



# **CORDA, Copernicus In Situ Requirements for NMCA's**

# CORDA

CORDA provides a centralised gateway or a **single-entry point node** for accessing the geospatial reference data from the European countries participating in the Copernicus program.

The **European Environment Agency** ensures that only authorised users, the Copernicus service providers, have access to the index of URLs containing relevant national and regional reference data and services.





# Agreements Data Requirements

Features	CEMS	CLMS	CSS
<i>Georeferenced datasets in vector format with an accuracy equivalent to a scale of 1:50 000 or larger:</i>			
<i>administrative boundaries</i>	x	x	x
<i>transportation infrastructure including roads and railway network</i>	x	x	x
<i>built up areas</i>	x	x	x
<i>toponyms / place names</i>	x	x	x
<i>hydrography / hydrographics networks</i>	x	x	x
<i>buildings</i>	x	x	x
<i>building (blocks, footprints and/or points)</i>	x		
<i>addresses</i>	x	x	x
<i>cadastral parcels</i>	x	x	x
<i>shoreline</i>		x	
<i>natural protected sites</i>		x	
<i>natural habitats and biotopes</i>		x	
<i>monitoring data on natural disasters (eg. Wild fires, landslides, etc.)</i>		x	
<i>reference buildings (e.g. diplomatic buildings, educational, medical, religious, point of interest)</i>			x
<i>bathymetry</i>			x
<i>Border Crossing Points (BCP)</i>			x
<i>nautical charts</i>			x
<i>utility and Governmental Services</i>	x		x
<i>harbour infrastructure</i>			x
<i>airfield infrastructure</i>			x
<i>production and industrial facilities</i>	x		x

Features	CEMS	CLMS	CSS
<i>orthophotos, accuracy = to or better than 0,5 m</i>	x	x	x
<i>raster topographical maps 1:50 000 or larger</i>	x	x	x
<i>Digital elevation models (DEM) with a resolution of 1m - 25 m</i>	x	x	x
<i>Digital Elevation Models (DTM) with a resolution of 1m - 10m (accuracy: horizontal CE90: 1m-25m; vertical LE90: 1-10m)</i>	x		
<i>Digital Surface Models (DSM) with a resolution of 1m - 10m (accuracy: horizontal CE90: 1m-25m; vertical LE90: 1-10m)</i>	x		
<i>LIDAR point cloud data (including classified data) from which Digital Elevation Models can be derived</i>	x		
<i>Land use / Land cover 1:50 000 or larger (raster/vector), ideally with a resolution of 1m - 10m</i>	x	x	x
<i>population and demographic data</i>	x		x
<i>ground control points</i>		x	
<i>land parcel identification system (LPIS) data</i>		x	
<i>geo-spatial aid application (GSA) data</i>		x	
<i>ground motion and/or single structure/building displacement measurements</i>		x	
<i>phenological observations</i>		x	
<i>national forest inventories</i>		x	

# Specific Data Requirements

- Downloadable data (possibly through bulk downloads), exception: orthoimagery
- With the better resolution available
- Attributes:
  - filled-in as many as possible
  - part of a well documented in a data dictionary (if different from INSPIRE), made available in English and referred to in the metadata
- Conditions for access and use: ideally no conditions for access and use. If any, CC-BY 4.0 or similar
- Semantic rich XML metadata, primarily in terms of abstract and lineage

# Data Requirements for specific products



<https://emergency.copernicus.eu/>  
**Early Warning and Monitoring**

- Droughts
- Floods
- Wildfires
- On-demand Mapping



<https://www.copernicus.eu/en/copernicus-services/security>

- **Border Surveillance**
- **Maritime Surveillance**
- **Support EU External and Security Actions**
- **Research and Development for Earth Observation Security**

# Data Requirements for specific products



## EU-Hydro:

<https://land.copernicus.eu/en/products/eu-hydro>

Hydro-NET: harmonize national waterbodies' **centerline** datasets

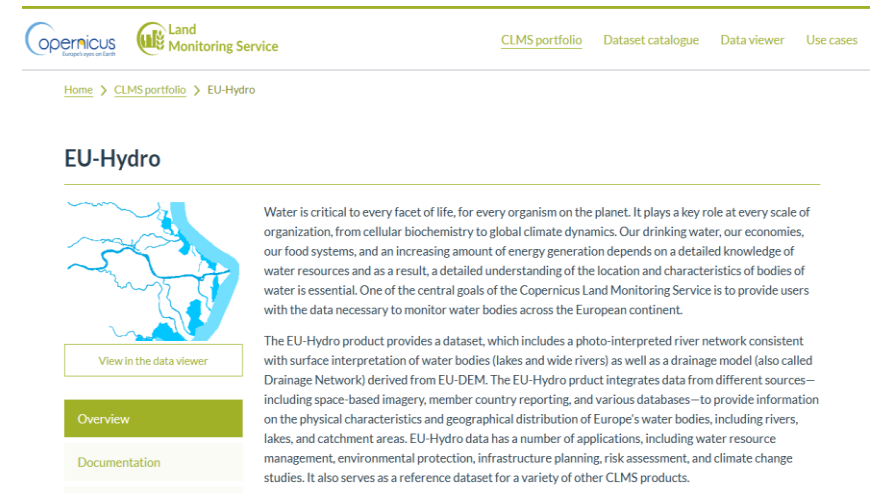
1. Better level of detail, scale (1/50k) or Strahler detail, than EU-Hydro data

