Revision of INSPIRE Directive

- Originating from European legal system
- Any EU Directive shall be revised
- For INSPIRE Directive is revision foreseen between 2013 and 2014

Conformity state-of-the-art

- Article 7.3 of INSPIRE Directive:
  
  „Member States shall ensure that […] spatial data sets and the corresponding spatial data services are available in conformity with the implementing rules […]“

- Conformity statement shall be included in metadata:
  - conformant
  - not conformant
  - not evaluated

- Conformity shall be included in INSPIRE monitoring and reporting.

The basic conformity question

Revision of INSPIRE Directive

- Conformance testing
- Data quality according to ISO 19157
- Changes in metadata Regulation
- European (Union) Location Framework
- Applying INSPIRE principles to open data
- INSPIRE profile for O&M
- VGI (Volunteer Geographic Information) and INSPIRE

…
Inspiration from ISO and OGC

- More detailed classification is desired
  - Benefits for users as well as data providers
- Abstract Test Suite
  - Principles of conformance testing in ISO and OGC follow ISO 19105
  - 1..N conformance classes (dealing with similar aspects)
  - Conformance class consists of 1..N tests
  - Passing all tests in one conformance class mean passing that conformance class
  - Passing all conformance classes mean overall „conformant“
  - Enables to distinguish e.g. a data set that fulfills all requirements except for e.g. a reference system

Abstract Test Suite (ATS)

- Methodology development:
  1. Analysis of requirements between legally binding and technical guidelines documents
  2. Common ATS for all INSPIRE data specifications
  3. Theme-specific ATS for each INSPIRE data specification

Conformity testing

- 7 conformance classes
  - 39 basic tests
  - Implementing Rules and Technical Guidelines tests
  - Applicable also for Annex I data specifications

Common part of the ATS

- 7 conformance classes
- 39 basic tests
- Implementing Rules and Technical Guidelines tests
- Applicable also for Annex I data specifications

Open questions

- So far, there is not any certification body, options:
  1) Conformity is declared by the data provider
  2) Certification by the INSPIRE national contact point
  3) Certification by the JRC
- Still only option No. 1)

Situations in conformance testing

1. I have all spatial data objects, attributes, etc.
2. I have only few spatial data objects, etc.
3. I have all spatial data objects, attributes, etc. plus some more.
Conformity statement in metadata

- Legal requirement to declare "only" conformity to
  Commission Regulation No. 1089/2010
- Possibility to declare conformity with technical guidelines (data specifications)
- Possibility to declare conformity through ATS' conformance classes

<table>
<thead>
<tr>
<th>Conformance class</th>
<th>Conformity statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application schema</td>
<td>conformant</td>
</tr>
<tr>
<td>Extended application schema</td>
<td>conformant</td>
</tr>
<tr>
<td>Reference systems</td>
<td>conformant</td>
</tr>
<tr>
<td>Data quality</td>
<td>conformant</td>
</tr>
<tr>
<td>Metadata</td>
<td>conformant</td>
</tr>
<tr>
<td>Encoding</td>
<td>not conformant</td>
</tr>
<tr>
<td>Portrayal</td>
<td>conformant</td>
</tr>
<tr>
<td>OVERALL RESULT</td>
<td>NOT CONFORMANT</td>
</tr>
</tbody>
</table>

Data quality according to ISO 19157

- ISO 19113 and 19114 are being replaced by ISO 19157
- New data quality elements
- Binding since 23. 11. 2012
- XSDs foreseen for December 2014
- JRC may propose needed XSDs
- CEN may adopt such JRC proposal
- ISO may adopt such CEN proposal

European (Union) Location Framework

- 2 main projects:
  - European Union Location Framework (EULF)
  - European Location Framework (ELFI)
- JRC, EuroGeographics, other partners, selected experts
- Both projects aim at enhancing the INSPIRE principles into e-government

INSPIRE profile for O&M

- O&M is very generic
- INSPIRE makes the O&M specification more strict
- Applicable only to Annex II and III data
- Currently version 1.7
- Not publicly available

Observations & Measurements concept in INSPIRE

Currently used in several spatial data themes

- Geology
- Oceanographic geographic features
- Atmospheric conditions
- Meteorological geographic features
- Environmental Monitoring Facilities
- Soil
INSPIRE maintenance

- INSPIRE 2.0 ?