



In situ

Copernicus KEN meeting December 2017

Henrik Steen Andersen, EEA





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Copernicus Services need geospatial data

Requirements group	Copernicus Service Component							
	CEMS		CLMS					
	Mapping	Early Warning	Local	Pan EU	Global			
Settlements	x	x	x	x				
Hydrographic network	x	x	x	x				
Land cover	x	x	x	x				
Digital Elevation Model	x	x	x	x				
Transportation network	x	x	x	x				
Administrative boundaries	x	x	x	x				
Aerial Ortho-imagery	x		x	x				
Industry and Utilities	x	x						
Large scale population information	x	x						
Physiography	x	x						
Meteorological forecast data		x						
Toponyms	x							
LPIS data		x	x	x				
Oceanographic data and forecast								
Vessel Identification and tracking (LRIT, AIS, S AIS)								2
Vessel database						x	x	2
Occurrence by Service	11	11	8	8	5	12	5	10





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Partnership Agreement signed March 2017



Home » News » EEA and EuroGeographics sign agreement

Print

[Security](#) [Land](#) [Spatial Data](#) [Agreements](#) [Emergency](#)

Partnership agreed to improve access to pan-European maps for Copernicus users

Users of Copernicus services are set to benefit from a new partnership which improves access to pan-European maps and land information from official sources. The cooperation agreement signed today (29 March 2017) between the European Environment Agency (EEA) and EuroGeographics signals a commitment to make more national authoritative geospatial information available through the European Commission's flagship initiative for earth observation and monitoring.



Left: Executive Director Hans BRUYNINCKX (EEA); Middle: Mick Cory, Secretary General and Executive Director (EuroGeographics); Right: Anders Sandin, Chair of the EuroGeographics Copernicus Knowledge Exchange Network.

Mrs Ingrid Vanden Berghe, President, EuroGeographics said: "Our members, the European National Mapping, Cadastral and Land Registry Authorities, already provide data to crisis response teams through the Copernicus Emergency Mapping Service. This new agreement strengthens and builds on their relationship with the EEA and will benefit people across Europe by supporting wider initiatives underpinned by pan-European harmonised data."

NEWS



1 SEP 2017
Workshop: INSPIRE implementation and Copernicus Services dat...



17 JUL 2017
How EUMETNET and its members support Copernicus



17 JUL 2017
The European Climate Assessment & Dataset and Copernicus

[VIEW ALL](#)

EVENTS

No upcoming events at this time.

[VIEW PAST EVENTS](#)



European Environment Agency



European Commission





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Building up a cooperation framework

Version: FINAL



European Environment Agency



AGREEMENT

Between

The European Environment Agency (hereinafter referred to as "EEA"), established in Denmark, Kongens Nytorv 6, DK – 1050 Copenhagen K, which is represented for the purpose of signature of this Agreement by Mr. Hans Bruyninckx, Executive Director

On the one hand

And

EuroGeographics AISBL (hereinafter referred to as "EG"), established in Belgium, rue de la Woluwe 62, B - 1200 Brussels, which is represented for the purpose of signature of this Agreement by Mrs. Ingrid Vanden Berghe, President,

On the other hand

Being referred to individually as "the party" or collectively as "the parties".

WHEREAS the EEA is an agency of the European Union governed by Regulation (EC) No 401/2009 of the European Parliament and of the Council¹ dedicated to providing objective, reliable and comparable information on the environment. The aim of the EEA is to ensure that the decision-makers and the general public are kept informed about the state and outlook of the environment. The EEA also provides the necessary independent information and knowledge to enable the European Union and the EEA member countries to take appropriate measures to protect and improve the environment as laid down by the Treaty and by successive Community action programmes on the environment and sustainable development. The EEA also provides the necessary independent information and knowledge to enable the European Union and the EEA member countries to take appropriate measures to protect and improve the environment as laid down by the Treaty and by successive Community action programmes on the environment and sustainable development. The EEA works in partnership with government departments and agencies, in particular through Eionet, international conventions and UN bodies, the scientific community, private sector and

¹ OJ L 126 of 21.5.2009, p. 13.

The Partnership Agreement;
CEMS specific agreements;
The Copernicus Reference Data
Access portal;
The 'ELS test case';
Eurogeographics/e-geos DEM
Study.

