Towards a Map of Open SDI/INSPIRE

INSPIRE Conference 2017 – Workshop
4 September 2017, Kehl (Germany)

**KENNISCENTRUM
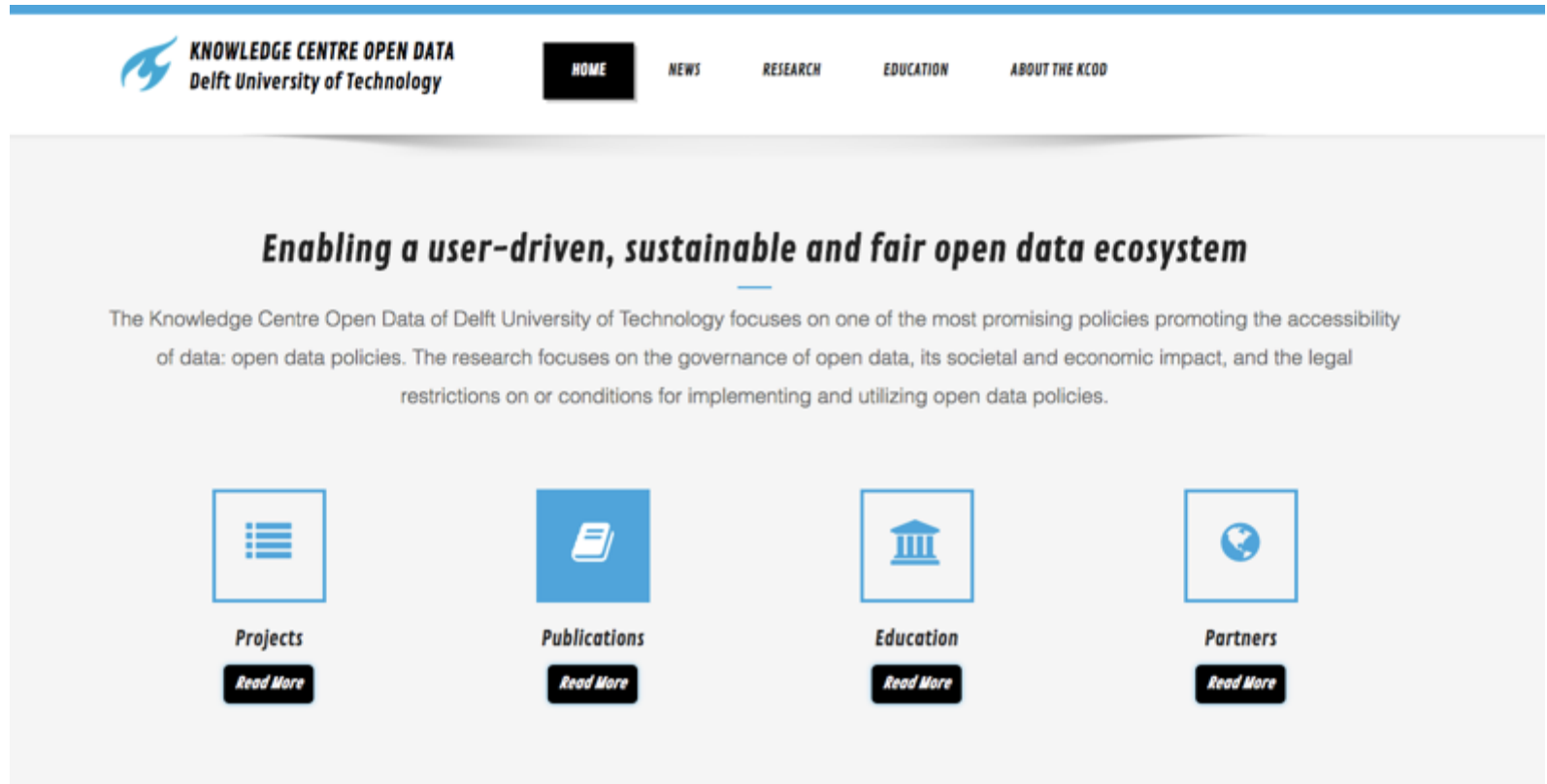OPEN DATA**

Workshop programme

Part 1:

   Different views on Open SDI/INSPIRE

Part 2:

   Your view on Open SDI/INSPIRE: discussions

About us

More information: http://kcopendata.eu/

Part 1

Different views on Open SDI

Topic of today

OPEN SDI

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Learning objectives

1. Understand the different components of the Open SDI/INSPIRE concept, i.e. multiple ways of making an SDI/INSPIRE more open

2. Analyse the status of Open SDI/INSPIRE in your own country and in Europe in general

3. Consider examples of best practices of Open SDI/INSPIRE

4. Identify the main challenges in making NSDIs and INSPIRE more open

Things to think about during this workshop

1. Open, HOW? *In which sense?*

2. Open, TO WHOM? *Citizens, businesses, academics, other actors?*

3. Open, WHY? *Who benefits?*

Open SDI = a new generation of SDIs?

1st generation SDI: producer driven

2nd generation SDI: user driven

3rd generation SDI: produser driven

4th generation: open SDI?

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And the most open SDI is…

What do you think?

https://www.mentimeter.com

Open SDI

= open spatial (government) data?

Government data shall be considered open if it is made public in a way that complies with the principles below:

1. **Complete**
   All public data is made available. *Public* *data* is data that is not subject to valid privacy, security or privilege limitations.

2. **Primary**
   Data is as collected at the source, with the highest possible level of granularity, not in aggregate or modified forms.

3. **Timely**
   Data is made available as quickly as necessary to preserve the value of the data.

4. **Accessible**
   Data is available to the widest range of users for the widest range of purposes.

5. **Machine processable**
   Data is reasonably structured to allow automated processing.

6. **Non-discriminatory**
   Data is available to anyone, with no requirement of registration.

7. **Non-proprietary**
   Data is available in a format over which no entity has exclusive control.

8. **License-free**
   Data is not subject to any copyright, patent, trademark or trade secret regulation. Reasonable privacy, security and privilege restrictions may be allowed.
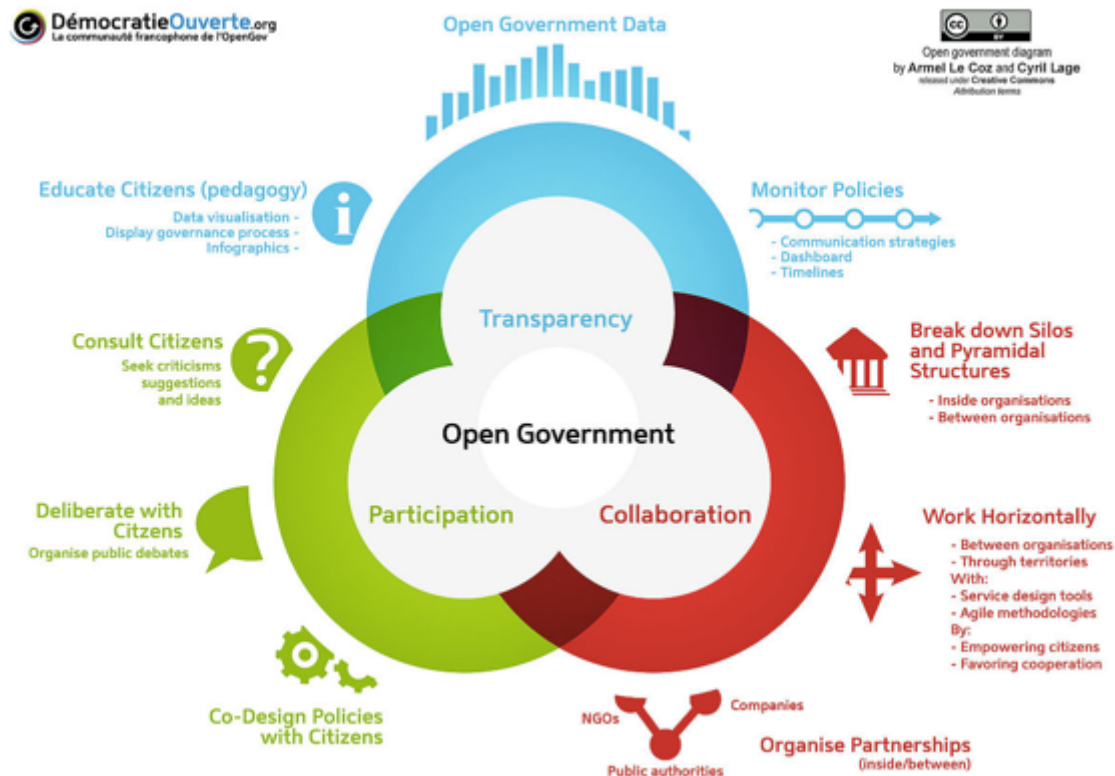
Compliance must be *reviewable*.

