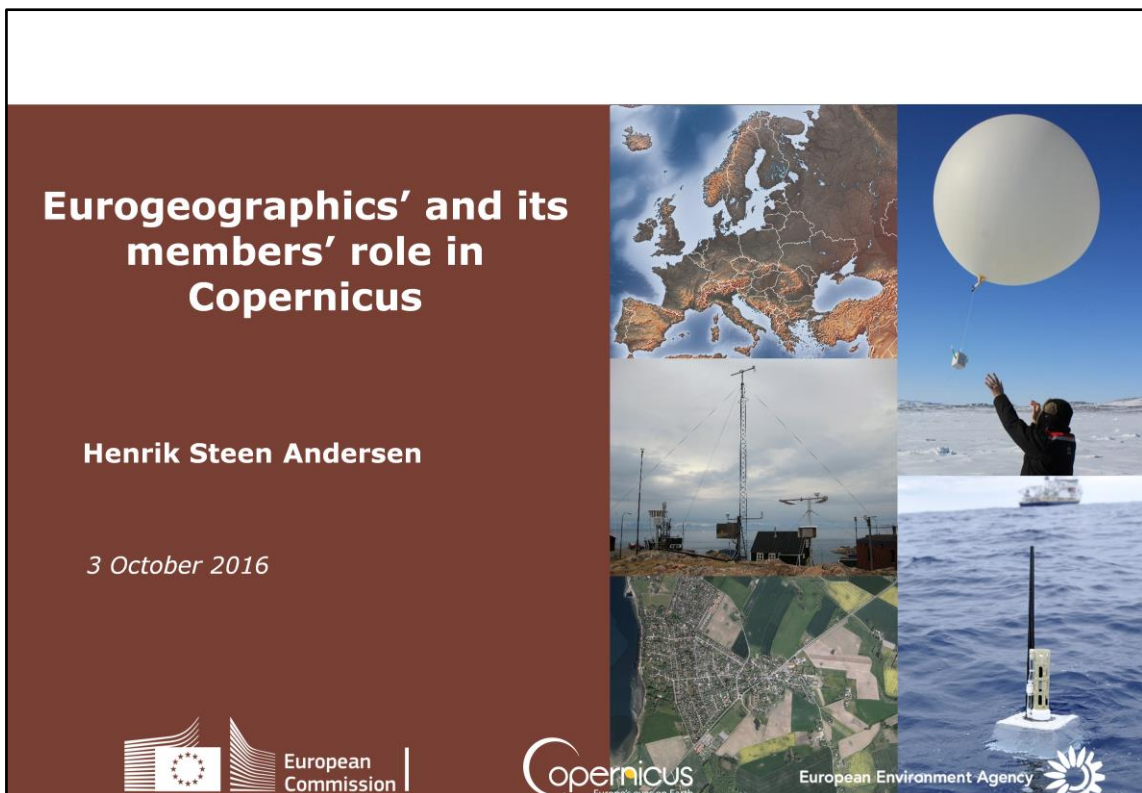




Eurogeographics' and its members' role in Copernicus

Henrik Steen Andersen

3 October 2016



European
Commission



European Environment Agency



Thanks for giving me this opportunity to address the General Assembly and inform you about Copernicus and the role of Eurogeographics and its members.

Last week I attended part of the INSPIRE conference. It was very interesting, and various presentations demonstrated important progress regarding the implementation of INSPIRE. This is important for Copernicus. Because access to and availability of geospatial data will improve.

What could also turn out to be very important for Copernicus is the European location framework. Really amazing what you are building up, not only the technical infrastructure, but you are also facilitating cooperation, knowledge sharing, and providing guidance.

