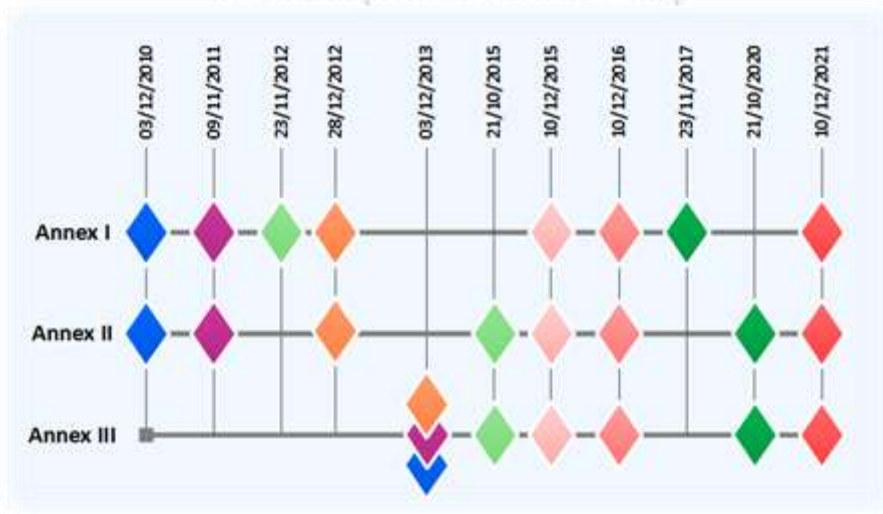


Supporting the implementation of INSPIRE

Michael Lutz

INSPIRE/GWF Conference, 25 June 2015, Lisbon



www.jrc.ec.europa.eu

*Serving society
Stimulating innovation
Supporting legislation*

Why implementation support?

- Reflect implementation experience in Technical Guidelines
- Additional Technical Guidelines
- Ensure consistency of infrastructure components
- Additional infrastructure components
- Simplifying implementation
- Sharing good practices

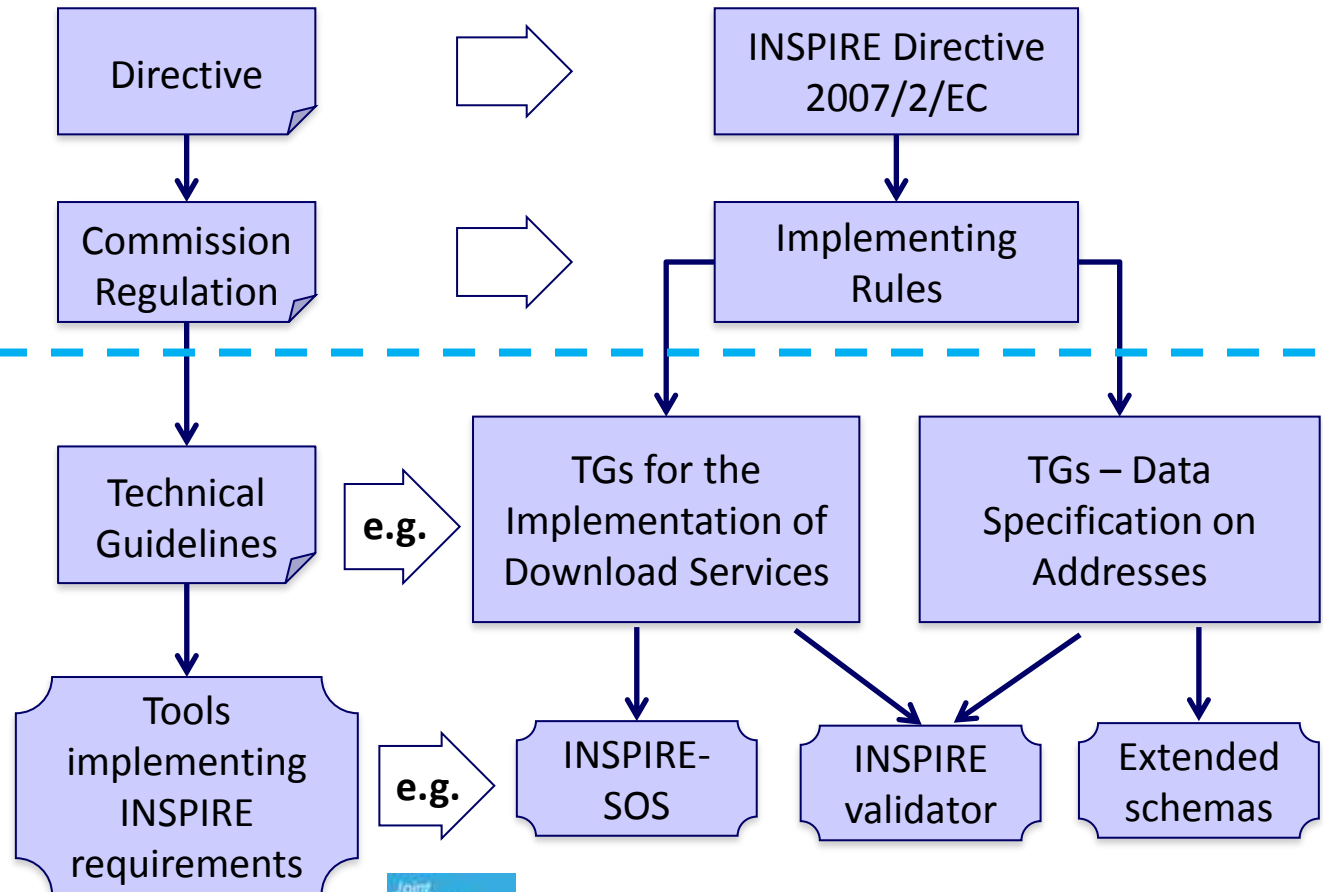
Implementing Rules (IRs), Technical Guidelines (TGs) and tools

