



Eurostat: Update on latest activities

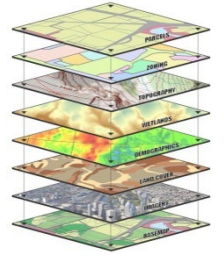
9th Joint UN-GGIM: Europe - ESS - UNECE Meeting on the Integration of Statistical and Geospatial Information

3 October 2023, Belgrade

Overview

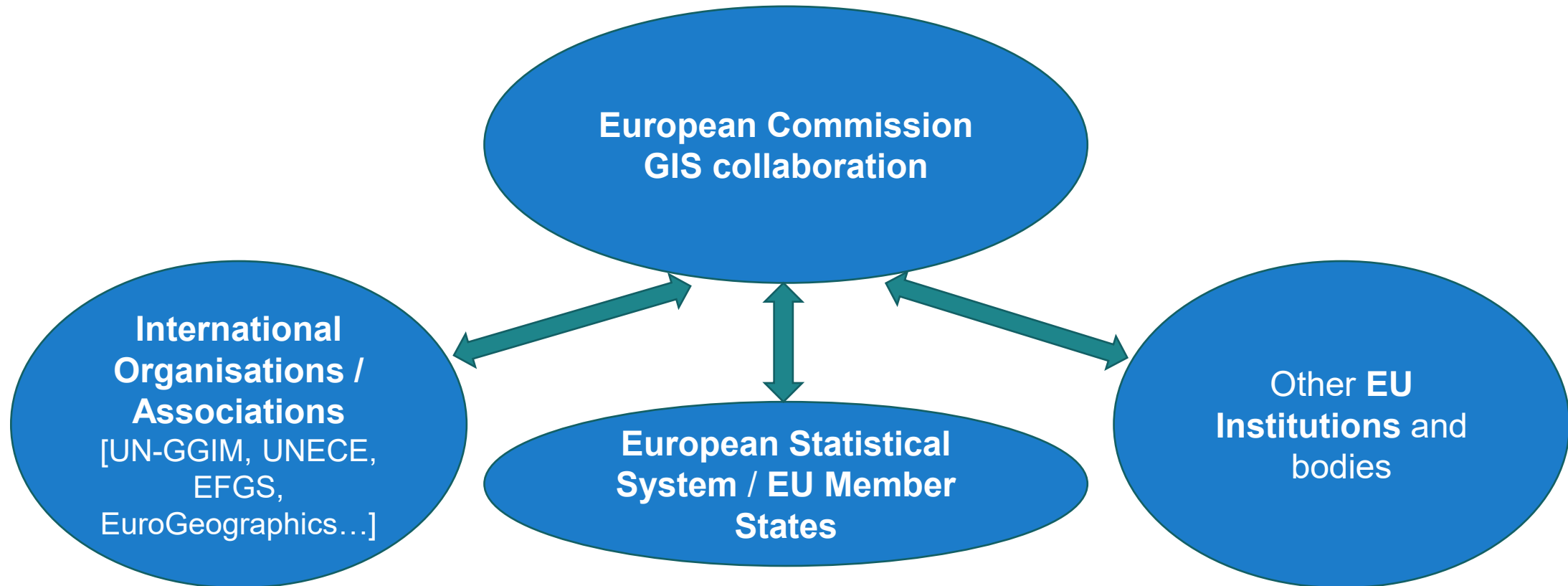
- GISCO team – Role and main tasks
- Recent and ongoing work
- Activities planned for 2023 / 2024

GISCO team – Role and main tasks



- Permanent service of the European Commission (Eurostat)
- Provide **reference geographical information** and related services for use within Eurostat, the European Commission, and to the European citizens at large
 - ✓ Infrastructure and tools, relevant geospatial data
- **Answer the needs** of the European Commission, Eurostat and – to some extent – of the Member States **for geographical information** at the level of the European Union, its Member States and regions
 - ✓ Specialized resources, guidance and training, thematic mapping/data and spatial analysis
- Contribute to, and coordinate, the work in the European Statistical System on the **integration of statistical and geospatial information**

GIS ecosystem / stakeholders



Current main activities

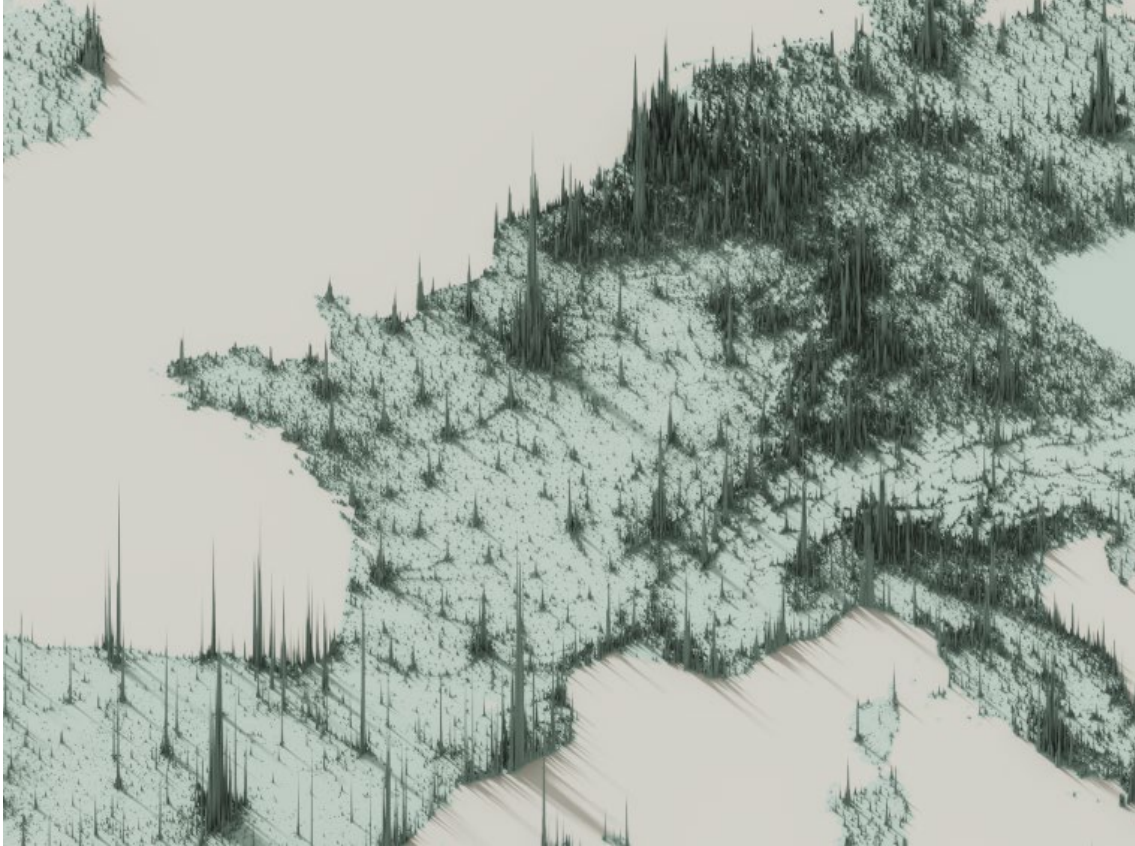
- Management of the **geographical reference database** of the European Commission
 - ✓ Collection, validation and dissemination of geospatial data for use by EC and other EU Institutions / bodies
- Operation of the **spatial data infrastructure** of the European Commission (servers / cloud, map services, routing, geocoding, IMAGE, Statistical Atlas...)
- Coordinate mapping activities within the EU Institutions and provide guidelines for correct mapping (e.g. with trainings, support and advice)
- Data processing, mainly for **thematic mapping**, data dissemination and **spatial analysis** like:
 - ✓ How long does it take on average to drive to the closest hospital?
 - ✓ How accessible are education facilities?
 - ✓ What is the population density in specific areas?