The Copernicus programme needs access to geospatial data to deliver requested products and services



Cooperation between Eurogeographics and its members and Copernicus is required to achieve this

EuroGeographics GA October 2016



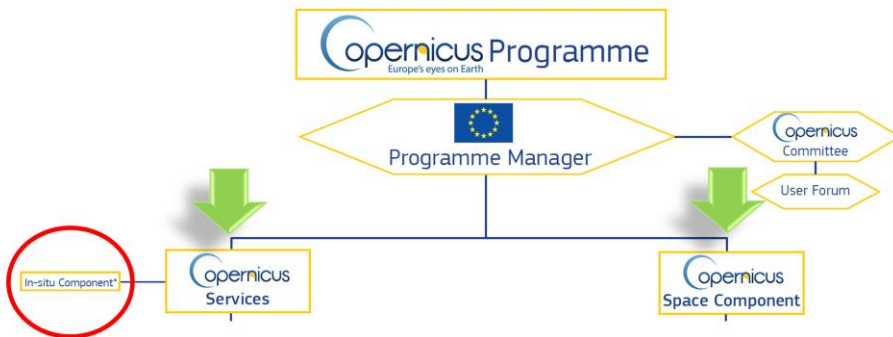
European
Commission



|

Let us not forget that you are already playing an important role. A role I hope we together can expand and clarify during the coming months and years.

The Copernicus programme In situ and geospatial reference data



The Copernicus programme is managed by the European Commission and governed by the Member States via the Copernicus User Forum and the Programme Committee, and is implemented by a group of entrusted entities. The EEA is one of these entities, and is responsible for two components of the Copernicus Land Service (Pan-European and Local Land), and with the overall coordination of the Copernicus in situ component.



The Copernicus in situ component

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



The primary objective of the Copernicus in situ component is to provide **reliable and sustainable access** to in situ data to the Copernicus services, **relying on existing capacities** operated at national and European level, and global observing systems.



The Copernicus in situ component EEA's main cross-cutting activities

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

**Improve
access to
selected in situ
data**

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

EuroGeographics GA October 2016



European
Commission



| 5

The EEA will focus on:

- Maintain an overview of the Copernicus in situ component;
- Improve access to selected in situ data;
- And raise the awareness about the Copernicus in situ component.

The coordination activities will be governed by the requirements of the Copernicus services.



The Land Monitoring Service Essential geospatial data sets

- ✓ **Ortho-imagery**
- ✓ **Buildings**
- ✓ **Administrative units**
- ✓ **Hydrographic network**
- ✓ **Land cover/use**
- ✓ **Transport networks**
- ✓ **Digital elevation models**



Preferably delivered via web services

EuroGeographics GA October 2016



European
Commission



| 6

Last time we asked

- Ortho-imagery for geo-referencing and/or background, accuracy <0,5 m, to be provided preferably as WMS or download*
- Topographic features (altern. through access to topographic maps):
 - Buildings, to be provided preferably as WFS, with an accuracy equivalent to a scale of 1:10 000 - 1:50 000
 - Administrative units to be provided preferably as WFS, with an accuracy equivalent to a scale of 1:25 000 - 1:50 000
 - Hydrographic network (water bodies) to be provided preferably as WFS, with an accuracy equivalent to a scale of 1:25 000 - 1:50 000
 - Land cover/use, to be provided preferably as WFS, with an accuracy equivalent to a scale of 1:50 000 or larger
 - Transport networks, to be provided preferably as WFS, with an accuracy equivalent to a scale of 1:25 000 - 1:50 000
- DEM, to be provided preferably as WMS or download, resolution <10 m



The Emergency Management Service Essential geospatial data sets

- ✓ Ortho-imagery
- ✓ Assets at risk
 - ✓ Building footprints and blocks
 - ✓ Built-up areas
- ✓ Hydrographic network
- ✓ Land cover/use
- ✓ Transport networks
- ✓ Digital elevation models



