



Geospatial data integration and statistics – experiences and outlook

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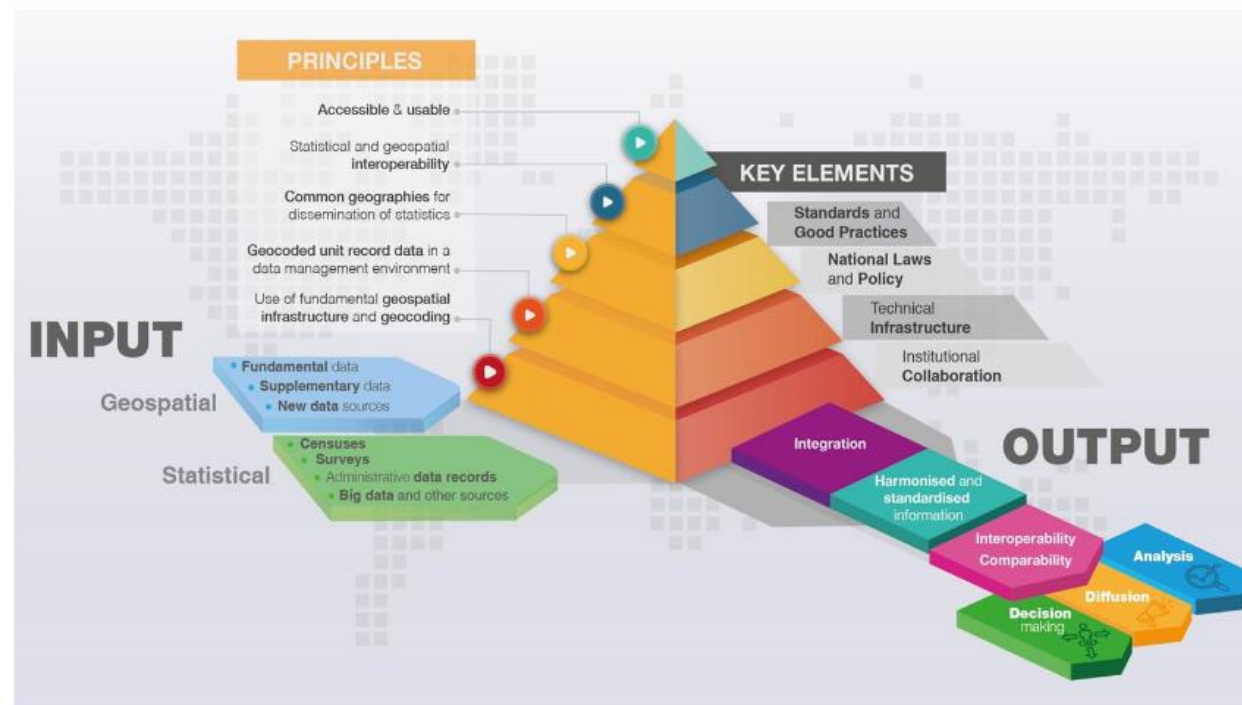
Eurostat E4 – GISCO

Geospatial data is essential for statistics

Location - just as time

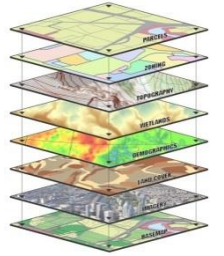
- is a key factor in statistics for:
collecting, processing,
storing, analysing and
aggregating data.

Statistics on a specific
area help
understanding the
relevance of
information.



http://ggim.un.org/meetings/GGIM-committee/9th-Session/documents/The_GSGF.pdf

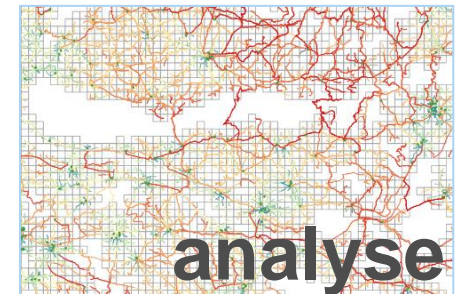
GISCO



- Service of the European Commission (Eurostat)
- Role: Answers needs of European Commission for geographical information at EU/national/regional levels.
 - Provision of GIS (reference) data, services and software
 - Support cartographic and spatial analysis activities
 - Coordinates commission-wide GI activities
 - Stimulate the use of GIS to support commission activities
 - Support activities on the integration of statistical and geospatial information