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Open SDI

= building the infrastructure
in an open manner?

Open implementation
+
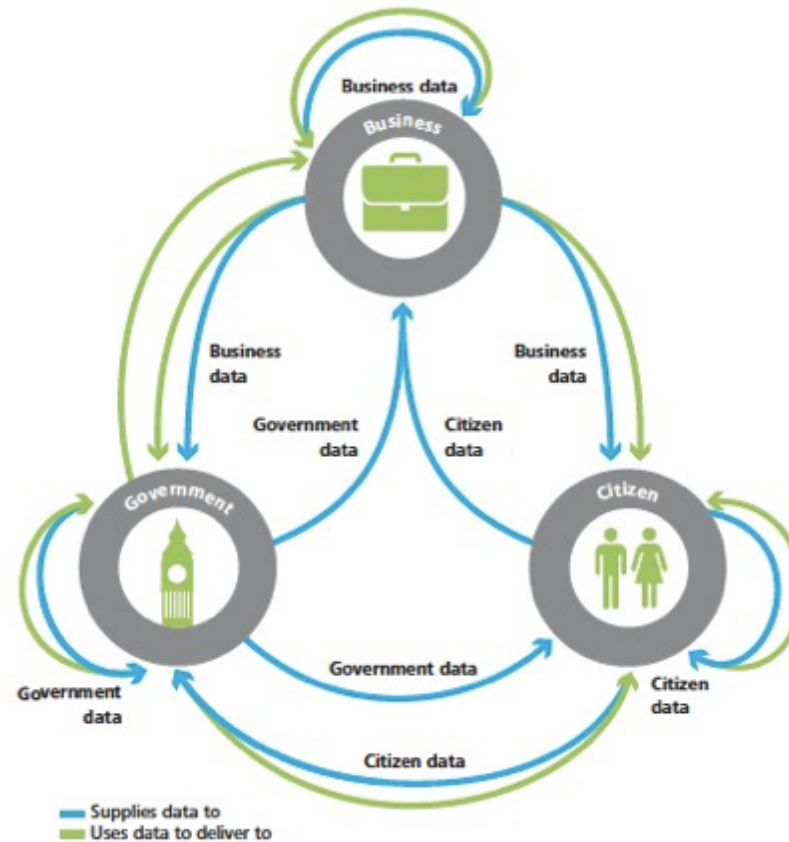Open governance

Open SDI

= open – spatially-enabled – government?
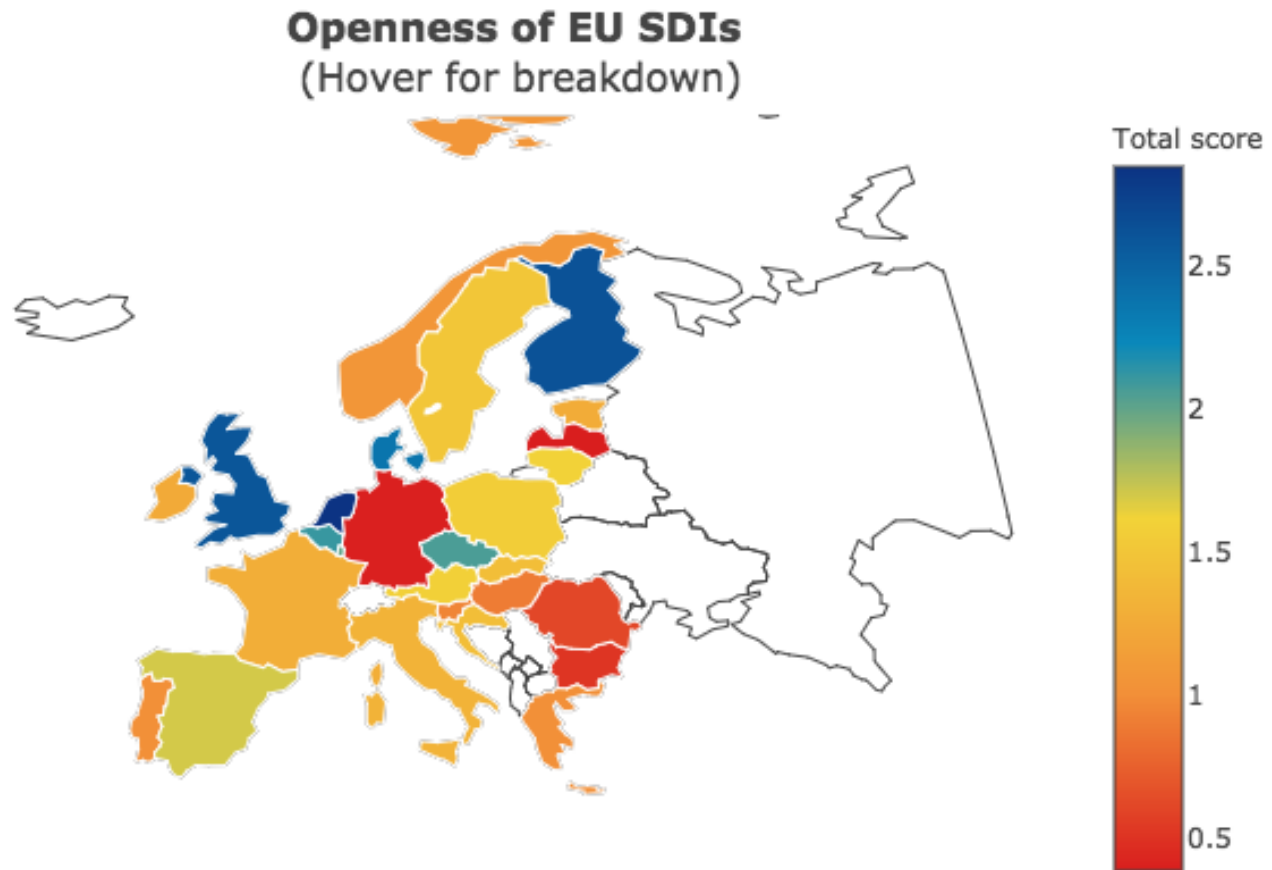

Source: Le Coz & Lage

Open SDI

= creating an open spatial data ecosystem?

Source: Deloitte, 2012

And the most open SDI is...