Recent and ongoing work (I)



- CENSUS 2021 and grid data
 - ✓ Update of the administrative / statistical units' boundaries
 - ✓ Data validation and visualization
 - ✓ Support dissemination of results
- Geospatial datasets
 - ✓ Process definition for 'experimental' data collections on education and health and its expanding to other topics / services
 - ✓ Develop spatial analysis based on needs of policy DGs / thematic units in ESTAT
 - ✓ Improve process when relevant for core datasets management (e.g. admin. / statistical units, addresses, postal codes, POI...)
- Implementing of NUTS 2024 based on new Regulation

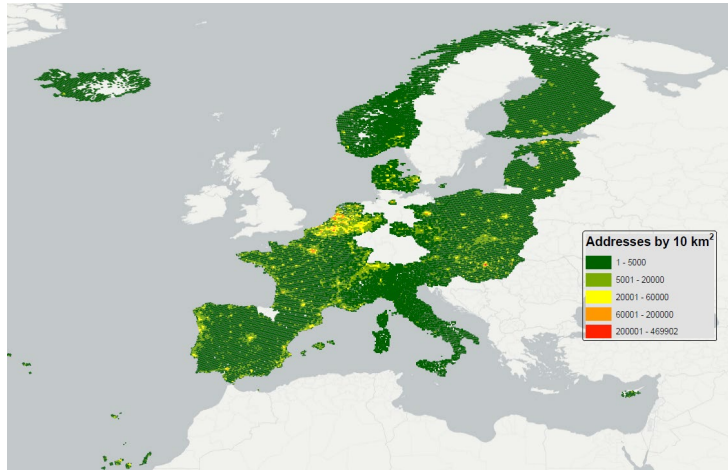
Example: Support for CENSUS 2021



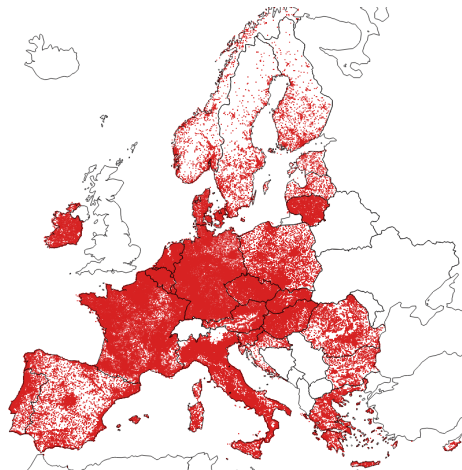
Population density, 2021
(number of inhabitants per 25 km²)