Nr.	Country	Signed by	Date of signature	Technical contact
1	Azerbaijan	Ramiz Gulgeev	14/12/2016	Chingiz Tanriverdiyev
2	Cyprus	Andreas Sokratous	28/11/2016	Andreas Hadjiraftis
3	Czech Rep.	Karel Vecere	28/11/2016	Karel Brazdil
4	Denmark	Kristian Moller	01/12/2016	Susanne Bolesen Petersen
5	Estonia	Tambet Tiits	06/12/2016	Tanel Hurt
6	Georgia	Papuna Ugrehelidze	29/11/2016	Ivane Tsartsidze
7	Greece	Byron Nakos	30/11/2016	Andriana Katsina
8	Iceland	Magnus Gudmundsson	25/11/2016	Gunnar H. Kristinnsson
9	Italy	Gianfranco Rossi	13/12/2016	Enzo Santoro
10	Netherlands	Haico van der Vegt		Dorus Kruse
11	Spain	Amador Elena Cordoba	29/11/2016	Emilio Lopez Romero
12	Sweden	Bengt Kjellson	02/12/2016	Katrin Falk
13	France	Daniel Bursaux	15/12/2016	Francois Chirle
14	Germany	Judex Michael	18/05/2016	Judex Michael
15	Portugal	Rui Manuel	13/12/2016	Mario Caetano

16	Belgium	Wouter de Ryck	22/12/2016	
17	Romania	Radu Codrut Stefanescu	22/12/2016	Constantin Ene
18	Slovenia	Anton Kupic	03/01/2017	Uros Mladenovic
19	Northern Ireland	Colum Boyle	02/12/2016	Sandra Christie
20	Malta	John Buttigieg	05/12/2016	Raymond Attard
21	Lithuania	Danielius Kuprys	22/12/2016	Andrius Balciunas
22	Slovakia	Maria Frindrichova	07/02/2017	Matus Fojtl





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The Agreement's main specific objectives

- Improve Copernicus' access to EG' data and services such as EuroBoundaryMap, EuroRegionalMap, and E.L.F;
- Enhance the dialogue between Copernicus and EG' members with a view to making more national authoritative geospatial data available to the Copernicus services in accordance with their requirements;
- Foster knowledge exchange between Copernicus and EG members to ensure a clear mutual understanding of the Copernicus services' in situ requirements and geospatial data produced by EG and its members;





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The Agreement's main specific objectives

- Promote awareness raising activities intended to improving the visibility of the Copernicus in situ component and the important role of EG and its members herein;
- Support initiatives aiming at providing harmonised geospatial data sets and services at the European level.





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Looking ahead

The framework is in place

now we need to

consolidate and expand concrete,
comprehensive, relevant and reliable
solutions.

