



Geospatial Data Requirements

INSPIRE MIG Meeting

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Geospatial data is essential for statistics and evidence based policy making in the EU



1 NO POVERTY

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

7 AFFORDABLE AND CLEAN ENERGY

6 CLEAN WATER AND SANITATION

11 SUSTAINABLE CITIES AND COMMUNITIES

13 CLIMATE ACTION

8 DECENT WORK AND ECONOMIC GROWTH

10 REDUCED INEQUALITIES

Need for pan-European geographical datasets for EU policy



https://ec.europa.eu/regional_policy/en/newsroom/news/2019/01/01-03-2019-access-to-universities-in-the-eu-a-regional-and-territorial-analysis



https://ec.europa.eu/regional_policy/sources/docgener/focus/2013_09_passenger.pdf

Objective

- Provide a consolidated and consistent overview of Commission needs
- Set out cross-cutting and domain specific requirements of the European Commission for EU wide geospatial information from Member States
- To support to Sustainable Development and other EU policies.
- Seek support from Member States to obtain more and better quality data

Key EU Policies with extended geospatial information needs

- European Statistical System (ESS) – 223/2009/EC
- Integrated Administration and Control System (IACS) - 1306/2016/EU
- Infrastructure for Spatial Information in the European Community (INSPIRE) - 2007/2/EC
- Directive on the re-use of public sector information (PSI) – [2003/98/EC](#)
- Deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport (ITS) – 2010/40/EU
- Can we use these EU legal basis for developing more relevant pan-European geospatial data?

UN-GGIM: Europe



UN-GGIM: Europe








United Nations Committee of Experts on
Global Geospatial Information Management

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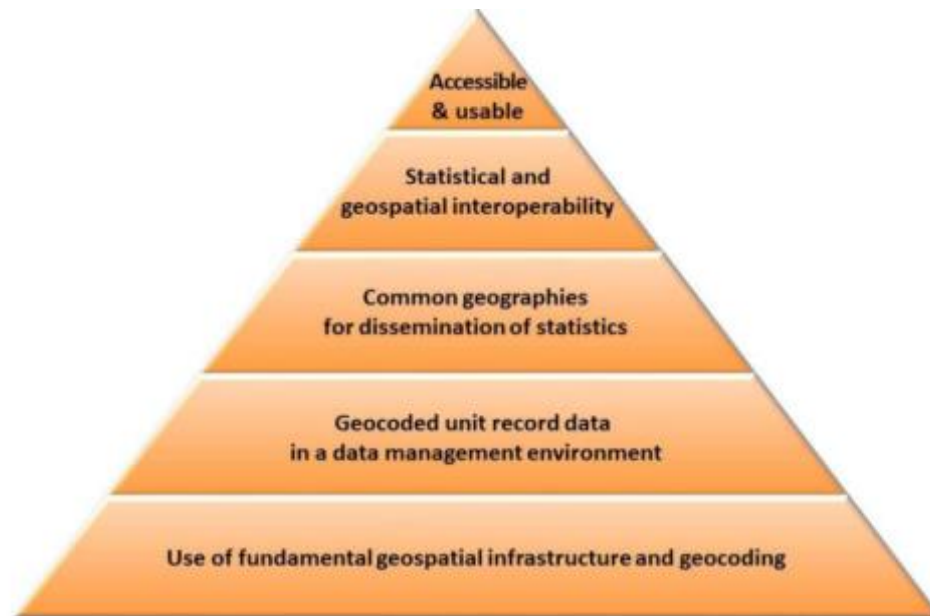
Selection of core data themes – Core data scope

Core spatial data themes – Recommendations for content

File	Date added
 Core spatial data theme 'Cadastral parcels' – Recommendations for content – Final version 1.1 (pdf)	09/02/2018
 Core spatial data theme 'Address' – Recommendations for content – Draft version 1.0 pdf	11/10/2017
 Core spatial data theme 'Geographical Names' – Recommendations for content – Draft version 1.0 pdf	11/10/2017
 Core spatial data theme 'Basic Services' – Recommendations for content – Draft version 1.0 pdf	17/01/2018
 Core spatial data theme 'Administrative Units' – Recommendations for content – Draft version 1.0 pdf	01/02/2018
 Core spatial data theme 'Buildings' – Recommendations for content – Draft version 1.0	17/01/2018
 Core spatial data theme 'Statistical Units' – Recommendations for content – Draft version 1.0	02/10/2018



