directive 2007/2/EC

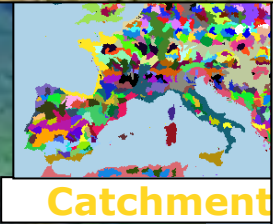
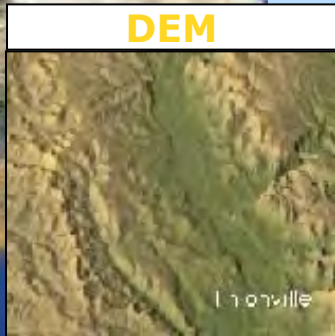
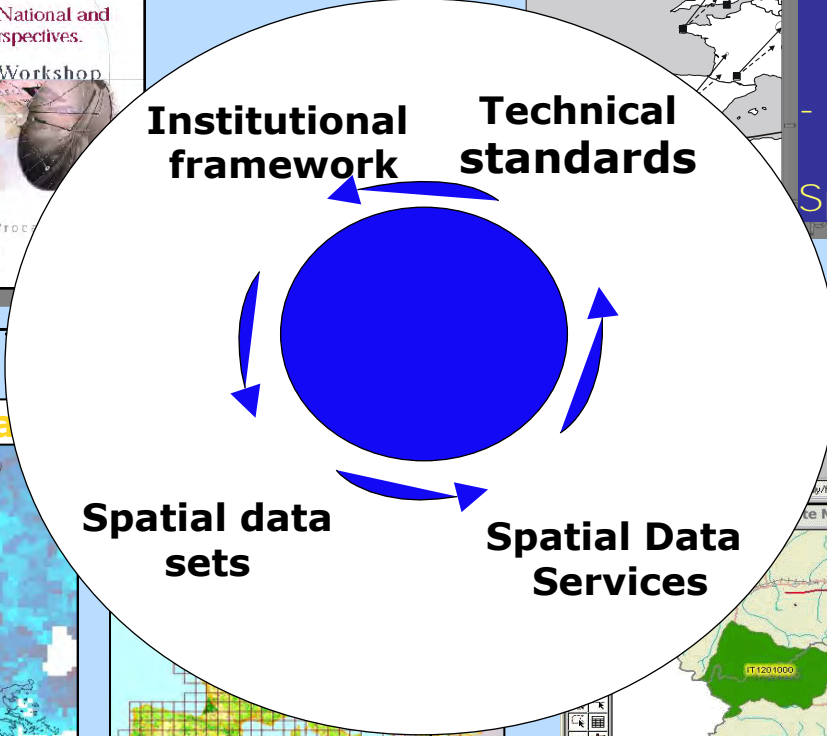


European
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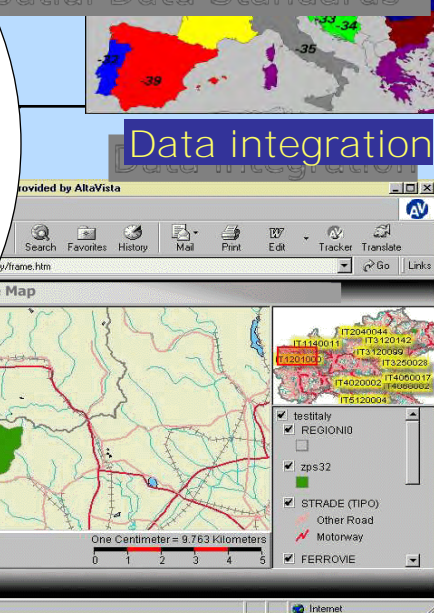
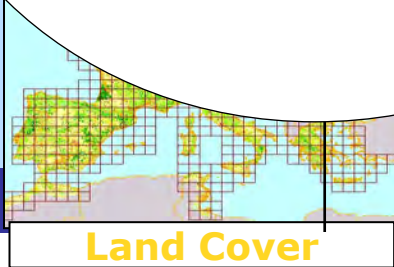
Data policies and
co-ordination



Meta-data
Network services
Discovery
View
Download
Transform
Invoke
Spatial Data Standards



Spatial data sets





European Commission

Use Cases



Reporting

Waste	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
...

SEVESO	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
...



- Urban Planning
- Water Management Plans
- Environmental Impact Assessment
- Risk Management
- Citizens Information
- Public Inspections

...

General Provisions

- **general rules** to establish an infrastructure for spatial information in Europe for the purposes of Community environmental policies and policies or activities which may have an impact on the environment
- based on the infrastructures for spatial information established and operated by the Member States
- **does not require collection of new spatial data**

Spatial Data Sets

- held by or on behalf of a public authority operating down to the lowest level of government when laws or regulations require their collection or dissemination
- 34 Spatial Data Themes

Data Policies : sharing between public bodies

Article 17

1. Each Member State shall adopt measures for the sharing of spatial data sets and services between its public authorities referred to in point (9)(a) and (b) of Article 3. Those measures shall enable those public authorities to gain access to spatial data sets and services, and to exchange and use those sets and services, for the purposes of public tasks that may have an impact on the environment.