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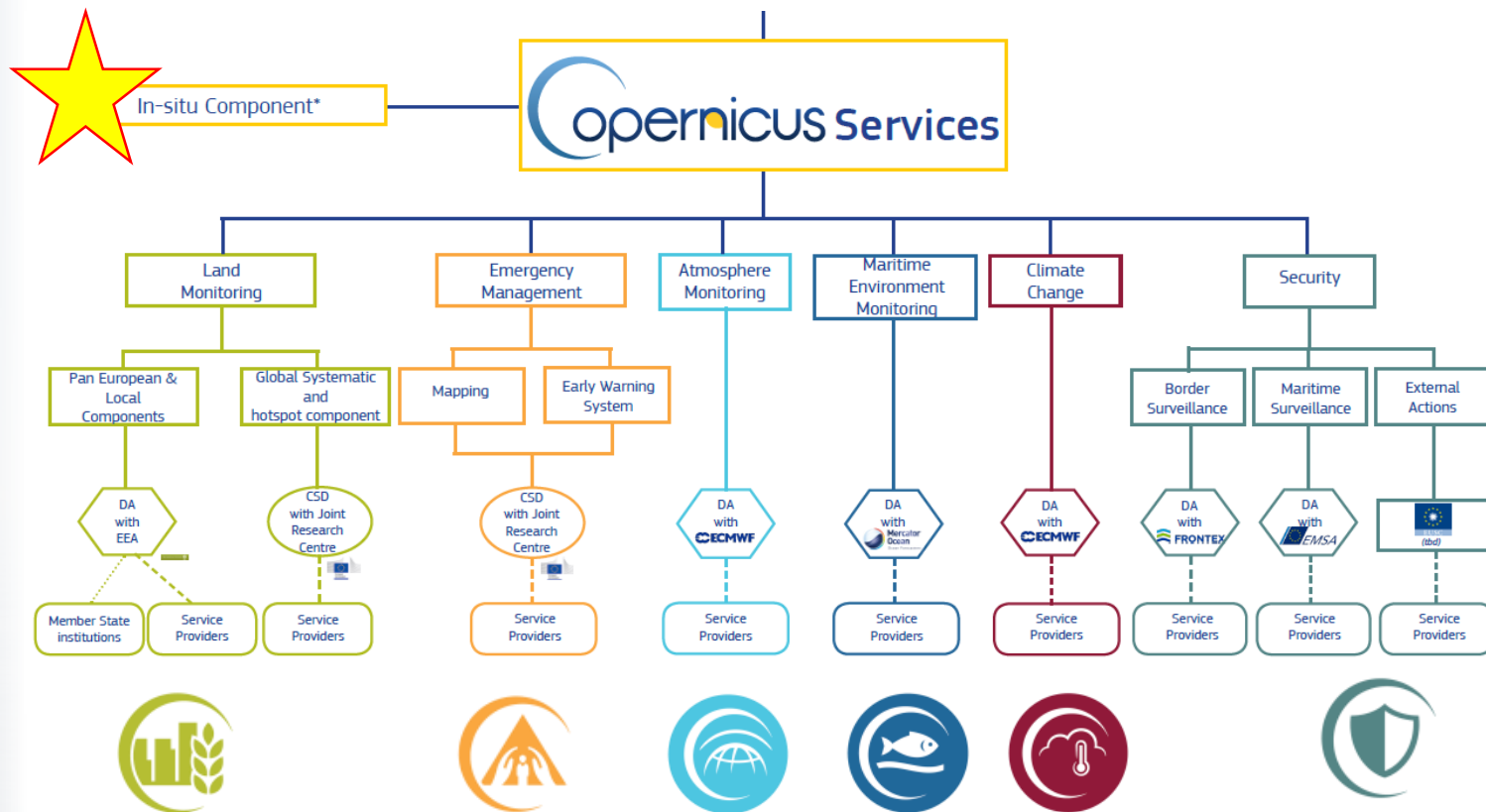
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Commission

Copernicus
Europe's eyes on Earth



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Copernicus service and in situ components



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In situ

The Copernicus in situ component

- Provides reliable and sustainable access to in situ data, relying on existing capacities operated at national and European level, and global observing systems;
- Is implemented by the services, and by the EEA when overall coordination is required;
- Member states' in situ infrastructures and data are essential contributions to Copernicus.





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EEA's main cross-cutting activities

**Maintain an
overview of the
Copernicus in
situ component**

**Improve
access to
selected in situ
data**

**Raise
awareness
about the
Copernicus in
situ component**





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Copernicus & INSPIRE - a simple question

Is Copernicus benefitting from INSPIRE, e.g. regarding spatial data discovery, accessibility, and usability?

Yes, of course, but ...





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Copernicus & INSPIRE

The Copernicus programme and its users consider the timely implementation of INSPIRE to be important as a key source of in situ data.

With the implementation of INSPIRE, the number of available data sets and services relevant for the Copernicus services is expected to increase, and discovery and access operations will be made considerably easier.






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CORDA is still moving forward


Copernicus Reference Data Access


European Environment Agency



Contact with data providers – Success stories

Successful contacts

Via direct contact with several data providers, CORDA has successfully identified and helped fixing various errors in files and services, making sure the information is both reachable and reliable.

In addition to that, many data providers have agreed to share with CORDA a number of datasets that are not published in their catalogues or otherwise difficult to find.

The previous cases include, but are not limited to:

- **Eurostat** - Fixed DEM download for southern Spain and Portugal
- **Swedish Board of Agriculture** - Vector file about Meadow and pasture inventory
- **Switzerland** - Cadastral Parcels dataset available
- **Germany** - New Hydrology service that is not published in the catalog
- **Slovakia** - New data for CEMS
- **Portugal** - New datasets for Orthoregistry, Elevation and Topographic maps
- **Austria** - New data source for Administrative Units and Elevation

This consolidates CORDA as one of the best resources to find geographic information in Europe, serving not only as an entry point for information that is thoroughly reviewed but also contains pieces of information that are not available anywhere else.