Global Statistical Geospatial Framework



3/2020/37



United Nations

Statistical Commission

**Report on the fifty-first session
(3–6 March 2020)**

51/123

Integration of statistical and geospatial information

The Statistical Commission:

(a) Welcomed the report of the Expert Group on the Integration of Statistical and Geospatial Information,³⁹ and commended the Expert Group on its significant body of work to advance the development and completion of a global statistical geospatial framework so that there is increased information available to support social, economic and environmental policy and decision-making, including at the regional, national and subnational levels;

(b) Noted the increasing relevance of and need for the integration of statistical and geospatial information as an important bridge to enable the production of harmonized, standardized and integrated, geospatially enabled statistical data to facilitate data-driven decision-making, in particular with regard to the implementation of the 2020 round of population censuses and the Sustainable Development Goals;

(c) Endorsed the Global Statistical Geospatial Framework, as adopted by the Committee of Experts on Global Geospatial Information Management in its decision 9/106 of 9 August 2019, and welcomed its adoption and implementation by Member States as a result of a broad and inclusive global consultation process;

(d) Encouraged Member States to continue to implement the Framework and, in that regard, called for increased institutional coordination and collaboration between national statistical and geospatial agencies and other relevant stakeholders, especially in developing countries, to ensure more targeted interventions on, and informed understanding of, socioeconomic data within a geospatial context;

EC Geospatial Data Requirements paper and international requirements converge

Internal EC Consensus document outlining the EC needs for geospatial data

(Document for information and not approval)

...to provide a consolidated and consistent overview of the European Commission user needs and set out cross-cutting and domain specific requirements of the European Commission for EU wide geospatial information and data products from Member States in support to Sustainable Development and other EU policies....



Priority Geospatial Datasets for the European Commission

Priority Geospatial Datasets for European Commission needs

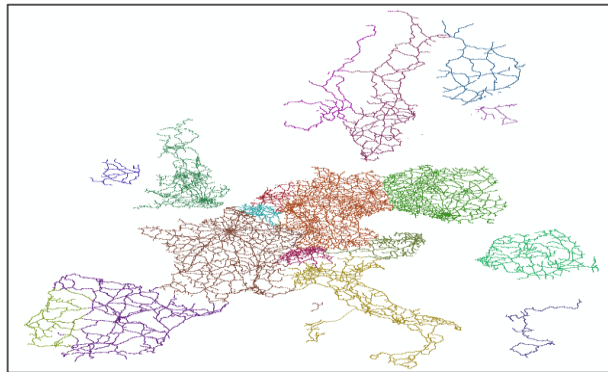
- Buildings (BU),
- Cadastral Parcels (CP),
- Addresses (AD),
- Administrative units (AU),
- Statistical Units (SU),
- Transport Networks (TN),
- Land Parcel Information System (LPIS)
- Postal Codes (PC)
- Utility and governmental services (US)

General Requirements for data themes

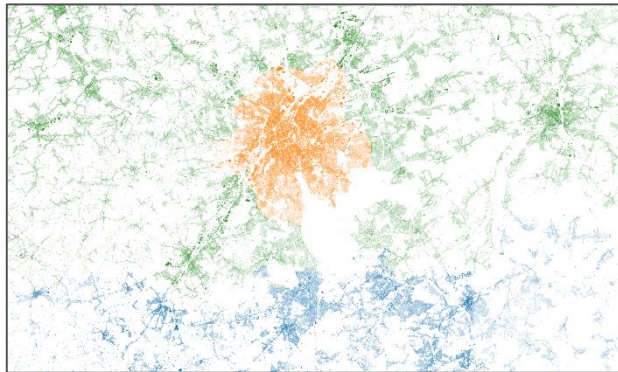
- Unique and persistent identifier
- full geographic extent of the territory
- at the scale ~1: 5000-10.000
- update frequency (incremental) should be once a year or better
- INSPIRE mechanism of life-cycle attributes and versioning.

