



INSPIRE from the JRC point of view

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European Commission
Joint Research Centre
Institute for Environment
and Sustainability
Digital Earth and Reference
Data Unit
www.jrc.ec.europa.eu

*Serving society
Stimulating innovation
Supporting legislation*

Joint
Research
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Outline

- JRC Overview
- INSPIRE process
- Recent developments
- Role of the JRC in INSPIRE
- Challenges
- Conclusion





JRC overview



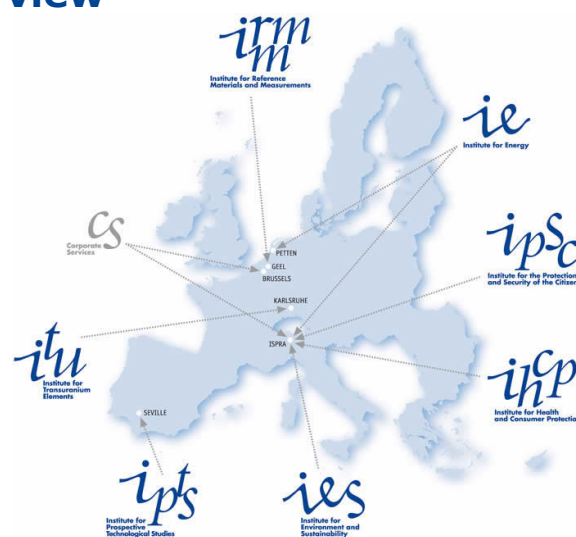
- Established in 1957 (Treaties of Rome).
- Is a department (Directorate-General, DG) of the EC providing independent scientific and technological support for EU policy-making
- It works closely on the development of EU legislation with the relevant Commission services, such as the Agricultural, Enterprise and Industry, Environment and Health, Connect and Consumers DGs
- Staff of around 2890
- Annual budget of around €330 million



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JRC overview



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INSPIRE process

"Infrastructure for Spatial Information in the European Community"



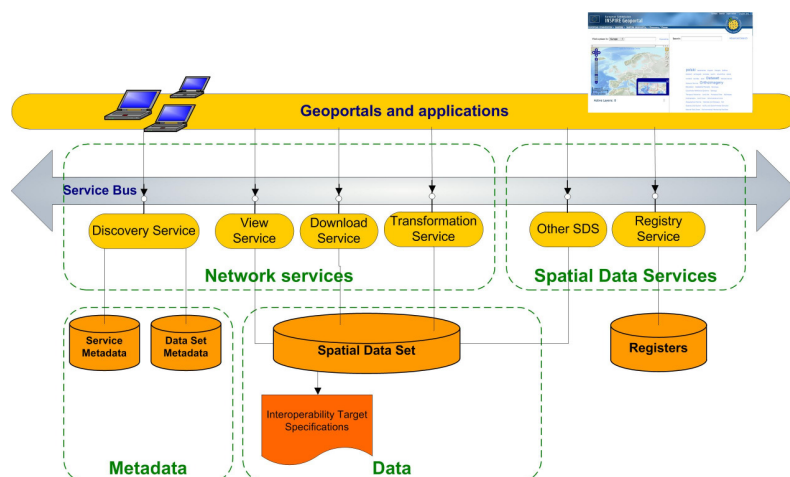
- INSPIRE is a Framework Directive
- Detailed technical provisions are laid down in Implementing Rules (IRs) on:
 - Metadata
 - Interoperability of spatial data sets and services
 - Network services (discovery, view, download, transform, invoke)
 - Data and Service sharing
 - Coordination and measures for Monitoring & Reporting
- Once adopted, IRs become European legislative acts and national law in 27 Member States and in some EFTA countries



