The INSPIRE registry – A central component of the infrastructure

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Overview

- Overview INSPIRE registry
- Re3gistry software v0.4
- Registry activities in the MIG
The INSPIRE registry in a nutshell

• Key infrastructure component
  ▪ provide unique and persistent identifiers for resources
  ▪ allow their consistent management and versioning
  ▪ items can be referred to unambiguously

• Registers for
  ▪ code lists and values
  ▪ feature concepts
  ▪ application schemas
  ▪ glossary
  ▪ reference documents
  ▪ possibly others (organisations, licences, layers, portrayal rules, encodings, ...)

• Based on Re³gistry software developed in ARe³NA ISA action
Features

• Current
  ▪ Multilingual content (based on IR content) and user interface
  ▪ Search, table filtering, sorting and pagination
  ▪ Formats: HTML, (bespoke) XML, JSON and Atom
  ▪ Support for external references
  ▪ Versioning of register items
  ▪ Improved register management, e.g.
    – user interface (supported ISO 19135 workflow)
    – incremental import

• Future plans
  ▪ Links to external extensions
  ▪ API
  ▪ Additional formats: (ISO 19135) XML, SKOS/RDF
ISA Action 1.17

**ARe³NA**
A Reusable INSPIRE Reference Platform

**Interoperability**

**Openness**

**Reuse**

**Collaboration**

Building a collaborative platform for sharing reusable INSPIRE components to aid INSPIRE implementation and cross-border/-sector interoperability
Data organization

Registers
- Application Schema register
- Theme register
- Codelist register
- ... register
- ... register

Items
- Application Schema
- Theme

INSPIRE Registry
Data organization

Registers

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- ... register
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Items

- Application Schema
- Theme
- Codelist

Item collection

- Codevalue
- Codevalue
- Codevalue
Data organization

INSPIRE Registry

Registers
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  - ... register
  - ... register

Items
- Application Schema
- Theme
- Codelist
  - Codevalue
    - Codevalue
      - Codevalue

Hierarchy

Item collection
Data model

Registry

Register

Item
- Label
- Definition
- Description
- Status
- Custom attributes

Item class
Technical details

**Backend**
- Apache Tomcat
- Java
- eclipse
- link
- PostgreSQL
- MySQL
- ORACLE
- SQL Server
- Apache Solr

**Frontend**
- APACHE HTTP SERVER
- HTML
- CSS
- jQuery
- Modernizr
- User interface
Re3gistry v0.4: What’s new?

• Simplified for easier reuse and personalization
• Support of ISO 19135 actions, workflow and versioning (supersession, retirement, ...)
• Simplified data input file
• Support to incremental updates (insert & update elements)
• Complete data consistency check included in the update procedure

Release ready for testing → take a flyer...
Re3gistry v0.4: Reuse & personalization

- Reorganisation into modules: main module and a list of add-ons with clear guide to customize the available modules or to extend the system creating new modules
Re3gistry v0.4: Structure

- Registers can be managed ISO 19135 actions
- The system produces static files suitable for a web service
Re3gistry v0.4: Data consistency

- Analyse input files and provide a detailed list of errors, in order to easily find and fix errors.
Re3gistry v0.4: Development status

- Software modularization: complete
- Data input file simplification: complete
- ISO 19135 action: complete
- Incremental data procedure: complete
- Versioning: complete
- Data consistency check: complete
- Testing & deployment: on-going
Re3gistry: Next steps

- RDF features
- Registry federations: linking national registers
- Additional formats: ISO 19135 XML, SKOS/RDF
- Advanced export, e.g. all languages, search results
- Include TG code list values
- Include external codelist values (for information)
- API

- [your suggestion here]
MIWP-6: Registries and registers

• Issue:
  ▪ MS need to build registries and use the central INSPIRE registers
  ▪ There are no guidelines how to build them, how to extend central INSPIRE registers and how to link national registers/extensions to the central INSPIRE registry.
  ▪ Priorities for the further development (functionality and content) of the central INSPIRE registry should be discussed between the EC and MS
MIWP-6: Registries and registers

- **Proposed change or action:**
  - Develop TGs / best practices explaining how to build registries and how to link them to EU registry
  - Provide requirements and set priorities for the development of the central INSPIRE registry and underlying Re3gistry software
  - Test new releases of mainly the service (and possibly the software) and provide feedback
  - Set-up a test-bed for connecting national registries to the central INSPIRE registry
  - Set-up a registry of registries that contains metadata for registries and registers in the Member States
  - Define procedures and decision-making rules for a control body for the INSPIRE Registry

- **Status**
  - Initial workshop in January 2014
  - MIG sub-group to be set up
Find out more...

- INSPIRE registry: http://inspire.ec.europa.eu/registry
- Re3gistry software on Joinup https://joinup.ec.europa.eu/software/re3gistry