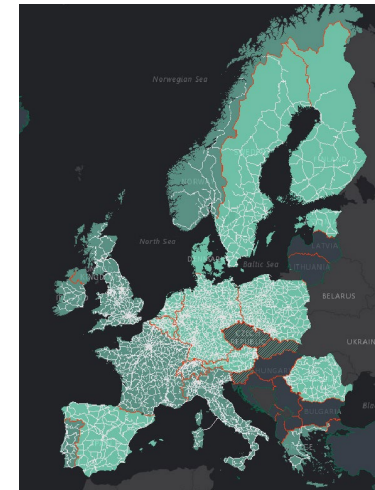
Example: Pan European Datasets



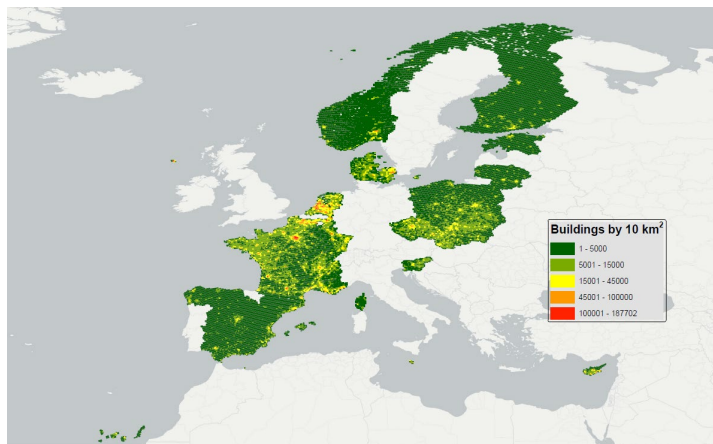
Addresses



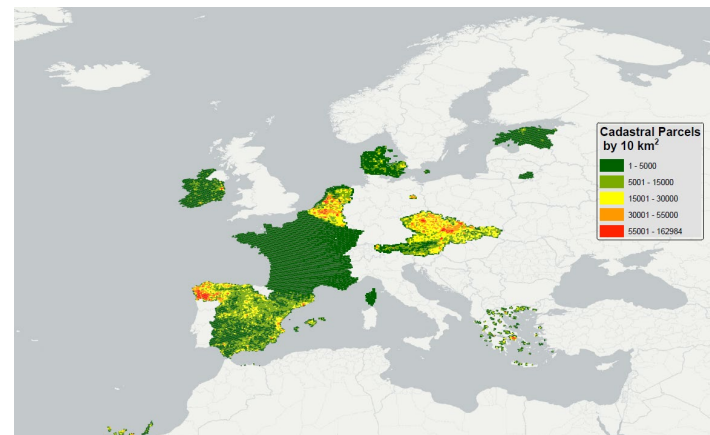
Utility services



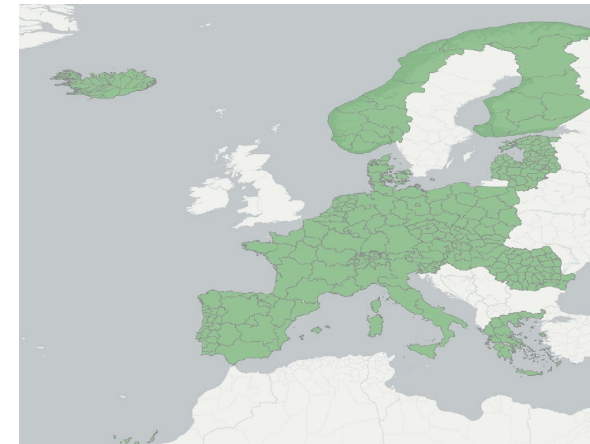
Transport Networks



Building Units

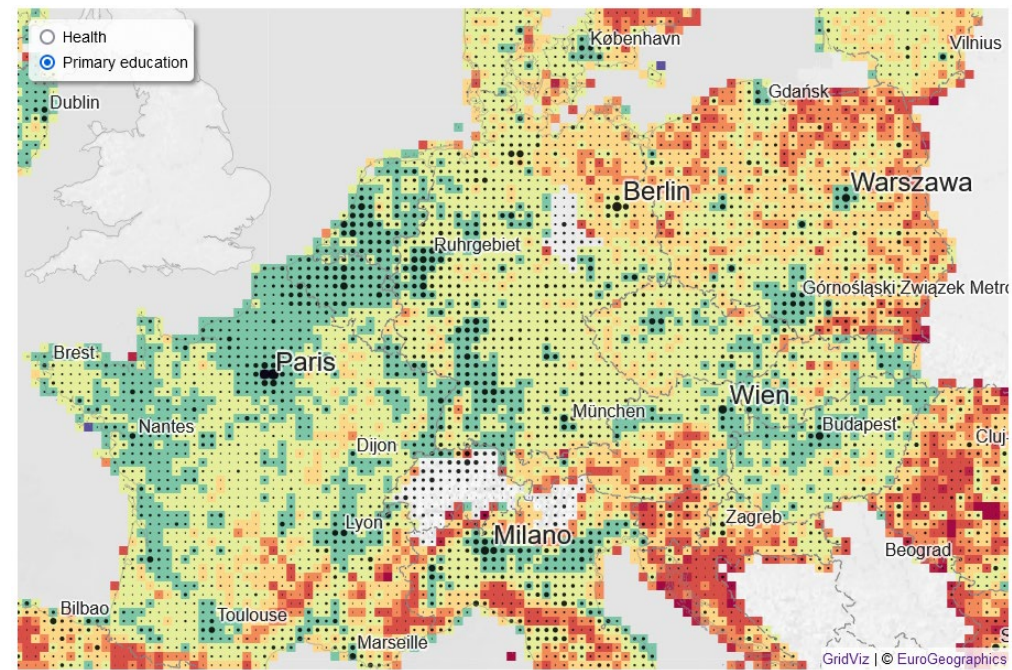
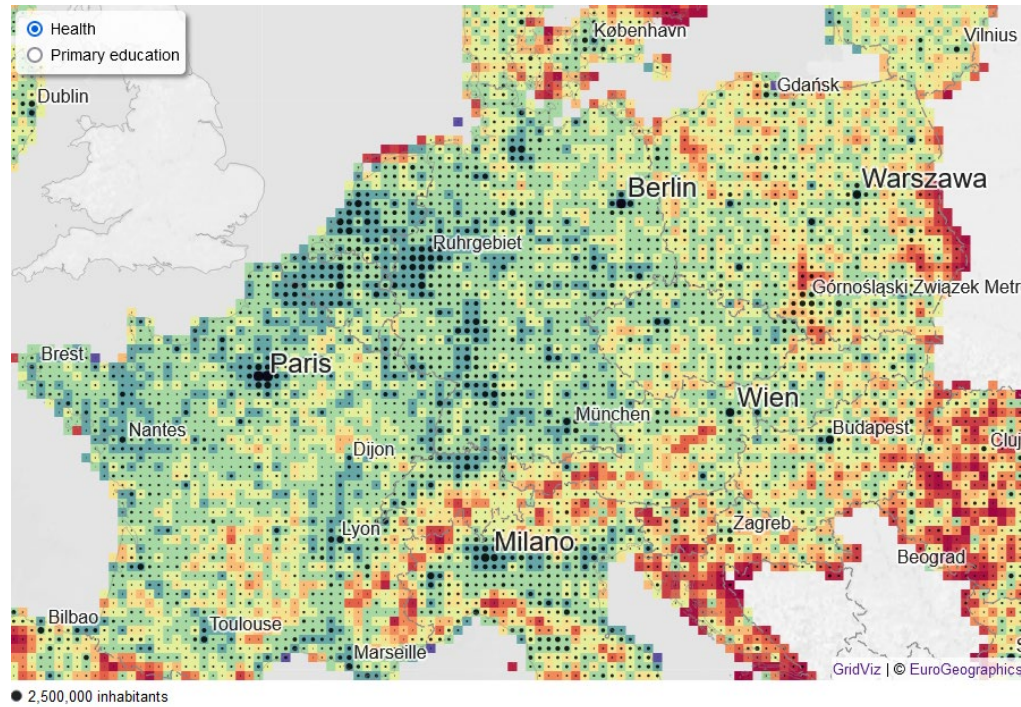