National coverage improved

CORDA keeps growing

CORDA keeps improving its coverage at national level. In the last few months, datasets for new INSPIRE themes have been added for Portugal, Turkey, Switzerland, Belgium, Slovenia and Ireland.

The coverage of following themes has been extended:

- **Geographical Names** - Portugal, Turkey, Switzerland
- **Transport Network** - Switzerland
- **Elevation** - Turkey, Switzerland
- **Orthoregistry** - Belgium
- **Buildings** - Slovenia
- **Land Use** - Ireland (Vegetation)

With the latest additions, CORDA now has more than 6000 spatial data services (SDS) registered, grouped into more than 2000 datasets (DS). This volume of information makes it easier to find geographical information across Europe not having to surf through a lot of catalogues from different countries and in different languages.

DATASETS
2.160

SPATIAL DATA SERVICES
6.041

New in CORDA: LPIS

Did you know that...

...you can now find Land Parcel Information System (LPIS) for the following countries in CORDA? CORDA now has LPIS registered for 14 countries and 2 regions:

• Flanders (Be)	• France	• Poland	• Estonia
• Wallonia (Be)	• Luxembourg	• Portugal	• Lithuania
• Spain	• Austria	• Czech Republic	• Netherlands
• Slovakia	• Slovenia	• Sweden	



Since last workshop:

- More than 1000 additional datasets;
- Links to open LPIS data included;
- Focus on CEMS specific agreements;
- New explore tool;
- Usage monitoring.

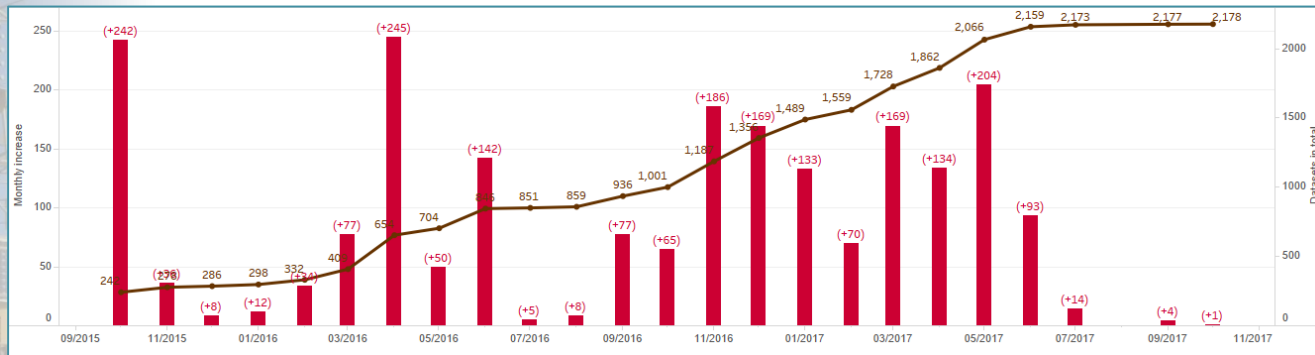




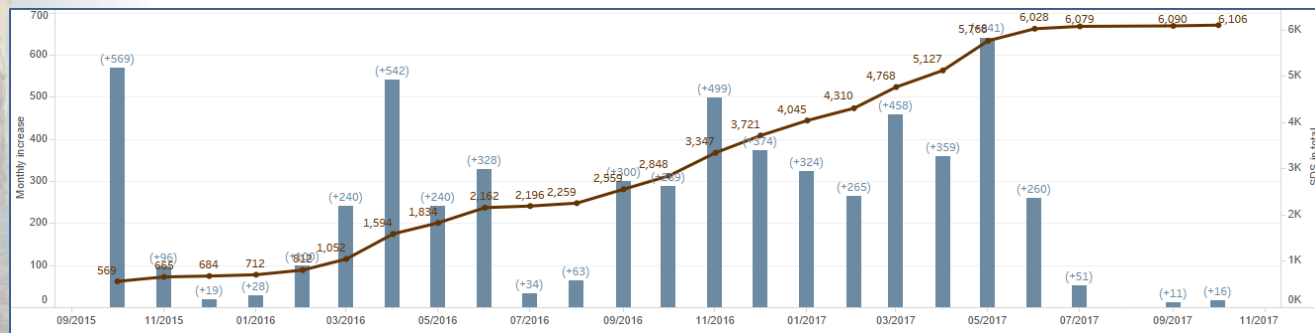
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Statistics from November