2. The measures provided for in paragraph 1 shall preclude any restrictions likely to create practical obstacles, occurring at the point of use, to the sharing of spatial data sets and services.

Article 17: sharing

- open to:
 - **public authorities of other Member States**
 - **to the institutions and bodies of the Community**

COMMISSION REGULATION (EU) No 268/2010

- derogations:
 - **the course of justice, public security, national defence or international relations**
 - **Arrangements**
- arrangements:
 - **may be accompanied by requirements under national law conditioning their use.**

Data policy: sharing with the public

- Article 11: Network Services available to the public
 - **shall be easy to use**
 - **accessible via the Internet or any other appropriate means of telecommunication**
- Article 13: Derogations
 - **IPR, confidentiality, course of law, international relations, public security, national defence, protection environment, ...**
 - interpreted in a restrictive way, public interest test



Article 18

- Member States shall ensure that appropriate structures and mechanisms are designated for coordinating, across the different levels of government, the contributions of all those with an interest in their infrastructures for spatial information.
 - **users, producers, added-value service providers**
 - **user needs**
- The Commission at EU level assisted by relevant organisations and, in particular, by the European Environment Agency.



- Objective :
 - **To ensure that the spatial data infrastructures of the Member States are compatible and usable in an EU and trans-boundary context.**
- Scope of the Implementing Rules:
 - 1) Metadata
 - 2) Network Services
 - 3) Spatial Data and Spatial Data Service Specifications
 - 4) Data and Service Sharing
 - 5) Monitoring and Reporting

} Technical
} Procedure
- Adopted as Commission Regulations/Decisions (No transposition)
- Following a logical roadmap

Status 10 years ago...

- Important obstacles related to use of geospatial data*

- ✓ *Spatial data is often missing or incomplete*
- ✓ *The description of available spatial data is often incomplete*
- ✓ *Spatial datasets can often not be combined with other spatial datasets*
- ✓ *The system to find, access and use spatial data often function in isolation only and are not compatible with each other.*
- ✓ *Cultural, institutional, financial and legal barriers prevent or delay the sharing and re-use of existing data.*

INSPIRE evaluation process

- Joint EEA-JRC report

„Midterm evaluation report on INSPIRE implementation“

Based on:

- ✓ 2013 Member State implementation reports
- ✓ DG Environment public consultation (Dec 2013 – Mar 2014)
- ✓ INSPIRE evaluation report on technical implementation in Member States (consultants report) (April 2014)
- ✓ further references



*Do you think that the
development plan is -*

- A. Very good.*
- B. Incredibly good.*
- C. Extremely good.*

<http://www.eea.europa.eu/publications/midterm-evaluation-report-on-inspire-implementation>

Technical report No 17/2014








The INSPIRE Directive, which came into force in 2007 and is expected to be fully implemented by 2020, aims to establish a European Spatial Data Infrastructure in order to support policy making by providing more and better spatial data. The following report analyses the state of implementation of the Directive at the mid-point of its implementation. The conclusions of the report suggest that INSPIRE implementation is on track, however, certain actions - especially coordination and data sharing - would benefit from strategic adjustment.





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1. Have the initial problems evolved?

	Status	Comment
<i>Availability</i>		Increased availability of spatial data; new socio-technical developments
<i>Data quality</i>		Only indirectly addressed (through documentation)
<i>Organisation of data</i>		More awareness and coordination emerging between producers and users; interoperability increasing
<i>Accessibility</i>		Improvements mainly due to progress around metadata and technological developments e.g. network services
<i>Data sharing</i>		Has evolved due to open data agenda but much more remains to be done



2. Are the objectives still relevant to the initial issues – is a review needed?

Public consultation: 92.5 % consider INSPIRE objectives still relevant

	Status	Comment
<i>Documentation</i>	 *	Metadata availability and quality is evolving; finding and accessing data remains a barrier (44% of respondents)
<i>Services</i>	 *	Insufficiently implemented in a consistent way but progressing
<i>Interoperability</i>	 *	Issues persist since the majority of data under Annex II and III are not yet available
<i>Data and service policy</i>		A review of objectives is needed to overcome barriers in sharing (53% of spatial data with no adequate data policy)
<i>Coordination</i>		Objective needs a review to enable further improvement efforts (poorly coordinated policy initiatives)

* Existence of issues acknowledged but objectives are still valid as described

3. Do the actions need modification?

	Actions	Comment
<i>Creating metadata</i>		Handled by maintenance process
<i>Establishing network services</i>		Only integration of new technical approaches with network services
<i>Ensuring interoperability</i>		e.g. better sharing of Member State implementation measures
<i>Facilitating data and service sharing</i>		Improving arrangements to overcome differences amongst countries
<i>Coordinating the implementation</i>		Strengthening at EU level, in many countries and cross-border

Summary



- Implementation with some delay and non-uniformity
- According to 92 % of respondents, objectives remains pertinent
- So far in line with expected costs and benefits
- Major investments and benefits have yet to materialize
- Implementation has taken place in the most difficult financial circumstances in many European countries
- More effort is needed to embed INSPIRE into environmental legislation
- Improving coordination between neighbouring countries
- Technical complexity and communciation are main areas of concern.



