



# **INSPIRE**

## **trenutni status i buduće aktivnosti**

Vlado Ceti

Dani IPP 2017, Zagreb, Hrvatska

Joint Research Centre

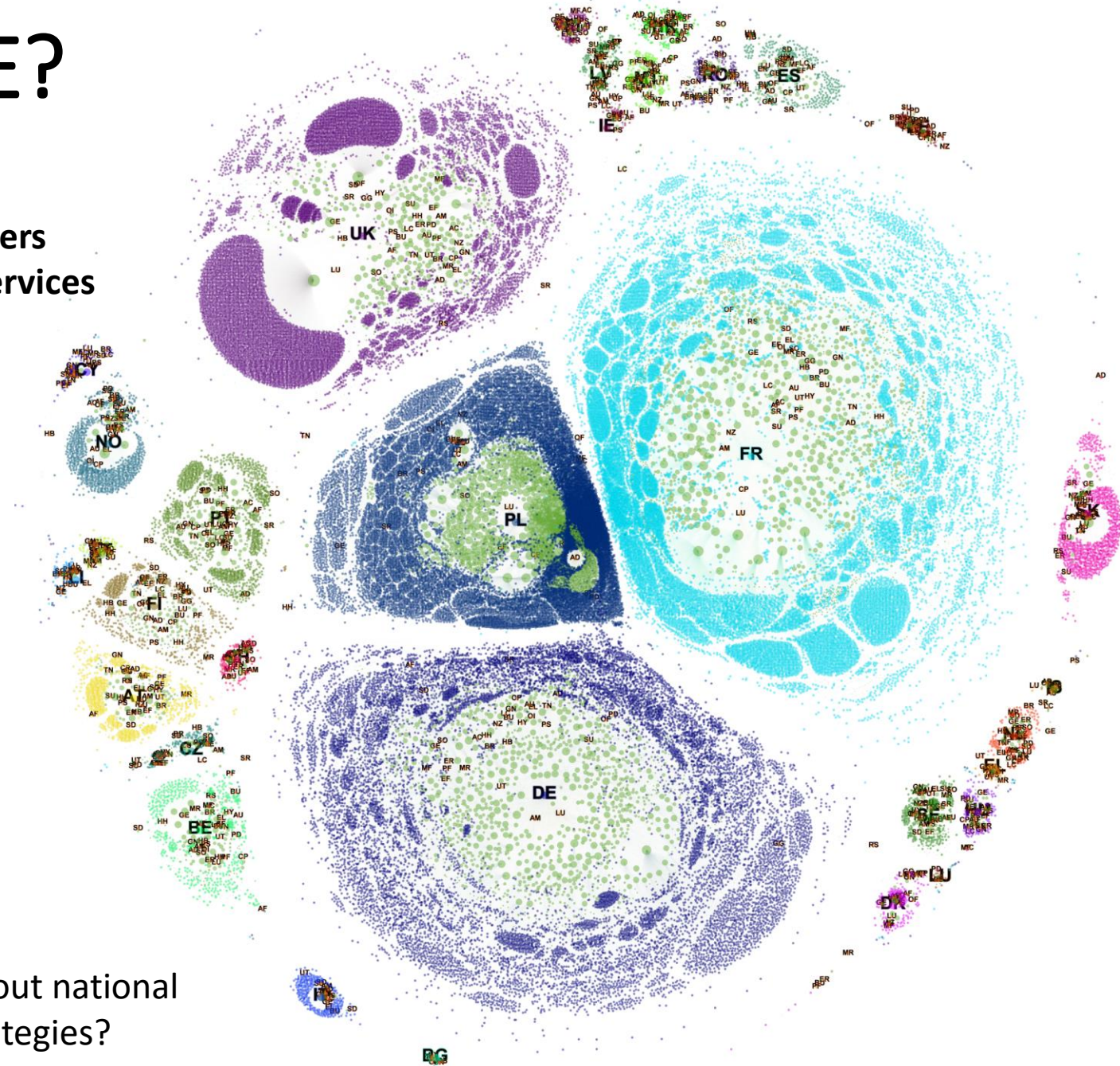
The European Commission's science and knowledge service