Datasets



Data services



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Copernicus Reference Data Access Portal

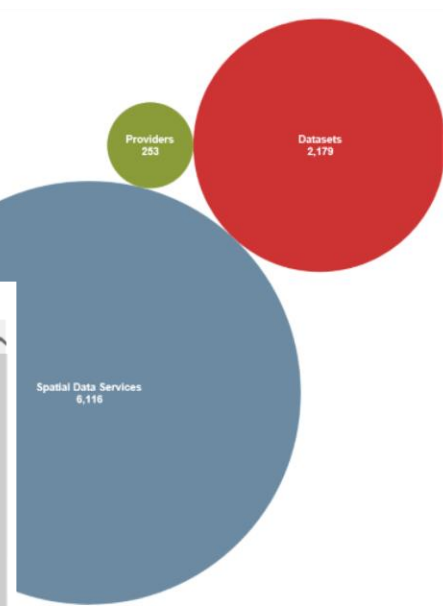
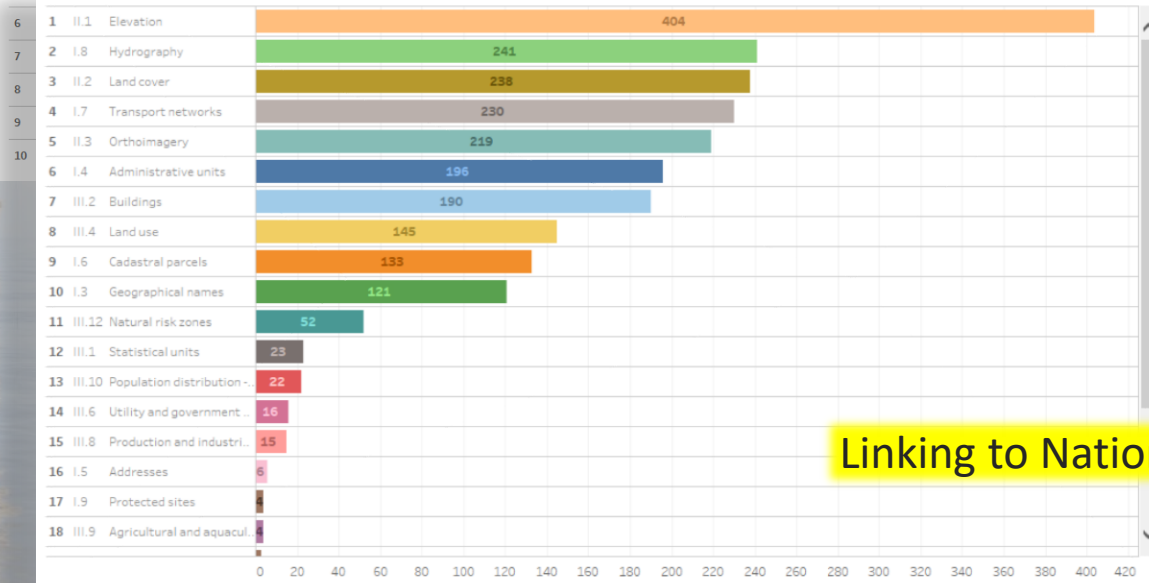


Most accessed datasets by Copernicus Services

Each time a visitor accesses a dataset page, clicks a hyperlink, views a graphic or performs any other action, information about that action is recorded. This dashboard shows the most used datasets by Copernicus Service Providers and the most used related INSPIRE themes.

