

# From INSPIRE priority datasets on environmental eReporting to pan-European datasets

Stefan Jensen  
supported by Henrik Steen Andersen

Joint UNGGIM – ESS – UNECE meeting  
Luxembourg 29. March 2019



# Some history and activities ahead

*Where we are after 12 years of INSPIRE implementation*

- Different speeds and engagement in Member States
- An EU INSPIRE Geoportal with ca. 155.000 metadata records and 11900 downloadable data sets

*What has been initiated under the INSPIRE Multiannual Implementation Work Programme until 2020/21*

- Various actions to increase data sharing and (technical) flexibility
- Focus on environment eReporting as an (authoritative) use case
- Start identifying pan-European datasets as further drivers

*Further activities as part of Copernicus in-situ coordination*

# INSPIRE MIWP 2016.5 work programme

## 1. Manage and update the priority list of eReporting datasets (environment legislation)

clearly identify the concrete datasets which are to be provided by the MS.

Start with “as-is” data

Publish priority dataset version 2 <https://ies-svn.jrc.ec.europa.eu/projects/2016-5/wiki/>

## 2. Make data available as is

MS have been asked to – voluntarily – make available data covered by INSPIRE „as-is“ and identified in the priority dataset list from 15.5.2018 onwards in the INSPIRE Geoportal

# INSPIRE MIWP 2016.5 work programme

**3. Common and interoperable European data models** per reporting obligation/data flow that are fit for purpose for the envisaged use case built upon INSPIRE

Areas currently addressed are commonly designated areas (CDDA), EU-Registry as part of the Industry Emissions Directive (IED), Marine Strategy Framework Directive (MSFD)

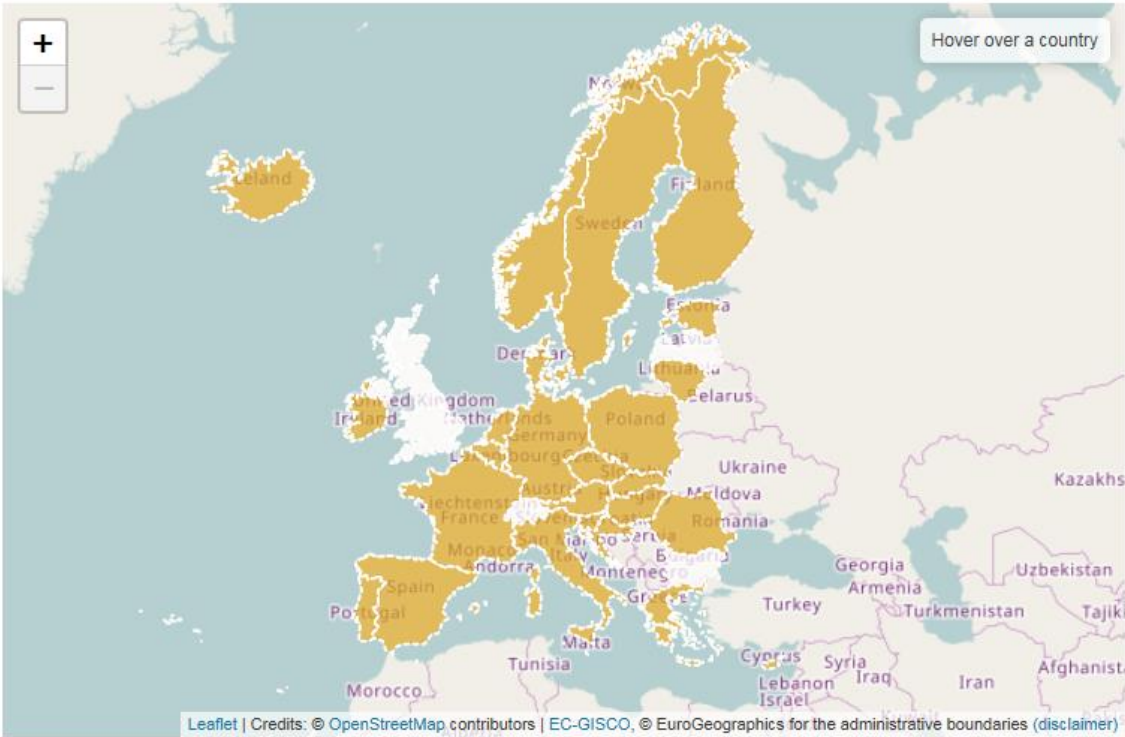
Work is starting on noise (END), floods (FD), invasive alien species (IAS)