European  
Commission

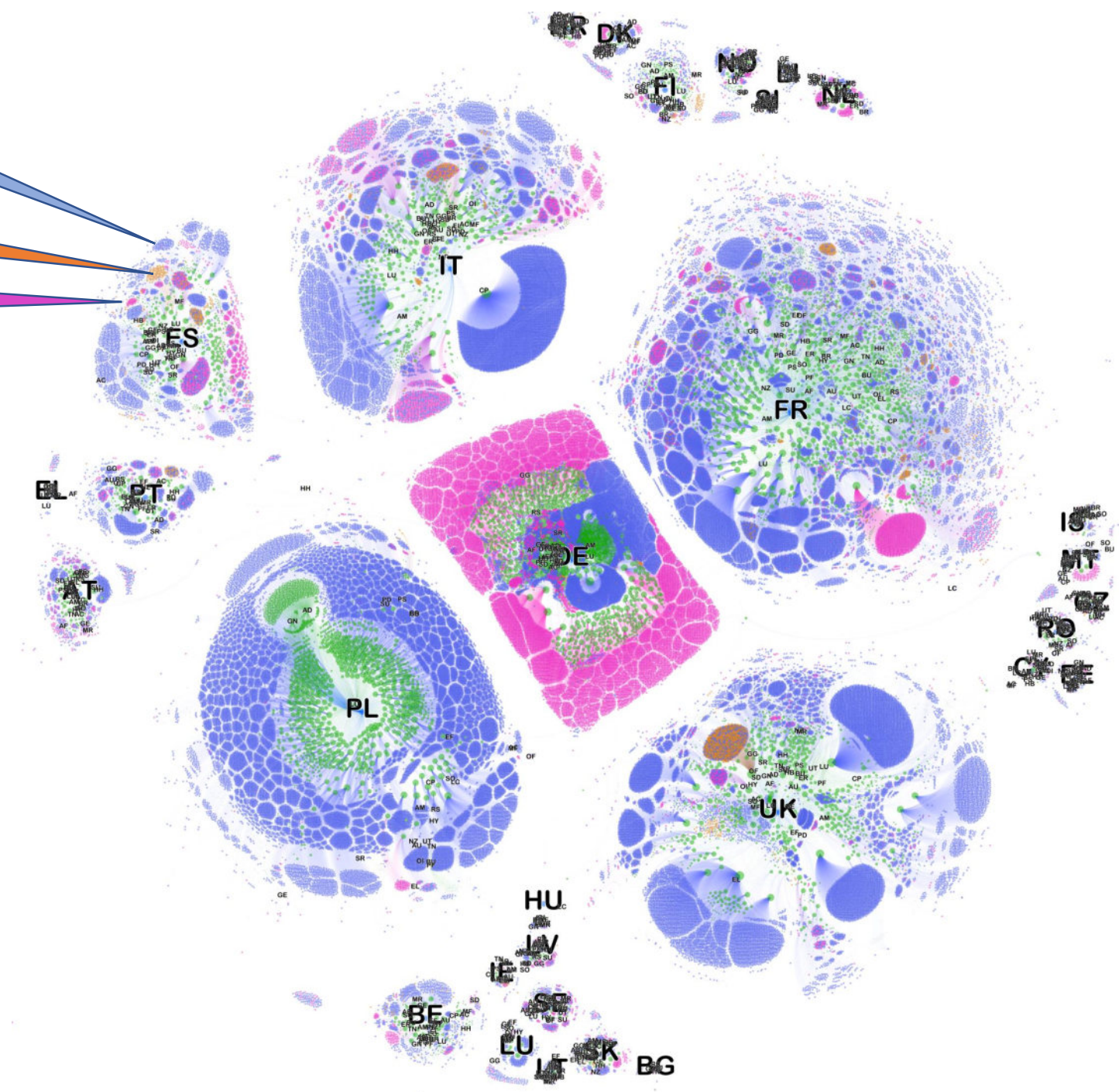
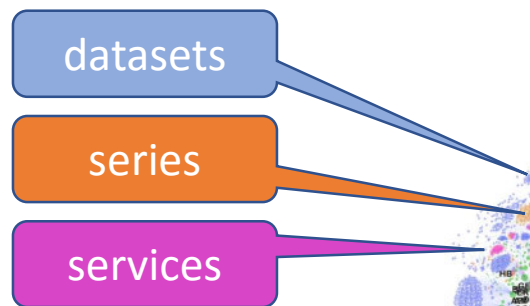
# What is INSPIRE?