Rank	Dataset Name	Data Provider	Country	Hits
1	Topographic map BDO (vector) 1:250000	Centre for Geodesy and Cartography Documentation (CODGIK)	Poland	152
2	BD TOP08 Topographic Data Base	National Institute of Geographic and Forest Information (IGN)	France	56
3	Basic Landscape Model Nordrhein-Westfalen	Geobasis NRW - Surveying and Mapping, Cologne Government Regional Office	Germany	49
4	Croatian base map at a scale of 1: 5000	State Geodetic Administration of the Republic of Croatia (DGU)	Croatia	45

Ranking by INSPIRE themes for All



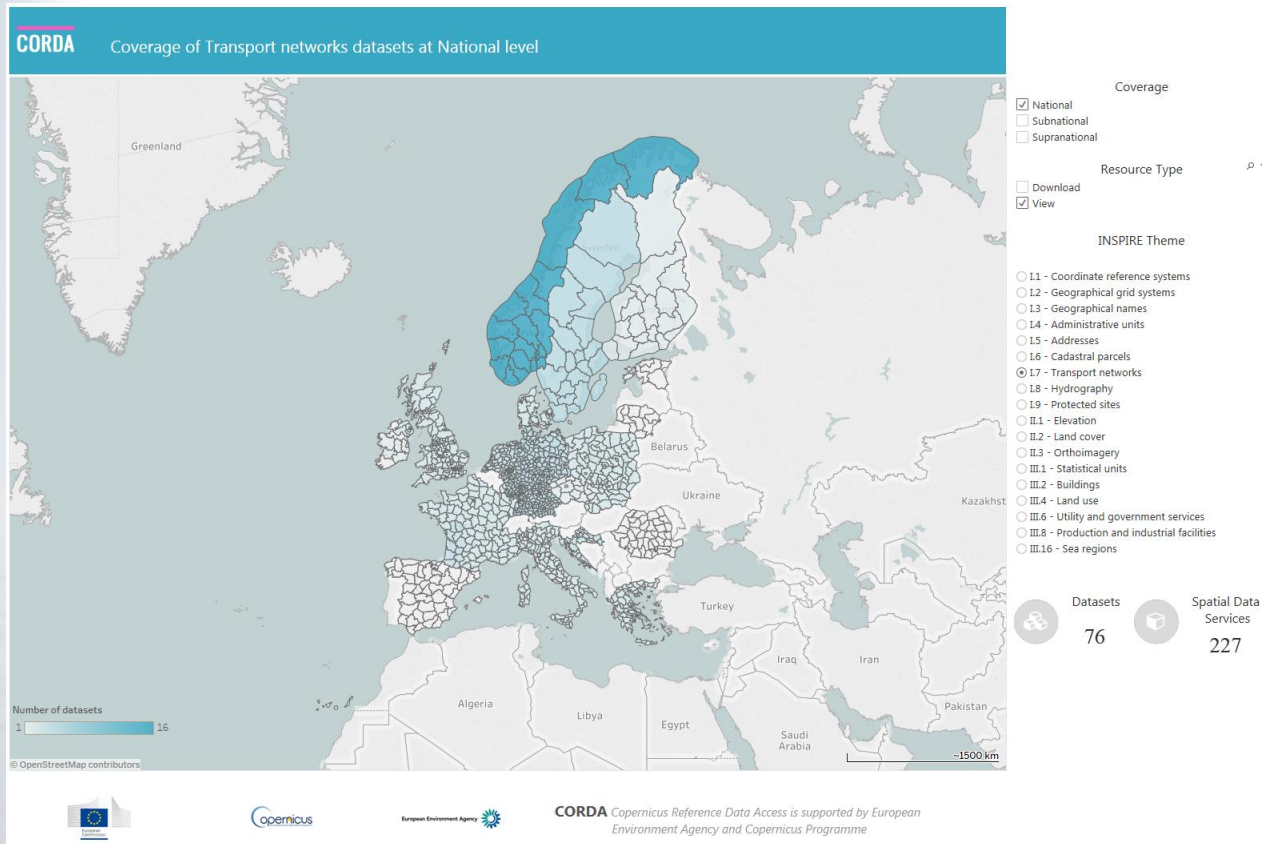
Linking to National Datasets and Services