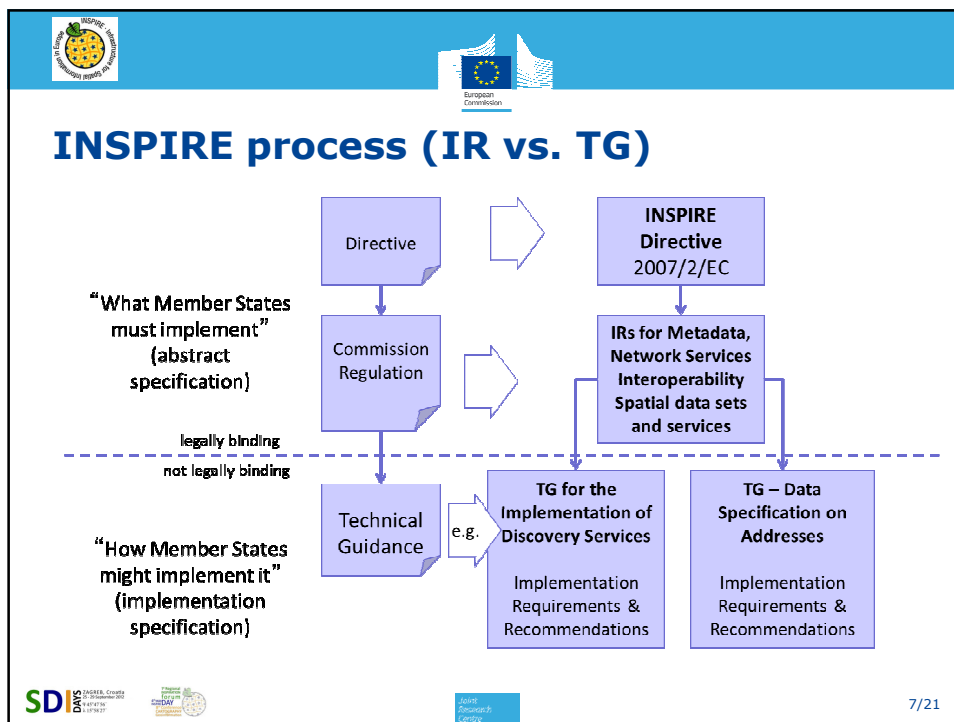
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INSPIRE process



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Recent developments

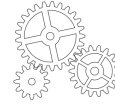
- INSPIRE Metadata Regulation published in December 2008
 - Two years for Member States to create metadata for Annex I and II, 5 years for Annex III
- Revised version of the TG to implement the Regulation using EN ISO 19115 Metadata and EN ISO 19119 Services was published on the INSPIRE web site in June 2010
- Metadata editor publicly available as part of prototype INSPIRE geo-portal

metadata describe definitions information Data

Logos at the bottom include SDI, INSPIRE, and the European Commission.



Recent developments



- INSPIRE Network Services Regulation published in October 2009 (Discovery and View)
 - TG Discovery Services and the INSPIRE View Service TG (Version 3.1) published on the INSPIRE web site in November 2011
- Commission Regulation as regards download services and transformation services was published in December 2010
 - The TG Coordinate Transformation Services, (V 2.1, 15/03/2010)
 - The TG Schema transformation services (V3.0, 15/12/2010)
 - The TG Download Services (V 3.0, 12/06/2012)



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Recent developments



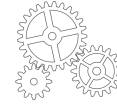
- INSPIRE Spatial Data Services and Invoke: Consultation started in August 2012
- The Initial Operating Capability Task Force (IOC TF) was set up in June 2009
 - Help and support Member States in the implementation of INSPIRE services
 - Ensure interoperability with the INSPIRE geo-portal of the EC
- IOC TF consists of the representatives from all MS (two representatives per MS), responsible for the Architecture design and the service implementation of the NSDIs



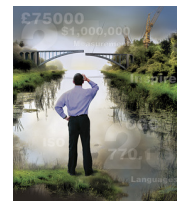
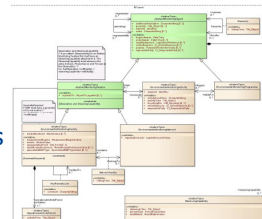
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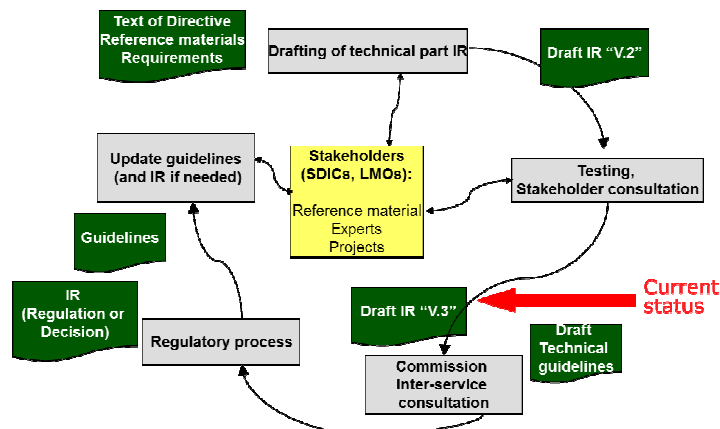
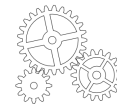
Recent developments