Cadastral Parcels

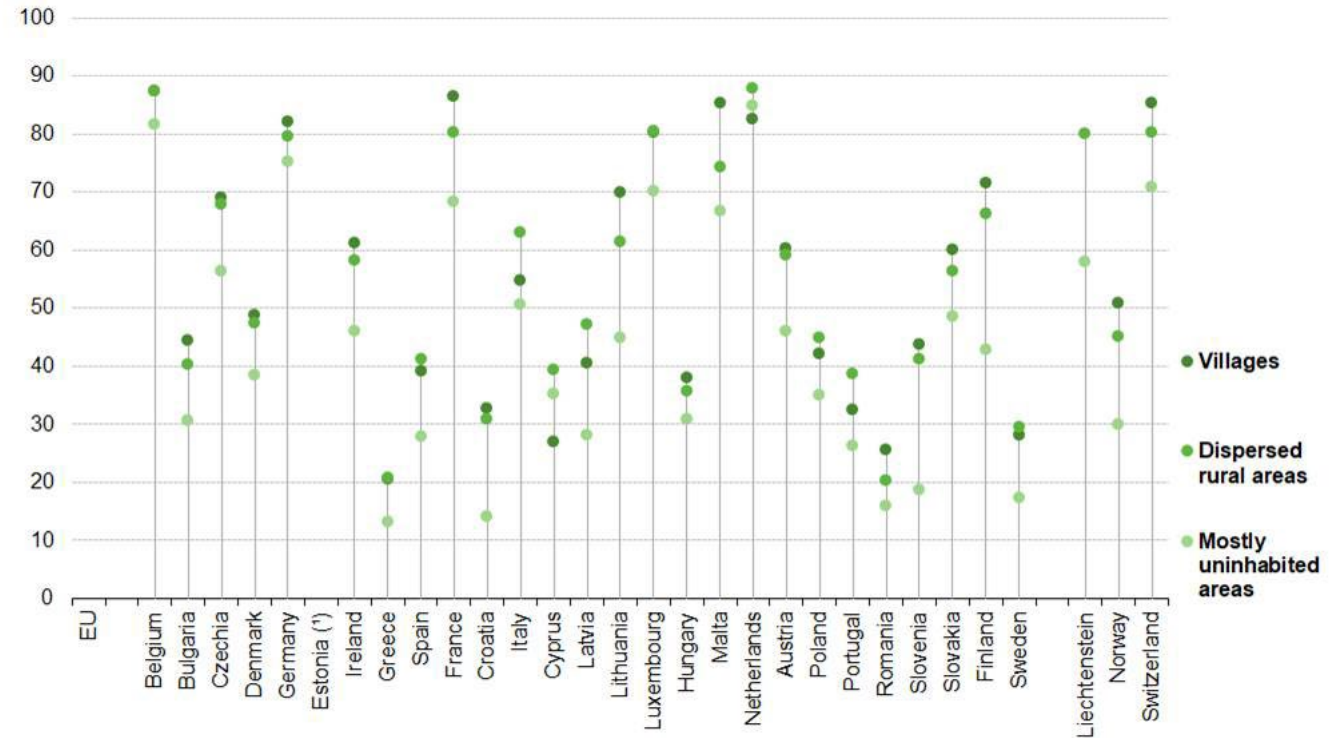
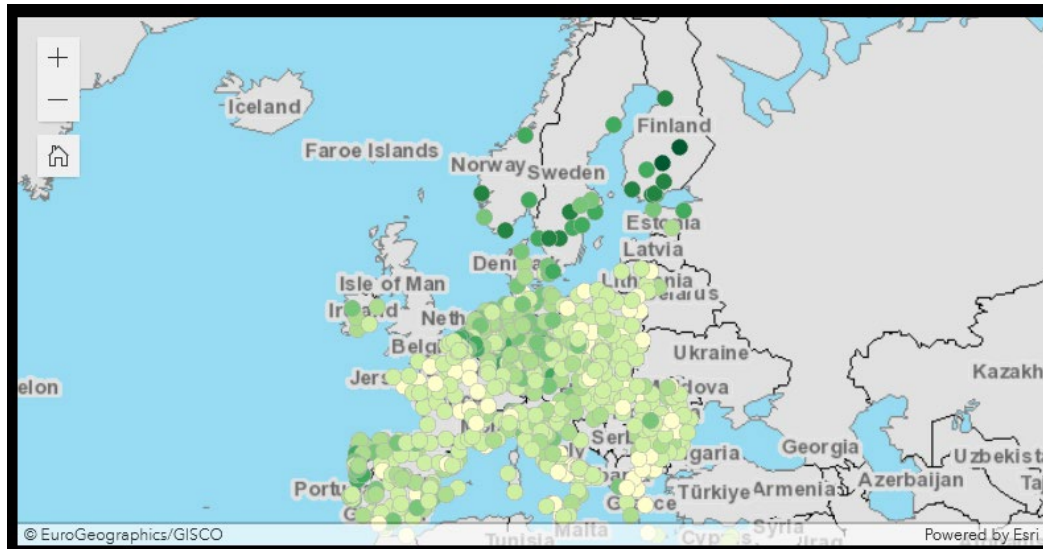


Administrative Units

Spatial analysis: Healthcare / Education Accessibility (I)



Spatial analysis: Healthcare / Education Accessibility (II)