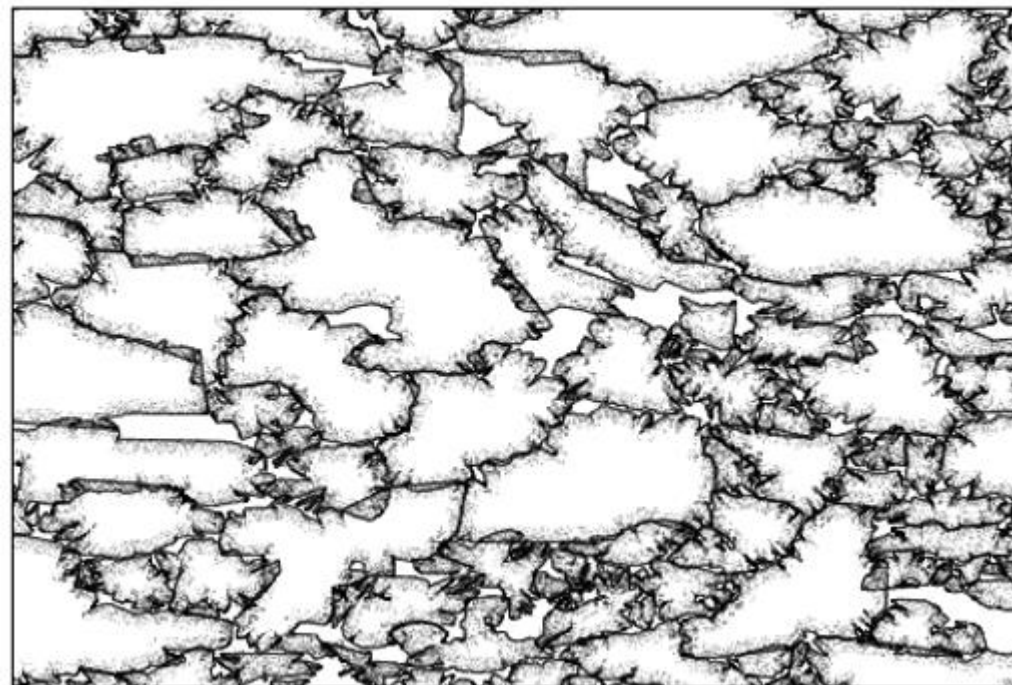
Examples from GISCO database

- Country, administrative+ statistical units, adresses
 - Settlements, Transport network, Hydrography
 - Land cover
 - Elevation (EuroDEM)
 - EU action zones
-
- Public datasets: <http://ec.europa.eu/eurostat/web/gisco>



EC Geospatial Data Requirements

- 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)



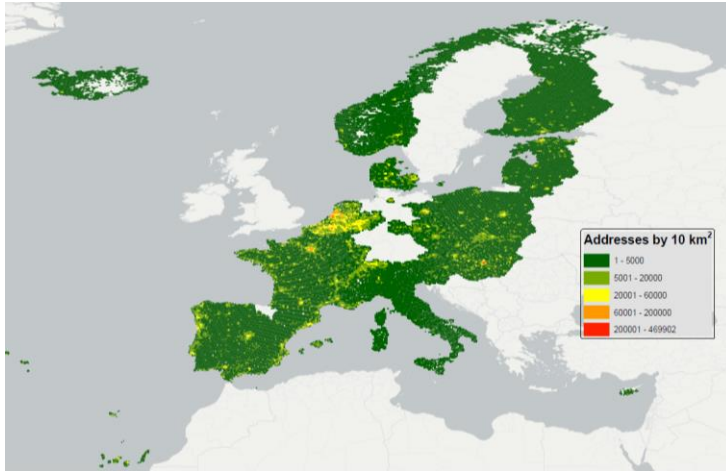
[Aligned with UNGGIM: Europe Core Specifications](#)

General Requirements for data themes

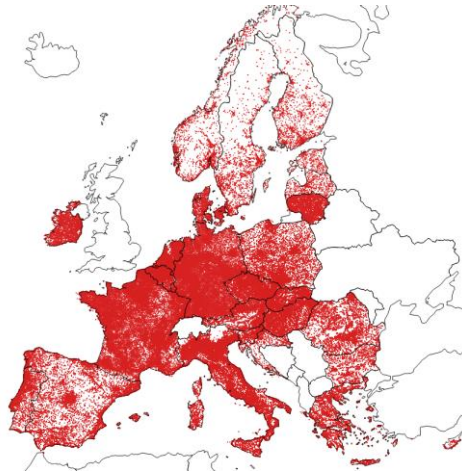
- Unique and persistent identifier
- full geographic extent of the territory
- at the scale ~1: 5000-10.000
- update frequency (incremental) should be once a year or better
- INSPIRE mechanism of life-cycle attributes and versioning.