Openness of EU SDIs
(Hover for breakdown)

Total score

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Programme of today

Part 1: Introduction and experts' views:
- A Finnish perspective – Jaana Mäkelä (Spatineo)
- An SME perspective – Giacomo Martirano (SmeSpire/Epsilon Italia)
- A technological perspective – Francisco J. Lopez-Pellicer (Universidad Zaragoza)
- *Intermezzo: let's test!*
- Our Map of Open SDI/INSPIRE

Break

Part 2: Your view on Open SDI/INSPIRE
- Discussion in smaller groups
- What do you think about Open SDI?

Experts' presentations

Intermezzo – let's test

Let's search and try to get access to European national address data

- Italy
- Germany
- Norway
- Romania

As a user

- Can you find the data?
- Can you get access to them?
- Can you use them (for all purposes)?
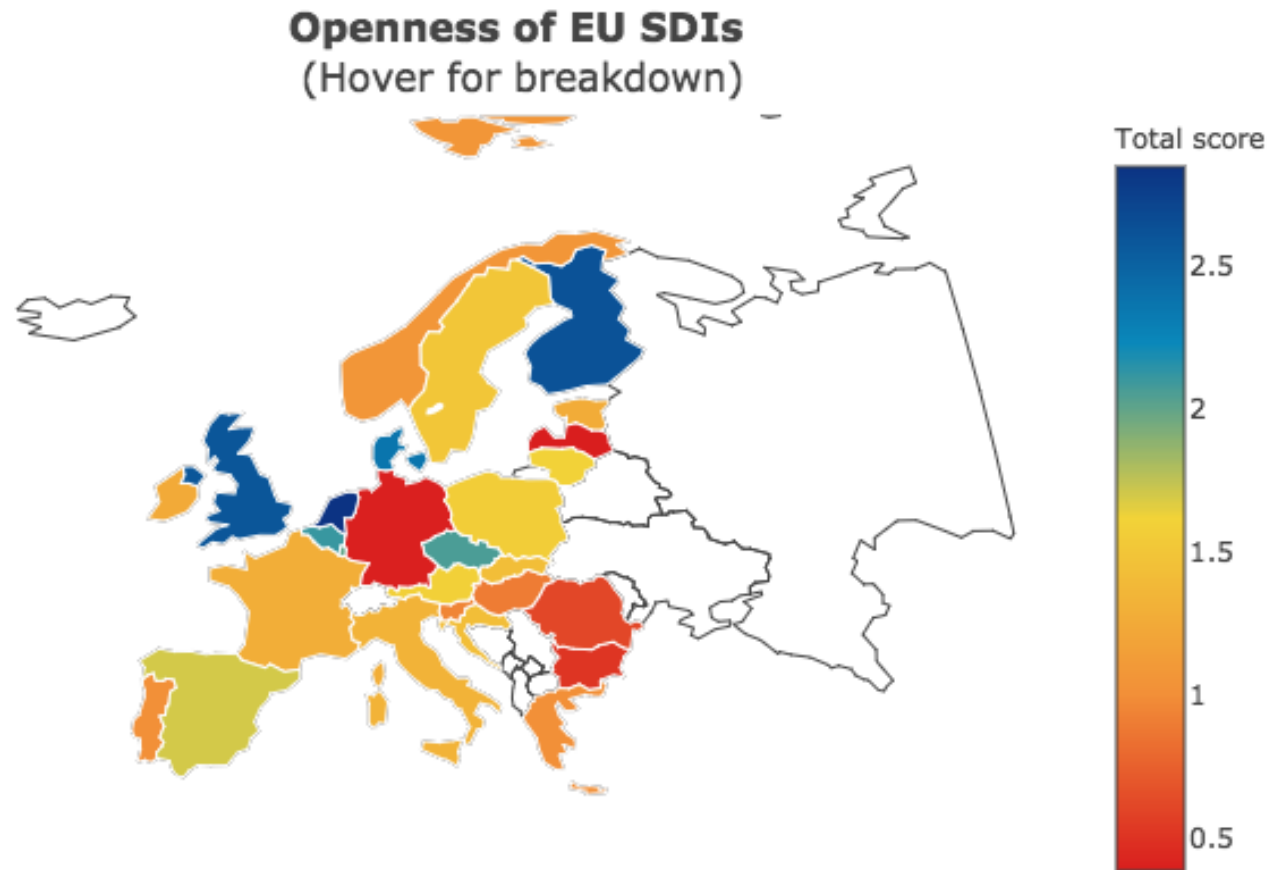
Intermezzo – let's test

Results?

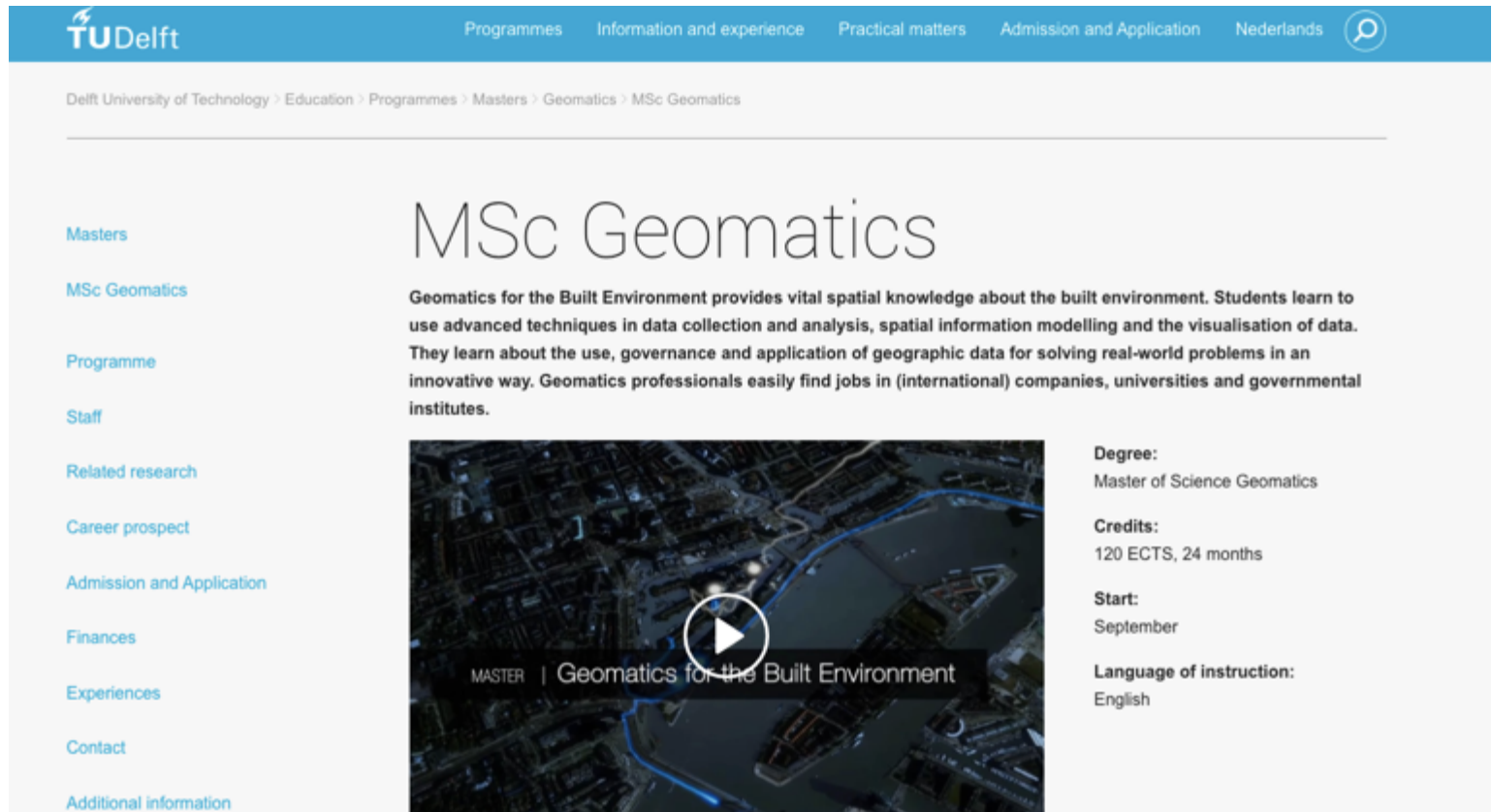**Experiences?**

Recommendations?