**7.500 data providers**  
**120.000 data and services**  
**32 countries**

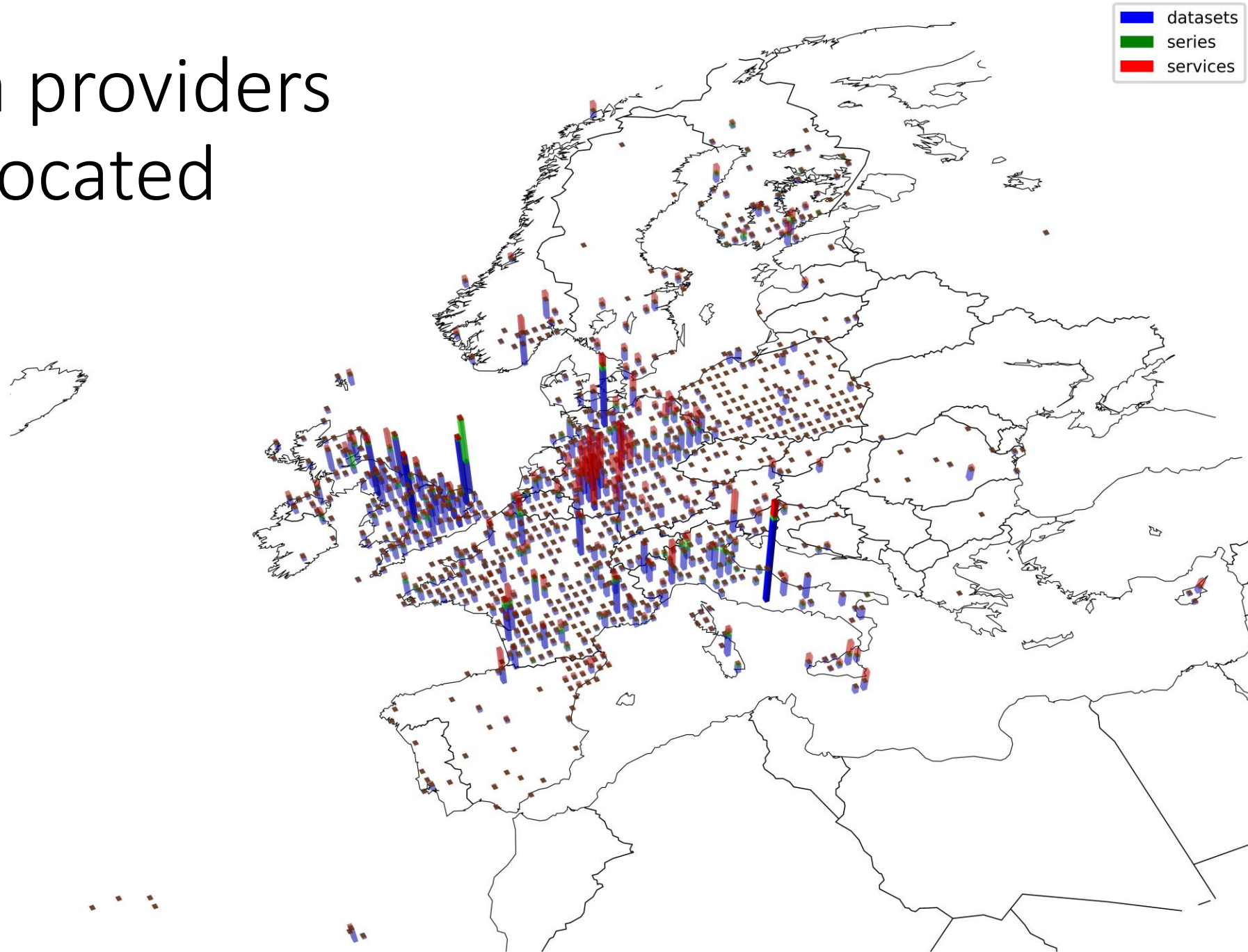


## What does it say about national implementation strategies?





# Data providers geolocated





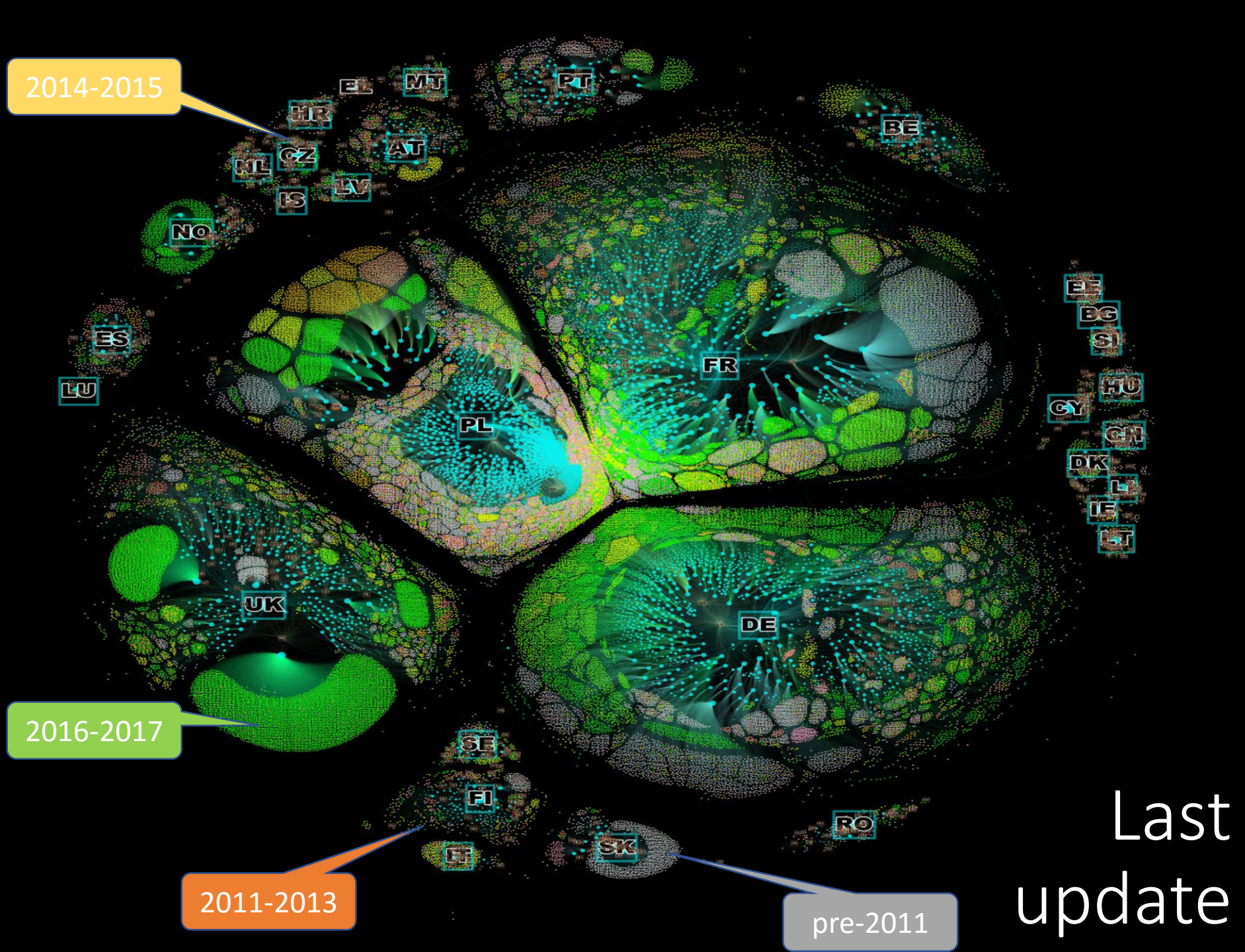
2014-2015

2016-2017

2011-2013

pre-2011

Last  
update





cca 95% of all searches

cca 95% of all searches

# 30%

10%

25%

elevation  
water

**5%**

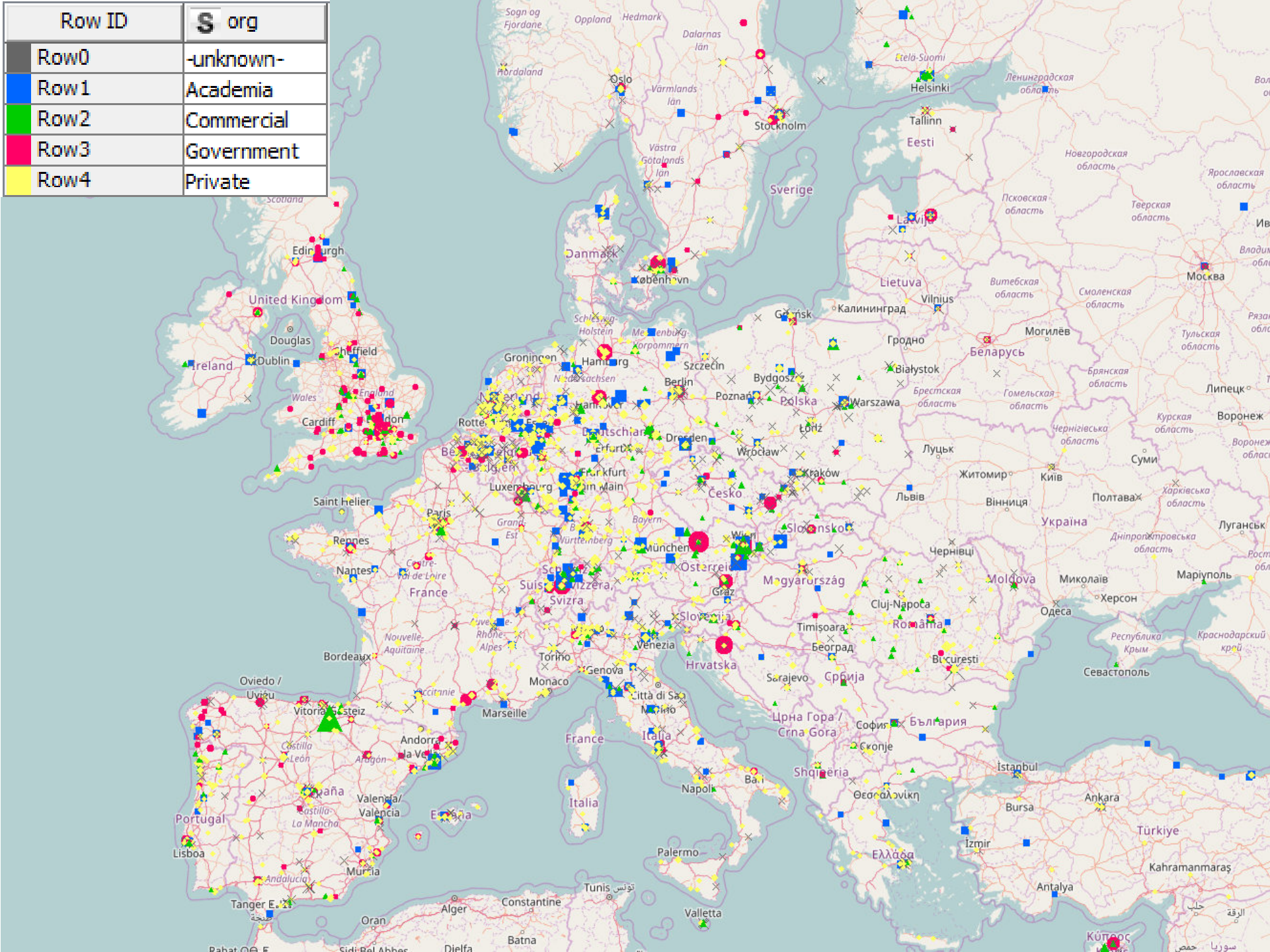
10%

**15%**

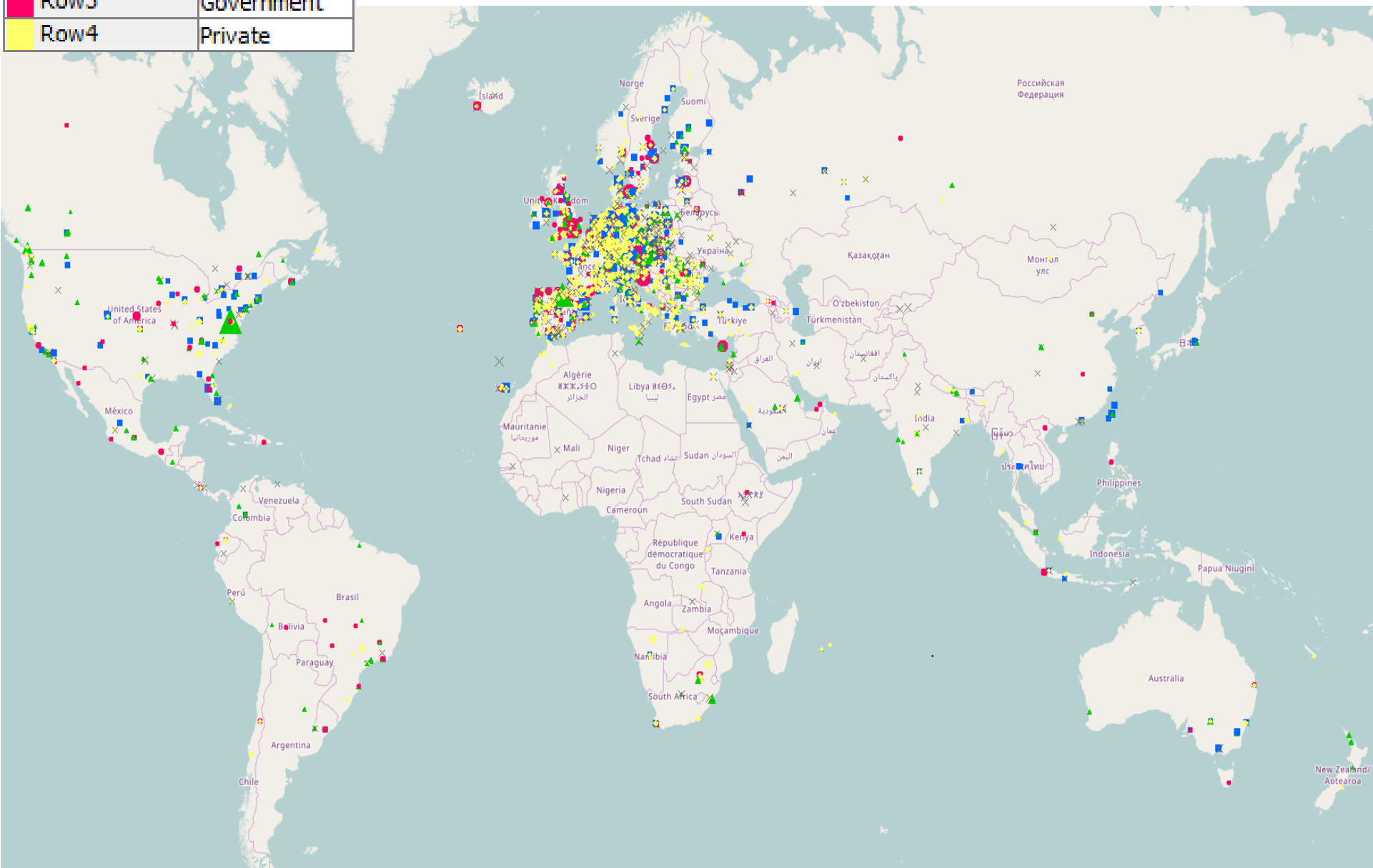
## Commercial companies



Row ID	S org
Row0	-unknown-
Row1	Academia
Row2	Commercial
Row3	Government
Row4	Private



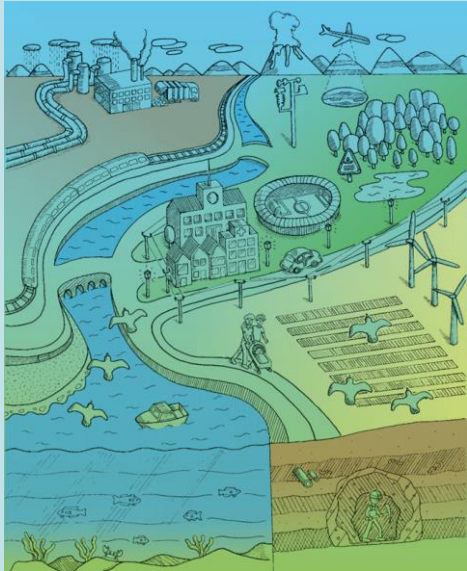
Row ID	S org
Row0	-unknown-
Row1	Academia
Row2	Commercial
Row3	Government
Row4	Private





# INSPIRE = pioneer in geospatial data interoperability in Europe

*in force since 2007*



