Pan European spatial data: Challenges, chances and opportunities

Stefan Jensen , European Environment Agency, Eurogeographics General Assembly , Manchester 8. October 2019

The European Environment Agency role

The EEA mission:

"The EEA aims to support sustainable development and to help achieve significant and measurable improvement in Europe's environment through the provision of timely, targeted, relevant and reliable information to policy makers and the public"

Main elements of our work on data

Countries deliveries

European datasets

European products

33 countries
XML, SHP, GML, KML, CSV, Access, etc…

100+ European Datasets

Downloads,Web sites,applications

A core data task: producing European environmental datasets

EEA experiences in building pan European data sets

	Page Title	Most downloaded data sets
1.	Digital Elevation Model over Europe (EU-DEM) – European Environment Agency	
2.	AirBase - The European air quality database – European Environment Agency	
3.	Urban Atlas – European Environment Agency	
4.	Natura 2000 data - the European network of protected sites – European Environment Agency	
5.	Corine Land Cover 2006 raster data – European Environment Agency	
6.	Elevation map of Europe – European Environment Agency	
7.	Monitoring of CO2 emissions from passenger cars – Regulation 443/2009 – European Environment A...	
8.	Europe coastline shapefile – European Environment Agency	
9.	Biogeographical regions – European Environment Agency	
10.	Air Quality e-Reporting (AQ e-Reporting) – European Environment Agency	

Initiatives building Pan European spatial reference data sets - what becomes available

Global (SDG linkage):
(United Nations Global Geographic Information Management) UN-GGIM: *Fundamental data*

Europe:
UN-GGIM Europe: *Core data*

EU INSPIRE:
e.g. Annex I reference data
Priority data sets for env. reporting

EU Public Sector Information (PSI)
Directive recast: *High Value datasets*

EuroGeographics: *Core (authoritative) data*

Business cases ?

Users ?

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Usage of spatial reference data in EEA and Eionet

Selected geospatial reference data used inside EEA

EuroRegionalMap 2019   *v. 01/2019*

Global Administrative Unit Layers (GAUL)   v. 12/2010

EU-Hydro River Network   v. 04/2016

EuroBoundaryMap 2019   *v. 01/2019*

Administrative boundaries of EEA39 v. 04/2018

Diversity of sources
Fitness for purpose

Lessons learnt from Member States practises

- Authoritative data from NMCAs is been used in datasets produced by environmental organisations

- Data is blended with other spatial data (e.g. OSM) and thematic data <u>based on user needs</u>

- Usage is often <u>application dependent</u> (analytical, webmapping, other mapping purposes)

- <u>Reuse</u> and distribution of such mixed products is <u>largely possible</u>
  - in some cases disclaimers need to be used
  - special licenses are rarely required

- PSI provisions <u>encourage opening up of data</u>

Diversity of sources
Fitness for purpose

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EEA's integrated data platform as knowledge inventory and analysis base