Map of Open SDI/INSPIRE

Approach, first results and findings

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(Previously) And the most open SDI is…

Openness of EU SDIs
(Hover for breakdown)

Total score

Context

https://www.tudelft.nl/en/education/programmes/masters/geomatics/msc-geomatics/

Core foundation courses

The core foundation courses provide a strong foundation to all students by teaching the fundamentals of data gathering, processing, analysing and visualisation. The core foundation courses are focussed around six fundamental themes: Location Awareness, Sensing Technologies, Geo datasets & Database Management Systems, Geoweb & Legal Aspects, GIS & Cartography and 3D Modelling & Disaster Management. The core courses are building up from fundamentals and basic skills to application and integration.

- (+) **Python Programming**
- (+) **Sensing Technologies**
- (+) **GIS and Cartography**
- (+) **Positioning and Location Awareness**
- (+) **Spatial Decision Support for Planning and Crisis Management**
- (+) **Geo Database Management Systems**
- (+) **3D Modelling of the Built Environment**
- (+) **Geo-datasets and Quality**
- (+) **Geo-information Organisation and Legislation**
- (+) **Geo Web, Sensor Networks and 3D-GeoVisualisation Technology**

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. *develop an implementation plan to arrive at a next level of an open SDI*

History of SDI assessment

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

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

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

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

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

History of open data assessment

OpenData Barometer

GLOBAL OPEN DATA INDEX

Open Data Maturity in Europe 2016

Open Data 500 GOVLAB

Open Data Impact Map
A public database of organizations that use open data from around the world.

OpenDataMonitor

PSI Scoreboard

1999-2003

2004-2006

2007-2009

2010-2012

2013 - ...

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Common open data assessment framework

- Initiative to explore the development of common methods and frameworks for the study of open data

- Identification of common categories and indicators in open data assessments within an overarching framework.

- Four main categories:
  1. **Context/readiness**
  2. **Data/implementation**
  3. **Use**
  4. **Impact**

Spatial data assessment framework

1. Readiness	2. Implementation	3. Use	4. Impact
Technological and non-technological components	Availability and accessibility of spatial data and services	Use of spatial data and services	Socio-economic benefits of using spatial data and services

Open spatial data assessment framework

1. Readiness	2. Implementation	3. Use	4. Impact
Technological and non-technological components	Availability and accessibility of spatial data and services	Use of spatial data and services	Socio-economic benefits of using spatial data and services
To involve non-government actors in developing and implementing the SDI	**To businesses, citizens, non-profit organizations and other actors**	**By businesses, citizens, non-profit organizations and other actors**	**For businesses, citizens, non-profit organizations and other actors**

1. Readiness

- Establishment of components to enable the participation of non-government actors in developing and 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. Implementation

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

- Focus on two datasets:
  - topographic data 1:10000
  - address data

- Assessment from a user's perspective: *"Can I find, access and use the data?"*

2. Implementation

- 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**
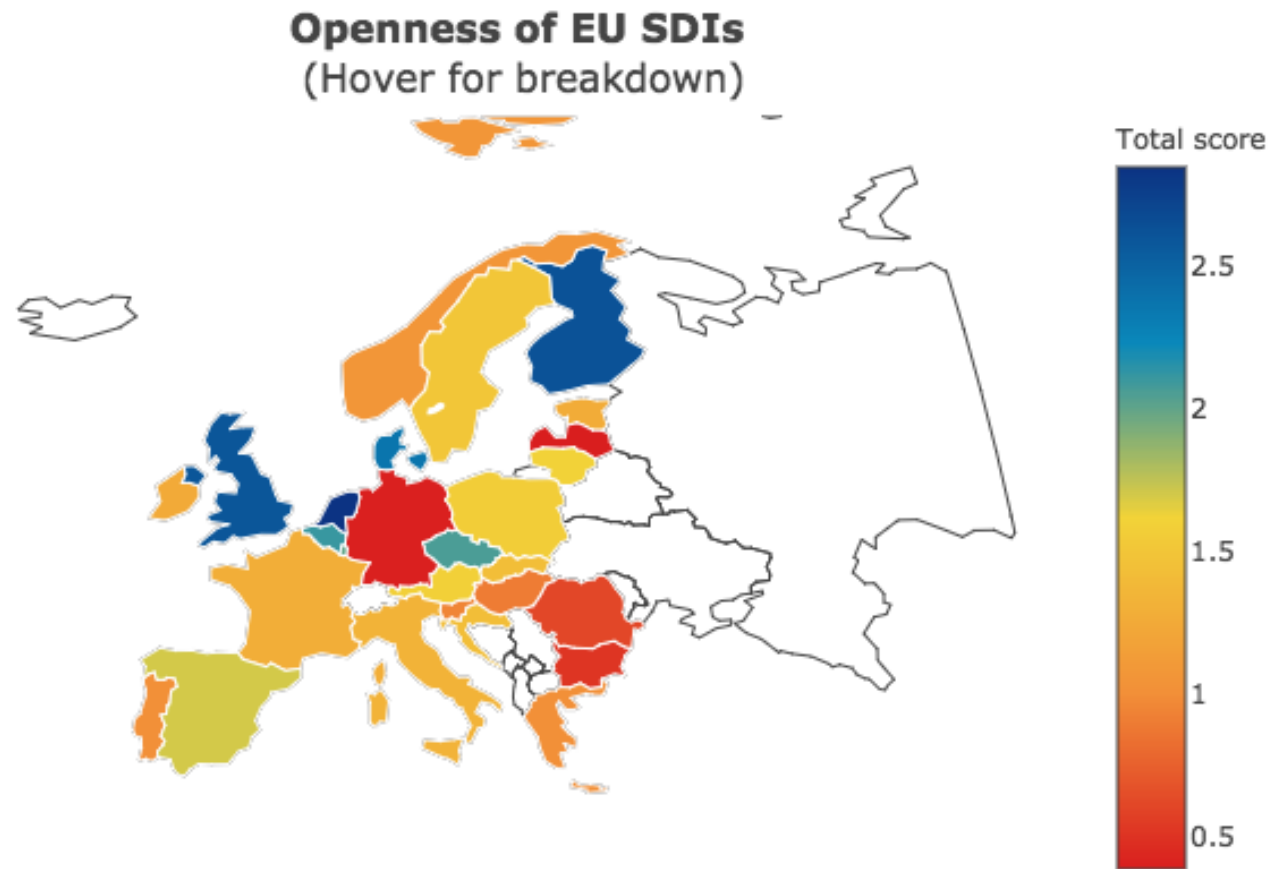
3. Impact