2. Provision of as many attributes as possible: Strahler Stream Order (stream hierarchy), River name, total river segment length km, ...)

3. National main river network available as **linear features**, avoiding:

- multipart geometry
- null geometry
- duplicate
- unsnapped vertex

4. Provision of Country complete coverage, avoiding the download in multiple small portions



✓ **Standardized data structure**

✓ **Standardized spatial reference systems**

✓ **Geometric conformity**

✓ **Uniform data quality**

# Data Requirements for specific products



## EU-Hydro:

Hydro-ART: harmonize national Artificial Structures datasets: dam, weir, barrier, culvert, ...

Hydro-COAST: harmonize national coastlines: shoreline Type (natural or modified), Valid from /to, ...

- Hydro-DEM
  - LiDAR data
  - DTM/DSM better than 10m altimetry
- Hydro-BAS: harmonize national Catchments /Sub-watersheds datasets. Sink points are needed

# Data Requirements for specific products



annual data

## LPIS:

Provides parcel-level information on land use and agricultural activities, aligned with the CAP (Common Agricultural Policy)

## GSA:

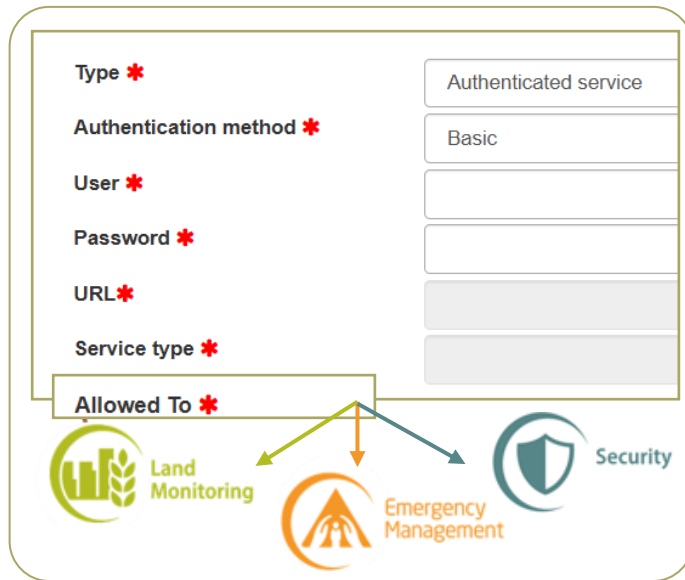
- HRL Croplands      2017–2021 (ref. 2025)  
<https://land.copernicus.eu/en/products/high-resolution-layer-croplands>
- HRL VLCC      from 2023 on (combined with Forest data)  
<https://www.copernicus.eu/en/news/news/observer-vegetated-land-cover-characteristics-vlcc-new-era-land-monitoring>



# Security around CORDA

**Objective:** provide **open data** to any Copernicus user.

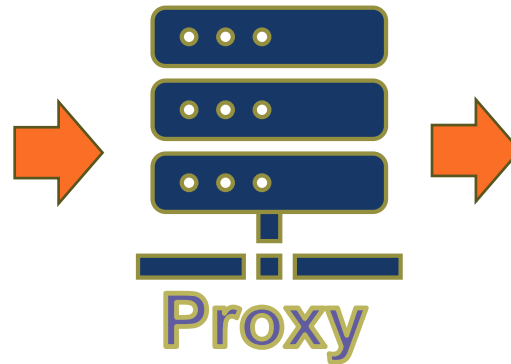
If for any reason, the data is provided exclusively for one, or several, of the Copernicus Services, CORDA team has the technology and experience to make the **data available just for the authorized team**.



The form contains the following fields and options:

- Type \* (Dropdown menu with "Authenticated service" selected)
- Authentication method \* (Dropdown menu with "Basic" selected)
- User \*
- Password \*
- URL \*
- Service type \*
- Allowed To \* (Radio buttons for "Land Monitoring", "Emergency Management", and "Security")

It works with standards:  
OGC, ESRI, ...

