



INSPIRE action 2017.2 on Alternative Encodings

Joint Research Centre

The European Commission's science and knowledge service



European
Commission

Context

- The consumption of INSPIRE data is not easy
 - TG define complex data structures
 - Existing applications (libraries, web, desktop, mobile) have difficulties to consume the content
 - Rapid evolution of mainstream ICT
- On-going action under the INSPIRE maintenance and implementation work programme to define **alternative encodings**

Key pillars of data interoperability

Conceptual data models

- objects types, properties & relationships
- cross-domain harmonization
- based on a common modelling framework
- managed in a common UML repository

Encoding

- conceptual models independent of concrete encodings
- standard encoding: GML, but also possible to derive other encodings (e.g. based on RDF)

Harmonised vocabularies

- achieve better interoperability than free-text and/or multi-lingual content
- allow additional terms from local vocabularies
- 400 code lists & almost 5000 values in central register

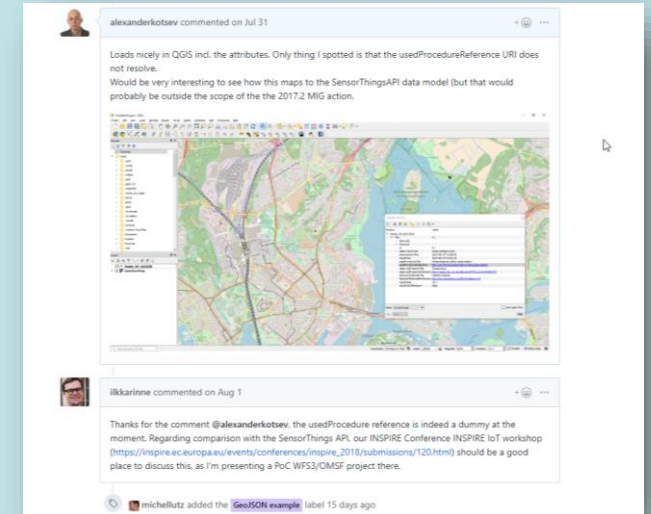
Registers

- provide unique and persistent identifiers for reference to resources
- allow their consistent management and versioning

2017.2: Alternative (to GML) encodings

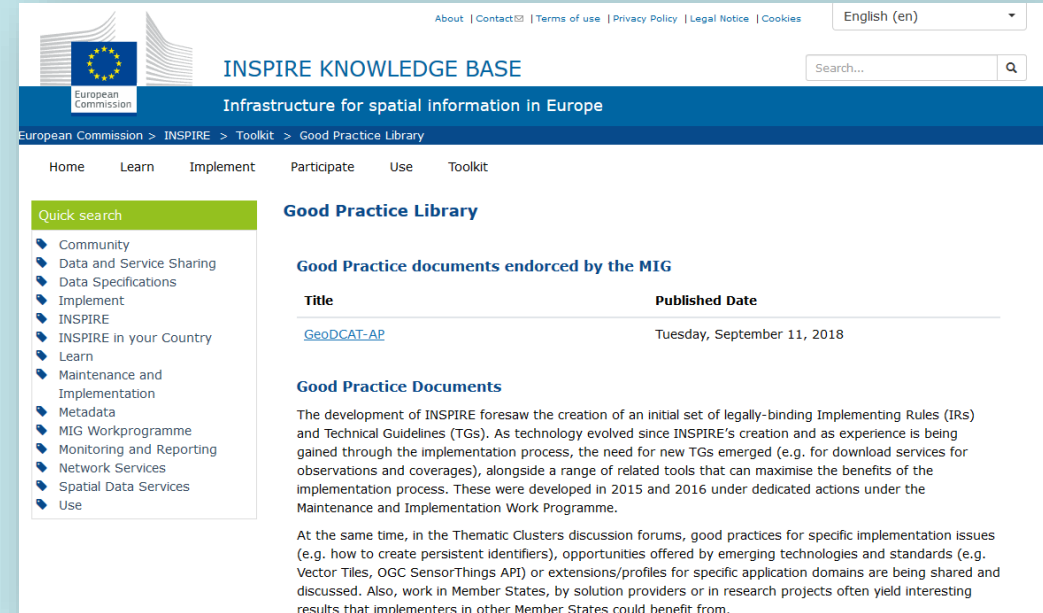
• Tasks

1. Encoding rule for GeoJSON (as a first example)
→ Good Practice document 1
 2. Generic rules / approaches for simplifying INSPIRE data models (useful for a number of alternative encodings)
→ Good Practice document 2
 3. Specific GeoJSON encodings (combining (1) and (2)) for Addresses, Environmental Monitoring Facilities & observations (as initial examples)
- Github working space: <https://github.com/INSPIRE-MIF/2017.2>
 - Other alternative encodings (e.g. GeoJSON for other themes, RDF, Geopackage, ...) can be proposed in the future following the INSPIRE Good Practice procedure



INSPIRE Good practices - procedure

- **Step 1.** Initiation using a "good practice fiche"
 - evidence that the solution has been put into practice, and
 - has received broader support
- **Step 2.** Outreach through a webinar
- **Step 3.** Submission for inclusion in a good practices section in the INSPIRE Knowledge Base
 - ideally with support from one or several INSPIRE MS representatives
- **Step 4.** Opinion of the MIG to endorse, ask for clarification or reject the good practice
- **Step 5.** Feedback from users through the good practice repository



The screenshot displays the INSPIRE Knowledge Base website. At the top, there is a navigation bar with the European Commission logo, the text "INSPIRE KNOWLEDGE BASE", and a search bar. Below this is a blue header with the text "Infrastructure for spatial information in Europe". The main content area is titled "Good Practice Library" and features a "Quick search" box on the left with a dropdown menu containing various categories like "Community", "Data and Service Sharing", "Implement", etc. The main content area lists "Good Practice documents endorsed by the MIG" with a table showing the title "GeoDCAT-AP" and the published date "Tuesday, September 11, 2018". Below this, there is a section for "Good Practice Documents" with a paragraph of text explaining the development of INSPIRE and the role of the MIG.

<https://inspire.ec.europa.eu/portfolio/good-practice-library>

Next steps

Adoption of GP documents

- Presentation of the Good Practice documents in a public webinar (today)
- Development of example implementations (until end of May)
- Public review (until end of May)
- Proposal for endorsement by the MIG (June meeting)

Other activities

- Work on other alternative encoding proposals (e.g. Geopackage)
- Challenge for the INSPIRE Helsinki workshop on 22-24 October 2019