

GeoNetwork

The future of (geo)data discoverability

Author:

Jeroen Ticheler

Date:

17 January 2024



GEOCAT



GEONETWORK
ENTERPRISE

Commercial product support as expected by professional customers + the value of FOSS



GEOSERVER
ENTERPRISE

Utility to simplify the publishing process from the desktop



BRIDGE
ONE CLICK DATA PUBLISHING

Fully managed SDI in the cloud



LIVE
SERVER



GeoNetwork
open source

The FOSS metadata catalog

Discover open
data from my Organization

Search datasets, services and maps ...



The latest

The most popular

What is GeoNetwork?

- The glue in a Spatial (and Open) Data Infrastructure
- Comprehensive and proven catalog software
- Very comprehensive metadata editing and management tool
- Free and Open Source Software
- Code and issues on Github
- ~85% of the current national INSPIRE end-points

OSGeo Project since 2007



Implementing Standards



Open
Geospatial
Consortium®



International
Organization for
Standardization

F

A

I

R



Findable



Accessible



Interoperable



Reusable

The visible side

Browser window showing the website nationalegeoregister.nl. The page title is "NGR Nationaal Georegister".

Navigation menu: Home, Zoeken, Kaart, Voor ontwikkelaars, Over NGR, Actueel, Inloggen, Contact, Help.

Breadcrumbs: Home / Zoeken / BRT Achtergrondkaart

Search bar: Terug naar zoeken, < Vorig, Volgende >


BRT Achtergrondkaart

Brontype: Dataset


De BRT Achtergrondkaart is afgeleid uit TOPioNL uit de Basisregistratie Topografie (BRT). De BRT Achtergrondkaart is beschikbaar in vier verschillende thema's: standaard, grijs, pastel en water. Vanaf april 2021 wordt het buitenland transparant weergegeven. Hierdoor is het mogelijk om een andere, internationale kaartlaag naar keuze 'onder' de BRT Achtergrondkaart te leggen waardoor het kaartbeeld over de grens doorloopt. De BRT Achtergrondkaart wordt ontsloten in de projecties: EPSG 28992 (RD), EPSG 25831 (ETRS89 UTM zone 31N) en EPSG 3857 (WGS84 WebMercator).

Buttons: Download, Weergave

Overzicht




large_thumbnail



thumbnail

Ruimtelijke dekking



Downloads, views en links

WMTS view service BRT achtergrondkaart, alle varianten

Deze dataset is gepubliceerd in de view service (WMTS)
https://service.pdok.nl/brt/achtergrondkaart/wmts/v2_07/request=getcapabilities&service=wmts met identificatie WMTS view service BRT achtergrondkaart, alle varianten.

Voeg aan kaart toe

WMTS view service BRT achtergrondkaart, alle varianten. Deze viewservice wordt in oktober 2021 uitgefaseerd en tot die tijd niet meer bijgewerkt.

Deze dataset is gepubliceerd in de view service (WMTS)
<https://geodata.nationalegeoregister.nl/tiles/service/wmts?request=GetCapabilities> met identificatie WMTS view service BRT achtergrondkaart, alle varianten. Deze viewservice wordt in oktober 2021 uitgefaseerd en tot die tijd niet meer bijgewerkt..

Voeg aan kaart toe

Downloads, views en links

BRT achtergrondkaart Grijs WMTS

De achtergrondkaart PDOK is de kaartlaag waarop locatiegebonden content wordt afgebeeld. De achtergrondkaart moet ervoor zorgen dat de eindgebruiker zich kan oriënteren tijdens het gebruik van geografische applicaties. Data automatisch generaliseerd op basis van TOPioNL.... meer...

Gerelateerde service

BRT achtergrondkaart Pastel WMTS

Generaliseerde service

Extensive filtering and search capabilities

Filter

Uitklappen Inklappen

BRONTYPE

- Dataset (344)

ONDERWERPEN

- Hoogte (345)
- Binnenwater (25)
- Grenzen (15)
- Transport (11)
- Locatie (11)
- [alle \(11\)](#)

TREFWOORDEN

- Hoogte (75)
- Jarkusmetingen (36)
- Monitoring (36)
- Bodem (35)
- 31105748 (34)
- [alle \(15\)](#)

INSPIRE-da
Organisatie: F
Datum van de
Onderwerp(e)
binnenwater
nutsbedrijv
INSPIRE-data
geharmonise
richtlijnen.
Waterinfo R
Organisatie: F
Datum van de
Onderwerp(e)
In Waterinfo
meetgegeven
de waterstan
Zuid-Hollan

Home Zoeken Kaart Contact Inloggen

Welk onderwerp? Op welke locatie?

Zoeken Bennekom Toon resultaten Reset

Geavanceerd zoeken

Data beschikbaarheid Filteren op datum

- Visualisatie
- Downloadbare data
- Data op aanvraag

Datum aanmaak

Van Tot

INSPIRE thema

Organisatie

- RWS Water Verkeer ...
- RWS Centrale Infor...