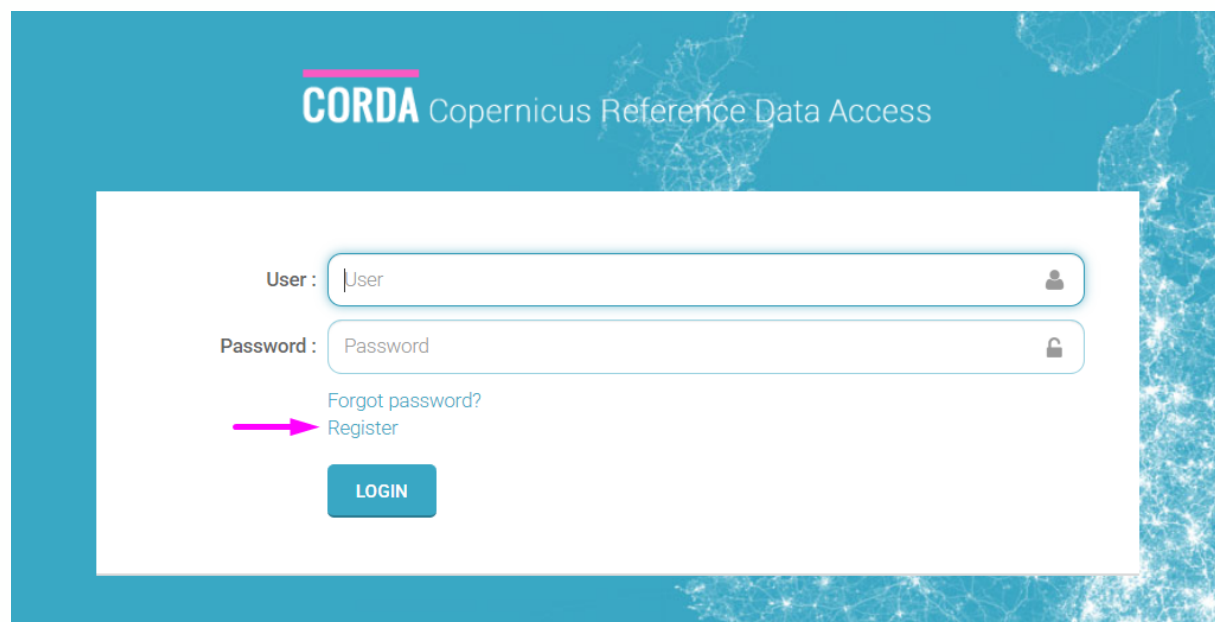


[https://corda.eea.europa.eu/\\_layouts/15/CORDAAuth/CORDAProxy.aspx?internal parameters of CORDA different from the user and password provided](https://corda.eea.europa.eu/_layouts/15/CORDAAuth/CORDAProxy.aspx?internal parameters of CORDA different from the user and password provided)

Telemetry:  
the number  
of unique  
users  
accessing  
your dataset  
can be  
provided

# Security around CORDA

You can see the data of your agency indexed in CORDA



The image shows the CORDA Copernicus Reference Data Access login interface. It features a teal header with the CORDA logo and title. Below is a white login box with fields for 'User' and 'Password'. A pink arrow points to the 'Register' link, which is located below the password field and next to a 'Forgot password?' link. A blue 'LOGIN' button is at the bottom of the login box.

## CORDA Membership Request

User Name:

First Name:

Last Name:

Email:

If you are not a CORDA Data Provider please note that due to data policy issues CORDA is currently only available to Copernicus services and their contractors. Under 'Explanations' please indicate in what way you are affiliated with the Copernicus services.

Are you a data provider?: ☒

# Agreements' data impact in CORDA

Country	Data Provider	Number of new Datasets	Number of updated Datasets
Albania	State Authority for Geospatial Information (ASIG)	26	0
Belgium	NGI Belgium	4	3
Croatia	State Geodetic Administration of the Republic of Croatia	5	1
Cyprus	Department of Lands and Surveys	1	8
Czechia	Surveying, Mapping and Cadastre	3	0
Denmark	Agency for Data Supply and Infrastructure	1	1
Estonia	Estonian Land Board	1	1
Finland	National Land Survey of Finland	1	3
France	NGI France	3	0
Iceland	National Land Survey of Iceland	4	1
Ireland	Tailte Éireann	7	1
Latvia	Geospatial Information Agency	4	4
Malta	Planning Authority	15	0
Moldova	Agency for Geodesy, Cartography and Cadastre of the Republic of Moldova	0	0
Norway	Norwegian Mapping Authority	2	0
Poland	Agency for Geodesy and Cartography of Poland	0	0
Slovakia	Geodesy, Cartography and Cadastre Authority of Slovakia	9	7
Spain	NGI Spain	13	4
Sweden	Lantmäteriet	2	0
<b>Total:</b>	<b>07/05/2024 to 08/05/2025</b>	<b>101</b>	<b>34</b>

# Thank you !!

**You can contact CORDA team at:  
[corda.support@eea.europa.eu](mailto:corda.support@eea.europa.eu)**