**INSPIRE**  
"lingua  
franca" for  
geospatial data

**INSPIRE** is to build an **EU-wide infrastructure for geospatial information** enabling:

- **interoperability** for public administration, businesses & citizens **in support** of the **Digital Single Market**
- **e-reporting & Better Regulation** in the env. domain
- **innovative applications** in other policy areas & cross border e.g. Intelligent Transport Systems, Energy efficiency, Disaster management..
- **culture change** in data management & provision practices in Public administration (all levels)



in **close collaboration** with  
**all types of stakeholders**

(e.g. communities of practice, legally mandated organizations, solution providers..)

**Support to  
SMEs**



**Stakeholders  
engagement**



***"INSPIRE has been a pioneer of European digital society and economy"***

- by Roberto Viola, Director General DG CONNECT – during INSPIRE Conference 2017 (6-8.9.2017)

# State of Play – INSPIRE Summary Report 2016



## JRC TECHNICAL REPORTS



## Summary Report on Status of implementation of the INSPIRE Directive in EU

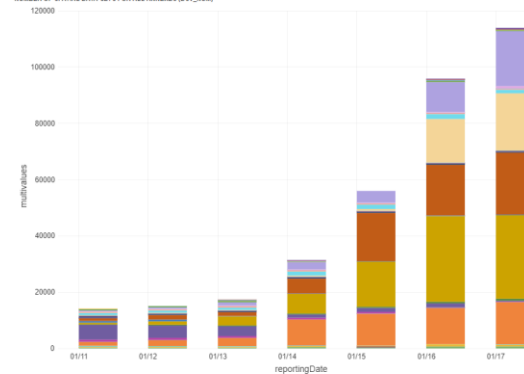
*Vlado Cetl, Vanda Nunes de Lima,  
Robert Tomas and Michael Lutz (DG  
JRC)*

*Joachim D'Eugenio, Adam Nagy and  
Joeri Robbrecht (DG ENV)*

### INSPIRE EU dashboard

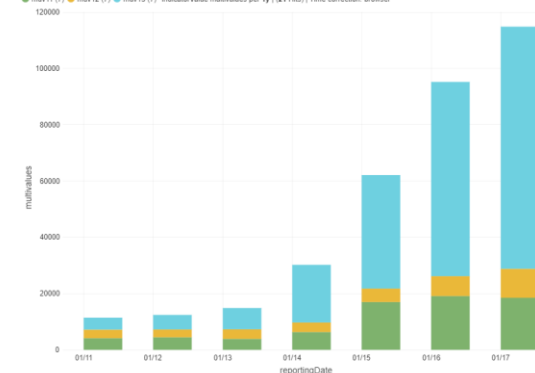
#### Data sets and services availability for all Member States

NUMBER OF SPATIAL DATA SETS FOR ALL ANNEXES (DIV\_NUM)



NUMBER OF SPATIAL DATA SETS PER ANNEXES

mdv11 (7) mdv12 (7) mdv13 (7) indicatorValue multivalues per ty (21 Hbs) Time correction: browser