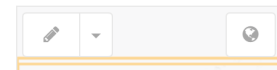
345 resultaten gevonden

Sortering: relevantie

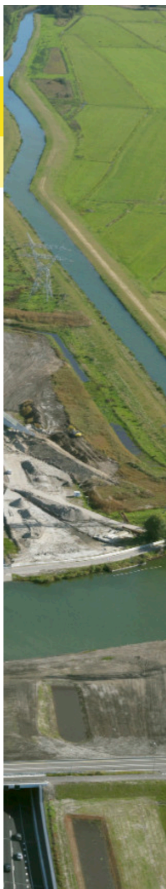

hoogte


INSPIRE-data Nederland (RWS)

Organisatie: Rijkswaterstaat



Clean and rich content presentation





Rijkswaterstaat
Ministerie van Infrastructuur en Waterstaat

[Contact](#)

[Home](#) [Zoeken](#) [Kaart](#) [Contact](#)

[Inloggen](#)

[Home / Zoeken / Geluidregister Rijkswegen](#)

Geluidregister Rijkswegen

Brontype: Dataset

De webviewer geluidregister is een interactieve kaart waarop u actuele informatie rond referentiepunten en bijbehorende geluidproductieplafonds vindt.

[Beschrijving](#) [Contact gegevens](#) [Downloads, views en links](#)


Over deze bron

Trefwoord	snelheden , wegdek , verkeer , geluidproductieplafond
Onderwerp	Omgeving
Gebruiksbeperkingen	Geen gebruiksbeperkingen
Licenties	http://creativecommons.org/publicdomain/mark/1.0/deed.nl
Herzieningsfrequentie	continu
Datum van de bron (aangemaakt)	01-07-2012

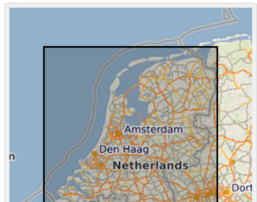
Technische informatie

Bron Identificatie	<i>vtsrcb15-525a-gaat-6iho-dnnnt98pto2m</i>
Algemene beschrijving herkomst	De informatie van het Geluidregister die u wordt verstrekt is samengesteld met de grootst mogelijke zorg. Deze informatie wordt verstrekt door en onder verantwoordelijkheid van het Ministerie van Infrastructuur en Waterstaat (vanaf nu: het Ministerie). De verstrekte

Overzicht



Ruimtelijke dekking



Powerful Metadata Editor

Tiendwegen Categories ▾ Group ▾ Validate Cancel Save & close Save metadata

Identification info

Title *

Date *

Citation identifier

Code *

Abstract *

Purpose


Status

Point of contact

Organisation name	Individual name	Electronic mail address	Role
-------------------	-----------------	-------------------------	------

Validation



Overview



Associated resources

Online resources

Sort by Protocol ▲ Url Title

-  OGC:WMS
<https://services.rce.gevoorziening.nl/landschapsatlas/tiendwegen>
-  OGC:WFS
<https://services.rce.gevoorziening.nl/landschapsatlas/tiendwegen>

Administrative Interface

The screenshot displays the Geonetwork Enterprise Administrative Interface. At the top left is the Geonetwork Enterprise logo. The top navigation bar includes 'Search', 'Map', 'Contribute', and 'Admin console'. The user is logged in as 'admin admin ADMINISTRATOR' and the language is set to 'English'. A left sidebar lists navigation options: Summary, Metadata and templates, Users and groups, Harvesting, Statistics and status, Reports, Classification systems, Settings, and Tools. The main dashboard area features a grid of management tools: Metadata and templates, Users and groups, Harvesting, Statistics and status, Reports, Classification systems, Settings, and Tools. Below these are six summary cards: Dataset (32), Service (7), service-download (4), service-view (2), Feature catalog (1), and service-OGC:WMS (1). A detailed view for the 'Service' category shows 'RL_623' with 1 record, and a green highlighted section indicating '41 records in the catalog'.

Category	Count
Dataset	32
Service	7
service-download	4
service-view	2
Feature catalog	1
service-OGC:WMS	1

Item	Count
RL_623	1
records in the catalog	41

Discovery Mechanisms

DOI: extending our distribution and persistence (SEO)


Bundesamt
für Eich- und
Vermessungswesen

Datenkatalog BEV

Digitales Landschaftsmodell - Bauten

Der Objektbereich Bauten umfasst in Form von hochgenauer Vektorgrafik mit Attributen als Basis für Geographische Informationssysteme flächendeckend für Österreich die Elemente:

- (a) Objekte (Koordinative Bezugspunkte - POI) aus den Bereichen Kommunale Einrichtungen, Betriebseinrichtungen, Kultur, Freizeit und Sport, Schutzeinrichtungen
- (b) Sonstige linienhafte Objekte (z.B. Bob-, Rodelbahn)
- (c) Anlagen und Bauwerke für Versorgung (Stromleitungen und Strommasten)

Date (Revision)	2021-10-15T00:00:00
Date (Publication)	2022-01-01T00:00:00
Identifier	https://doi.org/10.48677/cf69f625-cd76-40e0-9e75-3cc05c90f193
Resource provider	 Bundesamt für Eich- und Vermessungswesen - Abteilung Landschaftsinformation
GEMET - INSPIRE themes, version 1.0	• Gebäude
Spatial scope	• National
Use limitation	Für dieses Produkt gilt die Standardlizenz Creative Commons CC-BY-4.0
Use limitation	https://creativecommons.org/licenses/by/4.0/
Use limitation	http://inspire.ec.europa.eu/metadata-codelist/LimitationsOnPublicAccess/noLimitations
Access constraints	Other restrictions
Other constraints	Für dieses Produkt gilt die Standardlizenz Creative Commons CC-BY-4.0
Other constraints	https://creativecommons.org/licenses/by/4.0/

Overviews

Spatial extent



Keywords


GEMET - INSPIRE themes, version 1.0

Gebäude

Spatial scope


National

Provided by

 Bundesamt
für Eich- und
Vermessungswesen

Share on social sites



 Access to the portal

Read here the full details and access to the data.