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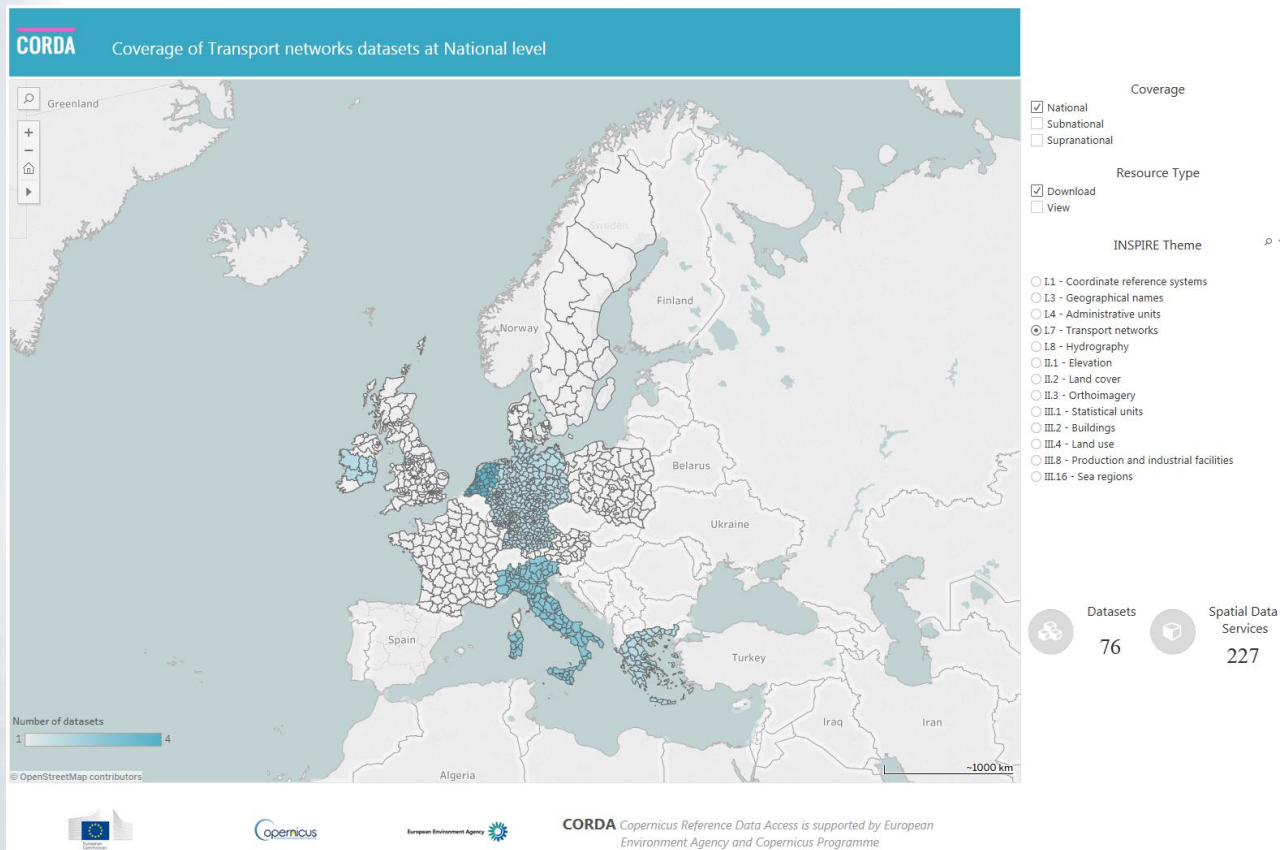
Copernicus needs pan-European coverage





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Copernicus needs pan-European coverage



CORDA Copernicus Reference Data Access is supported by European Environment Agency and Copernicus Programme

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A concrete example - EBM

- What we would need for production, is one authoritative, simplified (e.g. without coastal buffers included for some countries), consistent dataset that has all land and sea borders of all EEA-39 countries included at comparable levels of generalisation, and with a good match to the actual coastline;
- A number of countries are only included as highly generalized placeholders. This is true for TR, the Channel Islands and Montenegro;
- The Channel Islands as included show a major geometric shift as compared to our image data;
- Significant differences in the level of generalisation between the GISCO boundaries used in 2012 and EBMv11 were found for the small islands of the coast of southern FI.



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A concrete example - CEMS



Emergency
Management

Mapping

Operational needs

- 24/7/365 access
- Automatic and direct access to datasets.
 - No helpdesk interface. Language issue.
- Search tools for content, area of interest
 - Info description, good viewer, clear table of contents
- Access/download only AOI
- Common and standard formats
- Known data model - metadata standard

Preferences/priorities

- Available as standard web services and download
- Harmonized data model
- Single access point and sign on for accessing data
- Move from catalogue of potentially available datasets to actual access





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Thank you for your
attention

