Assessing the status of Open SDI/INSPIRE in Europe

Mind the Gap
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The students
Topic of today

Open SDI
Map of Open SDI

Openness of EU SDIs
(Hover for breakdown)
Context
TU Delft, Master of Geomatics
5 ECTS Master Course Geomatics

GEO-INFORMATION ORGANIZATION AND LEGISLATION
This year’s assignment

Write a paper on the status of the open SDI in a European country

1. develop an assessment framework for measuring the openness of spatial data infrastructures
2. apply this framework to one European country
3. suggest a plan to arrive at a next level of an open SDI
User profile

• Has no money
• Has no idea what INSPIRE or a geoportal is
• Just wants to download and play with the data
• Speaks English
Open SDI
Looking for a definition
• Open spatial data
  1. Complete
  2. Primary
  3. Non-discriminatory
  4. Machine processable
  5. ...

Based on 8 principles of Open Government
Data Sebastopol meeting

• Open government
  • Transparency
  • Collaboration
  • Participation

• Open Infrastructure development
  • Governance
  • Data
  • Accessibility

• Open spatial ecosystem
An SDI where governmental and non-governmental actors commonly govern, and freely share open data.
Assessment framework(s)
Development, relevance
SDI assessment

1999-2003
- 1999 1st generation SDI
- 2002 GINIE Country reports
- 2002 INSPIRE State of Play

2004-2006
- 2004 SDI Effectiveness
- 2005 SDI Maturity Matrix
- 2005 SDI Readiness Index
- 2006 Clearinghouse Suitability Index

2007-2009
- 2007 Multi-view framework
- 2007 Regional SDI studies
- 2009 INSPIRE M&R

2010-2012
- 2010 GI Transaction Costs
- 2012 SDI process performance
- 2012 Balanced Scorecard

2013 - ...
- 2015 STIG
- 2016 OSD assessment
- ...

2013 - ...
- 2015 STIG
- 2016 OSD assessment
- ...

2013 - ...
- 2015 STIG
- 2016 OSD assessment
- ...

2013 - ...
- 2015 STIG
- 2016 OSD assessment
- ...
Open data assessment
### Open spatial data assessment framework

<table>
<thead>
<tr>
<th>1. Readiness</th>
<th>2. Data</th>
<th>3. Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technological and non-technological components</td>
<td>Availability and accessibility of spatial data and services</td>
<td>Socio-economic benefits of using spatial data and services</td>
</tr>
<tr>
<td>To involve non-government actors in developing and implementing the SDI</td>
<td>To businesses, citizens, non-profit organizations and other actors</td>
<td>For businesses, citizens, non-profit organizations and other actors</td>
</tr>
</tbody>
</table>
OSD assessment

Key Performance Indicators
1. Readiness

- Establishment of components to enable the participation of non-government actors in implementing SDI/INSPIRE

- Indicators
  1.1. vision on Open SDI
  1.2. participation of non-government actors in SDI decision making
  1.3. open data policy (for all – spatial – data)
  1.4. non-government data included in the SDI
2. Data

- Availability and accessibility of spatial data to non-government actors

- Focus on two datasets:
  - topographic data 1º10000
  - address data
2. Data

• Indicators
  • 2.1. search engine score
  • 2.2. available through geoportal and/or open data portal
  • 2.3. language(s)
  • 2.4. publicly available
  • 2.5. discovery, view and download services
  • 2.6. available for free
  • 2.7. use restrictions
  • 2.8. interoperability
  • 2.9. use statistics
3. Impact

• Use of spatial data by non-government actors and associated benefits

• Indicators
  3.1. use cases of non-government actors using open spatial data
  3.2. studies showing the benefits of open spatial data
Results
Map of Open SDI

Openness of EU SDIs
(Hover for breakdown)
Map of Open SDI - Readiness
Map of Open SDI - Data

Implementation result
(Hover for breakdown)
Map of Open SDI - Impact

Impact result
(Hover for breakdown)
Map of Open SDI - overview
Map of Open data
TOP 5: OSD versus OD
Conclusion

Mind the gap
International non-spatial data user

• Hard to find:
  • Language barrier
  • Not in first 20 Google results
  • No common dataset naming
  • Multiple access points

• Hard to understand:
  • Language barrier
  • Geoportal search gives irrelevant results

• Hard to use:
  • Many datasets
  • National licenses
All in all...

- There is a difference between an expert and non-expert users.
- Also between an SDI and open SDI
- There is a gap between Open Data and Open Spatial Data
Resources

- Icons: Suitcase: Xinh Studio; People: Ivan Boyko, CC BY 3.0, Temple: own work.

- All visualizations were made using Plotly Python Offline, under MIT license
Thank you for your attention

Comments? Questions? Interested to contribute?

Let us know!

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Visit our website

http://kcopendata.eu/openSDI