Examples (Work performed by GISCO)

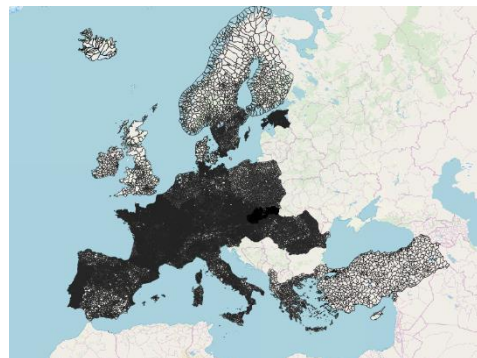
Railway



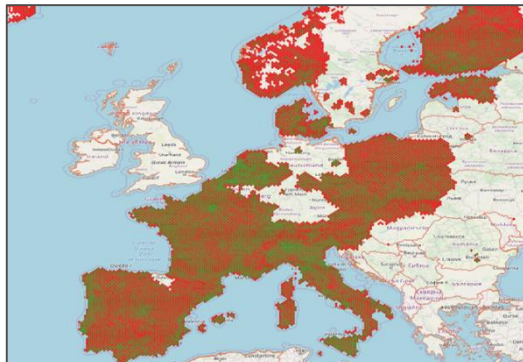
Buildings



Administrative Units

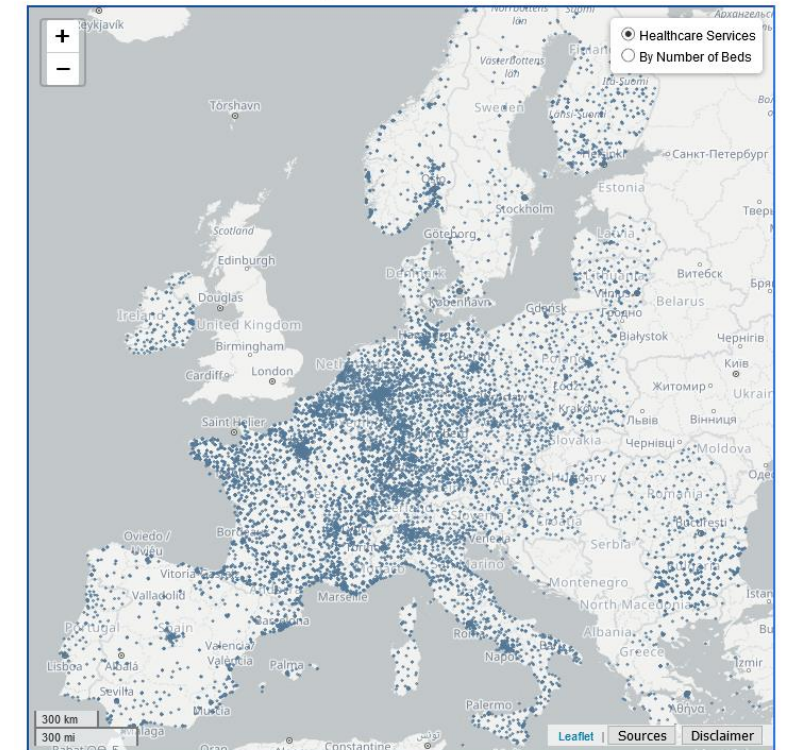


Addresses



Healthcare Services

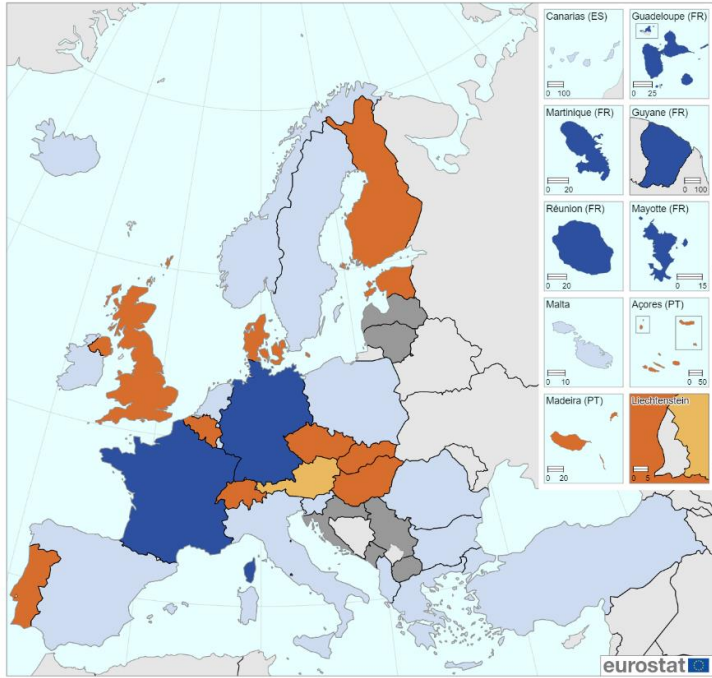
Locations of Healthcare Services in Europe