Urban Rural Publication

[Green Spaces \(EEA\)](#) Average of urban green space within 300m around educational facilities

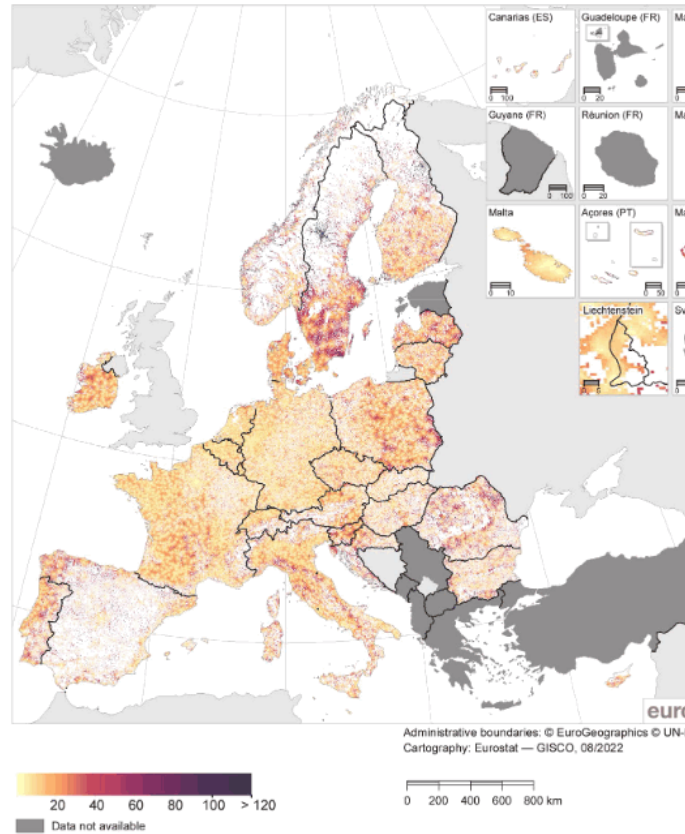
Recent and ongoing work (II)



- Financial support: New series of **grants** to support Member States
- Technical support
 - ✓ Various dissemination-related activities (e.g. production of maps for the Eurostat Regional Yearbook and other publications)
 - ✓ Update of mapping tools (IMAGE, Statistical Atlas), freely available for users
 - ✓ Update of transport matrixes
- Earth Observation for statistics
 - ✓ Implementation of the [Warsaw Memorandum](#) and recommendations from the 48th Meeting of the European Statistical System Committee (February 2022)
- Follow-up of relevant legislation implementation

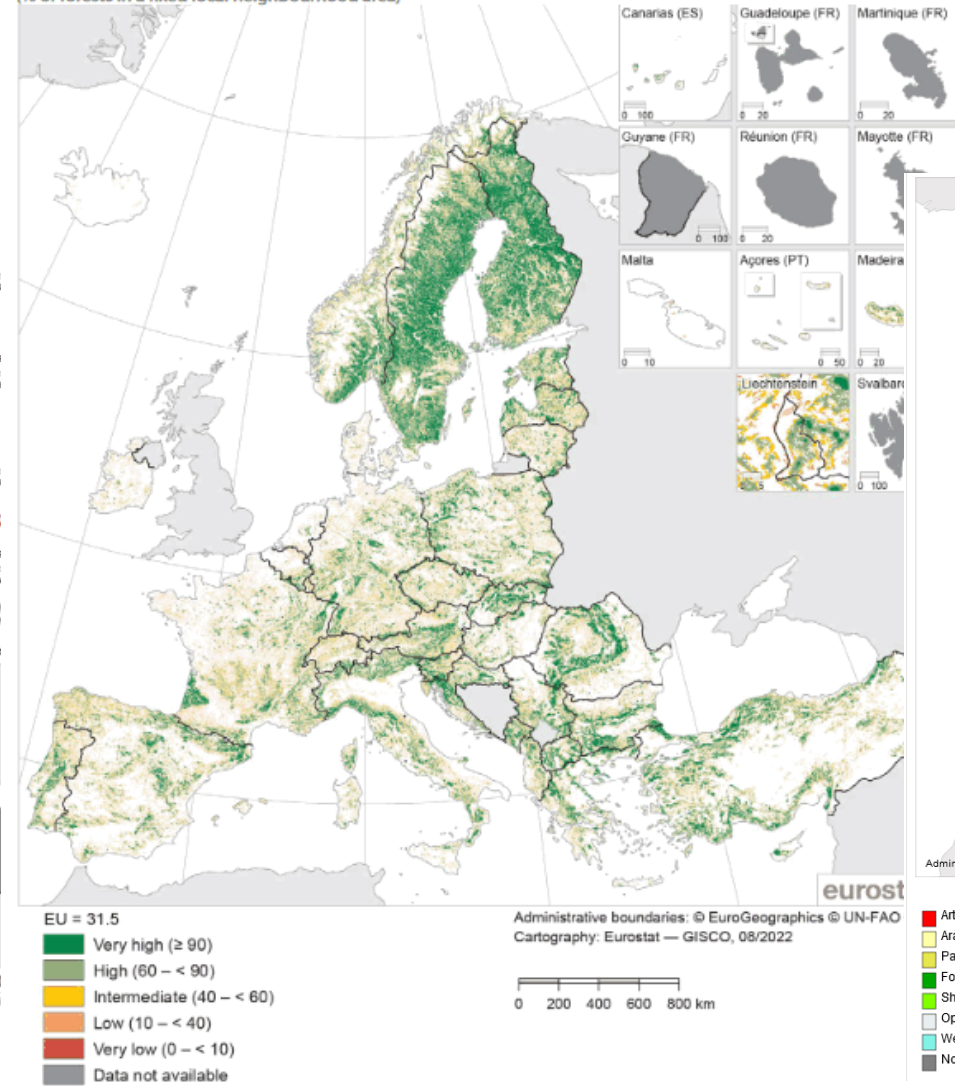
Example: Published maps

Map 2.3: Travel time to nearest hospital, 2020
(minutes, by 1 km² grid cells)

