OME2: Supporting cross-border analyses of healthcare and education services

The quality of geographical data has an impact on the result of spatial analysis; therefore, we need up-to-date, multi-scale, comparable, edge-matched geospatial data covering the European territories. The Open Maps for Europe 2 (OME2) high-value, large-scale, pan-European prototype is an excellent contribution to meet these requirements. Our objective is to show how vector topographic datasets from National Mapping, Cadastral and Land Registration Authorities and GIS methodologies can be used to produce statistical indicators for policymakers.

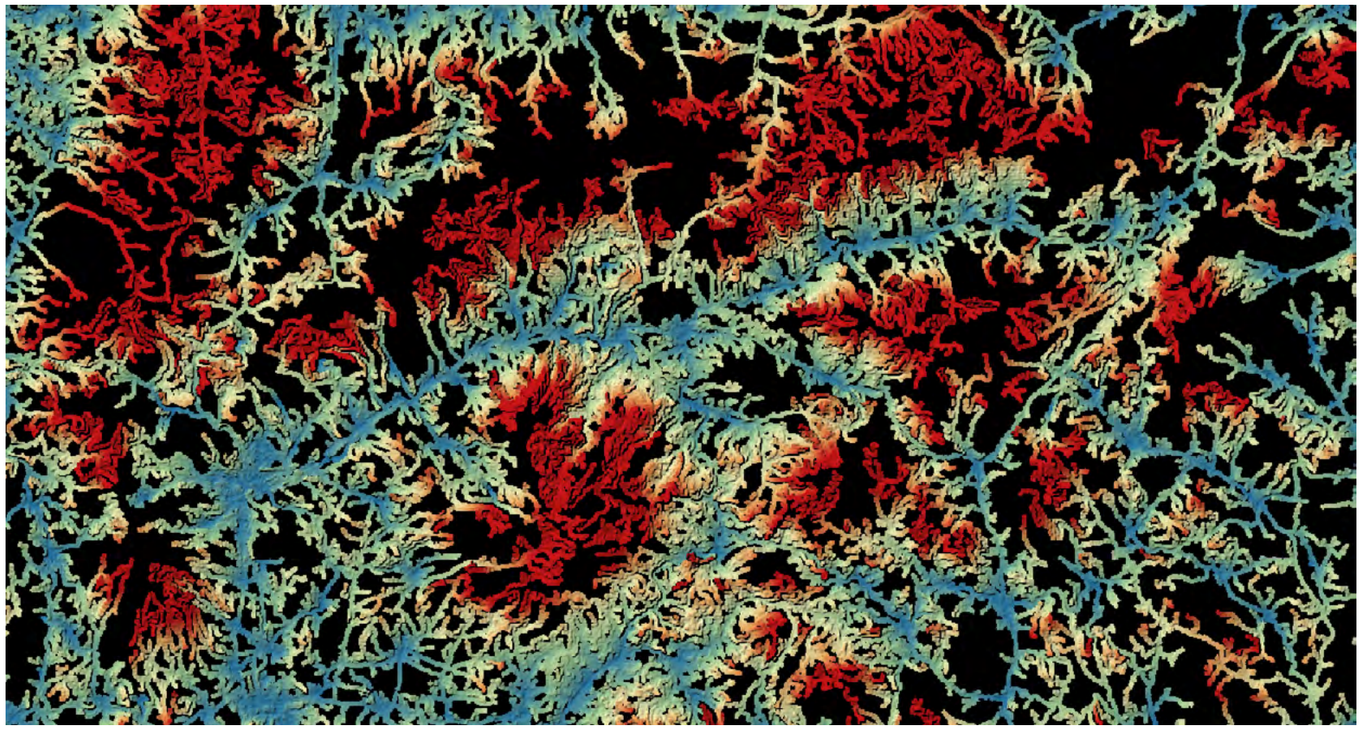
Julien Gaffuri
GIS and Cartography Engineer, Eurostat

Introduction

Geospatial data provides context to information about people and places, enabling insights and answers to some of the key issues facing society. In the European Union, official statistic are provided by Eurostat, which uses reliable geographic information to ensure accurate spatial analysis of data for policymakers.

Challenge

Education and healthcare are two of the most important basic services but are irregularly distributed across Europe. This means some people are 'left behind' because their nearest services are either too far away or too difficult to reach and access by road. Knowing which populations are disenfranchised is crucial for delivering EU-wide and regional policies, such as the EU4Health programme for stronger, more resilient and more accessible health systems, as well as for monitoring the UN Sustainable Development Goals.



Benefit

- Enables accurate spatial analysis of data using reliable geographic information from official national sources – the European National Mapping, cadastral and Land Registration Authorities.
- Provides geographical context to official statistical information about people and places to highlight key issues and potential solutions.
- Meets the data quality specifications required by Eurostat to produce official statistics for the European Union.
- Addresses the challenge of finding, easily accessing and licensing authoritative pan-European harmonised, edge-matched boundary data.
- Saves time, effort and resources by providing harmonised data from multiple countries through one central portal under one easy-to-understand open data licence.

Solution

Eurostat used the transportation theme of the Open Maps for Europe 2 (OME2) high-value, large-scale, pan-European prototype to produce its new dataset on the localisation of health and education provision. Released in January 2025, the dataset describes accessibility in terms of driving time to the nearest main healthcare and primary education service for each Census 2021 population 1 km grid. It also shows the average driving time to the three nearest providers.

The OME2 road data, which aggregates, harmonises and edge-matches national information, provided key information for the analysis and identification of potential population clusters with low or limited access.