Examples of pan European GI Datasets



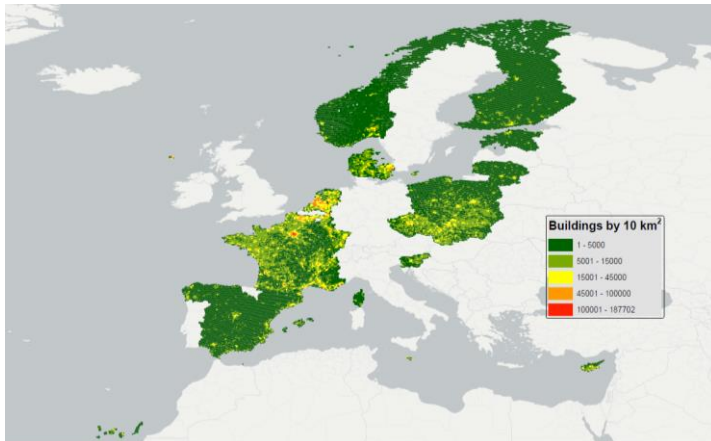
Addresses



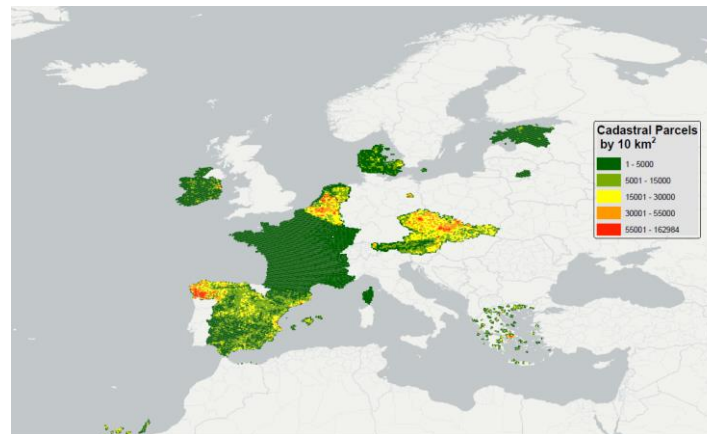
US (Education)