# State of Play – INSPIRE Summary Report 2016

- Summary Report on Status of implementation of the INSPIRE Directive in EU has been prepared to highlight the overall implementation performance across Member States. The report combines the findings of the specific country fiches which have been based on:
  - the 2016 [tri-annual INSPIRE implementation reports](#) and action plans for future development
  - the 2016 [monitoring reports](#)
  - [bilateral meetings](#) on the implementation of the INSPIRE Directive between the Commission and most of the Member States
- It shows the progress in relation to the INSPIRE mid-term report and the REFIT evaluation which referred to the situation in 2013-15. The [monitoring reports](#) submitted by the Member States in May 2017 show further progress in some countries and areas

# Country fiche – Croatia



## Status of implementation of the INSPIRE Directive – 2016 Country Fiches

### COUNTRY FICHE Croatia

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## 4. Summary - How is Country doing?

INSPIRE key obligation	Overall implementation status and trend	Outlook	Dashboard Legend
Ensure effective coordination	☹️➡️	🟢	<b>Implementation Status:</b> ☺️: implementation of this provision is well advanced or (nearly) completed. Outstanding issues are minor and can be addressed easily. ☹️: implementation of this provision has started and made some progress but is still far from being complete. Outstanding issues are significant and need to be addressed to ensure that the objectives of the legislation can still be reached by 2020. ☹️: implementation of this provision is falling significantly behind or has not even started. Serious efforts are necessary to close implementation gap. <b>Trend:</b> ↗️: the trend of the implementation is positive. ➡️: the trend of the implementation is neutral. ↘️: the trend of the implementation is negative. <b>Outlook:</b> 🟢: clear and targeted actions have been identified which allow reaching the objectives of the legislation in an effective way. 🟡: No real progress has been made in the recent past or actions which have been identified are not clear and targeted enough to predict a more positive outlook. 🔴: no actions have been identified to overcome identified implementation gaps.
Data sharing without obstacles	☹️➡️	🟡	
Step 1: Identify spatial datasets	☹️➡️	🟢	
Step 2: Document datasets (metadata)	☺️↗️	🟢	
Step 3: Provide services for identified spatial datasets (discovery, view, download)	☹️➡️	🟡	
Step 4: Make spatial datasets interoperable by aligning them with the common data models.	☹️➡️	🟡	





# State of Play – INSPIRE Summary Report 2016

**Table 3.** Ensure effective coordination

MS	Overall implementation status and trend	Outlook	Dashboard Legend
AT	😊➡	🟢	<b>Implementation Status:</b> 😊: implementation of this provision is well advanced or (nearly) completed. Outstanding issues are minor and can be addressed easily. 😐: implementation of this provision has started and made some progress but is still far from being complete. Outstanding issues are significant and need to be addressed to ensure that the objectives of the legislation can still be reached by 2020. 😞: implementation of this provision is falling significantly behind or has not even started. Serious efforts are necessary to close implementation gap. <b>Trend:</b> ↗: the trend of the implementation is positive. ➡: the trend of the implementation is neutral. ↘: the trend of the implementation is negative. <b>Outlook:</b> 🟢: clear and targeted actions have been identified which allow reaching the objectives of the legislation in an effective way. 🟡: No real progress has been made in the recent past or actions which have been identified are not clear and targeted enough to predict a more positive outlook. 🔴: no actions have been identified to overcome identified implementation gaps.
BE	😊➡	🟢	
BG	😊➡	🟢	
HR	😊➡	🟢	
CY	😊➡	🟢	
CZ	😊➡	🟢	
DK	😊➡	🟢	
EE	😊➡	🟢	
FI	😊➡	🟢	
FR	😊➡	🟢	
DE	😊➡	🟢	
EL	😊➡	🟢	
HU	😊➡	🟢	
IE	😊➡	NA	
IT	😊➡	🟢	
LV	😊➡	🟢	
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LU	😊➡	🟢	
MT	😊➡	🟢	
NL	😊➡	🟢	
PL	😊➡	🟢	
PT	😊➡	🟢	
RO	😊➡	🟢	
SK	😊➡	🟢	
SI	😊➡	🟢	
ES	😊➡	🟢	
SE	😊➡	🟢	
UK	😊➡	NA	

**Table 4.** Data sharing without obstacles

MS	Overall implementation status and trend	Outlook	Dashboard Legend
AT	😊➡	🟢	<b>Implementation Status:</b> 😊: implementation of this provision is well advanced or (nearly) completed. Outstanding issues are minor and can be addressed easily. 😐: implementation of this provision has started and made some progress but is still far from being complete. Outstanding issues are significant and need to be addressed to ensure that the objectives of the legislation can still be reached by 2020. 😞: implementation of this provision is falling significantly behind or has not even started. Serious efforts are necessary to close implementation gap. <b>Trend:</b> ↗: the trend of the implementation is positive. ➡: the trend of the implementation is neutral. ↘: the trend of the implementation is negative. <b>Outlook:</b> 🟢: clear and targeted actions have been identified which allow reaching the objectives of the legislation in an effective way. 🟡: No real progress has been made in the recent past or actions which have been identified are not clear and targeted enough to predict a more positive outlook. 🔴: no actions have been identified to overcome identified implementation gaps.
BE	😊➡	🟢	
BG	😊➡	🟡	
HR	😊➡	🟡	
CY	😊➡	🟢	
CZ	😊➡	🟢	
DK	😊➡	🟢	
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HU	😊➡	🟡	
IE	😊➡	NA	
IT	😊➡	🟢	
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LT	😊➡	🟢	
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NL	😊➡	🟢	
PL	😊➡	🟢	
PT	😊➡	🟢	
RO	😊➡	🟡	
SK	😊➡	🟢	
SI	😊➡	🟢	
ES	😊➡	🟢	
SE	😊➡	🟢	
UK	😊➡	NA	