Julien Gaffuri explains: *"We used the road transport network theme from the OME2 pan-European dataset prototype for testing and comparison with other data sources which enabled us to compute cross-border accessibility analyses with an excellent level of detail (100m resolution) across the available countries (France, Belgium and The Netherlands). Without it, we would have had to use alternative data sources which have some strong limitations."*

Open Maps For Europe Datasets used

High-value large-scale pan European prototype transportation theme:

- Multi-themed high-value topographic dataset at the scale 1:10 000 aligned to key EU Policy objectives and UN core geospatial data recommendations.
- Seamless, harmonised authoritative data produced by the OME2 project using EuroGeographics' members' national databases.

VISIT WEBSITE
https://www.mapsforeurope.org/datasets/hvlsp

About the OME2 Project and Open Maps For Europe Portal

Open Maps For Europe 2 (OME2) is developing a new production process and technical specification for free-to-use, edge-matched data under a single open licence. Authoritative 1:10 000 scale data for 10 countries will be delivered via the user interface built by the award-winning Open Maps For Europe Project.

OME2 is also enhancing the five existing Open Maps For Europe datasets, including the Open Cadastral Map.

The OME2 project is co-funded by the European Union and being delivered by a consortium comprising: EuroGeographics; National Geographic Institute, Belgium; National Institute of Geographic and Forest Information, France; Hellenic Cadastre; General Directorate for the Cadastre, Spain; and Cadastre, Land Registry and Mapping Agency, The Netherlands.

The project corresponds with Member States' obligations to implement high-value data and will be completed at the end of 2025.

VISIT WEBSITE
https://eurogeographics.org/open-maps-for-europe/ome2-progress

About Eurostat

Eurostat is the statistical office of the European Union. Its mission is to provide high-quality statistics and data on Europe, and it coordinates statistical activities at Union level, particularly inside the Commission.

Eurostat produces European statistics in partnership with National Statistical Institutes and other national authorities in the EU Member States. This partnership is known as the European Statistical System (ESS). It also includes the statistical authorities of the European Economic Area (EEA) countries and Switzerland.

Eurostat coordinates statistical activities at Union level and more particularly inside the Commission.

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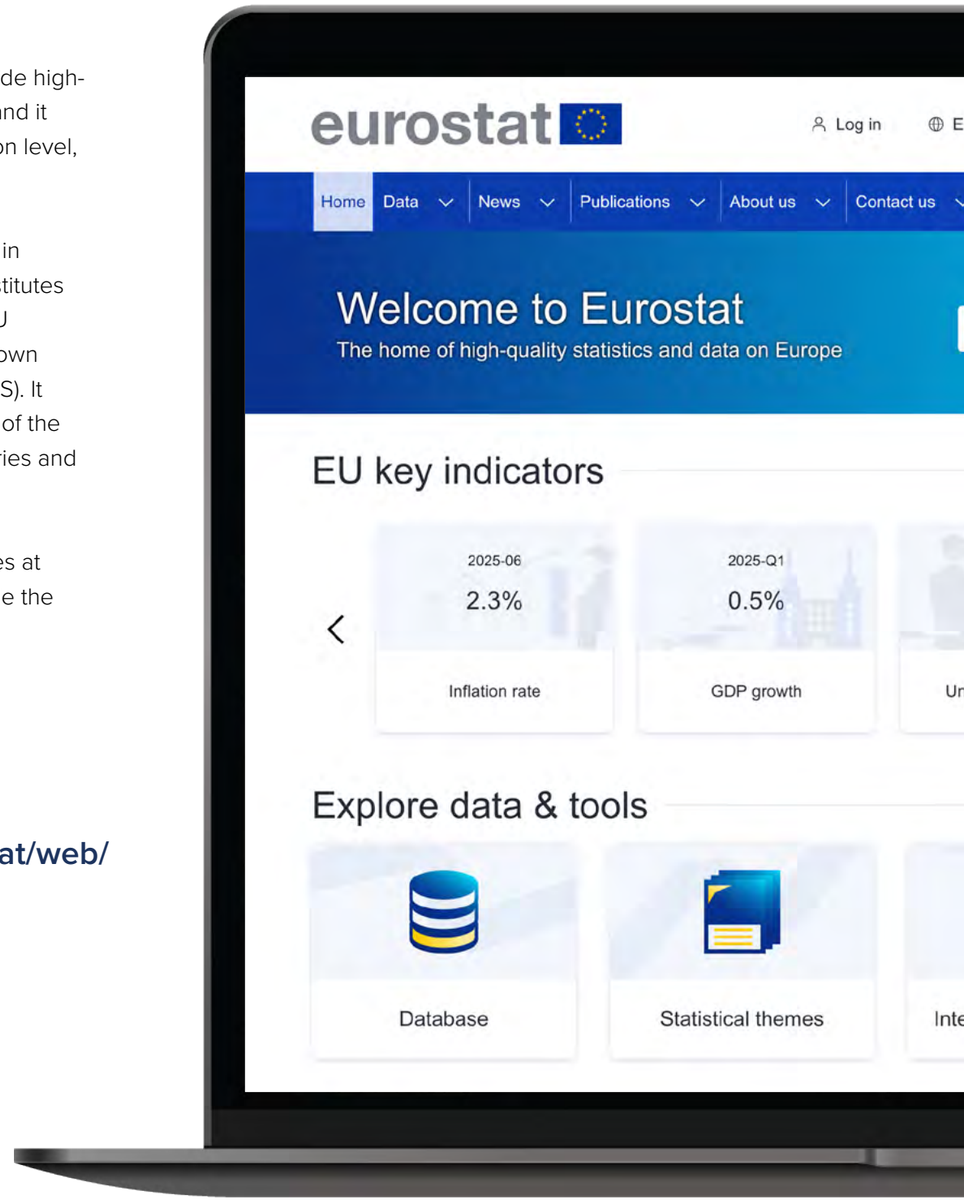

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