Issues observed

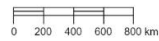
- Metadata:
 - Datasets exists but are not documented
 - Data exists locally by not centrally
- Data
 - Various scales/outdated under INSPIRE+OpenData
 - Restrictive Licence / Access restrictions
 - GML/WFS not performant enough for pan-European purpose.
 - Datasets are hidden in Companies – commercial fees are charged – fair use principle and creating an obstacle for use

Approximate map scales for Member States Administrative Units data



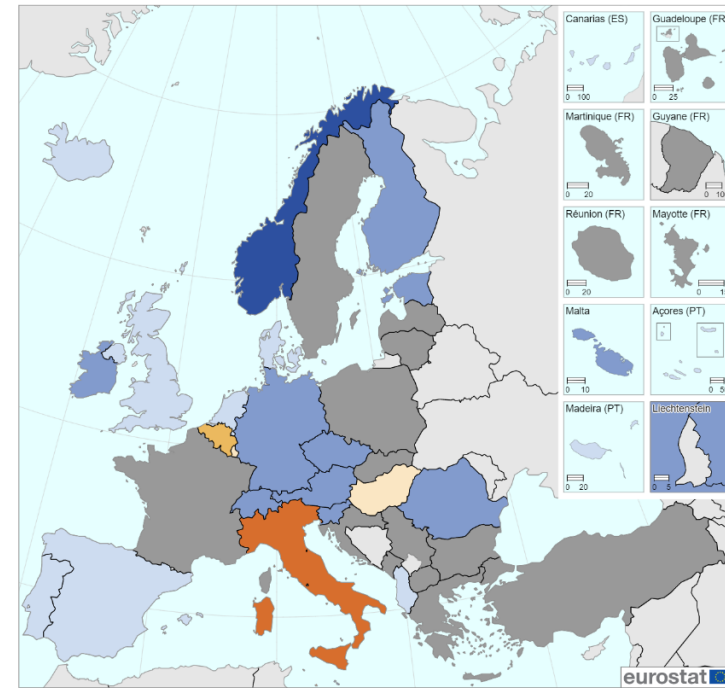
Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat
Cartography: Eurostat – IMAGE, 12/2019

- 1: 10, 000
- 1: 50, 000
- 1: 100, 000
- 1: 250, 000
- Data not available



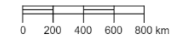
Scales not always provided - estimate based on EBM

Reference Year



Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat
Cartography: Eurostat – IMAGE, 12/2019

- 2011
- 2015
- 2016
- 2018
- 2019
- 2020
- Data not available



Maps done with <http://intragate.ec.europa.eu/image/>

How can Member States contribute?

- Enhance Quality beyond INSPIRE requirements: scale, thematic coverage, temporal coherence;
- Favourable Access and use conditions: open data, reasonable fees and rights to re-disseminate;
- Increase Reactivity: speed at which new data requirements from EU services can be met (INSPIRE/UNGGIM:Europe);
- Better Harmonisation: differences in the implementation and interpretation of INSPIRE make the compilation of pan-EU products difficult without further harmonisation work;
- Ensure Availability of download services as-is.

What could Eurostat do more in future

What?