Preferably delivered via web services

EuroGeographics GA October 2016



European
Commission



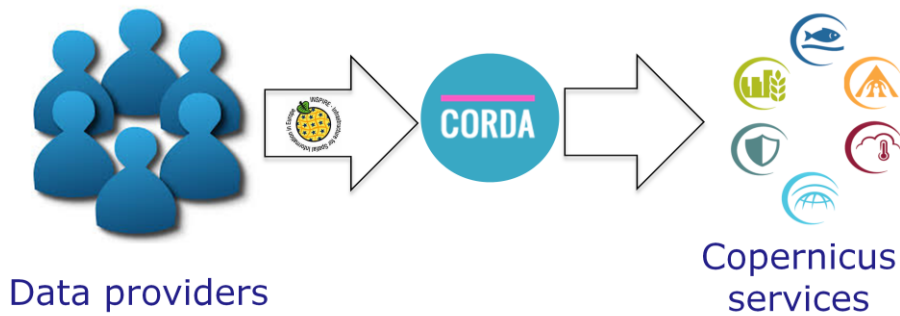
| 7

Last time we asked

- Ortho-imagery for geo-referencing and/or background, accuracy $\approx 0,5$ m, to be provided preferably as WMS or download*
- Topographic features (altern. through access to topographic maps):
 - Assets at risk:
 - Building footprints (scale : $< 1:10.000$), to be provided preferably as WFS
 - Building blocks (scale $1:10.000 - 1:50.000$), to be provided preferably as WFS
 - Built-up areas (scale $1:50.000 - 1:500.000$), to be provided preferably as WFS
 - Hydrographic network to be provided preferably as WFS, with an accuracy equivalent to a scale of $1:50\ 000$ or larger
 - Land cover/use, to be provided preferably as WFS, with an accuracy equivalent to a scale of $1:50\ 000$ or larger

- Transport networks, to be provided preferably as WFS, with an accuracy equivalent to a scale of 1:50 000 or larger
- DEM, to be provided preferably as WMS or download, resolution <10 m.

CORDA **Copernicus Reference Data Access portal**



EuroGeographics GA October 2016



European
Commission

Copernicus
Europe's eyes on Earth



| 8

One way of making geospatial reference data available to Copernicus services.

INSPIRE provides a way to discover and access data needed for the production and validation of Copernicus services, and a way to describe and distribute data to the widest possible range of users.

CORDA Copernicus Reference Data Access portal

CORDA

Search Data Providers News What's New Statistics Help Management Henrik Steen Andersen

Search

Search:

Advanced search

CLEAR SEARCH

★ Single access node providing links to up-to-date relevant authoritative geospatial reference data at their source

★ Tailored to the needs and accessible only for Emergency Management and Land Monitoring services

MAU NIGER CHAD SUDAN NIGERIA ETHIOPIA

Atlantis Ocean

Earth HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors

EUROPEAN COMMISSION

Copernicus Europe's eyes on Earth

EEA

EuroGeographics GA October 2016



European
Commission



| 9

CORDA

Copernicus Reference Data Access portal

Key features

- ★ Makes it easier for Copernicus services to discover data sets and services made available by NMCAs and other data providers;
- ★ NMCAs can explore their own data, provide feedback, and suggest new data sets and services (registration necessary);
- ★ Data and services are not changed;
- ★ Availability of services is monitored;
- ★ Restricted access – the EEA approves users;
- ★ Use conditions are respected.



<https://corda.eea.europa.eu>



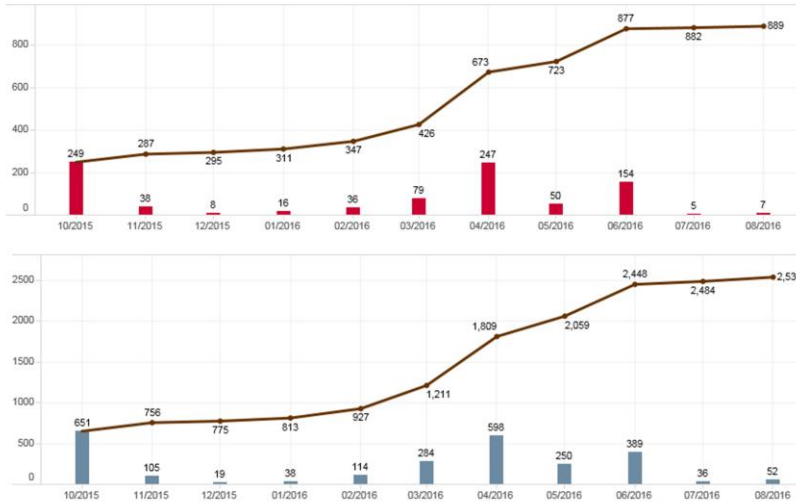
CORDA Datasets & Spatial Data Services



Themes

Administrative units
Transport networks
Elevation
Land cover
Ortho-imagery
Buildings
Land use