A unique catalog



Toutes les données publiques des Hauts de France

ex: cadastre, littoral, antennes



Les plus récentes

Les plus appréciées

ACCUEIL

DONNÉES

ORGANISATIONS

Fil d'activité



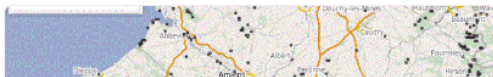
Conservatoire botanique national de Bailleul

a créé ce Jeu de données hier

Hauts-de-France - Lichens tous statuts - Pression d'inventaire (Période moderne - Par maille 1 km²)

0 ☆

Nombre par commune d'observations de lichens (tous statuts) pour la région des Hauts-de-France, réalisées depuis 2000
Description du contenu Cette couche précise par commune des...



Quelques chiffres



6680
données



552
organisations

Aperçu

CARTE

TABLEAU

GRAPHIQUE

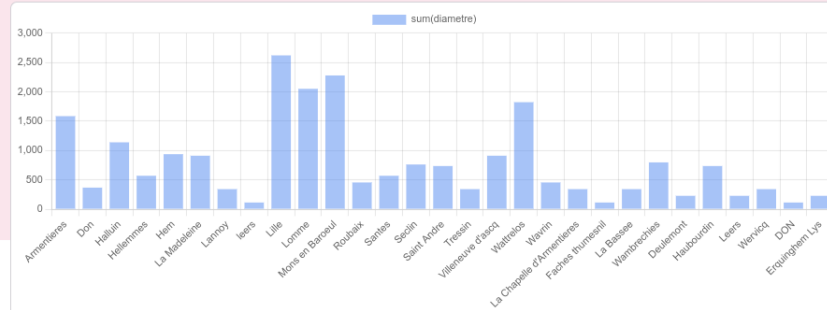
Source de données **csv (csv)**

Type **barre**

Axe X **commune**

Axe Y **diametre**

Agrégation **somme**



<https://mel.integration.apps.gs-fr-prod.camptocamp.com/datahub/wc-embedder.html?e=gn-dataset-view-chart&a=af>

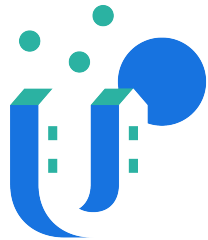
Cherchez des données cartographiques en Auvergne-Rhône-Alpes avec le CRAIG