- Combination of Use + Impact/Benefits

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

- Indicators
    - **3.1. Use cases of non-government actors using open spatial data**
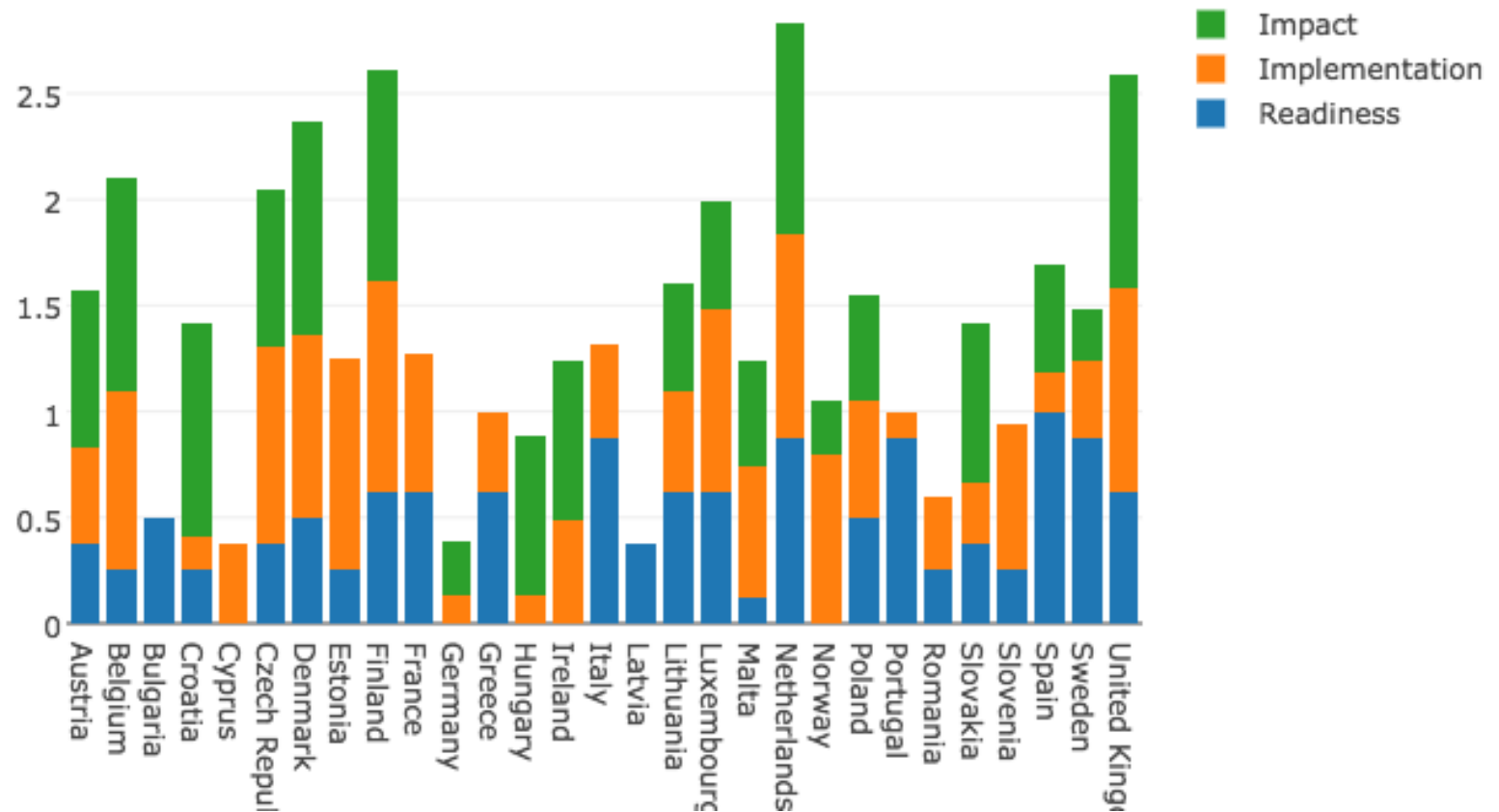   - **3.2. Studies showing the benefits of open spatial data**

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Results

- Go to http://kcopendata.eu/opensdi/

- Disclaimer: work in progress!

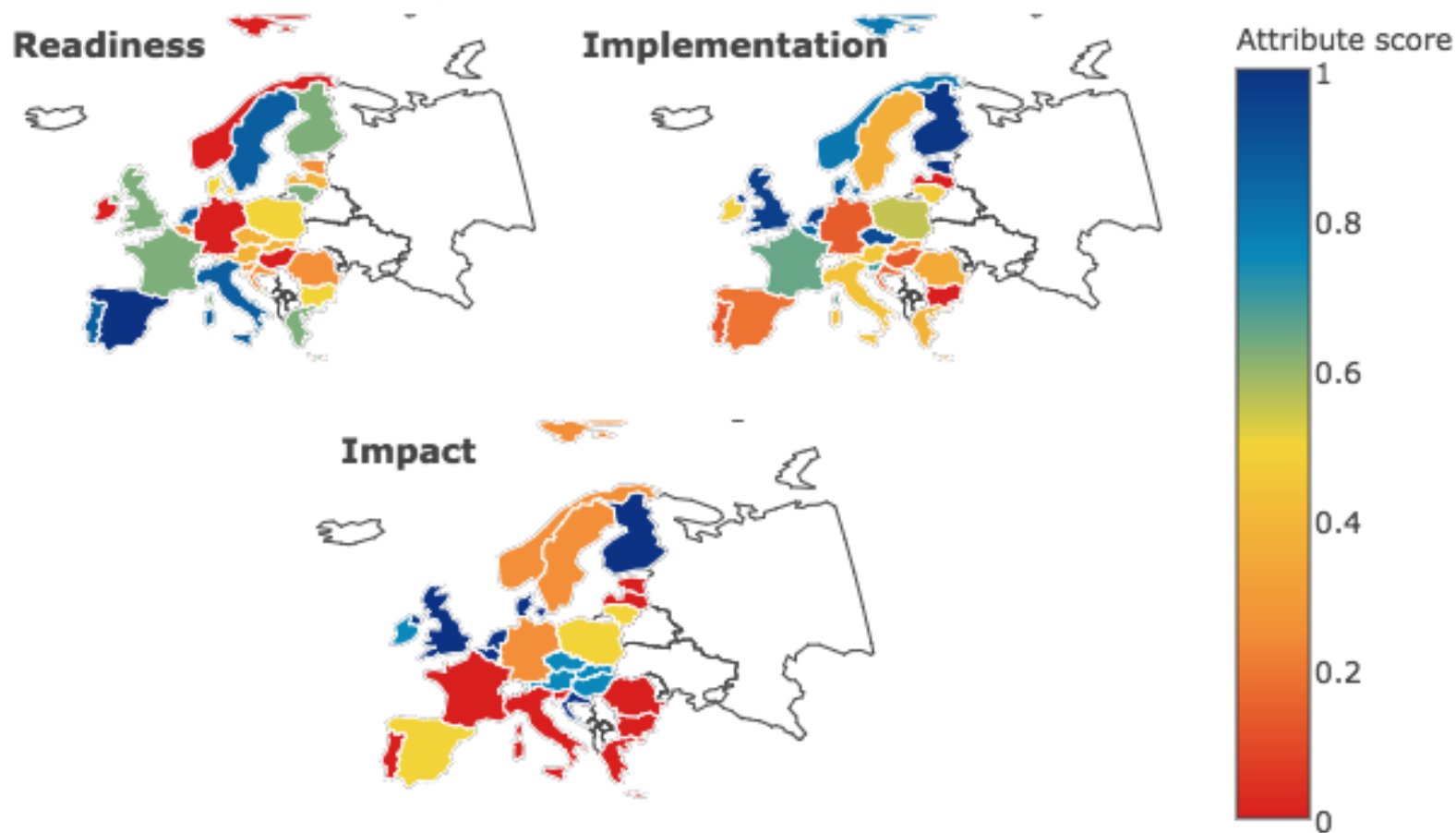# Map of Open SDI
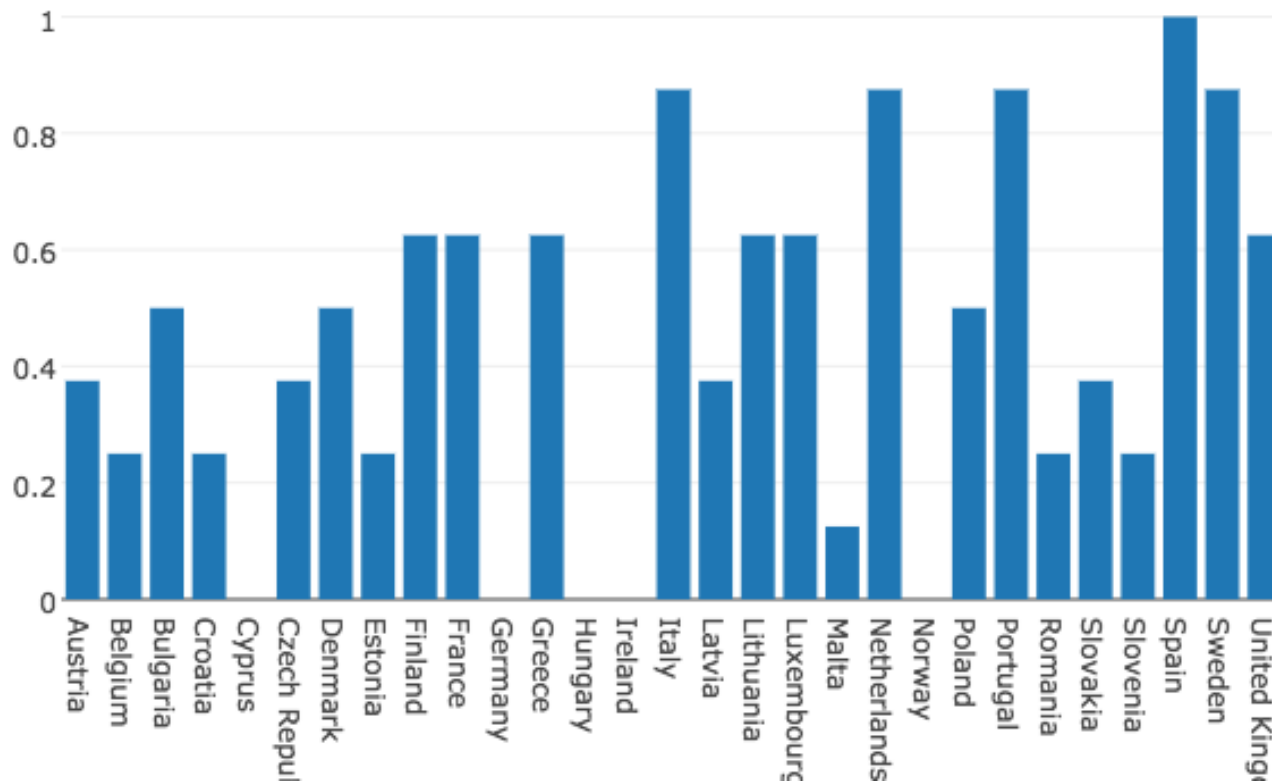