Promote the integration of statistics and geospatial information

Contribute to the setting of international standards on geographical information

Enhance cooperation with Mapping Agencies to create new pan-European geospatial data – Eurostat needs authoritative geospatial data

Provide more support to Mapping Agencies to work closer with NSIs and Eurostat

Support the development of more joint actions NSIs - MA

Organise regional meetings with Mapping Agencies and NSIs to help enhance collaboration

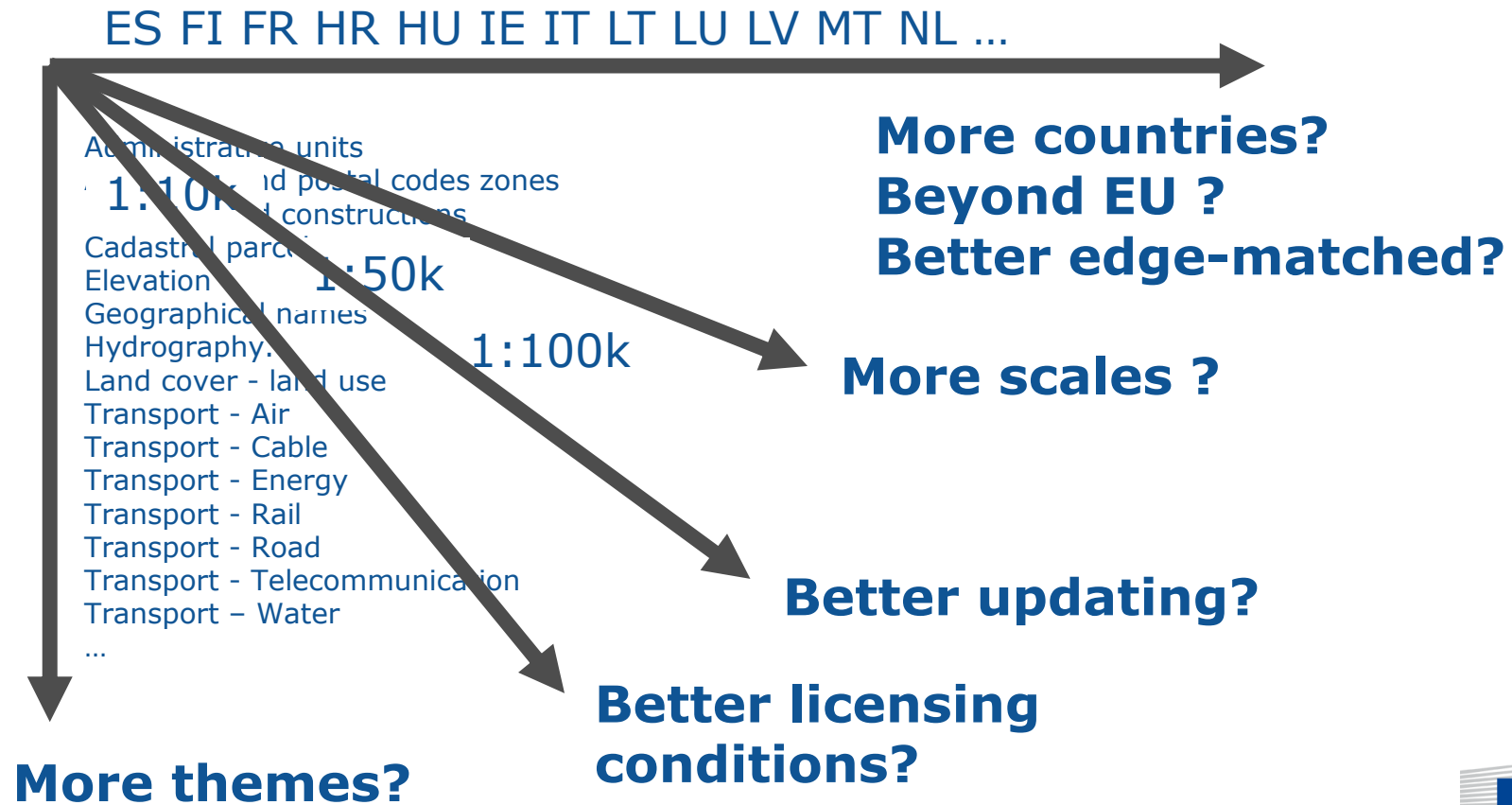
How?

More contacts with Mapp. Agencies
Support grants and contracts
Input to thematic Eurostat WGs
Support national initiatives
EU legal instruments (OD-HVD, INSPIRE, etc.)
International cooperation (UN-GGIM: Europe & UNECE)

Conclusions

- The Commission's priority geospatial data need are coherent with the international geospatial data needs
- We need data for internal EC work first (pan-European datasets, spatial analysis) and we will also work for you (access to data, analysis, tools)

Next





Thanks !

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