**4. Monitoring the availability of priority datasets as precursor for pan-European datasets**

Through the (new) dedicated INSPIRE viewer\* accessing the INSPIRE Geoportal content

\* [http://inspire-geoportal.ec.europa.eu/pdv\\_home.html](http://inspire-geoportal.ec.europa.eu/pdv_home.html)

# Priority Data Sets - EU & EFTA Country overview\* <http://inspire-geoportal.ec.europa.eu/>



Show: Downloadable Viewable

### INSPIRE Geoportal Data Set Statistics

1043  
Metadata records

431  
Downloadable Data Sets

\* status 19.3.2019

### Select a COUNTRY

Austria	74    56    67	Finland	20    14    13	Latvia	0    0    0	Portugal	134    26    78
Belgium	102    33    61	France	117    0    0	Liechtenstein	0    0    0	Romania	21    10    1
Bulgaria	0    0    0	Germany	70    23    23	Lithuania	3    3    3	Slovakia	12    2    4
Croatia	14    1    3	Greece	38    31    31	Luxembourg	62    62    56	Slovenia	4    1    0
Cyprus	5    0    5	Hungary	13    0    0	Malta	54    48    54	Spain	80    80    79
Czech Republic	38    6    33	Iceland	2    2    0	Netherlands	50    17    26	Sweden	30    8    12
Denmark	41    6    6	Ireland	9    0    0	Norway	12    1    1	Switzerland	0    0    0
Estonia	21    1    1	Italy	16    0    1	Poland	1    0    0	United Kingdom	0    0    0

# Focus: access to datasets – which is still difficult

Coun try	MD	DS	VS	No datasets	Only metad ata *	If any of service type is missing **	Low degree of accessibility (average < 50%) ***	Medium degree of accessibility (average 50%-90%) ****	High degree of accessibility (90%-100%) *****	Degree of accessibility all PDS
AT	74	63	68					****		****
BE	101	28	57				***			***
BG	0	0	0	NO PDS						NO PDS
HR	14	1	3				***			***
CY	5	5	1					****		****
CZ	39	5	37					****		****
DK	39	5	5				***			***
EE	21	1	1				***			***
FI	20	15	13					****		****
FR	117	0	0		*					*
DE	65	29	15				***			***
EL	38	31	31					****		****
HU	13	0	0		*					*
IS	2	2	0			**				**
IE	9	0	0		*					*
IT	16	0	1			**				**
LV	0	0	0	NO PDS						NO PDS
LI	0	0	0	NO PDS						NO PDS
LT	0	0	0	NO PDS						NO PDS
LU	66	66	56						*****	*****
MT	54	52	54						*****	*****
NL	42	25	26					****		****
NO	12	1	1				***			***

Coun try	MD	DS	VS	No datasets	Only metad ata *	If any of service type is missing **	Low degree of accessibility (average < 50%) ***	Medium degree of accessibility (average 50%-90%) ****	High degree of accessibility (90%-100%) *****	Degree of accessibility all PDS
PL	1	0	0		*					*
PT	134	27	79				***			***
RO	21	10	1				***			***
SK	12	2	5				***			***
SI	4	1	0			**				**
ES	81	80	81						*****	*****
SE	30	6	23				***			***
CH	0	0	0	NO PDS						NO PDS
UK	0	0	0	NO PDS						NO PDS