# State of Play – INSPIRE Summary Report 2016

**Table 5. Identification of spatial datasets**

MS	Overall implementation status and trend	Outlook	Dashboard Legend
AT	😊➡	🟢	<b>Implementation Status:</b> 😊: implementation of this provision is well advanced or (nearly) completed. Outstanding issues are minor and can be addressed easily. 😬➡: implementation of this provision has started and made some progress but is still far from being complete. Outstanding issues are significant and need to be addressed to ensure that the objectives of the legislation can still be reached by 2020. 😞: implementation of this provision is falling significantly behind or has not even started. Serious efforts are necessary to close implementation gap.  <b>Trend:</b> ➡: the trend of the implementation is positive. ➡: the trend of the implementation is neutral. ⬇️: the trend of the implementation is negative.  <b>Outlook:</b> 🟢: clear and targeted actions have been identified which allow reaching the objectives of the legislation in an effective way. 🟡: No real progress has been made in the recent past or actions which have been identified are not clear and targeted enough to predict a more positive outlook. 🔴: no actions have been identified to overcome identified implementation gaps.
BE	😊➡	🟢	
BG	😬➡	🟢	
HR	😬➡	🟢	
CY	😊➡	🟢	
CZ	😬➡	🟢	
DK	😊➡	🟢	
EE	😊➡	🟢	
FI	😊➡	🟢	
FR	😊➡	🟢	
DE	😊➡	🟢	
EL	😬➡	🟡	
HU	😬➡	🟡	
IE	😬➡	NA	
IT	😊➡	🟢	
LV	😬➡	🟢	
LT	😬➡	🟢	
LU	😊➡	🟡	
MT	😊➡	🟡	
NL	😊➡	🟢	
PL	😊➡	🟢	
PT	😊➡	🟢	
RO	😬➡	🟡	
SK	😊➡	🟢	
SI	😬➡	🟢	
ES	😬➡	🟢	
SE	😊➡	🟢	
UK	😊➡	NA	

**Table 6. Documentation of datasets and services (metadata)**

MS	Overall implementation status and trend	Outlook	Dashboard Legend
AT	😊➡	🟢	<b>Implementation Status:</b> 😊: implementation of this provision is well advanced or (nearly) completed. Outstanding issues are minor and can be addressed easily. 😬➡: implementation of this provision has started and made some progress but is still far from being complete. Outstanding issues are significant and need to be addressed to ensure that the objectives of the legislation can still be reached by 2020. 😞: implementation of this provision is falling significantly behind or has not even started. Serious efforts are necessary to close implementation gap.  <b>Trend:</b> ➡: the trend of the implementation is positive. ➡: the trend of the implementation is neutral. ⬇️: the trend of the implementation is negative.  <b>Outlook:</b> 🟢: clear and targeted actions have been identified which allow reaching the objectives of the legislation in an effective way. 🟡: No real progress has been made in the recent past or actions which have been identified are not clear and targeted enough to predict a more positive outlook. 🔴: no actions have been identified to overcome identified implementation gaps.
BE	😊➡	🟢	
BG	😬➡	🟢	
HR	😊➡	🟢	
CY	😬➡	🟢	
CZ	😊➡	🟢	
DK	😊➡	🟢	
EE	😊➡	🟢	
FI	😊➡	🟢	
FR	😊➡	🟢	
DE	😊➡	🟢	
EL	😬➡	🟢	
HU	😊➡	🟢	
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PT	😊➡	🟢	
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SK	😊➡	🟢	
SI	😊➡	🟢	
ES	😬➡	🟢	
SE	😊➡	🟢	
UK	😊➡	NA	



# State of Play – INSPIRE Summary Report 2016

**Table 7.** Provision of services for identified spatial datasets (discovery, view, download)

MS	Overall implementation status and trend	Outlook	Dashboard Legend
AT	😊➡	🟢	<b>Implementation Status:</b> 😊: implementation of this provision is well advanced or (nearly) completed. Outstanding issues are minor and can be addressed easily. 😐: implementation of this provision has started and made some progress but is still far from being complete. Outstanding issues are significant and need to be addressed to ensure that the objectives of the legislation can still be reached by 2020. 😞: implementation of this provision is falling significantly behind or has not even started. Serious efforts are necessary to close implementation gap.
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CY	😊➡	🟢	
CZ	😊➡	🟢	
DK	😊➡	🟢	
EE	😊➡	🟢	
FI	😞➡	🟢	
FR	😊➡	🟡	
DE	😊➡	🟢	<b>Trend:</b> ➡: the trend of the implementation is positive. ➡: the trend of the implementation is neutral. ⬇️: the trend of the implementation is negative.
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HU	😊➡	🟢	
IE	😊➡	NA	
IT	😊➡	🟡	
LV	😞⬇️	🟢	
LT	😊➡	🟢	
LU	😊➡	🟡	
MT	😊➡	🟢	
NL	😊➡	🟢	
PL	😊➡	🟢	<b>Outlook:</b> 🟢: clear and targeted actions have been identified which allow reaching the objectives of the legislation in an effective way. 🟡: No real progress has been made in the recent past or actions which have been identified are not clear and targeted enough to predict a more positive outlook. 🔴: no actions have been identified to overcome identified implementation gaps.
PT	😞➡	🟡	
RO	😊➡	🟡	
SK	😊➡	🟢	
SI	😊➡	🟢	
ES	😞➡	🟢	
SE	😊➡	🟢	
UK	😊➡	NA	