United Nations



Economic and Social Council

“Building infrastructure for the gathering, validation, compilation and dissemination of geospatial information is as important to countries as the building of roads, telecommunications networks, and the provision of other basic services.

.... it is increasingly recognized that the major barriers and impediments to building geospatial information infrastructures will not be technical ones, but rather institutional and organizational”

INSPIRE
Infrastructure for Spatial Information in the European Community

European Commission > INSPIRE >

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INSPIRE DIRECTIVE

In Europe a major recent development has been the entering in force of the INSPIRE Directive in May 2007, establishing an infrastructure for spatial information to support Community environmental policies, and policies or activities which may have an impact on the environment.

INSPIRE is based on the infrastructures for spatial information established and operated by the 27 Member States of the European Union. The Directive at 24 spatial data themes needed for environmental applications, with key components specified through technical implementing rules. This makes INSPIRE example of a legislative 'regional' approach.

Legislation

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) was published in the Official Journal on the 25th April 2007. The INSPIRE Directive entered into force on the 15th May 2007.

To ensure that the spatial data infrastructures of the Member States are compatible and usable in a Community and transboundary context, the Directive that common Implementing Rules (IR) are adopted in a number of specific areas (Metadata, Data Specifications, Network Services, Data and Service Site Monitoring and Reporting). These IRs are adopted as Commission Decisions or Regulations, and are binding in their entirety. The Commission is assisted in the process of adopting such rules by a regulatory committee composed of representatives of the Member States and chaired by a representative of the Commission (this is known as the Comitology procedure).

- 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) 14.03.2007
- INSPIRE Metadata Regulation 03.12.2008
- Commission Decision regarding INSPIRE monitoring and reporting 05.06.2009
- Commission Regulation (EC) No 976/2009 of 19 October 2009 implementing 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) 19.10.2009
- Compendium to INSPIRE Metadata Regulation 15.12.2009
- Regulation on INSPIRE Data and Service Sharing 19.03.2010
- Commission Regulation (EU) No 1089/2010 as regards interoperability of spatial data sets and services 08.12.2010
- Commission Regulation amending Regulation (EC) No 976/2009 as regards download services and transformation service 10.12.2010
- COMMISSION REGULATION implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services 16.12.2010
- COMMISSION REGULATION amending Regulation 1089/2010 as regards interoperability of spatial data sets and services 05.02.2011

Featured News

- 08-Apr-2013 Favourable opinion from INSPIRE Committee on INSPIRE Annexes II and III [Read More](#)
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- 18-Dec-2012 INSPIRE Conference 2013 - call for papers [Read More](#)
- 16-Jul-2012 INSPIRE Annex II and III draft guidance documents [Read More](#)
- 14-Jun-2012 Technical Guidance for the implementation of INSPIRE Download Services: Published [Read More](#)



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- about 7 days ago RT @Henkjscholten #GWF2013 Jeroen Geocat his software is now used in 12 countries. Nice example of an SME which is successful by applying INSPIRE
- about 7 days ago RT @maxcraglia @INSPIRE_EU leveraging SME strengths for INSPIRE session on now at Geospatial World Forum.
- about 7 days ago RT @geoworldmedia SMEs strength for @INSPIRE_EU session at #GWF2013 by @GeodanNL @geocat_by @geosolutions_it @FaunaliaGIS @EpsilonItalia @Geograma_

Latest Tweets for #INSPIRE_EU

- about a day ago Sad I know but So excited about deploying and testing my first fully transformed #INSPIRE_EU test #OGC WFS 2.0 into the cloud using #QGIS.
- about 6 days ago RT @massimozotti: @LuigiZan showing Italian geospatial SMEs collaborating for innovation: #SINERGIS & @Planetek geo #LOD #Inspire_eu twitpic.com/cqyc9o
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Latest INSPIRE Forum News

- News: INSPIRE Conference 2013: Draft programme published INSPIRE Forum 15 days ago
- News: INSPIRE: New GCM version - including guidelines for implementing identifiers using URIs INSPIRE Forum 15 days ago
- News: GI2013 - Interregional-GI/GIS/GDI- Interoperability - FORUM in DRESDEN / Saxony IGN-SN 25 days ago
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