ex: cadastre, littoral, antennes

ACCUEIL

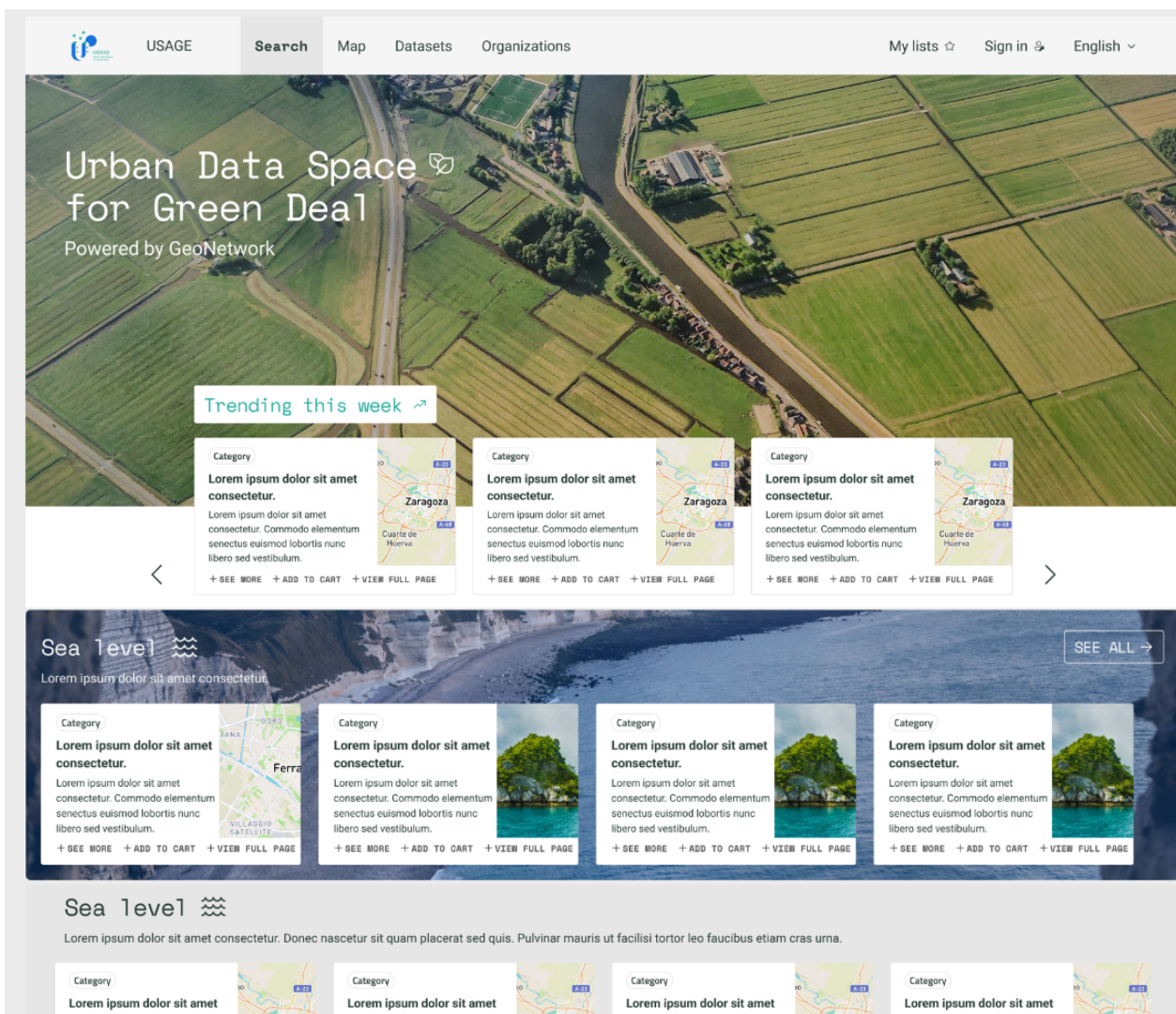
DONNÉES

ORGANISATIONS



USAGE

Urban Data Space
for Green Deal





Filters

[Reset all filters](#)

ARGOMENTO

- Argomento popolare (6)
- Argomento popolare (12)
- Argomento popolare (3)
- Argomento popolare (4)
- Argomento popolare (7)

[VEDI TUTTI](#)

ORGANIZZAZIONE

- Comune di Ferrara (20)
- Agenzia Mobilità Impianti Ferrara (15)
- Agenzia Interregionale per il fiume Po (5)
- Associazione Metropoli di Paesaggio (3)

TAG

- [Città \(36\)](#)
- [Ambiente \(3\)](#)
- [Scuola \(23\)](#)
- [Piste ciclabili \(13\)](#)
- [Mobilità urbana \(12\) ×](#)
- [Auto \(10\)](#)
- [Urbanistica \(6\)](#)
- [Rurale \(5\)](#)

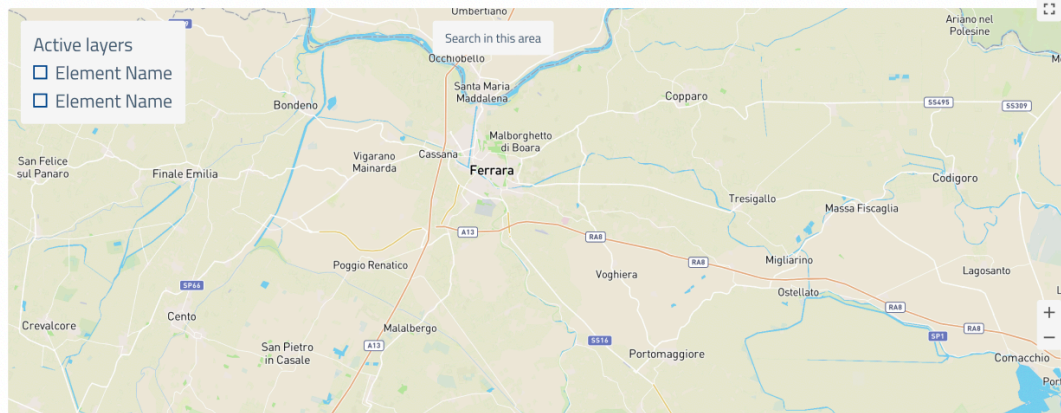
[VEDI TUTTI](#)

FORMATO

- .csv (20)
- .xls (22)
- RDF (6)
- Feed RSS (5)

ANNO DI PUBBLICAZIONE

“Searched keyword”

[Show map](#)


Tools

- [Draw an area filter](#)
- [Show selected results on the map](#)
- [Export map](#)

36 Results

[Mobilità urbana \(12\) ×](#)
[Filter \(12\) ×](#)

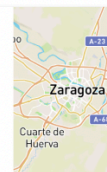
 Order by [Newer](#)


Category Category

Lorem ipsum dolor sit amet consectetur.

Lorem ipsum dolor sit amet consectetur. Commodo elementum senectus euismod lobortis nunc vestibulum.

[+ SEE MORE](#) [+ ADD TO CART](#) [+ FULL PAGE](#)

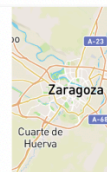


Category Category

Lorem ipsum dolor sit amet consectetur.

Lorem ipsum dolor sit amet consectetur. Commodo elementum senectus euismod lobortis nunc vestibulum.