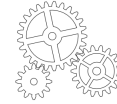


- Commission Regulation regards interoperability of spatial data sets and services has been published in November 2010
- Concerns the interoperability of spatial data sets for Annex I spatial data themes
- Data specifications (TGs) published in May 2010
- IR & DS for Annex II & III Data Themes are under development
- Draft TGs for all 25 themes published in July 2012



Recent developments



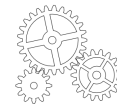


Recent developments

- Member States **will make available data** within the scope of INSPIRE using:
 - the same spatial object types (and definitions)
 - the same attributes (and definitions, types, code lists) and relationships to other types
 - a common encoding (format)
 - common portrayal rules (how data is displayed)
- This facilitates:
 - pan-European/cross-border aggregation and analysis
 - application development (e.g. information systems, reporting systems, forecasting models)



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Recent developments

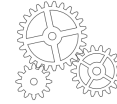
- The Commission Regulation regards the access to spatial data sets and services of the MS by Community institutions and bodies under harmonised conditions was adopted in March 2010
 - TG and a "Good Practice" document are available on INSPIRE web site
- The Commission Regulation regards monitoring and reporting was adopted in June 2009
 - In 2010 the first INSPIRE monitoring and reporting documents were provided by MS
- 6th edition of the State of Play reports is available that covers the period 2010 - 2011



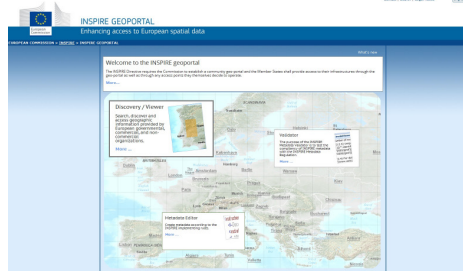
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Recent developments



- Operational INSPIRE geo-portal has been published



- It provides searching and viewing of spatial data sets from the EU Member States within the framework of the INSPIRE Directive



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Role of the JRC in INSPIRE



- The role of JRC in INSPIRE is in line with its mission which is to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of EU policies
- 2002 - MoU was agreed on cooperation between DG Environment, Eurostat and JRC for the first steps in the development of the INSPIRE initiative
- 2006 - MoU was updated ...
- Within the JRC, Digital Earth and Reference Data Unit (DERD), former SDI Unit, in the Institute for Environment and Sustainability (IES), is responsible for INSPIRE



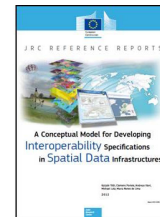
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Role of the JRC in INSPIRE



- Original role
 - Preparation of the INSPIRE IR for Metadata, Data specifications, Network services and Interoperability
 - Development and upgrading of the INSPIRE geo-portal
 - Technical coordination with other EU and international initiatives
 - Work with international standardisation bodies (e.g. ISO/TC211, CEN/TC 287 and OGC)
- In the meantime the role of Unit has evolved ...
 - Implementation and Development
 - Management and coordination of communication with SDIC and LMO
 - CB assessments



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Role of the JRC in INSPIRE

- Sharing Policies for Environment (SHAPE)
 - coordinate the development of the INSPIRE Directive and its IRs
 - support the policy development of the Shared Environmental Information System (SEIS)
 - support the interoperable development of international SDI initiatives
 - advance research in semantic interoperability and impact assessment
- Environmental Information Systems Implementation and Evolution (ENABLE)
 - coordinate the development of the INSPIRE geo-portal and facilitates the IOC TF
 - support the development and implementation of the IRs in MS
 - support the policy implementation of the SEIS
 - support the development of international SDI initiatives
 - contribute to the development of the next generation Digital Earth



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Challenges



- INSPIRE is an infrastructure currently built by 27 different countries using more than 23 languages!
- Existing standards have to be tested in real distributed and multilingual settings
- Some standards are still do not exist and some are not mature enough
- Organizational challenges in MS
- Capacity building
- Emphasis shifts from the EC to the MS
- Maintenance
- ...



Conclusions



- Clear results and benefits
- Collaboration
- Main stakeholders have been already “inspired” in MS and at the EU level
- The focus is now on MS!
- The role of JRC is indispensable

Annoni, A. (2011) :

**“Arguably there have been many ‘fathers’ of INSPIRE
but, as in real life, there can only be one ‘mother’ –
the JRC!”**



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

Thank you for your attention!



Questions?
Suggestions?



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