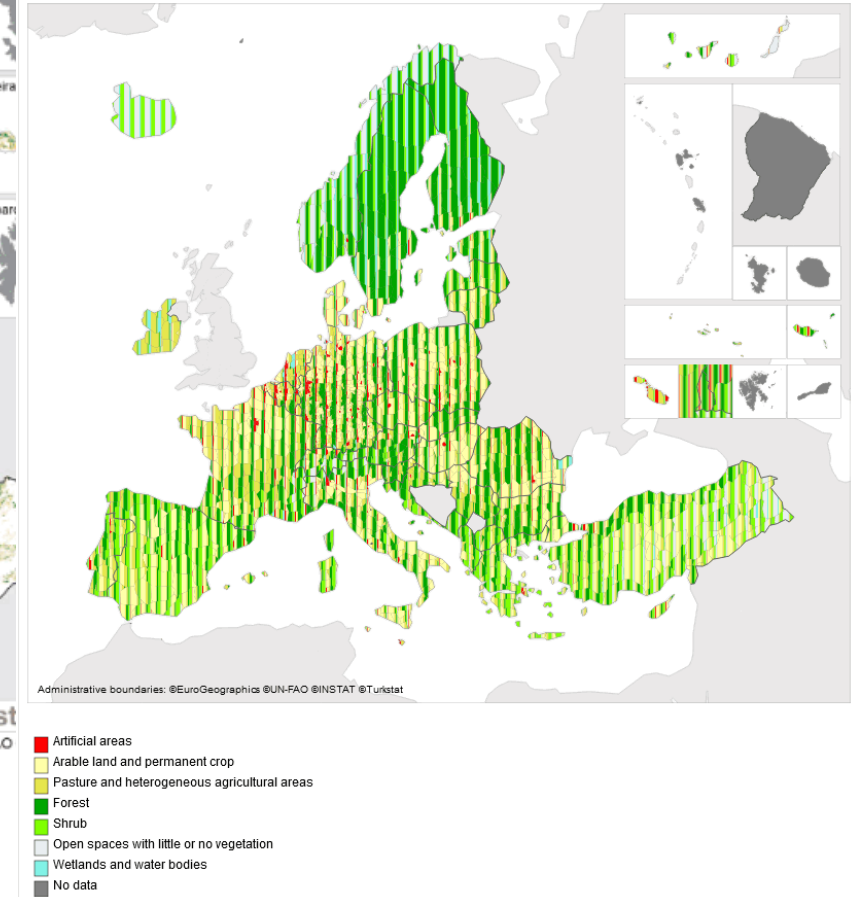


Note: the nearest hospital may be across a national border. Only populated grid cells are shown (white grid cells are uninhabited).
Source: Tomtom Multinet, 2020, Geostat population grid 2018, Eurostat-GISCO hospital locations 2020

Map 12.4: Forest connectivity, 2018
(% of forests in a fixed local neighbourhood area)



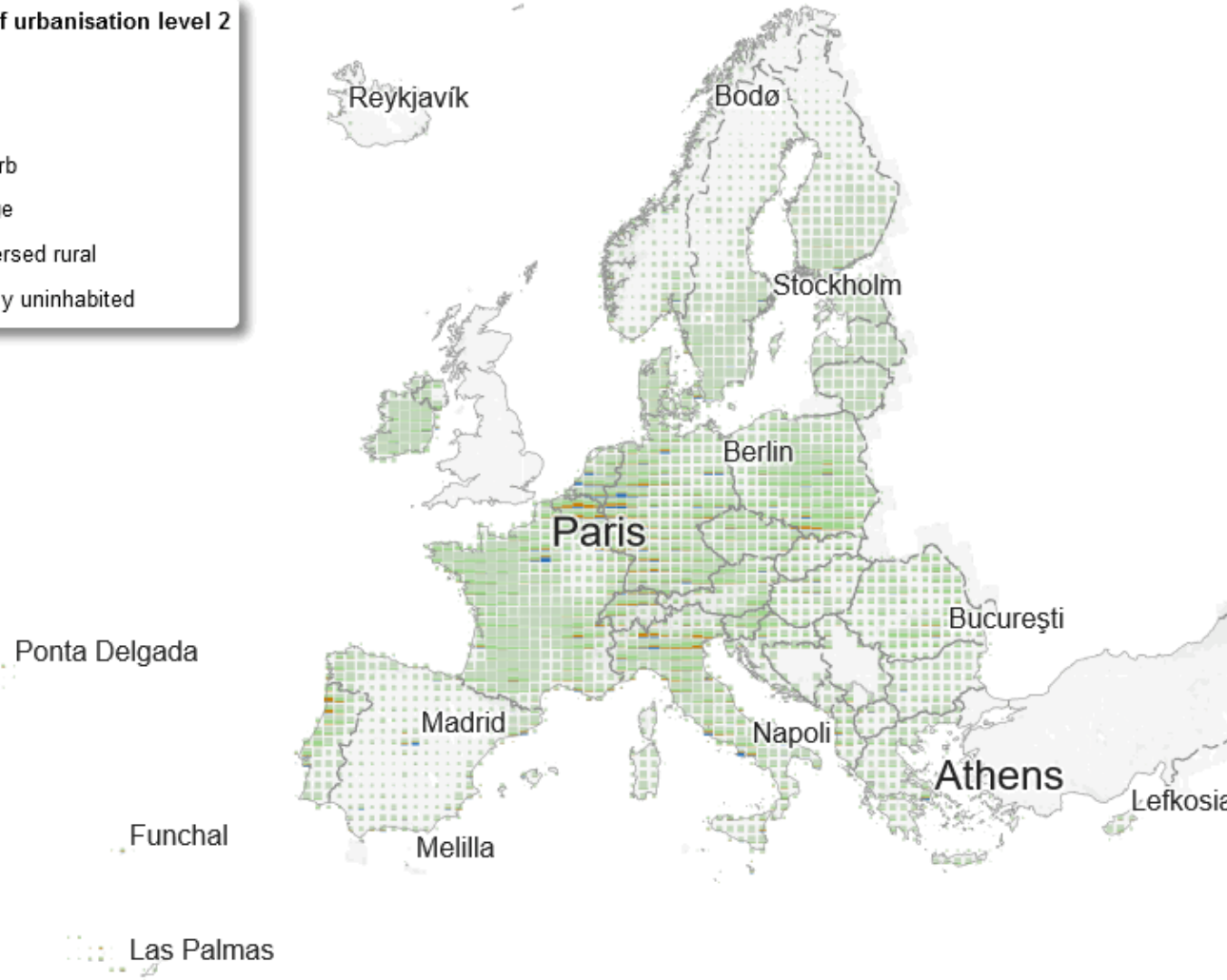
Note: forest area density (FAD) is defined as the proportion of all forest pixels within a fixed local neighbourhood area (529 hectares).
Source: Corine landcover (CLC), Joint Research Centre (JRC), European Commission