“What Member States must implement”
(abstract specification)

legally binding

not legally binding

“How Member States might implement it”
(implementation specification)



Reflect implementation experience in TGs

Example: MIWP-8: Update of Metadata TGs

- Implementation experience since 2009
- Two updates planned June and December to address identified issues:
 - Metadata for SDS
 - Integrate metadata for interoperability
 - Language neutral identifiers
 - Unique Resource Identifier
 - Coupled resources
 - Conditions applying to access and use
 - Harmonized restrictions/licenses
 - Integrate Theme specific metadata
 - Relation to ISO19115-1:2014
 - Conformance classes in registry
 - Metadata for monitoring
 - Add Abstract Test suite



INSPIRE
Infrastructure for Spatial Information in
Europe

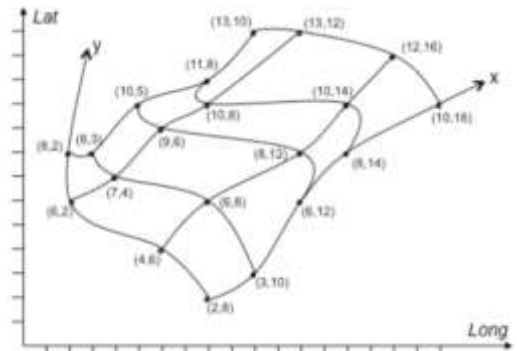
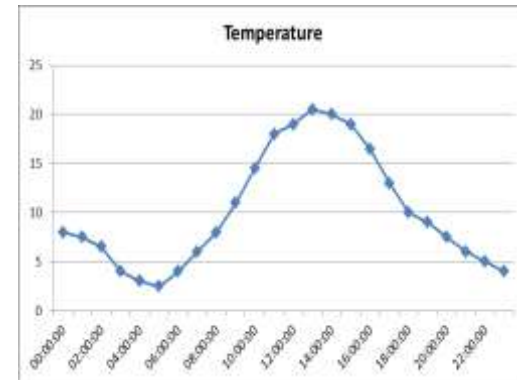
INSPIRE Metadata Implementing Rules: Technical Guidelines based on EN ISO 19115 and EN ISO 19119

Title	INSPIRE Metadata Implementing Rules: Technical Guidelines based on EN ISO 19115 and EN ISO 19119
Creator	Drafting Team Metadata and European Commission Joint Research Centre
Creation date	2007-10-26
Date of last revision	2013-10-29
Subject	INSPIRE Implementing Rules for Metadata
Status	V. 1.3
Publisher	European Commission Joint Research Centre
Type	Text
Description	Guidelines based on EN ISO 19115 and EN ISO 19119 for Commission Regulation (EC) No 1205/2006 of 3 December 2006 Implementing Directive 2007/2/EC of the European Parliament and of the Council as regards metadata
Contributor	See Acknowledgements
Format	Pdf
Source	European Commission Joint Research Centre
Rights	Public
Identifier	MD_IR_and_ISO_20131029.doc
Language	EN
Relation	Not applicable
Coverage	Not applicable

Additional TGs

Example: MIWP-7a/b: Extension of Download Service TG for observation and coverage data based on SOS/WCS

- Many Annex II+III data sets are based on observations or coverages
- Available solutions in TGs for Download services (WFS and Atom) not suited for providing direct access to observation or coverage data
- Additional opportunities for sharing data using SOS/WCS



Additional TGs

Example: MIWP-7a/b: Extension of Download Service TG for observation and coverage data based on SOS/WCS