**Table 8.** Provision of interoperable spatial datasets

MS	Overall implementation status and trend	Outlook	Dashboard Legend
AT	😊➡	🟢	<b>Implementation Status:</b> 😊: implementation of this provision is well advanced or (nearly) completed. Outstanding issues are minor and can be addressed easily. 😐: implementation of this provision has started and made some progress but is still far from being complete. Outstanding issues are significant and need to be addressed to ensure that the objectives of the legislation can still be reached by 2020. 😞: implementation of this provision is falling significantly behind or has not even started. Serious efforts are necessary to close implementation gap.
BE	😊➡	🟢	
BG	😊➡	🟡	
HR	😐➡	🟡	
CY	😊➡	🟢	
CZ	😊➡	🟢	
DK	😊➡	🟢	
EE	😊➡	🟢	
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FR	😊➡	🟢	
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HU	😊➡	🟡	
IE	😊➡	NA	
IT	😊➡	🟢	
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LT	😊➡	🟢	
LU	😊➡	🟢	
MT	😊➡	🟢	
NL	😊➡	🟢	
PL	😊➡	🟢	<b>Outlook:</b> 🟢: clear and targeted actions have been identified which allow reaching the objectives of the legislation in an effective way. 🟡: No real progress has been made in the recent past or actions which have been identified are not clear and targeted enough to predict a more positive outlook. 🔴: no actions have been identified to overcome identified implementation gaps.
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RO	😊➡	🟡	
SK	😊➡	🟢	
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ES	😊➡	🟢	
SE	😊➡	🟡	
UK	😐➡	NA	

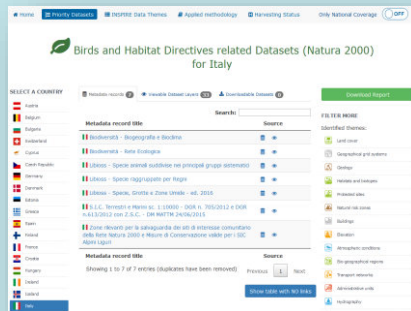


# State of Play – INSPIRE Summary Report 2016

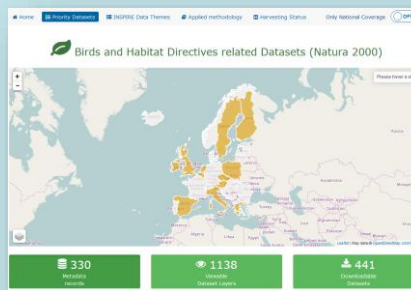
- The number of reported spatial data sets and services slowly but steadily increases. **More than 90%** of spatial data sets are reported by **only 5 countries**. The identification of spatial data could further improve by identifying and documenting spatial data sets required under the reporting and monitoring regulations of EU environmental law.
- The documentation of data and services is constantly improving. Overall, **87%** of the metadata for data sets and network services conforms to the INSPIRE metadata specifications.
- The accessibility of digital spatial data through view and download services is evolving slowly and needs further improvement. More than **40.000** view services and more than **30.000** download services are available. **More than 80%** of these spatial data services are reported by **only 2 countries** and many of the identified spatial data sets are still not accessible through the services. The overall technical conformity of the existing services is **more than 50 %**, which is low and should be also further improved.
- **Almost 14.000 data sets** were reported by the Member States to be **conformant** to the INSPIRE interoperability specifications. It shows that Member States already started preparations to meet 2017 and 2020 data interoperability deadlines. However, significant efforts will still be needed by all Member States in order to meet these upcoming obligations.

# REFIT on INSPIRE = INSPIRE Thematic Viewer

## Priority datasets for e-Reporting



## MS “benchmarking”



- **Simplified** MS data access & use
- Better Regulation in e-reporting = **re-use** of INSPIRE
- Application of **advanced ICT** methods & tools
- The impressive number of MD records  $\neq$  the number of downloadable data
- Tool to **communicate** INSPIRE

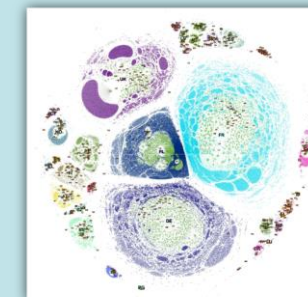


**Hiding complexity  
max. benefits for all**

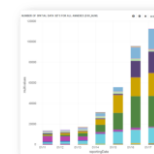
## Progress monitoring

INSPIRE key objective	Overall implementation status and trend	Outlook	Dashboard Legend
Ensure efficient coordination			Implementation of this provision is well advanced or nearly completed. Outstanding issues are minor and can be addressed.
Data sharing without obstacles			Implementation of this provision has started and made some progress but is still far from being complete. Outstanding issues are significant and need to be addressed in order for the objectives of the legislation to be achieved by 2020.
Step 1: Identify spatial context			Implementation of this provision is well advanced or nearly completed. Outstanding issues are minor and can be addressed.
Step 2: Develop common standards (metadata)			Implementation of this provision is well advanced or nearly completed. Outstanding issues are minor and can be addressed.
Step 3: Provide services for data sharing (metadata)			Implementation of this provision is well advanced or nearly completed. Outstanding issues are minor and can be addressed.
Step 4: Make data available for data sharing (metadata)			Implementation of this provision is well advanced or nearly completed. Outstanding issues are minor and can be addressed.

## Content visualisation



**Nr. of MS Datasets – 115 000+**  
**Nr. of MS View services – 24 000+**  
**Nr. of MS Download services – 22 000+**





**INSPIRE's not  
complicated  
... it's just complex**

***... like most things, when you  
break them down***

# *Hvala na pažnji*



Pitanja?

[vlado.cetl@ec.europa.eu](mailto:vlado.cetl@ec.europa.eu)

**Interoperability is better achieved by**



**...sharing solutions in a collaborative way**