Source: INSPIRE Geoportal, 27.02.2019

Legend

High degree of accessibility (90%-100%) (*****)
Medium degree of accessibility (average 50%-90%) (****)
Low degree of accessibility (average < 50%) (***)
If any of service type is missing (**)
Only metadata (*)
No priority datasets

# Next steps regarding environmental eReporting datasets

Stepwise - based on user needs - identify pan-European datasets built from them

Prioritise data with reference data function

Focus on datasets to which the INSPRIE data models have been applied (PDS task 3)





In situ

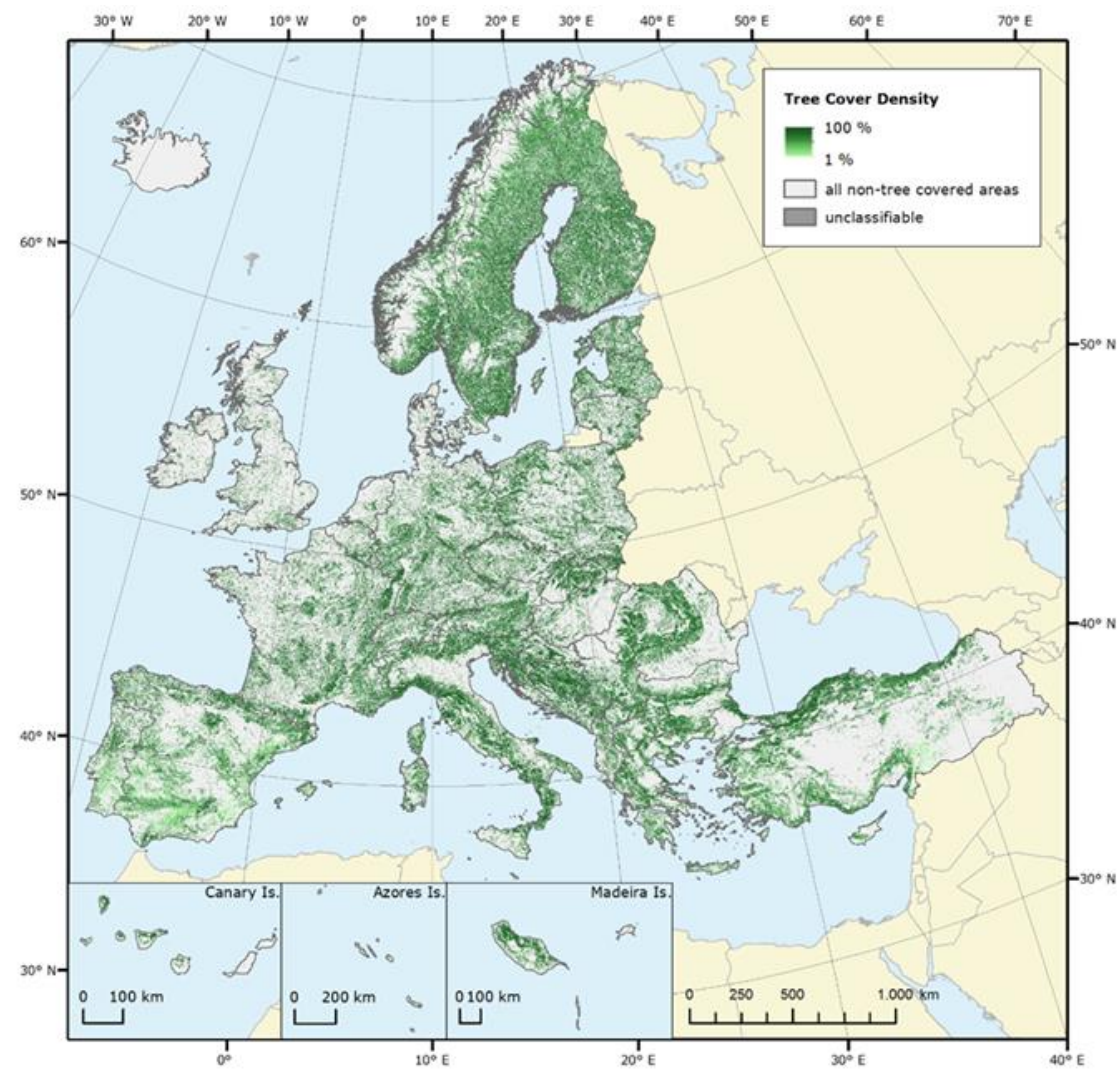
# Copernicus and INSPIRE – proof of concept

Copernicus can benefit from the Member States' implementation of INSPIRE.