- Technical Guidelines for Download Services based on SOS and WCS → INSPIRE SOS/WCS profiles
- Updated guidelines for the encoding observation and coverage data in INSPIRE
- Open Source INSPIRE compliant SOS 2.0 and WCS 2.0 implementations
- Analysis of the impacts (e.g. costs) of implementing the updated Technical Guidelines

Ensure consistency of infrastructure components

Example: MIWP-5 Validation and conformity testing

- In the implementation phase there is a great need of tools for validation (of metadata, services, data)
- Validation service available from JRC and some Member States
 - duplication of effort
 - potentially inconsistent results
- Software vendors claim that their products are INSPIRE-compliant without having undergone a certification process



Ensure consistency of infrastructure components

Example: MIWP-5 Validation and conformity testing

- Planned development of commonly agreed validation rules (and tools) for data, metadata & network services
 - Based on TG requirements → Abstract Test Suites (ATS)
 - MIG to jointly agree on the tests included in the validator
 - Investigate feasibility of executable tests and/or tools or services
- ATS work reveals several ambiguities and missing requirements in MD+NS TGs
- Discussion on possible compliance certification



Additional infrastructure components

Example:MIWP-6: Registries and registers

- Need for central INSPIRE registry for code lists and other artefacts (schemas, themes, concepts)
- MS need to build registries and use the central INSPIRE registers
- Guidelines needed for extending central INSPIRE registers → register federation
- Priorities for the further development (functionality and content) of the central INSPIRE registry to be discussed between the EC and MS



Additional infrastructure components

Example:MIWP-6: Registries and registers

- INSPIRE registry developed by JRC
 - based on Re3gistry software (developed in ARE3NA)
- MIWP-6 sub-group
 - Testbed and guidelines for registry federation
 - Requirements, priorities and feedback for the development of the INSPIRE registry & Re3gistry software
 - Define procedures and decision-making rules for a control body for the INSPIRE registry



The screenshot shows the INSPIRE Registry website interface. At the top, there is a header with the European Commission logo and the text "INSPIRE REGISTRY Enhancing access to European spatial data". Below the header, the main content area displays the "INSPIRE registry" details, including its ID, label, content summary, registry manager, and other formats. A "Registers" section is visible at the bottom, showing a list of registers with columns for "Items per page" and "Filter".

INSPIRE registry

ID: <http://inspire.ec.europa.eu/registry>

Label: **INSPIRE registry**

Content Summary: The INSPIRE infrastructure involves a number of items, which require clear descriptions and the possibility to be referenced through unique identifiers. Examples for such items include INSPIRE themes, code lists, application schemas or discovery services. Registers provide a means to assign identifiers to items and their labels, definitions and descriptions (in different languages). The INSPIRE registry provides a central access point to a number of centrally managed INSPIRE registers. The content of these registers are based on the INSPIRE Directive, Implementing Rule and Technical Guidelines.

Registry Manager: **European Commission, Joint Research Centre**

Other formats:  XML  XML Schema  RDF/XML  JSON  Atom  CSV

Registers

Items per page	Filter
14	Label
INSPIRE application schema register	
INSPIRE code list register	
INSPIRE feature concept dictionary	
INSPIRE glossary	
INSPIRE metadata code list register	
INSPIRE reference document register	
INSPIRE theme register	

