INSPIRE & NSDI SoP
Survey on use and usability

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Outline

• Background of the INSPIRE & NSDI SoP

• Key findings of the assessment of the State of Play in 2010

• Results of the survey on use and usability

• Feedback from the countries & conclusions
Background

- INSPIRE & NSDI State of Play started in 2009
  - Follow-up of the State of Play studies that started in 2002
- Objectives of the study
  - Collect and structure information on INSPIRE & NSDI developments in 34 countries in Europe
  - Assess the status of INSPIRE & NSDI implementation; analyse particular issues in more depth
  - Highlight ‘Good Practices’
  - Provide recommendations regarding further implementation of INSPIRE & NSDI in Europe
- Outcomes of the study
  - A series of deliverables integrating the feedback from the countries through dedicated workshops
Background

- MR Reports
  - 8 indicators

- Desktop Study
  - 34 country reports
  - Detailed Survey
  - SoP
    - 32 indicators

Assessment:
- Indicators
- Qualitative
- Conclusions
- Recommendations
1. Member States, but also non-Member States have transposed or on their way to transpose the INSPIRE Directive
   Although many were too late! Mainly due to difficulties to interpret parts of the INSPIRE Directive
2. Many countries have no strategic documents, implement INSPIRE & NSDI as it comes
   Very limited specific funding
3. The national level still seems to be the most important level for INSPIRE & NSDI implementation
   The sub-national and local levels are expected to become more important
4. Shift towards a more prominent role for the user communities, mainly the major Ministries (political lead)
   Often Mapping of similar Agencies take the operational lead
5. Data & service sharing policies are just to emerge in Europe
Most important findings 2010

1. Most countries are very active in developing the different parts of their NSDI: metadata, data & services
   - 11 countries have metadata for < 50% of the reported data sets
   - In 3 countries more than 50% of the data sets can viewed and downloaded

2. View services are very well developed, download and discovery services start to emerge now
   - 798 reported in 2010, 2338 in 2011 (around 75% viewing)

3. Although many countries are actively developing an INSPIRE geoportal, 13 of the countries that responded do not have one yet
   - Many activities in this field over the last year

4. In general terms, there is more and more focus on interoperability issues, and geo-standardization

5. In several countries the NSDI is broader than INSPIRE, while other countries put more or less everything under the INSPIRE umbrella
Survey on use and usability

• Gaining a better insight in the use and usability of INSPIRE & NSDI
  – Involvement of the user
  – Use of the infrastructure
  – Users and usage
  – Examples of use and benefits of use
Q1 – User involvement

• Q1.1 – Intended user community of INSPIRE & NSDI

<table>
<thead>
<tr>
<th>User Community</th>
<th>NSDI</th>
<th>INSPIRE</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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<tr>
<td>Individual citizen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NGO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic &amp; research sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public sector at local level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public sector at sub-national level</td>
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<td></td>
</tr>
<tr>
<td>Public sector at national level</td>
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INSPIRE Conference Edinburgh
Q1 – User involvement

- Q1.2 – User requirements study

<table>
<thead>
<tr>
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<tr>
<td>Yes</td>
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<td>24</td>
</tr>
<tr>
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</table>

<table>
<thead>
<tr>
<th>When</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Long time ago, Independent from the INSPIRE process</td>
<td>10</td>
</tr>
<tr>
<td>Once, prior to the INSPIRE transposition phase</td>
<td>10</td>
</tr>
<tr>
<td>Once, during the INSPIRE transposition phase</td>
<td>10</td>
</tr>
<tr>
<td>At several stages of the INSPIRE implementation process</td>
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</tr>
<tr>
<td>No answer</td>
<td>10</td>
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</table>
Q1 – User involvement

• Q1.3 – The way users are involved

**Ways of user involvement**

- No answer
- Through other means
- Through the organisation of focus or thematic groups
- User forum where developers and users meet
- Cooperation with a user association
- Specific user group for INSPIRE / NSDI
- Representatives in the coordinating structure
Q1 – User involvement

• Q1.4 – User feedback
Q2 – Use of the infrastructure

- Q2.2 - “We do not have a very precise idea about the number of users of our infrastructure”
Q2 – Use of the infrastructure