Openness of EU SDIs
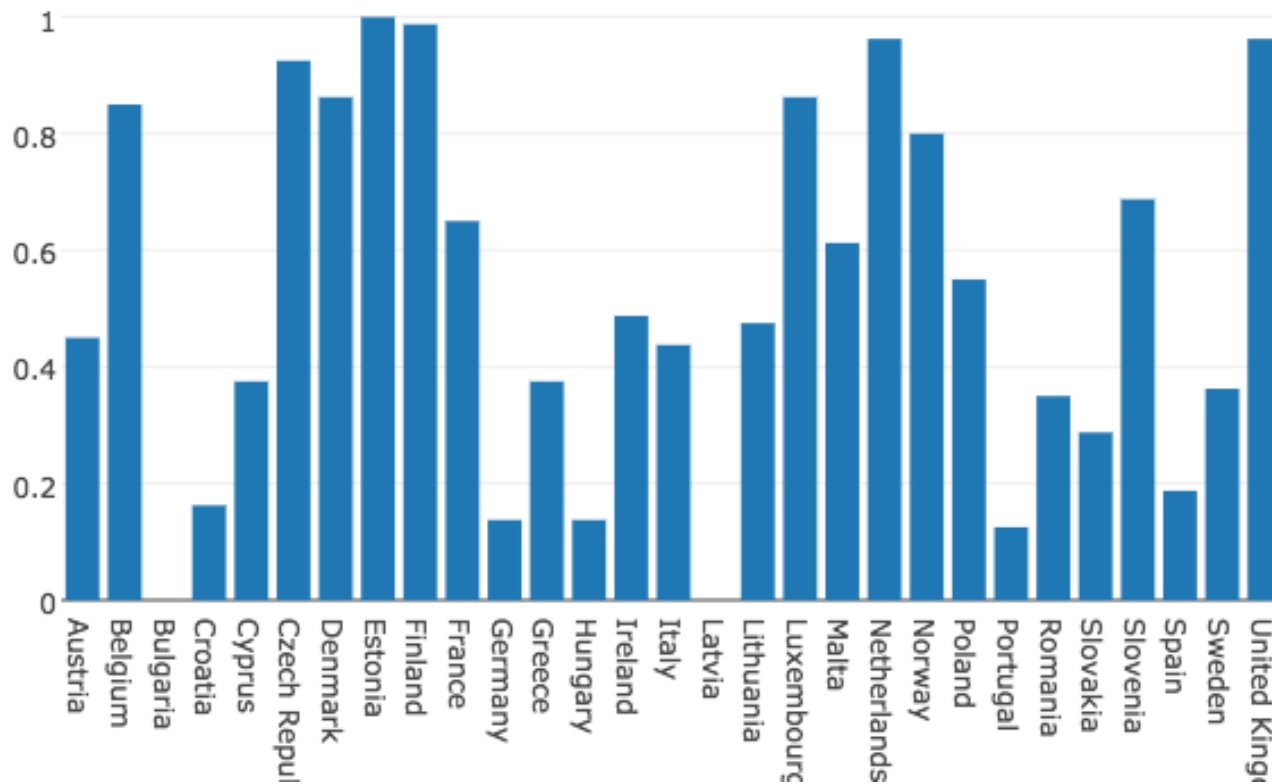(Hover for breakdown)