Showing 1 to 7 of 7 entries

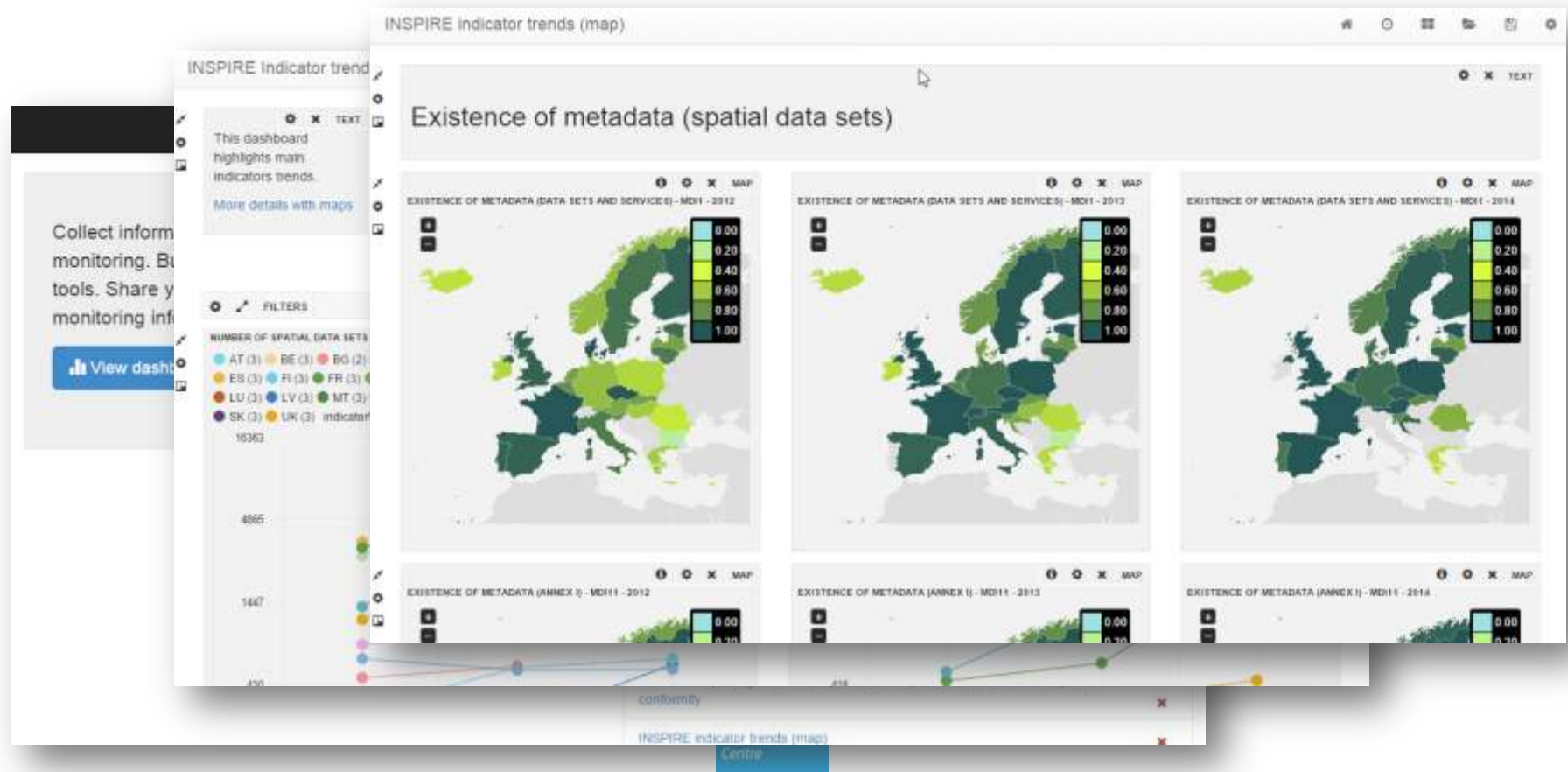
Simplifying implementation

Example: MIWP-16: Improve usefulness and reliability of monitoring

- Need to improve the usefulness and reliability of monitoring information
- Investigate how to automate the calculation of monitoring indicators while relying on metadata
- Design (and prototype) a dashboard providing access to all monitoring information and related indicators for every Member State
- Update the justification document for indicators and the TG on monitoring as appropriate

Simplifying implementation

Example: MIWP-16: Improve usefulness and reliability of monitoring



Sharing good practices

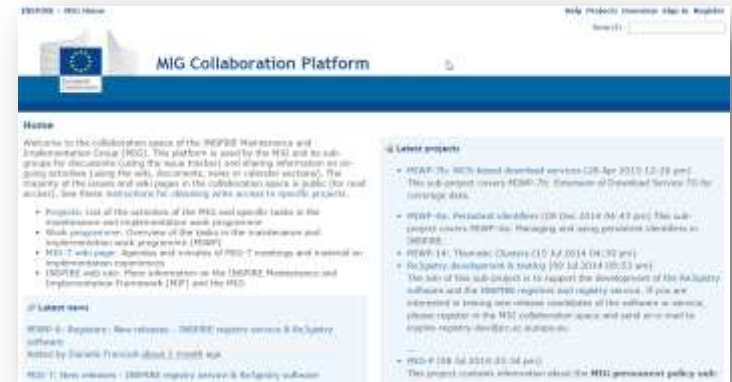
Many sessions 😊

- National implementation webinars
 - Netherlands, Spain, Poland, Sweden, Finland, Germany
 - <http://tinyurl.com/inspire-ms-impl>
- Implementation examples
- Good practices, e.g.
 - Extensions
 - APIs
 - Open data



Find out more

- MIG collaboration platform
 - <http://tinyurl.com/MIG-Platform>



Get involved

- Register in the **pool of experts**
 - <http://tinyurl.com/pool-experts>
- Participate in the **thematic clusters**
 - <https://themes.jrc.ec.europa.eu>
- Join a **temporary sub-group**
 - <http://tinyurl.com/mig-sub-groups>

- Give us **feedback**