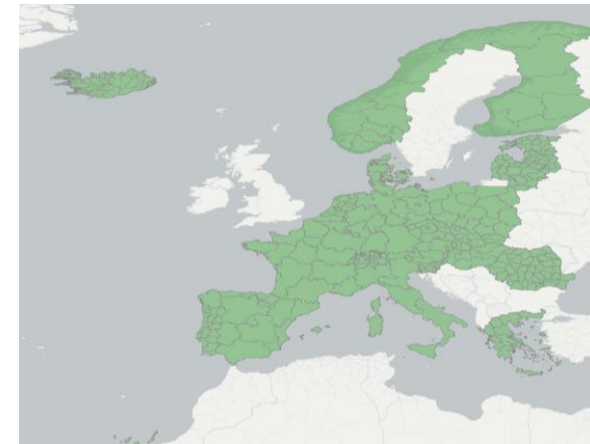
Transport Networks



Building Units



Cadastral Parcels



Administrative Units

Outlook

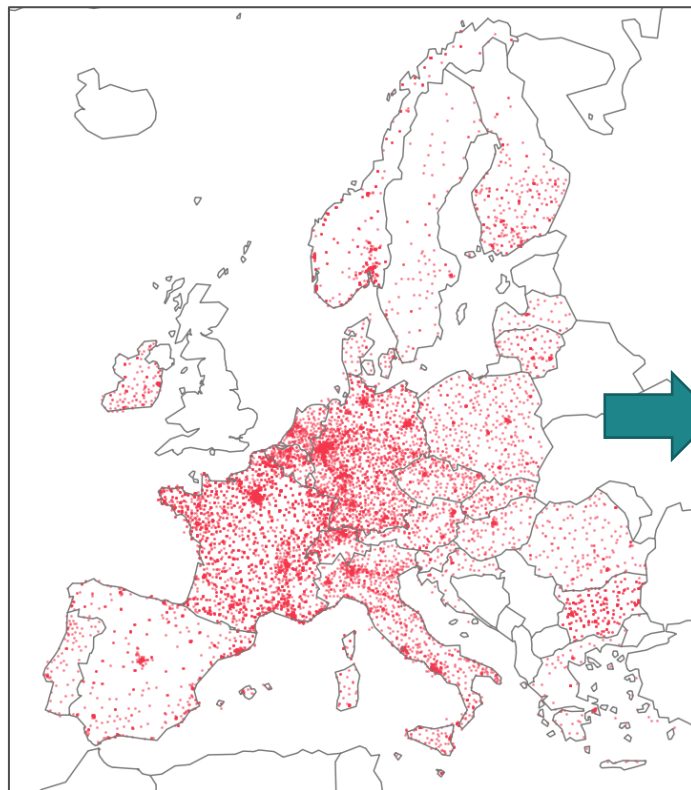
To bring Europe closer to citizens and regions, Eurostat will continue to make use of georeferenced data by systematically integrating and mainstreaming geospatial information into statistical production and **collecting more geospatial data, with a special focus on the core geospatial datasets** ⁽³⁾. This will allow for more detailed regional and local level statistics in areas such as demography, economy, environment, energy, transport and agriculture.

Management plan 2022

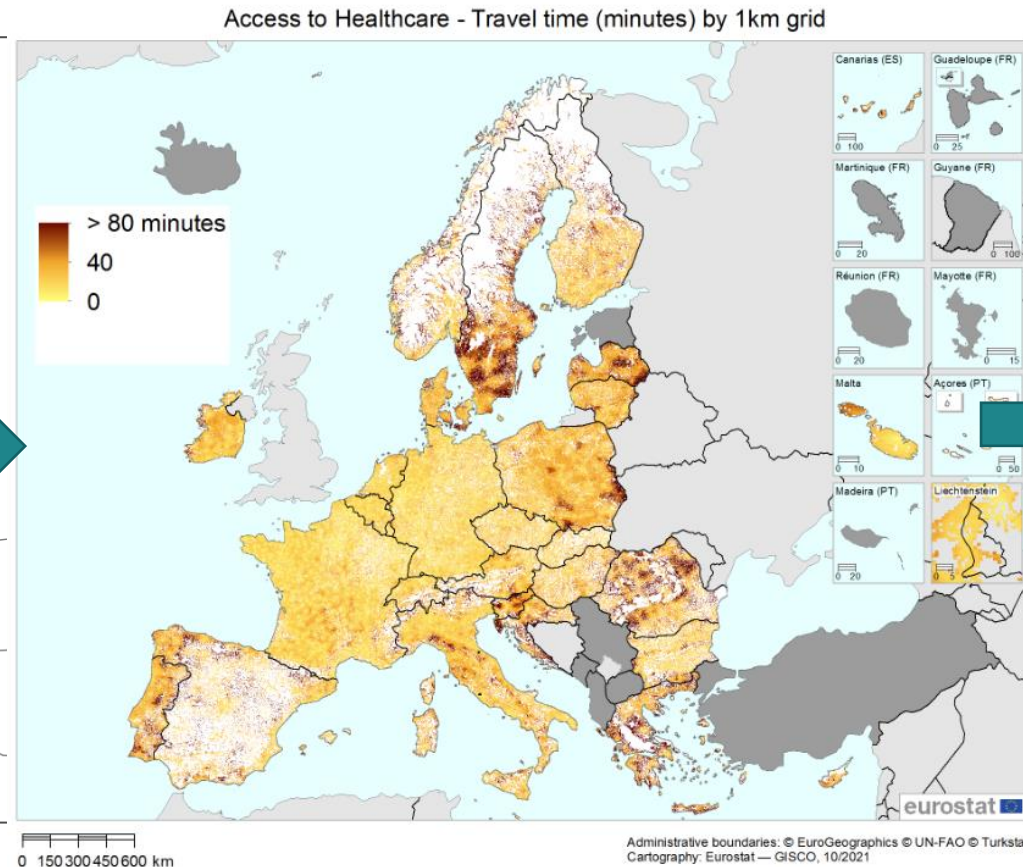
EUROSTAT

⁽³⁾ These are as defined by the Commission inter-service group on Geographic Information (COGI): administrative units, statistical units, buildings, cadastral parcels, addresses, transport networks, land parcel information system, postal codes, utility and governmental services.