Map of Open SDI - overview

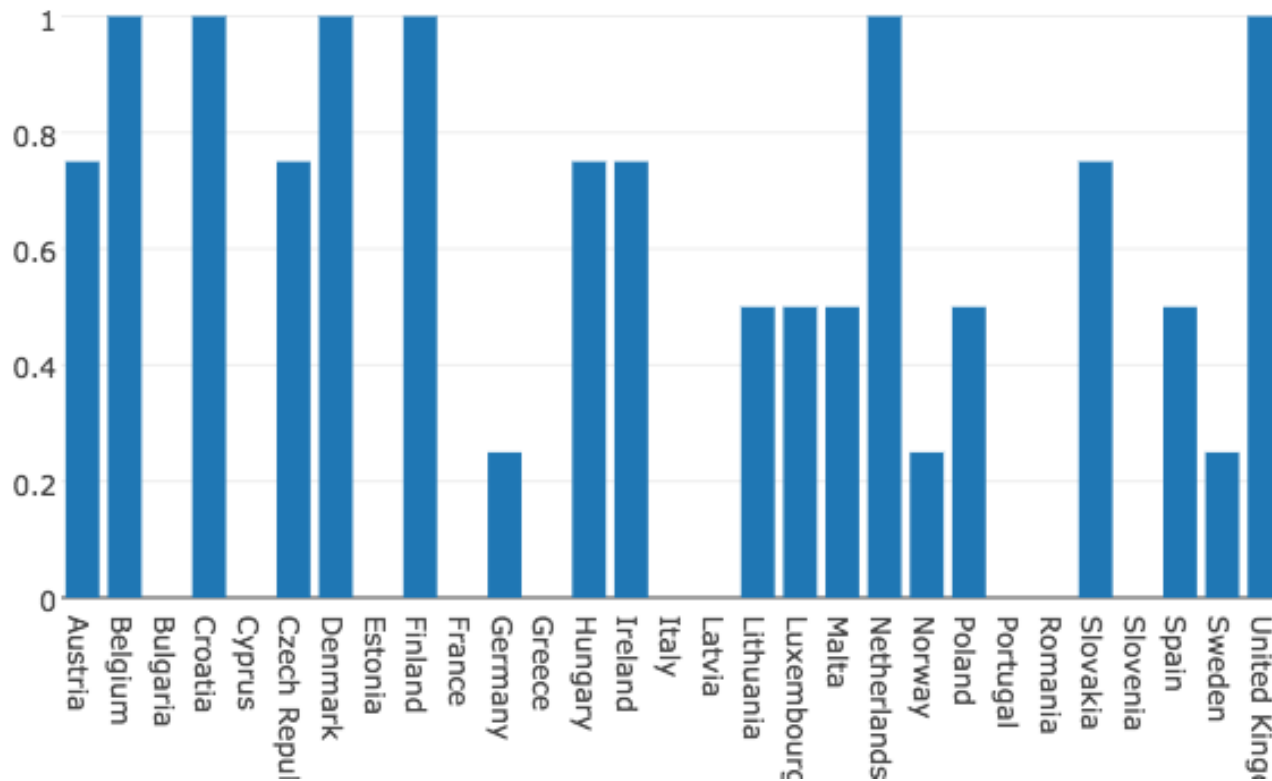# Openness of EU SDIs
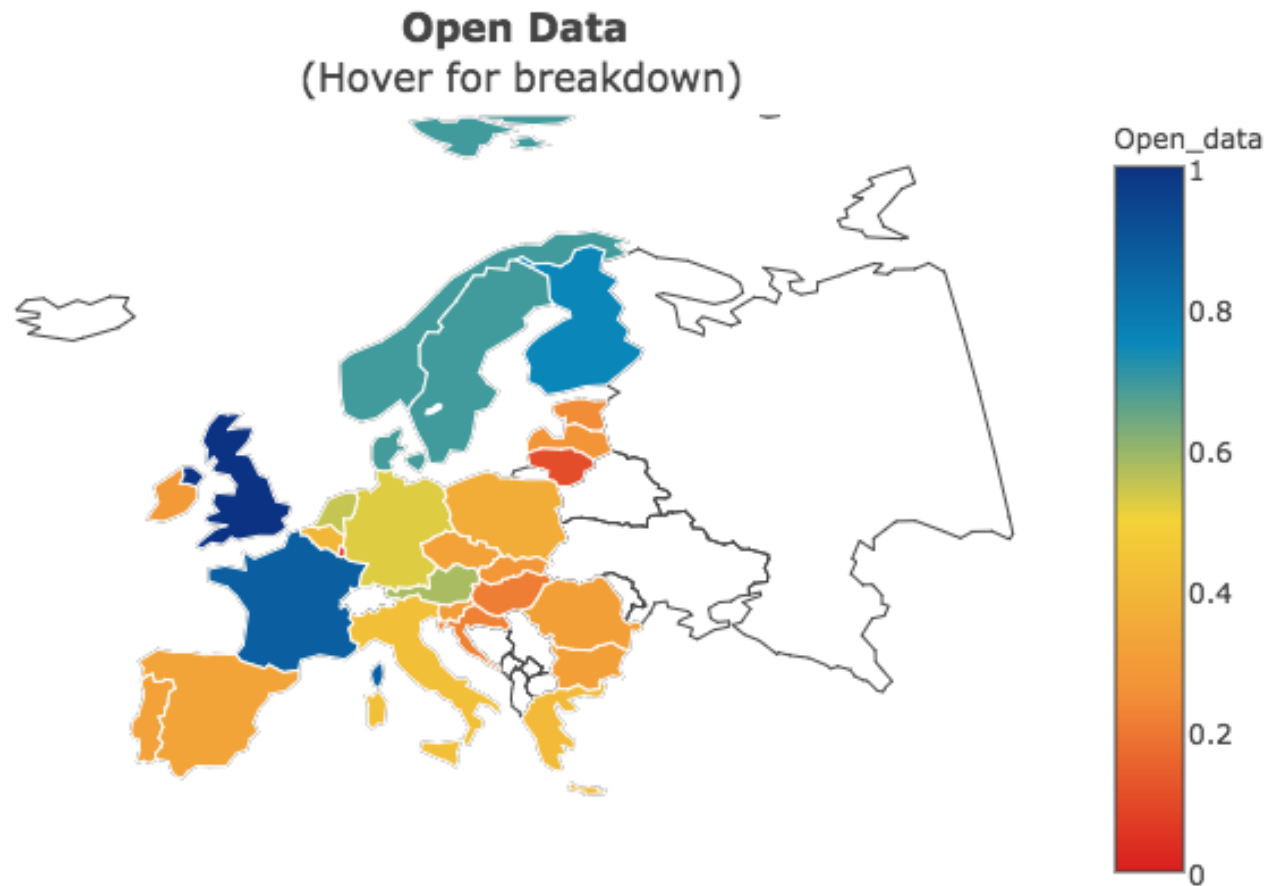## (Hover for breakdown)

