UN-GGIM: Europe core data to complement the INSPIRE framework – second step

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Introduction
What is UN-GGIM?

• United Nations initiative on Global Geographic Information Management

• Since 2011

• Strong implication of the statistical community

• Activities at:
  – Global level
  – Regional level: Europe, Africa, ...
What is core data?

• Core data is priority data
  – Geographic data
  – The most useful to analyse, achieve or monitor the SDG (Sustainable Development Goals)
  – Directly or indirectly
How is core data complementing INSPIRE?

• INSPIRE is about harmonisation of existing data
  – Common model
  – Still heterogeneous content (no LoD, voidable attributes)

• Core data is about encouraging production of new data (or upgrade of existing data)
What was first step?

Selection of core data themes

<table>
<thead>
<tr>
<th>Annex I</th>
<th>Annex II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinate Reference Systems</td>
<td>Elevation</td>
</tr>
<tr>
<td>Geographical Grid Systems</td>
<td>Land Cover</td>
</tr>
<tr>
<td>Geographical Names</td>
<td>OrthoImagery</td>
</tr>
<tr>
<td>Administrative Units</td>
<td>Geology</td>
</tr>
<tr>
<td>Addresses</td>
<td></td>
</tr>
<tr>
<td>Cadastral Parcels</td>
<td></td>
</tr>
<tr>
<td>Transport Networks</td>
<td></td>
</tr>
<tr>
<td>Hydrography</td>
<td></td>
</tr>
<tr>
<td>Protected Sites</td>
<td></td>
</tr>
</tbody>
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<thead>
<tr>
<th>Annex III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistical units</td>
</tr>
<tr>
<td>Buildings</td>
</tr>
<tr>
<td>Soil</td>
</tr>
<tr>
<td>Land use</td>
</tr>
<tr>
<td>Human health and safety</td>
</tr>
<tr>
<td>Utility and governmental services</td>
</tr>
<tr>
<td>Environmental monitoring facilities</td>
</tr>
<tr>
<td>Production and industrial facilities</td>
</tr>
<tr>
<td>Agricultural and aquaculture facilities</td>
</tr>
<tr>
<td>Population distribution - demography</td>
</tr>
<tr>
<td>Area management/restriction/regulation</td>
</tr>
<tr>
<td>Natural risk zones</td>
</tr>
<tr>
<td>Atmospheric conditions</td>
</tr>
<tr>
<td>Meteorological geographical features</td>
</tr>
<tr>
<td>Oceanographic geographical features</td>
</tr>
<tr>
<td>Sea regions</td>
</tr>
<tr>
<td>Bio-geographical regions</td>
</tr>
<tr>
<td>Habitats and biotopes</td>
</tr>
<tr>
<td>Species distribution</td>
</tr>
<tr>
<td>Energy resources</td>
</tr>
<tr>
<td>Mineral resources</td>
</tr>
</tbody>
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What was first step?

• To know more:
  – Selection of core data themes
  http://un-ggim-europe.org/content/wg-a-core-data

• Specification of core data themes
  – Next year INSPIRE conference (may be)!
Second step
Objectives

• Work out ‘Recommendations for Content’ for the selected themes

• Based on
  – Existing standards: mainly INSPIRE
  – User requirements with focus on SDG related use cases
Principles

• Use INSPIRE specification as starting point
  – => common terminology

• Investigate user requirements
  – Bibliography
  – User interviews
  – Questionnaires
  – WG members expertise
Principles

• Decide on recommended levels of detail
• Decide on core content
  – Scope
  – Data model
  By restricting and/or by extending INSPIRE
• Propose quality rules
First results

• Recommendations for content (almost) ready for themes CP, AD, GN

• On-going work on remaining themes
First results

- Different focus / added value according to INSPIRE themes:
  - “well-defined themes” : CP, AD, AU, ...
    - Mainly quality criteria
  - “rich themes” with lots of features of attributes : TN, HY
    - Mainly extracting core information
  - “empty themes”: EL, OI, LC
    - Levels of detail
    - Content (DTM+DSM or just DTM, infra-red or just RGB, ...)
First results: examples (CP)

- Encourage cadastral parcels forming a partition of territory
  - Geographic extent: whole (land) territory
    - Cadastration of public domain encouraged
  - Completeness
  - Topology (no gaps or overlaps)
  - Cadastral parcels as single areas

- Encouraging efficient link with land registry
  - Model focus on national cadastral reference
  - Temporal consistency between cadastral map and land registry
First results: examples (GN)

• Restricting INSPIRE
  – Core data recommendation are for production
  – To avoid duplication of efforts, scope is limited to GN not in other themes
  – But to facilitate use, in delivery phase, it is of interest to combine all the Geographical Names of various themes: AU, HY, TN, ...
First results: examples (GN)

• Extending INSPIRE
  – For mapping use case, need of information on the “importance” of a named place
    • Selection according the scale / level of zoom
    • Relevant font for the label
First results: examples (GN)

- Extending / improving INSPIRE
  - INSPIRE data model has some information but as **subjective** criteria
  - Core data recommends to **focus on objective** criteria
    - Population (for named places)
    - Area (by representing named place with **true geometry** not just by a point)
First results: examples (AD)

- Production of true addresses
  - AD mainly used for geocoding
  - An AD should enable to find the related building
  - But in rural areas, the AD may be limited to the village name
  - Core data recommendation: create “true” AD (e.g. with street name + house number everywhere)
On-going discussions: examples

• Theme BU:
  – geometric representation: should 3D data be core? Is it key requirement?

• Theme US
  – Name of corresponding core theme: Basic Services
  – Restrict INSPIRE scope: only key features of Utility Network (power plants) and of Environmental Management Facilities (e.g. landfill)
  – Extend INSPIRE scope: all Governmental Services, including leisure ones
On-going discussions: examples

• Theme AM
  – Extend INSPIRE scope
    • Not only environment related AM
    • But also the AM related to economy and society (other SDG components)
  – Focus on specific areas
    • Generic areas (e.g. applying to all rivers or all buildings) not first priority
  – Add attribute to inform if geometry has legal value or not
  – Manage regulation texts and responsible authorities in other databases
Conclusions
Core data and INSPIRE

• INSPIRE:
  – (in theory) driven by pan-European or X-border use cases
  – interoperability of existing data => Common data models

• Core data:
  – Driven by the SDG => Mainly national or even local use cases (to achieve the SDG)
  – But common requirements => Common content
Core data and INSPIRE

Core data → Production of common content → Delivery of data according to common data model, format, services

Users get harmonised data with both common content and common structure
Core data and SDG indicators

- Core data: the most useful data to analyse, achieve or monitor the SDG (Sustainable Development Goals)

- Indicators require mainly statistical data but also geographic data
  - To display the results: AU, SU
  - To compute some indicators
    - Accessibility: TN, US, SU/PD, ...
    - Areas of interest and their protection: LC/LU, PS, AM, ...

Several core/INSPIRE themes involved