[+ SEE MORE](#) [+ ADD TO CART](#) [+ FULL PAGE](#)



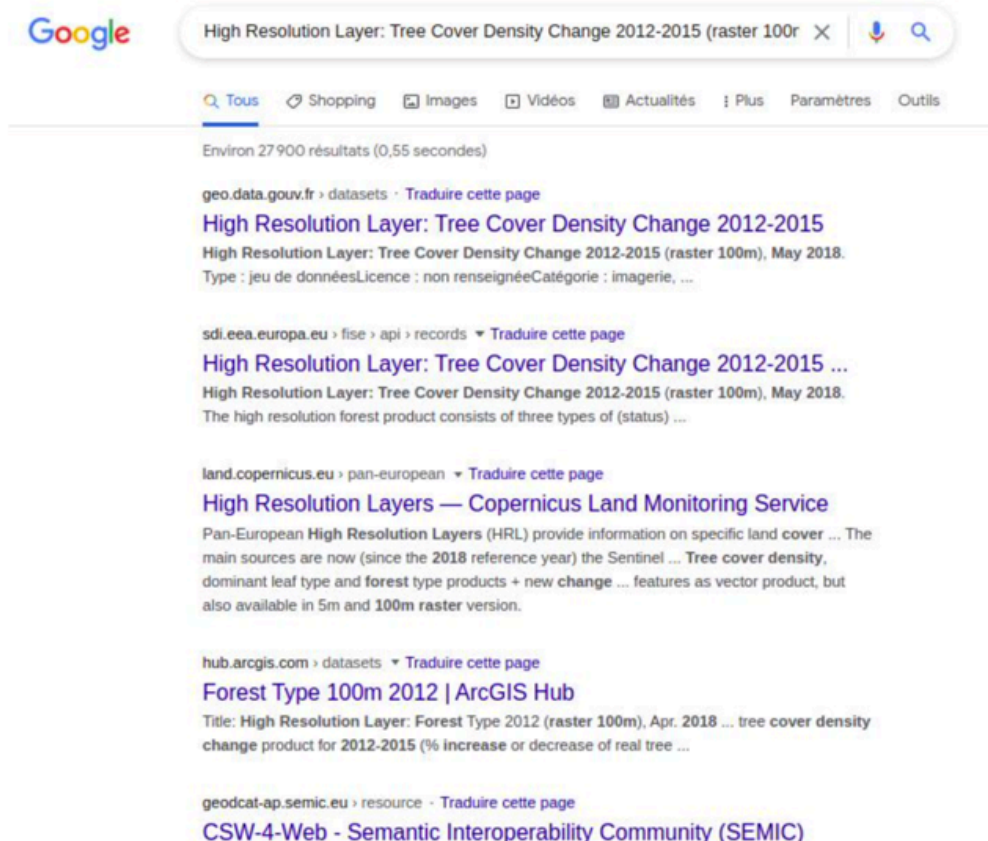
The partially visible side

OGC API Records

OGC:API Records - Improve discoverability

Search GIS data

→ Find GIS data



The image shows a Google search results page. The search bar contains the text "High Resolution Layer: Tree Cover Density Change 2012-2015 (raster 100m)". Below the search bar, there are navigation links for "Tous", "Shopping", "Images", "Vidéos", "Actualités", "Plus", "Paramètres", and "Outils". The search results show approximately 27,900 results in 0.55 seconds. The first result is from geo.data.gouv.fr, titled "High Resolution Layer: Tree Cover Density Change 2012-2015". The second result is from sdi.eea.europa.eu, titled "High Resolution Layer: Tree Cover Density Change 2012-2015 ...". The third result is from land.copernicus.eu, titled "High Resolution Layers — Copernicus Land Monitoring Service". The fourth result is from hub.arcgis.com, titled "Forest Type 100m 2012 | ArcGIS Hub". The fifth result is from geodcat-ap.semic.eu, titled "CSW-4-Web - Semantic Interoperability Community (SEMIC)".

Google

High Resolution Layer: Tree Cover Density Change 2012-2015 (raster 100m) X

Tous Shopping Images Vidéos Actualités Plus Paramètres Outils

Environ 27 900 résultats (0,55 secondes)

geo.data.gouv.fr › datasets · Traduire cette page
High Resolution Layer: Tree Cover Density Change 2012-2015
High Resolution Layer: Tree Cover Density Change 2012-2015 (raster 100m), May 2018.
Type : jeu de donnéesLicence : non renseignéeCatégorie : imagerie, ...

sdi.eea.europa.eu › fise › api › records ▼ Traduire cette page
High Resolution Layer: Tree Cover Density Change 2012-2015 ...
High Resolution Layer: Tree Cover Density Change 2012-2015 (raster 100m), May 2018.
The high resolution forest product consists of three types of (status) ...

land.copernicus.eu › pan-european ▼ Traduire cette page
High Resolution Layers — Copernicus Land Monitoring Service
Pan-European **High Resolution Layers** (HRL) provide information on specific land cover ... The main sources are now (since the 2018 reference year) the Sentinel ... **Tree cover density**, dominant leaf type and **forest type** products + new **change** ... features as vector product, but also available in 5m and **100m raster** version.

hub.arcgis.com › datasets ▼ Traduire cette page
Forest Type 100m 2012 | ArcGIS Hub
Title: **High Resolution Layer: Forest Type 2012 (raster 100m)**, Apr. 2018 ... tree cover density change product for 2012-2015 (% increase or decrease of real tree ...

geodcat-ap.semic.eu › resource - Traduire cette page
CSW-4-Web - Semantic Interoperability Community (SEMIC)

OGC API Records Part I core (draft)

ogc-api-records microservice

GET {root}/conformance

GET {root}/collections

GET /collections/{collectionId}

GET {root}/collections/{collectionid}/items

GET {root}/collections/{collectionid}/items/{recordid}



OGC API Records

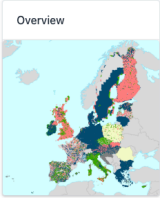
Output formats

- HTML
- XML (ISO19139, ISO19115-3)
- JSON
- RSS
- DCAT
- Turtle
- Schema.org


Population trend of bird species: datasets from Article 12, Birds Directive

All EU Member States are requested to monitor birds listed in the Birds Directive (2009/147/EC) and send a report about the progress made with the implementation of the Directive every 6 years following an agreed format.