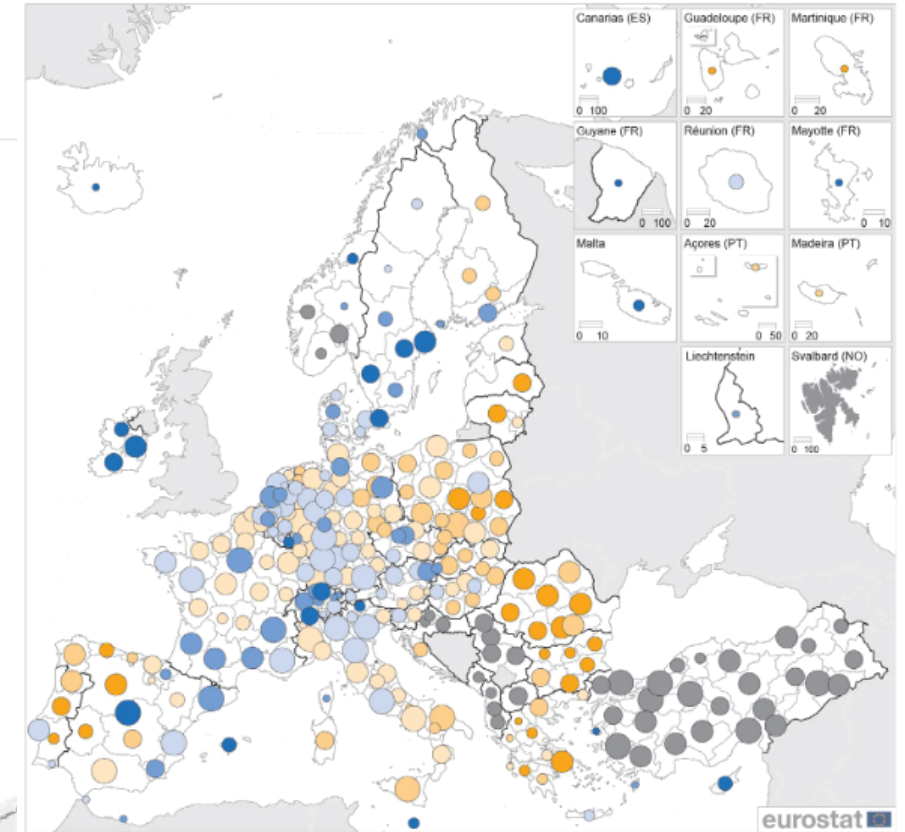
Example: Visualisations

Degree of urbanisation level 2

- City
- Town
- Suburb
- Village
- Dispersed rural
- Mostly uninhabited



Map 1.1: Population developments, 2021–2050
(by NUTS 2 regions)



Projected change between 2021 and 2050 (per 1 000 persons)
EU = -13.4

- ≥ 150
- $75 - < 150$
- $0 - < 75$
- $-75 - < 0$
- $-75 - < -150$
- < -150
- Data not available