In situ
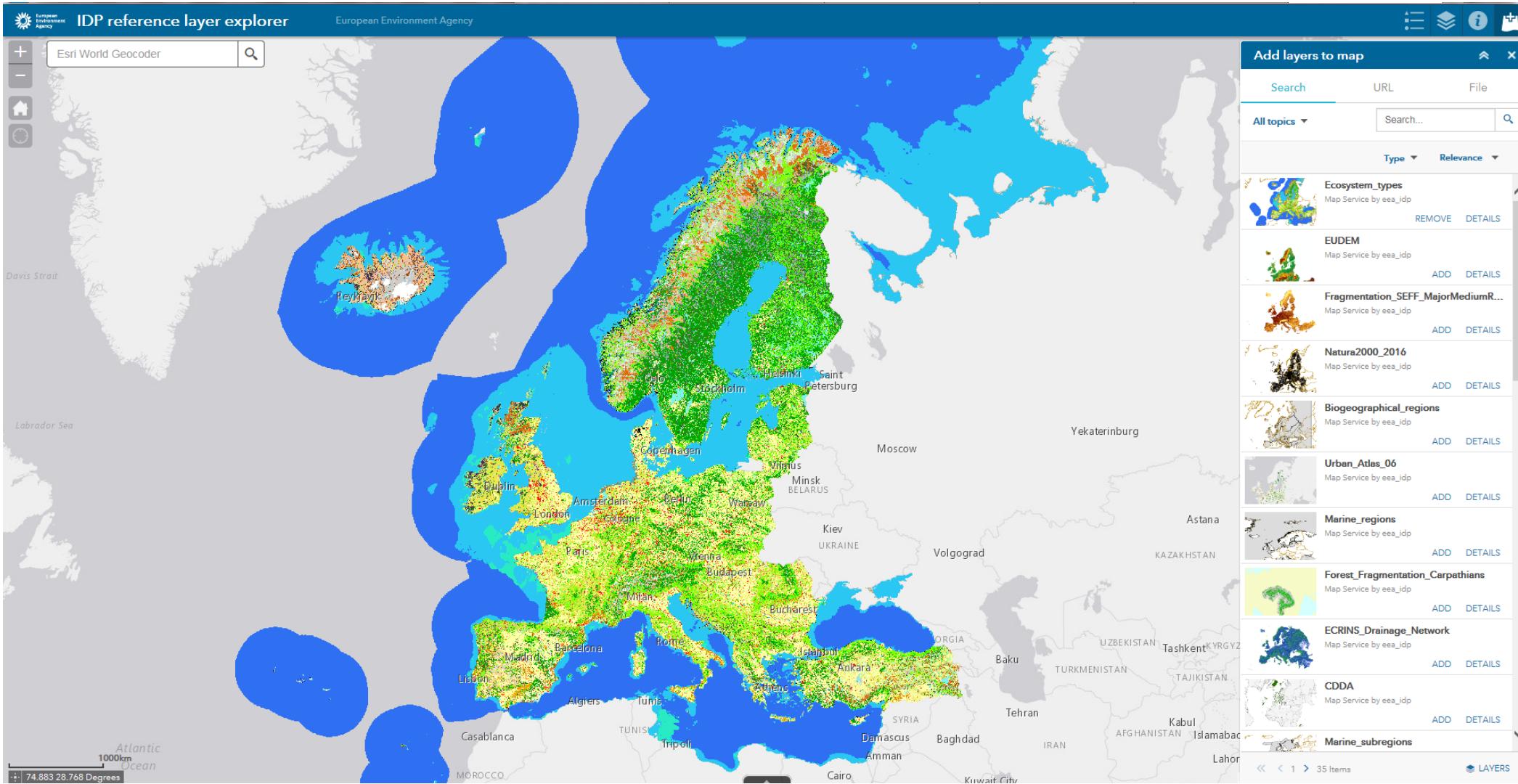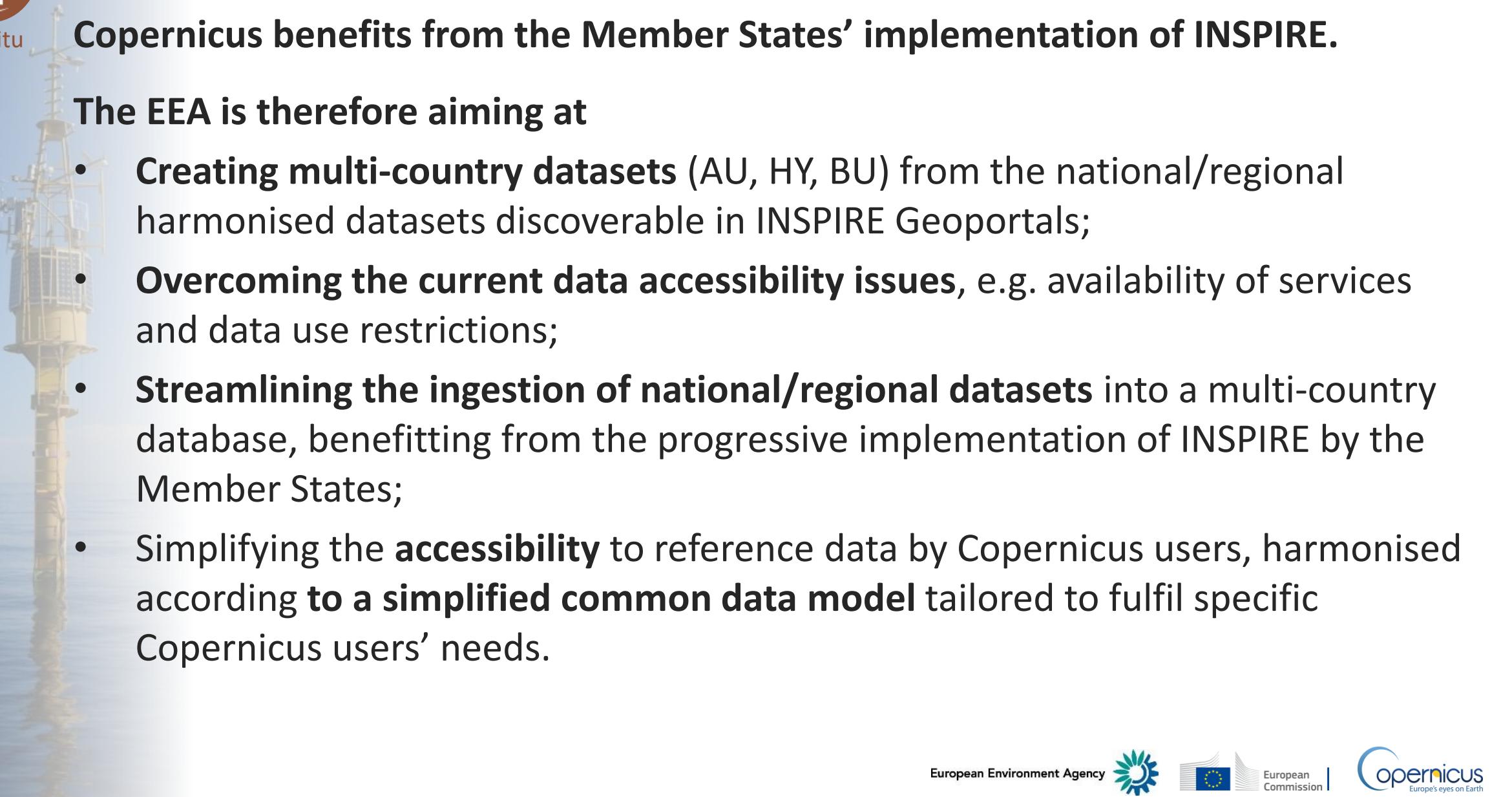
Copernicus benefits from the Member States' implementation of INSPIRE.