• Q2.3 – Use of services and geoportal

Use is as expected

Figures of use are highly variable
Often one or a few services are doing very well

<table>
<thead>
<tr>
<th>Figures use INSPIRE network services</th>
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Geoportal

<table>
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<tr>
<th>Geoportal</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Unique national geoportal</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>Several national geopORTALS</td>
<td>24</td>
<td>4</td>
</tr>
<tr>
<td>Dedicated INSPIRE geoportal</td>
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<td>3</td>
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<tr>
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</table>
Q3 – Users and usage

• Q3.2 – Sectors in which INSPIRE and NSDI are used

[Sectors in which INSPIRE & NSDI is used bar chart]

- No answer
- Other
- Education
- Research
- Utility management
- Coastal Zone Management & Fisheries
- Tourism
- Disaster/Emergency management
- Urban planning
- Security
- Transport & mobility
- Regional and spatial planning
- Agriculture
- Environmental monitoring & management
Q3 – Users and usage

- Q3.4 – Type of activities

<table>
<thead>
<tr>
<th>Access</th>
<th>Type of activities</th>
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<tbody>
<tr>
<td>Finding spatial data</td>
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</tr>
<tr>
<td>Visualisation of spatial data</td>
<td>Other</td>
</tr>
<tr>
<td>Downloading of spatial data</td>
<td>E-commerce</td>
</tr>
<tr>
<td>Transforming spatial data</td>
<td>Creating and maintaining spatial data</td>
</tr>
<tr>
<td>Publishing spatial data and their metadata</td>
<td>Monitoring &amp; reporting certain policies</td>
</tr>
<tr>
<td>No answer</td>
<td>Spatial analysis</td>
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Access:

<table>
<thead>
<tr>
<th>Activity</th>
<th>No answer</th>
<th>Other</th>
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<th>Creating and maintaining spatial data</th>
<th>Monitoring &amp; reporting certain policies</th>
<th>Spatial analysis</th>
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<tbody>
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<td>Finding spatial data</td>
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<tr>
<td>Visualisation of spatial data</td>
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<td>Downloading of spatial data</td>
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<td>Transforming spatial data</td>
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<tr>
<td>Publishing spatial data and their metadata</td>
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<tr>
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</table>
Q4 – Examples and benefits

• Q4.1 – Example of business processes

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Number of examples given</td>
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<tr>
<td>Number of valid examples</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>No answer</td>
<td>24</td>
<td>7</td>
</tr>
</tbody>
</table>

– Description of the process according to the input-throughput-output model of Thompson (1967)
– Short 1 hour interviews – topic list

• Example 2 - Spain
Q4 – Examples and benefits
• Example from Spain
  – Process
    • *Goolzoom.com is a geographic information system based on Google Maps that facilitate access to the public geographic information*
  – Organisations involved
    • *Google: providing Google Maps platform*
    • *Organizations that provides data in WMS (Web Map Service) standard. Most of them are public organizations*
  – Output / outcome
    • *The intended outcome is to facilitate to our users the access to all kind of public information using the Google Maps platform, already known to many users*
– Input
  
  • First we search for spatial data looking at WMS servers in Internet. Then we try organize data based on the following information: GetCapabilities document; response time of the server; area covered by the map; country of the information

– Throughput
  
  • Goolzoom reads the GetCapabilities document each 3 days, and reorganize data for the new updates
  • The data is always going directly from the WMS server to the user browser. We only try to organize the WMS servers in order to connect user with the information that is looking for

– Output
  
  • No new spatial data or any other product created
  • WMS integrated with Google Maps
1. It is early in the INSPIRE & NSDI implementation process to know the usage and the users well
   Although it is recognised that information on requirements, on the usage and users, and on the problems encountered should be collected from the beginning

2. In general it is correct that there is a very impartial view on if, how and to which extent the infrastructure is used

3. It is necessary to make a clear distinction between different type of users
   For real end users the infrastructure should be invisible (integrated in applications)

4. It might be useful to have some well defined use cases of the usage of the infrastructure
   It is suggested to have a real business case elaborated in the form of a ‘plugfest’ involving end users at different levels (EU, national, sub-national)
Thank you!

Questions?

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