2021 (million persons)
EU = 447.2

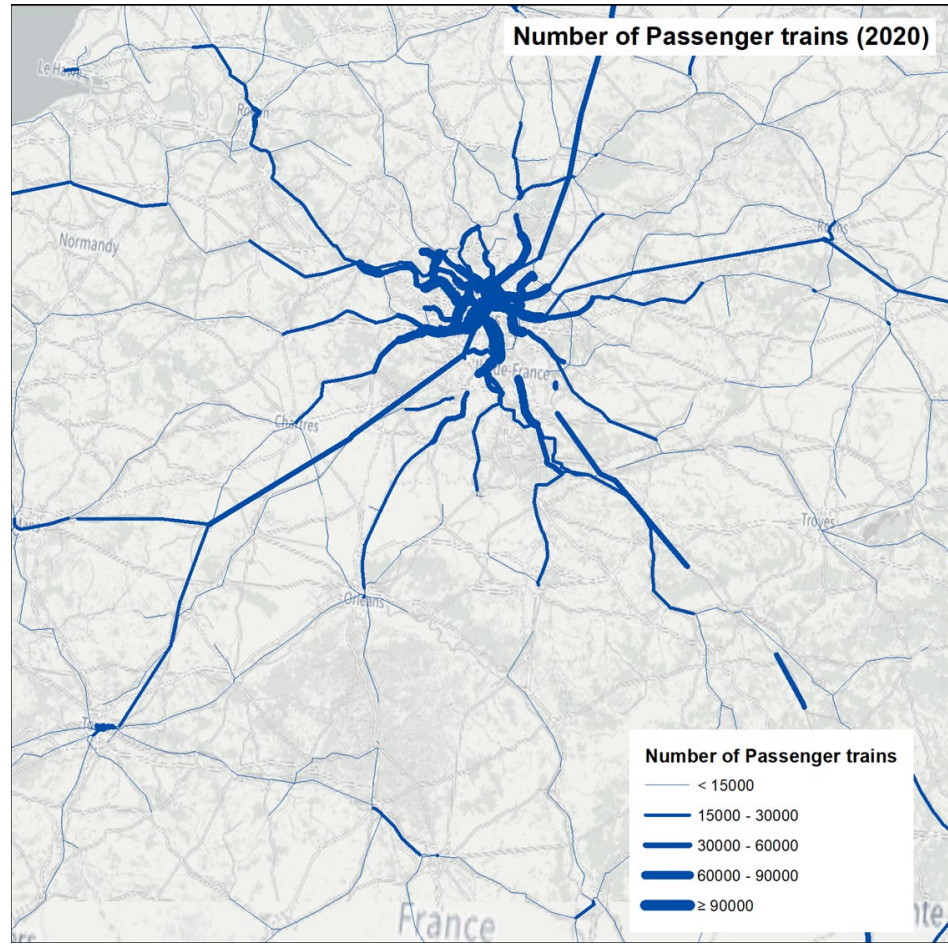
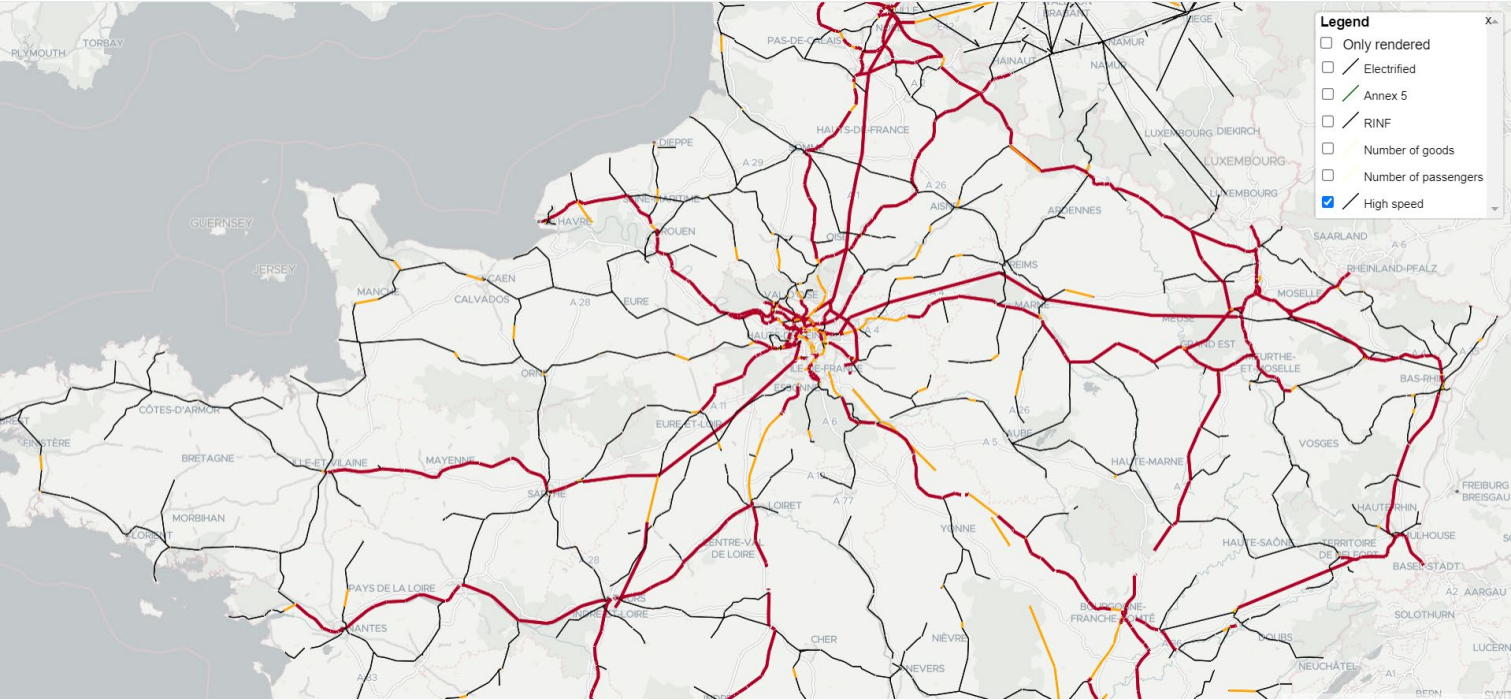
- ≥ 3.75
- $2.25 - < 3.75$
- $1.40 - < 2.25$
- $0.85 - < 1.40$
- $0.45 - < 0.85$
- < 0.45

Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat
Cartography: Eurostat — GISCO, 09/2022

0 200 400 600 800 km

Note: as of 1 January, Svalbard og Jan Mayen (NO08): not available.
Source: Eurostat (online data codes: demo_r_pjangrp3, proj_19rp3, demo_pjan and proj_19rp)

Example: Railroad matrixes



Data sources used

- Topographic, cadastral, administrative division data from **NMCAs** and **EuroGeographics**
- **National** and **EU geoportals** and geo-catalogues, usually **open and free data**
- **Commercial** and public open-source data
- Data from other organisations (e.g. EU agencies, UN...)

- Statistical data from **NSIs** and **Eurostat**

□ Goal is to **improve / streamline** the processes

Activities planned for 2023 / 2024 – Cooperation

- UN-GGIM and UNGGIM: Europe
 - ✓ Member of the Executive Committee
 - ✓ Following and contributing to the work of its working groups (e.g. EG-ISGI, Line of work on Data Integration and on SDGs): **webinar series**
 - ✓ Support to the organisation of the **UNGGIM: Europe Plenary** 22-23 November 2023, Brussels
 - ✓ Regular exchanges at **technical** and **management** level
- EFGS – European Forum for Geography and Statistics
 - ✓ Observer in its Steering Committee
 - ✓ Supporting the work of the EFGS including the EFGS conferences
- Next meeting of the Expert Group Integrating statistical and geospatial information (known also as **GISCO WG**)



Save-the-date: 12-13 March 2024 in Luxembourg

Thank you!

<https://ec.europa.eu/eurostat/web/gisco>



© European Union 2023

Unless otherwise noted the reuse of this presentation is authorized under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