The assessment of breeding population short-term trend at the level of country is here presented. The spatial dataset contains gridded birds distribution data (10 km grid cells) as reported by EU Member States for the 2013-2018 period. The dataset is aggregated by species code and country in the attribute CO_MS. By use of the aggregated attribute [CO_MS], the tabular data can be joined to the spatial data to obtain e.g. the EU population status and trend. This metadata refers to the public dataset, without sensitive species.



Overview

Data	Summary										
	<table border="1"><tr><td>creation</td><td>2020-10-29</td></tr><tr><td>publication</td><td>2020-10-29</td></tr><tr><td>nextUpdate</td><td>2026-01-01</td></tr><tr><td>Edition</td><td>01.00</td></tr><tr><td>Maintenance Frequency</td><td>continual</td></tr></table>	creation	2020-10-29	publication	2020-10-29	nextUpdate	2026-01-01	Edition	01.00	Maintenance Frequency	continual
creation	2020-10-29										
publication	2020-10-29										
nextUpdate	2026-01-01										
Edition	01.00										
Maintenance Frequency	continual										

Informations	
creation	2020-10-29
publication	2020-10-29
nextUpdate	2026-01-01
Edition	01.00
Unique resource identifier	eea_v_3035_10_mio_art12-2013-2018_p_2013-2018_v01_r00
Unique resource identifier	DAT-148-en

Population trend of bird species: datasets from Article 12, Birds Directive

html
xml
json
schema.org
dcat
dcat_turtle
geojson

html
xml
json
schema.org
dcat
rss
geojson

on Pollutant Release and Tra

C reporting (2013-2018) - P

C reporting (2008-2012) - P

on Pollutant Release and Tra

16 - PUBLIC VERSION - ver:

ata call 2021 - PUBLIC VERS


Population trend of bird species | Birds Directive dataset download

google.com/search?q=Birds+Directive+dataset+do...

Birds Directive dataset download


Afbeeldingen Video's Sites voor plaatsen Nieuws Boeken Vluchten

Ongeveer 652.000 resultaten (0,22 seconden)

 **European Environment Agency**
<https://www.eea.europa.eu/datahub/datahubitem-view>


datasets from Article 12, Birds Directive 2009/147/EC reporting

14 mei 2023 — **Datasets.** 2012-20182007-2012. Population trend of bird species: **datasets from Article 12, Birds Directive ... Direct download.** Services: ESRI:REST.

 **European Data Portal**
<https://data.europa.eu/dat-148-en> · [Vertaal deze pagina](#)


datasets from Article 12, Birds Directive 2009/147/EC reporting

Status and trends of bird populations: **datasets from Article 12, Birds Directive 2009/147/EC reporting ... Download all. Download Progress. x. Downloading files 0 ...**

 **Ireland's Open Data Portal**
<https://data.gov.ie/dataset/artic...> · [Vertaal deze pagina](#)

Article 12 Birds Directive Reporting 2013-2018 Dataset ...

20 dec 2023 — Maps of breeding birds distributions mapped using a 10x10 km grid associated with Article 12 **Birds Directive** report on the implementation of ...

 **GBIF**
<https://www.gbif.org/dataset> · [Vertaal deze pagina](#)

Birds Distribution from the Birds Directive 2008-2012 ...

The **Birds Directive** was implemented in 1979. This Directive frames the conservation and management of wild birds in Europe and human interactions with this ...

Population trend of bird species | Population trend of bird species

eea.europa.eu/en/datahub/datahubitem-view/96e1...

An official website of the European Union | How do you know? Environmental information systems

 **European Environment Agency** | **Datahub**

← **Datahub overview**

Population trend of bird species: datasets from Article 12, Birds Directive 2009/147/EC reporting

Prod-ID: DAT-148-en | Published 01 Mar 2022 | Last modified 15 May 2023

RSS

All EU Member States are requested to monitor birds listed in the Birds Directive (2009/147/EC) and send every 6 years a report about the progress made with the implementation of the Directive, every 6 years following an agreed format. The assessment of breeding population short-term trend at the level of country is here presented in the spatial dataset that contains

[See more](#)

Datasets

2013-2018

2008-2012

Population trend of bird species: datasets from Article 12, Birds Directive 2009/147/EC reporting (2013-2018) - PUBLIC VERSION - Apr. 2021

GDB Geopackage ESRI:REST

OGC:WMS

Published: 1 Mar 2022

Temporal coverage: 2013-2018

Metadata Factsheet

Download:

[Direct download](#)

Services:

The invisible side

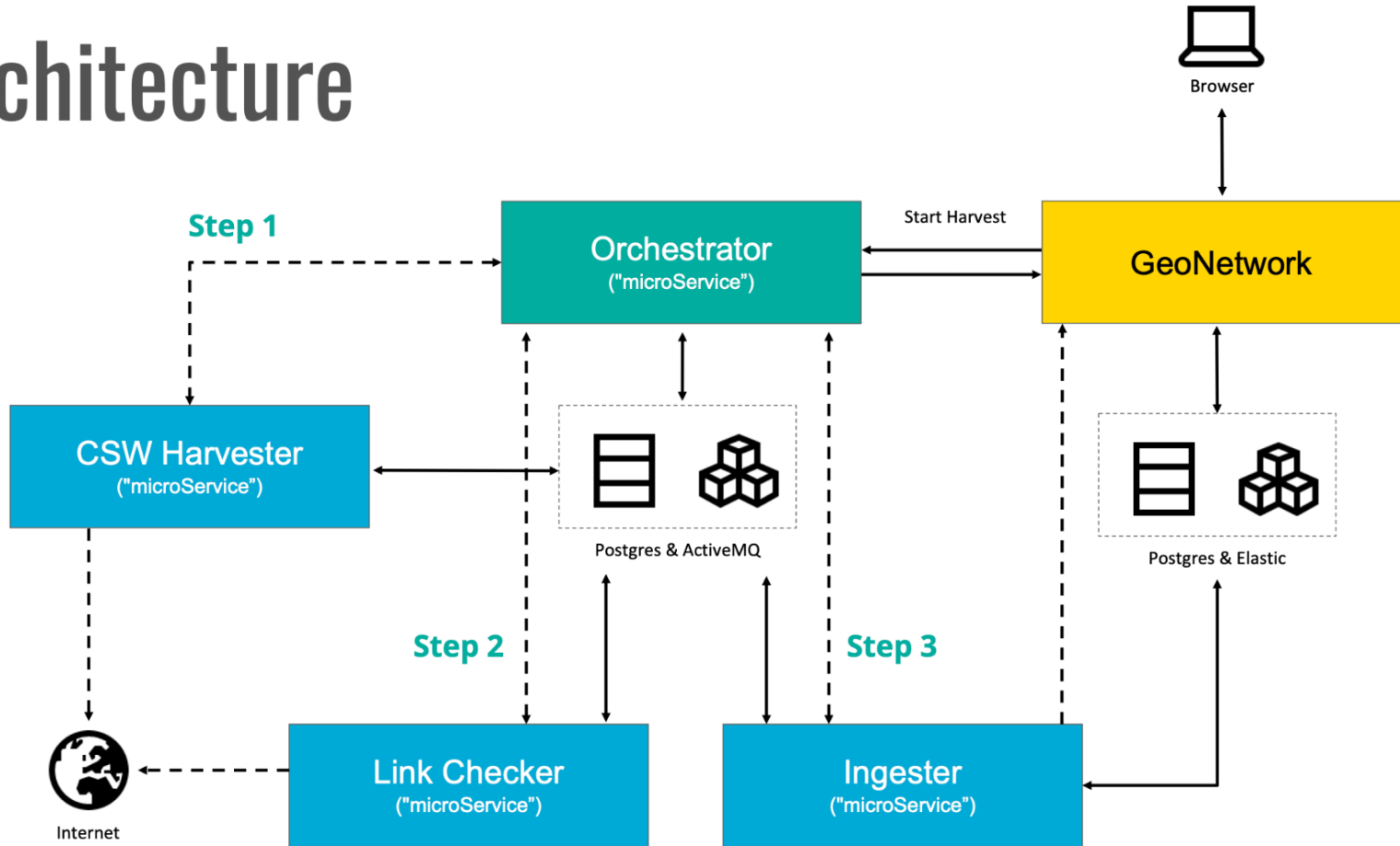
Developments for the INSPIRE Geoportal



The JRC INSPIRE Portal project

- Project to replace the existing EU Geoportal with GeoNetwork opensource
- 4 new components developed for GeoNetwork 4
- Operational since 2022, and again updated for the last reporting period
(December 2023)

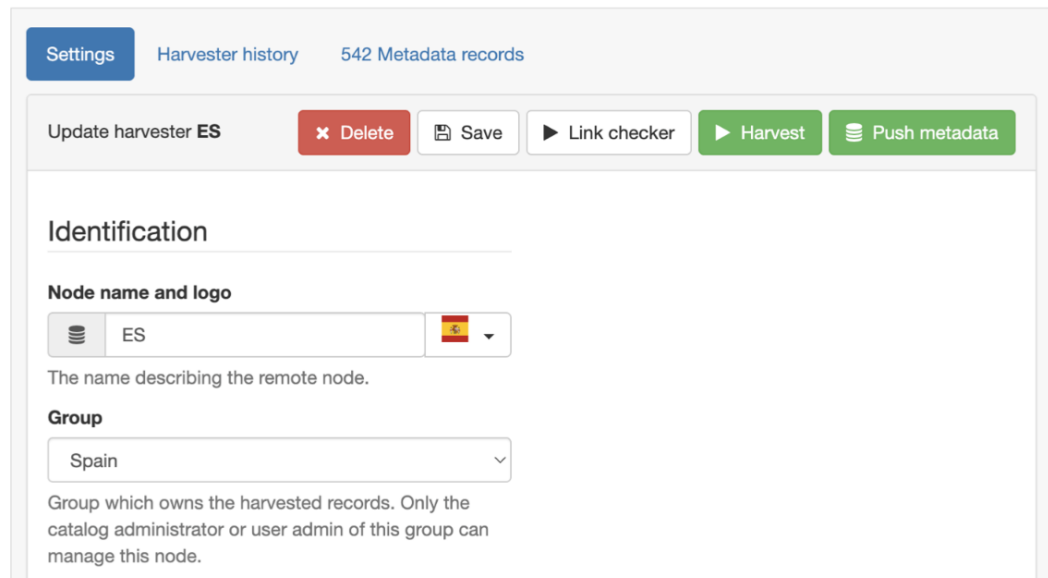
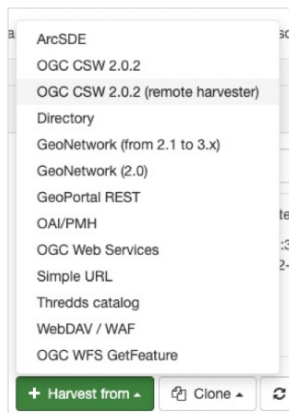
Architecture