The EEA has made an effort to verify how feasible it is to prepare INSPIRE (Annex I) data for use by Copernicus.

'Administrative Units' was chosen as a (simple) test case.

Another test case dealing with HY and BU is on-going.







In situ

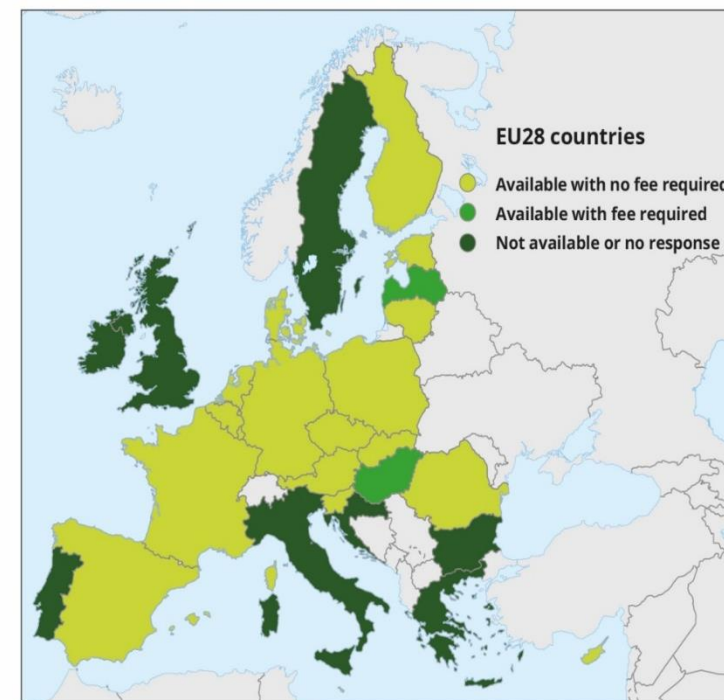
# Access to data

In November 2018 only AU datasets from 20 countries were available.

Despite the complex INSPIRE implementation conformance makes the use of the data and information easy.



Full dataset including 'close to INSPIRE data'.



The analysis was completed by the CORDA Team (Geograma) November 2018



In situ

# A new test case on H Y and B U

We are aiming at:

- **Creating multi-country datasets** from the national/regional harmonised datasets discoverable in the INSPIRE Geoportal;
- **Overcoming the current data accessibility issues**, e.g. availability of services and data usability restrictions;
- **Streamlining the ingestion** of national/regional datasets into a multi-country database, benefitting from the progressive implementation of INSPIRE by the data providers.