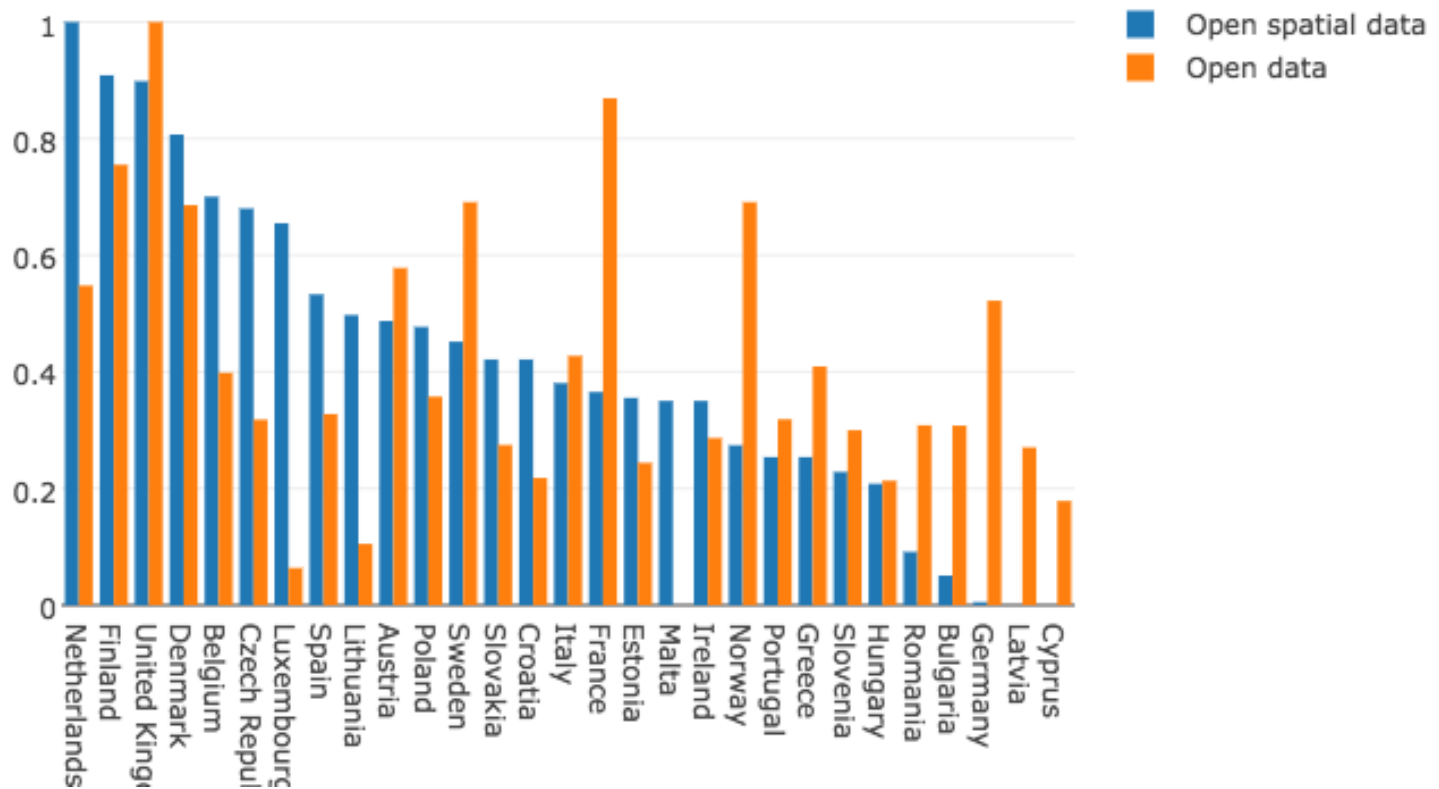# Map of Open SDI - Readiness

Map of Open SDI - Implementation

Map of Open SDI - Impact

Open data

Open Data
(Hover for breakdown)

Comparing Open SDI & Open Data

Comparing Open Data & Open SDI
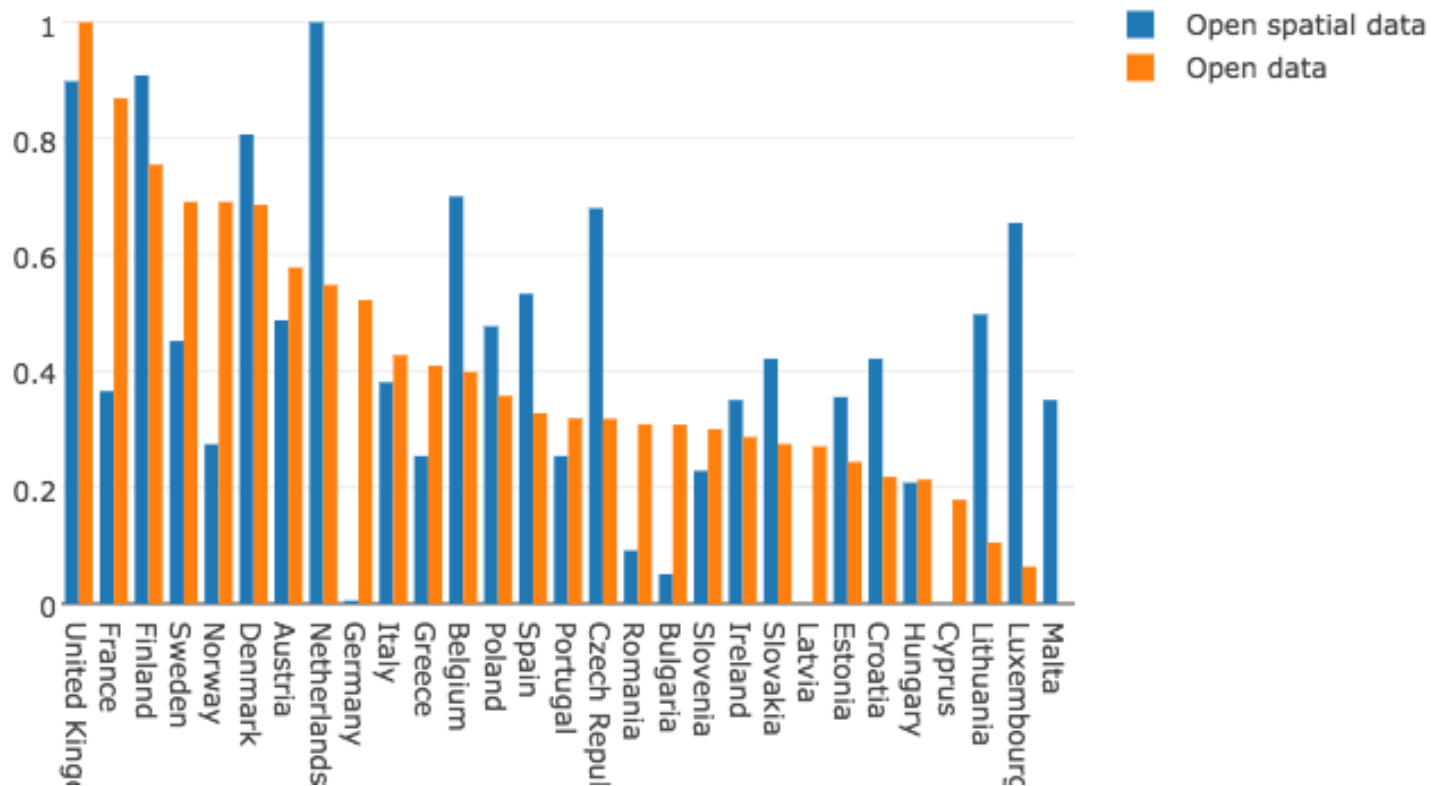
KNOWLEDGE CENTRE OPEN DATA
Delft University of Technology

Comments? Questions? Interested to contribute?

Let us know!
g.vancauwenberghe@tudelft.nl

Visit our website
http://kcopendata.eu/openSDI

After the break

What do you think about Open SDI/INSPIRE?

Let's discuss (in smaller groups)

Part 2

Map of Open SDI/INSPIRE Discussions

Open SDI - Discussion

- 4 groups – 4 moderators – 4 topics

- 1 moderator for each topic

- moderator will switch between tables/groups

- 15' discussion on each topic

Topics for the discussion

- Open SDI General *(Glenn)*

- Open SDI Readiness *(Bastiaan)*

- Open SDI Implementation *(Kotryna)*

- Open SDI Impact *(Frederika)*

Questions for the discussion

1. HOW TO MEASURE/ANALYZE? *What are most important aspects? What are key indicators? What is less relevant?*

2. *HOW TO COLLECT THE DATA/INFORMATION NEEDED? What is necessary, what is feasible? Which data/information – from other assessments – can be reused?*

3. *WHAT COULD OR SHOULD BE NEXT STEPS? How to ensure – practical – use of results? How to further improve the data and results?*

Wrap up and next steps

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