The EEA is therefore aiming at

- **Creating multi-country datasets** (AU, HY, BU) from the national/regional harmonised datasets discoverable in INSPIRE Geoportals;

- **Overcoming the current data accessibility issues**, e.g. availability of services and data use restrictions;

- **Streamlining the ingestion of national/regional datasets** into a multi-country database, benefitting from the progressive implementation of INSPIRE by the Member States;

- Simplifying the **accessibility** to reference data by Copernicus users, harmonised according **to a simplified common data model** tailored to fulfil specific Copernicus users' needs.

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European Commission

Copernicus
Europe's eyes on Earth

In situ

Datasets ingested into multi-country database	Amount of countries per dataset
Administrative Units	20
Buildings	4
Hydrography (Watercourses)	7
Hydrography (StandingWater)	5
Hydrography (Wetland)	5
Hydrography (LandWaterBoundary)	3
	Total: 44

e.g. hydrography - watercourse
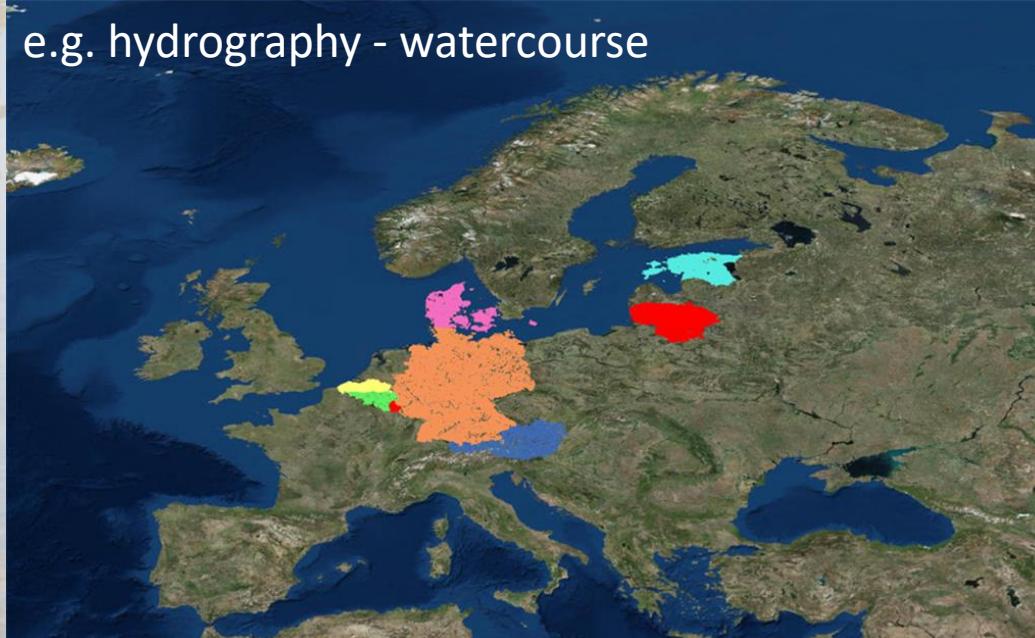
	Total amount at CORDA	NMCA // Whose origin is NMCA	
Providers	270	33	12% of all providers
Datasets	2183	479	9.2% (44) used for multi-country database
Resources/ SDS	5937	1586	

Status 1.10.2019

Key policy processes shaping the way ahead ...

Green Deal and Digitalisation:

Digital Europe Strategy:

Open data as foundation of a digital economy

- building added value on top of open data

Data related EU Initiatives:

Common European data space

for environmental and climate-related data

- open up data for integration

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Modernise - processes and products

Integrate - across diverse needs

Develop - sharing culture

COOPERATE

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