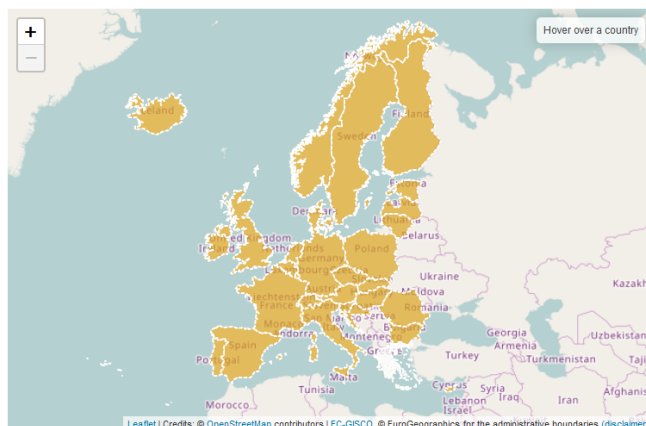




In situ

# Discoverable HY & BU datasets

## Data Sets - Hydrography of Europe



Show: ☐ Downloadable ☐ Viewable

### INSPIRE Geoportal Data Set Statistics

2612

Metadata records

169

Downloadable Data Sets

INSPIRE Geoportal

## Data Sets - Buildings of Europe



Show: ☐ Downloadable ☐ Viewable

### INSPIRE Geoportal Data Set Statistics

1381

Metadata records

79

Downloadable Data Sets

- Number of downloadable datasets is low, but progressively increasing;
- In some cases, we are able to locate additional downloadable datasets.

### Select a COUNTRY

Austria	2   1   2	Finland	38   0   2	Latvia	7   0   0	Portugal	11   1   0
Belgium	7   3   5	France	403   18   44	Liechtenstein	1   0   0	Romania	2   0   0
Bulgaria	0   0   0	Germany	88   26   31	Lithuania	1   0   0	Slovakia	3   0   0
Croatia	10   0   0	Greece	0   0   0	Luxembourg	20   20   19	Slovenia	3   1   2
Cyprus	1   0   1	Hungary	10   0   0	Malta	1   0   1	Spain	4   1   3
Czech Republic	4   1   2	Iceland	2   0   0	Netherlands	2   2   2	Sweden	2   0   0
Denmark	4   1   2	Ireland	2   0   0	Norway	13   1   0	Switzerland	6   0   0

European Environment Agency



European Commission

Copernicus  
Europe's eyes on Earth





In situ

# Copernicus services' access

**AU INSPIRE Harmonized**

Details: This collection includes all the INSPIRE compliant resources

**Now, data available on a country by country basis**

Spatial data services (SDS) for AU INSPIRE Harmonized Collection

Administrative Units Austria (SHP), INSPIRE HARMONIZED	Administrative Units Cyprus (WFS), INSPIRE HARMONIZED
<b>Format:</b> VECTOR FILE	<b>Format:</b> WFS
<b>State:</b> WORKING	<b>State:</b> WORKING
<b>Dataset:</b> Administrative Units Austria	<b>Dataset:</b> INSPIRE Administrative units - Department of Lands and Surveys
<b>Provider:</b> BEV - Federal Office for Metrology and Surveying (Austria)	<b>Provider:</b> Department of Lands and Surveys of Cyprus (Cyprus)
<b>Fees:</b>	<b>Fees:</b> no conditions apply
<b>Access constraints:</b>	<b>Access constraints:</b> None

Administrative Units Czech Republic (GML) INSPIRE [...]	Administrative Units Denmark (GML) INSPIRE HARMONIZED
<b>Format:</b> VECTOR FILE	<b>Format:</b> GML
<b>State:</b> WORKING	<b>State:</b> WORKING
<b>Dataset:</b> INSPIRE Administrative Units	<b>Dataset:</b> DAG Administrative Division
<b>Provider:</b> Czech Office for Surveying, Mapping and Cadastre (CZK) (Czechia)	<b>Provider:</b> Danish Geodata Agency (GST) (Denmark)
<b>Fees:</b>	<b>Fees:</b>
<b>Access constraints:</b>	<b>Access constraints:</b>

Administrative Units Estonia (WFS) INSPIRE HARMONIZED	Municipal Division Finland (GML), INSPIRE HARMONIZED
---	--