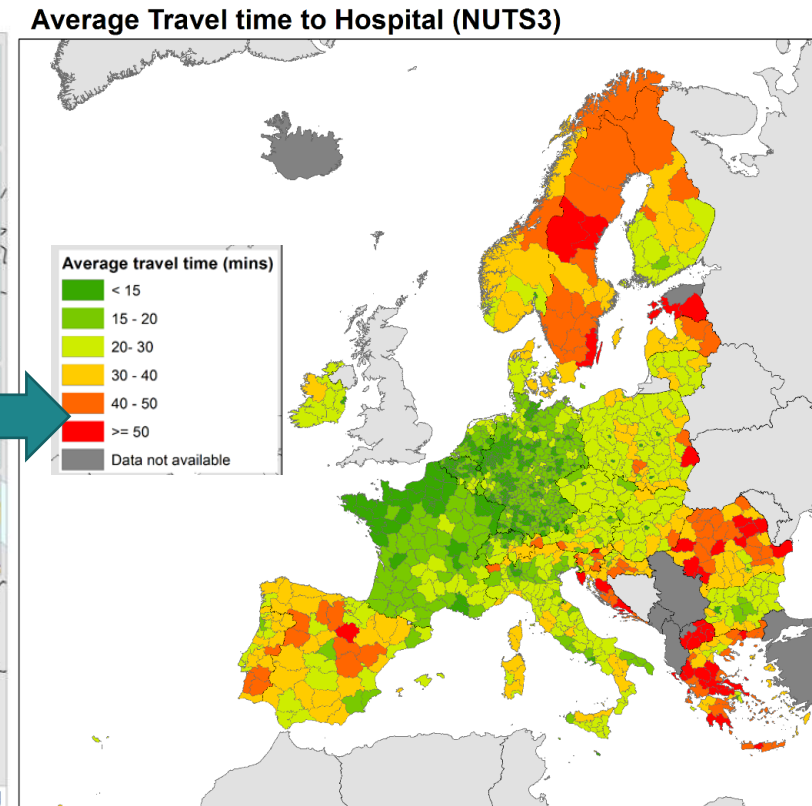
Application Example for pan European GI Datasets



Data: Utility Services (US) - Healthcare
from MS responsible authoritative
organisation



Analytics: Routing, Population, Utility Services



Statistics: Reporting at NUTS level, DEGURBA

Observations

Data exists but are not documented in Metadata systems (neither European or MS ones) or directly *hidden*.

Several datasets with various specifications exists for the same theme maintained by different organisations? Who is the master?

Dispersed datasets per country without a central authority

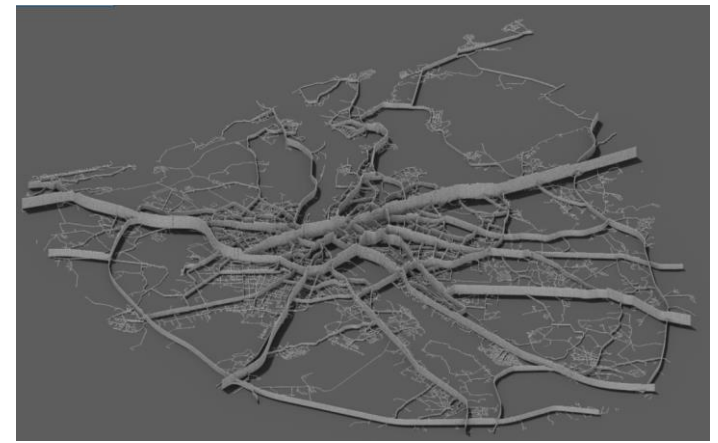
Depending on organisations - Administrative hurdles / Lock down mentality – not user centric

Officially data do not exist, but commercial datasets exist for the same area.