Geographical names
Cadastral parcels
Hydrography
Statistical units
Demography
Natural risk zones



EuroGeographics GA October 2016



European
Commission



New

11

Many members of Eurogeographics are already contributing



168 data providers



32 members contribute

Members of CORDA
■ EuroGeographics members in CORDA
■ EuroGeographics members

OpenStreetMap contributors
www.openstreetmap.org



European
Commission



EuroGeographics GA October 2016

| 12

Examples of contributions from members of Eurogeographics

Theme	Providers	Data sets	Data services
Administrative units	26	80	244
Buildings	18	34	98
Elevation	16	57	151
Geographical names	11	28	83
Hydrography	11	40	108
Land cover	11	33	84
Land use	10	16	37
Ortho-imagery	18	26	147
Transport networks	21	73	198

Working together – the way forward

- ★ Renewal of **EuroGeographics' Members' individual agreements with the EEA** for the provision of geospatial data to the Emergency Management Service;
- ★ **New partnership agreement** will strengthen the cooperation between EuroGeographics and the EEA / Copernicus, for the benefit of EuroGeographics' Members and the Copernicus programme.

LETTER: In 2011 EuroGeographics signed an overarching agreement with the European Environment Agency (EEA) to provide national geospatial data during crises situations in Europe, and to provide a framework for knowledge exchange between NMCAs and the (then) GMES emergency management service. Subsequently, a majority of EuroGeographics' members (30+) signed separate, individual agreements with EEA for the provision of the required data for emergency purposes.

The Copernicus programme is now operational, therefore it is necessary to renew these agreements. This also provides an opportunity for other countries not already providing such data to agree to do so.

AGREEMENT: EEA and EuroGeographics has agreed to broaden our partnership to establish a framework within which to strengthen the cooperation between our two organisations with a view to improving the Copernicus programme's access to and use of authoritative, in-situ geospatial data. By combining resources, knowledge and efforts, we can improve the awareness and availability of geospatial data in support of the Copernicus services, and strengthen European and international cooperation in respect of providing and sharing geospatial data.

The agreement aims at improving and increasing access to EuroGeographics' members' data, enhance dialogue, foster knowledge exchange between our organisations, raise awareness of the importance of in-situ data in Copernicus, and support initiatives aimed at providing harmonised geospatial data at European level.

Working together – the way forward

- ★ The EEA is **evaluating the ES-FR proposal** on “Copernicus Reference Data: Proposal for Coordinated Actions with Member States”, presented and discussed at the last Copernicus User Forum meeting;
- ★ The EEA (CORDA project team) will evaluate how **ELF can bring added value** to Copernicus services;
- ★ The EEA will help **underline the importance of geospatial data** for the Copernicus programme by documenting current use and gaps.

LETTER: In 2011 EuroGeographics signed an overarching agreement with the European Environment Agency (EEA) to provide national geospatial data during crises situations in Europe, and to provide a framework for knowledge exchange between NMCAs and the (then) GMES emergency management service. Subsequently, a majority of EuroGeographics' members (30+) signed separate, individual agreements with EEA for the provision of the required data for emergency purposes.

The Copernicus programme is now operational, therefore it is necessary to renew these agreements. This also provides an opportunity for other countries not already providing such data to agree to do so.

AGREEMENT: EEA and EuroGeographics has agreed to broaden our partnership to establish a framework within which to strengthen the cooperation between our two organisations with a view to improving the Copernicus programme's access to and use of authoritative, in-situ geospatial data. By combining resources, knowledge and efforts, we can improve the awareness and availability of geospatial data in support of the Copernicus services, and strengthen European and international cooperation in respect of providing and sharing geospatial data.

The agreement aims at improving and increasing access to EuroGeographics' members' data, enhance dialogue, foster knowledge exchange between our organisations, raise awareness of the importance of in-situ data in Copernicus, and support initiatives aimed at providing harmonised geospatial data at European level.



Thank you very much for your attention!