CORDA

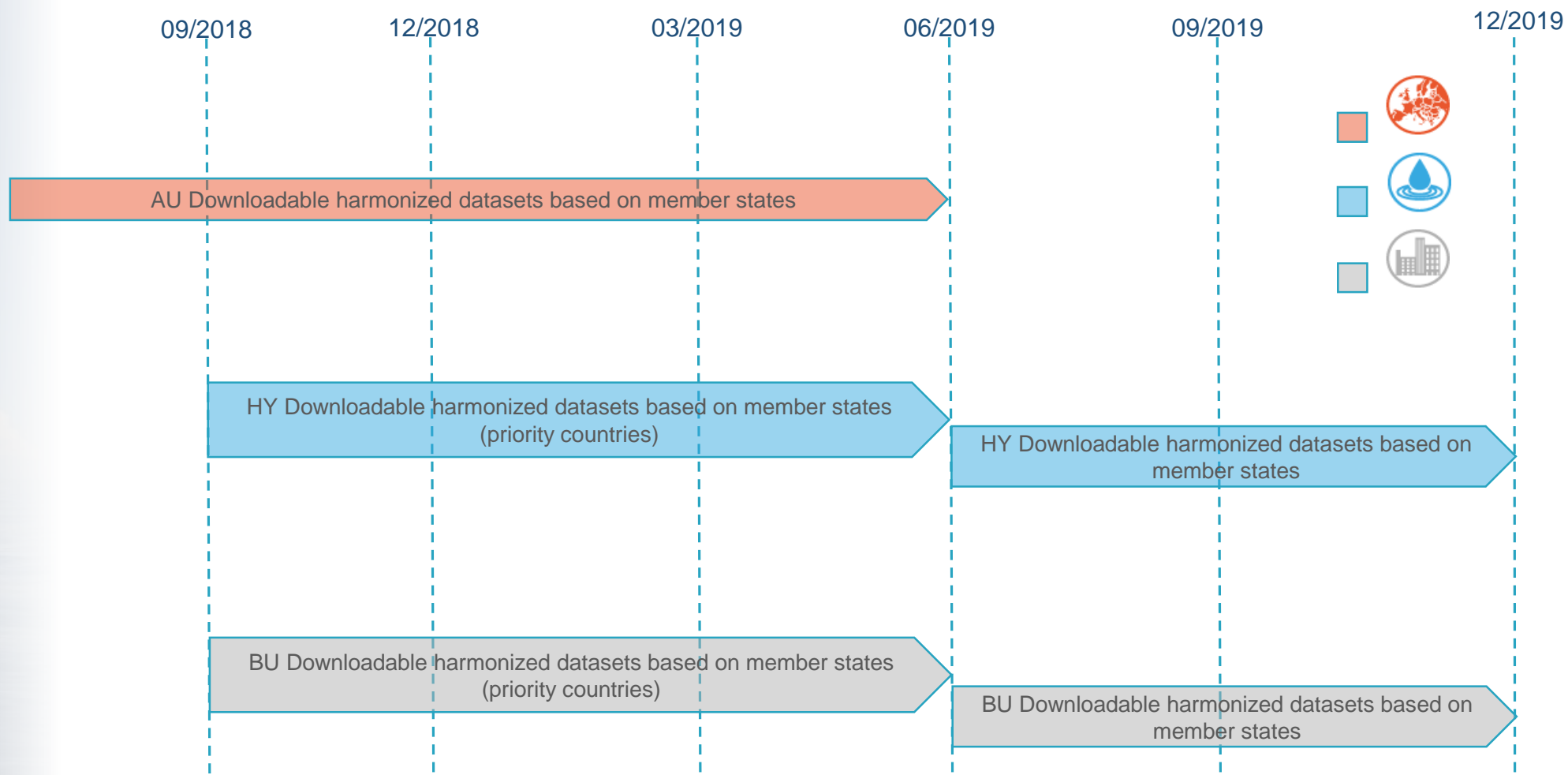
Soon, multi-country datasets will be available





In situ

# Timeline for multi-country products



# Conclusions

Various activities to build pan-European datasets are under way (but not yet completed)

- UNGGIM core data recommendation
- ESTAT/GISCO activities on transport (railways), geographic names, addresses, local admin. units
- INSPIRE Coordination team (ENV, EEA, JRC) work with Member States on priority datasets in environment eReporting
- Copernicus in-situ coordination activities

National datasets become increasingly available but access conditions and data quality are still very heterogeneous