Outdated (temporally), semantically or resolution reduced data (e.g. content, scale)

- Requirement: Data are documented in INSPIRE/ EuropeanDataPortal/National Portals
- Requirement: Coordination inside the MS
- Requirement: Central Access/Distribution Point
- Requirement: Data Access for EC
- Requirement: Public Administration data **MUST** exist and be accessible
- Requirement: update data at least once a year, full content

Supporting Elements



UNGGIM
Europe

GSGF:
Europe

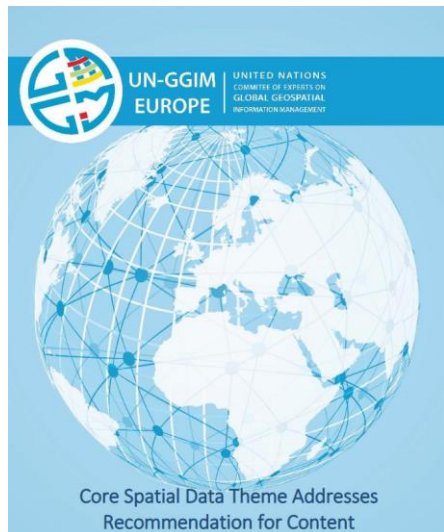
HVD

INSPIRE

Data
Spaces

ESS
GEOS
Grants

CONN/
REGIO
Support



GeoStat

GSGF Europe

GEOSTAT 4



20.1.2023

EN

Official Journal of the European Union

L 19/43

COMMISSION IMPLEMENTING REGULATION (EU) 2023/138
of 21 December 2022

laying down a list of specific high-value datasets and the arrangements for their publication and
re-use

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

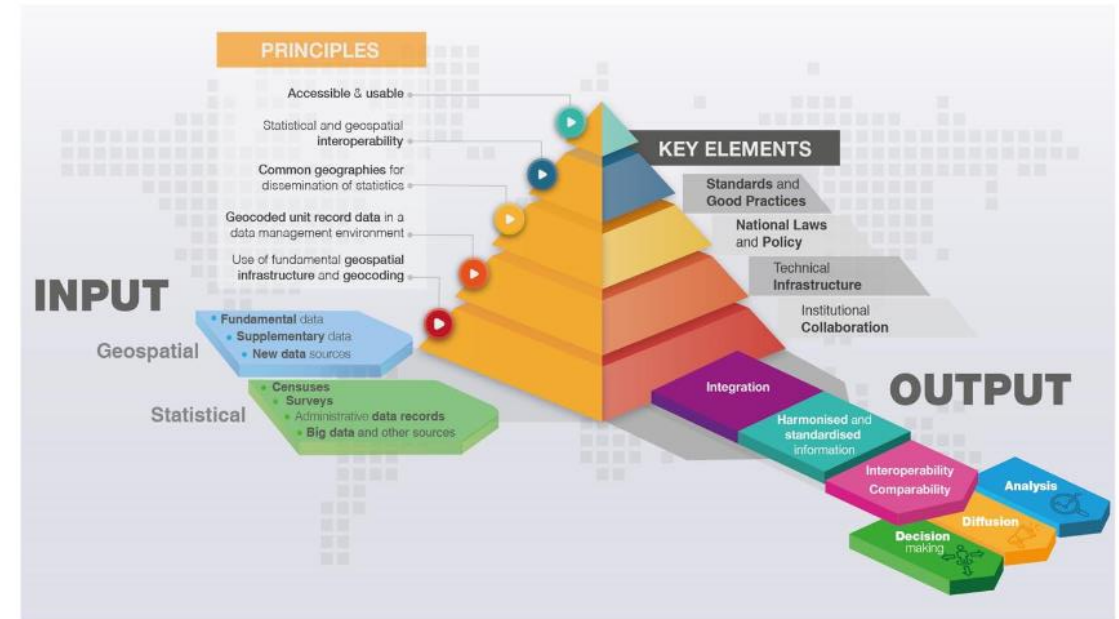
Having regard to Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data
and the re-use of public sector information (¹), and in particular Article 14(1) thereof,

Whereas:



Opportunities

- More timely and more granular data (unit-record-based)
- Do you have a fundamental geospatial infrastructure and geocoding in place ?
- API and Bulk Downloads are needed and support various user communities for Data Integration
- Code of conduct for Geospatial Data is required (e.g. PIDs, topology across domain, time-series) and enforced....



Recap

- GISCO – who we are and what we do
- Pan-European Dataset creation – Experiences and Outlook
- Supporting Elements

Thank you



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