

Testing INSPIRE Data Specifications

Input for Implementing Rules, Guidelines, and Implementation



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- Road Map:
 - Task 1: User requirements and use cases
 - Task 2: Analysis of the relevant reference materials
 - Task 3: “As-is” analysis
 - Task 4: Gap analysis
 - Task 5: Draft data specifications of Annex I data themes
 - Task 6: Testing of draft data specifications
 - Task 7: Adoption of IR for the interoperability and harmonisation of spatial data sets and services

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- Testing – Background & Overview
- Transformation Testing
- Application Testing
- Conclusion – The Role of Testing

- Goal of testing:
 - Feasibility of specifications and transformations required
 - Input to cost and benefits considerations

(Article 7, INSPIRE Directive: Implementing Rules (IRs) shall consider, amongst others, feasibility and cost-benefit aspects)
- Transformation testing of themes
 - Transform data in local schema -> INSPIRE-conformant schema
 - Measure
 - Technical feasibility
 - Related efforts / costs
- Application testing of themes (Use of themes)
 - Use case driven
 - Integration of spatial data (cross-theme)
 - Linking thematic information to data

- Contributors:
 - Legally Mandated Organisations (LMOs)
 - Spatial Data Interest Communities (SDICs)
- Roles:
 - Quantify the efforts related to transforming data from a local into INSPIRE-conformant schema
 - Based on own data
 - Demonstrate usefulness of harmonised schemas
 - Providers of free/commercial software tools for data (schema) transformation
 - Demonstrate the efficiency of their solutions in the transformation process
 - May use any data (e.g., offered by LMOs for this purpose)
 - Demonstrate usefulness of harmonised schemas

- Some SDIC/LMO already expressed interest
 - Open for all
- Terms of reference will be published end July 2008
 - Part of call for interest to participate (SDICs, LMOs)
 - Based on in kind / voluntary participation
- Indication of interest by 2nd half of September 2008
 - Draft data specifications available
- Testing finished by January 2009
- Comments resolution workshop 19-20 February 2009

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Data Specification:

- 1 Scope
- 2 Overview
- 3 Specification scopes
- 4 Data product identification
- 5 Data content and structure
- 6 Reference systems
- 7 Data quality
- 8 Metadata
- 9 Delivery
- 10 Data Capture (optional)
- 11 Portrayal

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Generic comparisons between source and target schemas: level of detail (can generalisation-specialisation hierarchies be discovered?)

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Feasibility test of application schema:

- Can local data be mapped to schema?
- Existing data cover the content required?
- Resources required (costs)?

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Metadata available that can fulfill requirements from specification?

Data Specification:

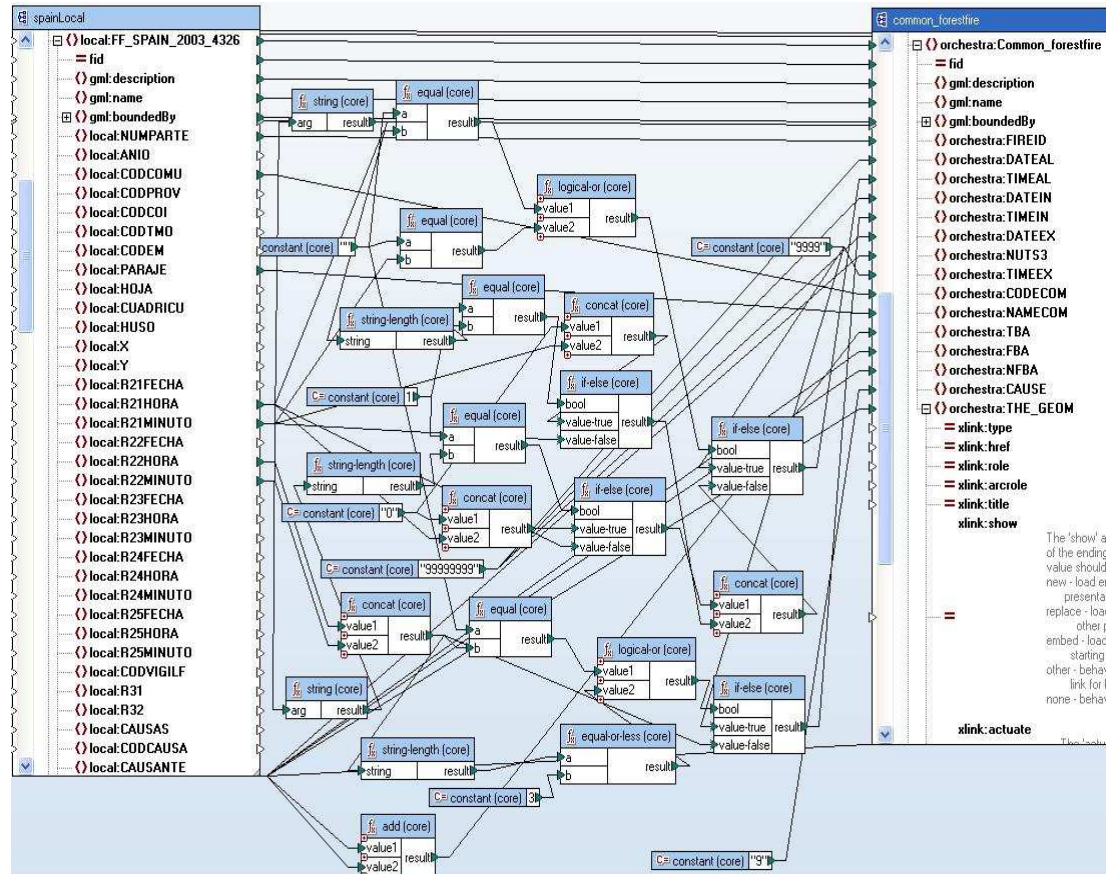
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Styling data according to the specification

- Test conducted separately for each data theme
- Off-line/on the fly on-line
- Data base mapping
 - Views
- ETL (Extract, Transform, Load)
 - Various tools available
- XML technologies
 - Stylesheets

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- (Ideal) Scenario 1
 - Fully implement operational use-case using INSPIRE-conformant data
 - Investigate how different themes operate together
 - Compare with a baseline situation (non INSPIRE)
 - Benefits
- Scenario 2
 - Reduced scope, but still based on a real world use-case
 - Partial implementation
 - Investigate how different themes operate together
 - Compare with a baseline situation (non INSPIRE)
 - Benefits
- Successful test
 - Application can use the data from the various MS without repetitive manual intervention
 - Application can perform all necessary actions to execute the use case
 - Shown benefits

- Can selected use cases be implemented by proposed INSPIRE data specifications?
- How do the different themes operate together?
- Are there overlaps and inconsistencies between the themes?
- Usefulness and benefits?

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- Are transformations feasible (local -> INSPIRE)
 - Technical issues
- Quantify costs related to transformation
 - E.g., assessing the direct costs/efforts of preparing and executing transformation algorithms
- Identify likely benefits based on
 - Potential usages
 - Time savings
 - Syntactic harmonisation
 - Semantics harmonisation
 - Other

- EC will use the results (feedback) in designing the Implementing Rules
 - E.g., depending on feasibility specification elements may be either compulsory (legal text) or optional (guidelines)
- SDICs and LMOs can use the results
 - Evaluate how well they are aligned with the data specifications
 - Evaluate how to support the transformation process
 - Evaluate which datasets are relevant for INSPIRE

Thank you!