



# **INSPIRE from the JRC** point of view

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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

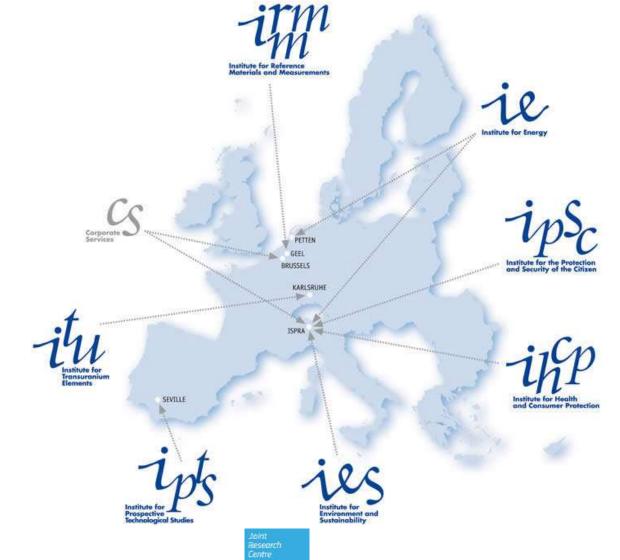








#### **JRC overview**





1. DAY





"Infrastructure for Spatial Information in the European Community"

### **INSPIRE process**

• INSPIRE is a Framework Directive





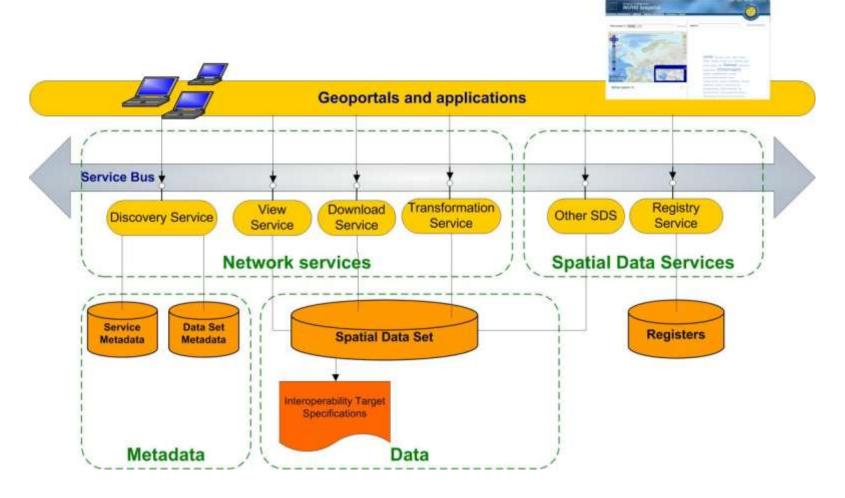
- Detailed technical provisions are laid down in Implementing Rules (IRs) on:
  - Metadata
  - Interoperability of spatial data sets and services
  - Network services (discovery, view, download, transform, invoke)
  - Data and Service sharing
  - Coordination and measures for Monitoring & Reporting
-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







#### **INSPIRE process**





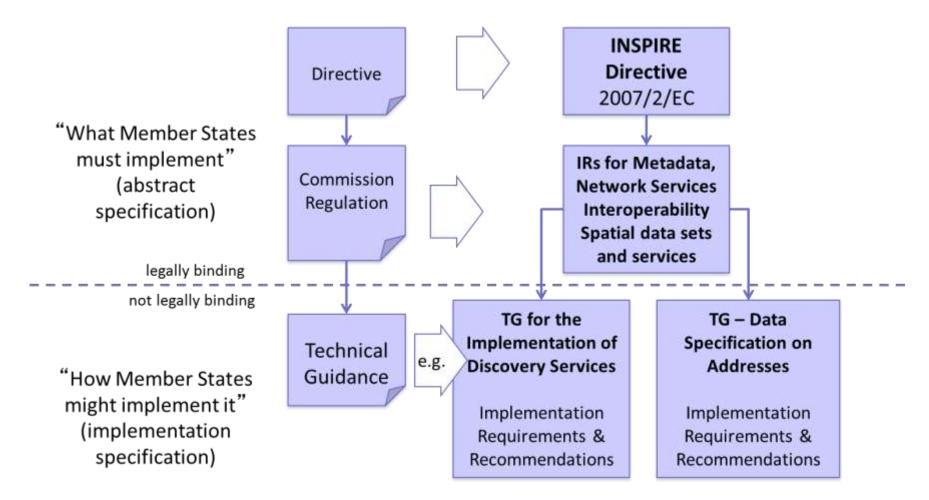








## **INSPIRE process (IR vs. TG)**





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- 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











- 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)











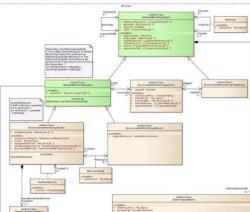
- INSPIRE Spatial Data Services and Invoke: Consultation started in August 2012
- The Initial Operating Capability Task Force (IOC TF) was set up in June 2009
  - Help and support Member States in the implementation of INSPIRE services
  - Ensure interoperability with the INSPIRE geo-portal of the EC
- 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





- **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





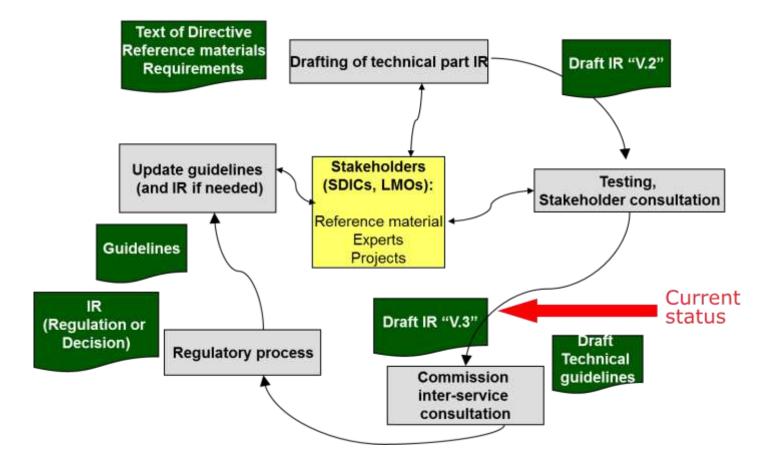
























- Member States will make available data within the scope of INSPIRE using:
  - the same spatial object types (and definitions)
  - the same attributes (and definitions, types, code lists) and relationships to other types
  - a common encoding (format)
  - common portrayal rules (how data is displayed)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













- 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 where provided by MS
- 6th edition of the State of Play reports is available that covers the period 2010 - 2011













• 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









# **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







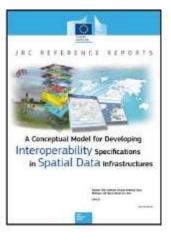
# **Role of the JRC in INSPIRE**

- 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













## **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 of international SDI initiatives
  - contribute to the development of the next generation Digital Earth











### 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?** 