Harvester console

Added a new harvester type: Remote CSW harvester, to configure the CSW servers of the member states to harvest

- URL of the server to harvest
- CSW filter configuration
- Error conditions handling
- etc.



Harvester console

And statistics about the metadata harvested, including:

- Date of the harvesting
- Number of metadata records harvested
- Number of metadata per type: datasets / series / services
- Downloadable datasets
- Viewable datasets

The most invisible side





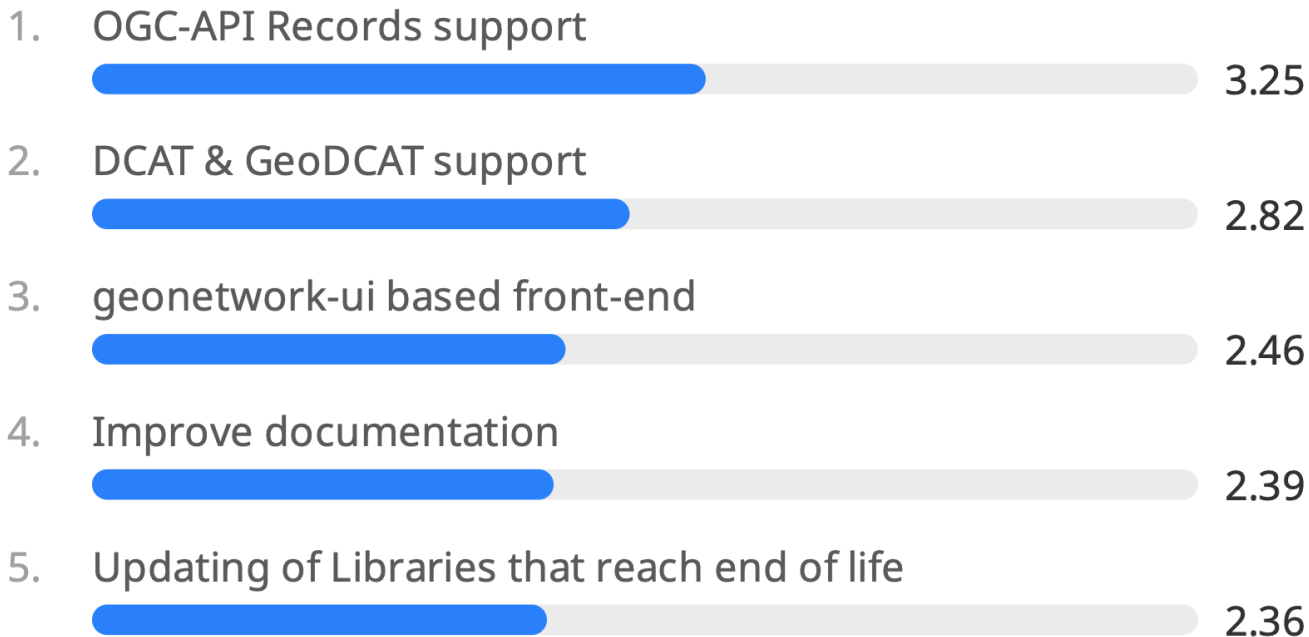
The funding requirements



Can you rank developments according to your needs?

0 2 8

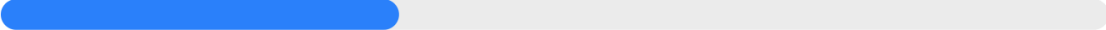
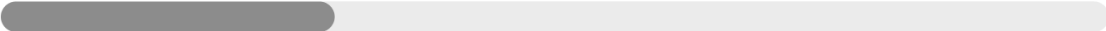
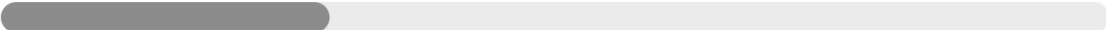
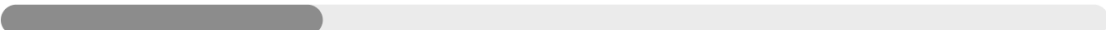
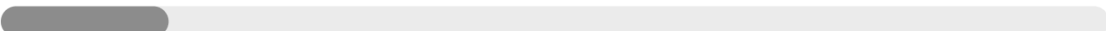
(1/2)



Can you rank developments according to your needs?

0 2 8

(2/2)

6. OGC-API Features support  2.04
7. Optimize how Google indexes your catalog  1.68
8. Further improve/evolve existing UI  1.64
9. Updating Elasticsearch to version 8  1.61
10. Integrate ChatGPT into the GeoNetwork search engine  0.75

You need to get involved!

Early participation is critical for a good standard development

Contact me for more information



PUT YOUR HEART
IN EVERYTHING YOU DO

 GEOCAT