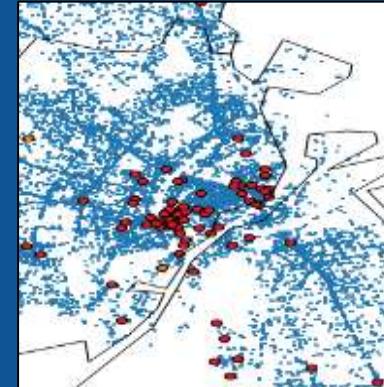
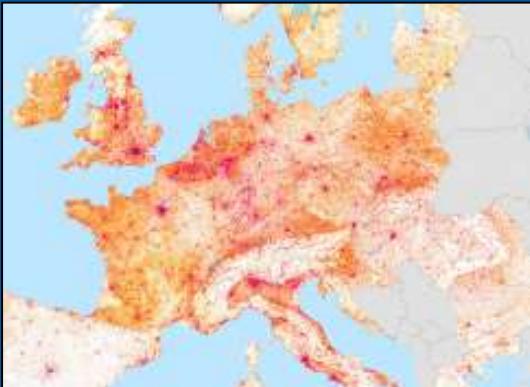
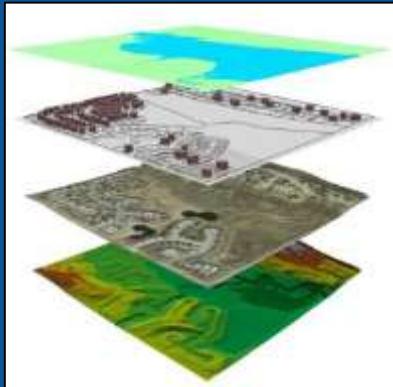




GISCO Tools and Services



Eurostat - Regional statistics and geographical information - E4 – GISCO Team - Hannes I. Reuter

Expectation management

- *You will not be a GIS experts but*
- **You know a bit about geo domain**
- **You know what is possible**
- **You know whom to ask for help....**



Overview

- Introduce Eurostat and GISCO services
- Explain that ANY information has a geographic location.
- Introduce GIS, data types, data providers – how to find data
- Showcase Offline and Online Map Making
- Showcase Examples of GIS Services provided
- Describe analytical use case(s)

Eurostat – statistical office of the EU

- *Statistical office of the European Union and part of the European Commission*
- *Chairs the European Statistical System (ESS)*
- *Prepares legislation on European statistics*
- *~ 800 staff, located in Luxembourg*

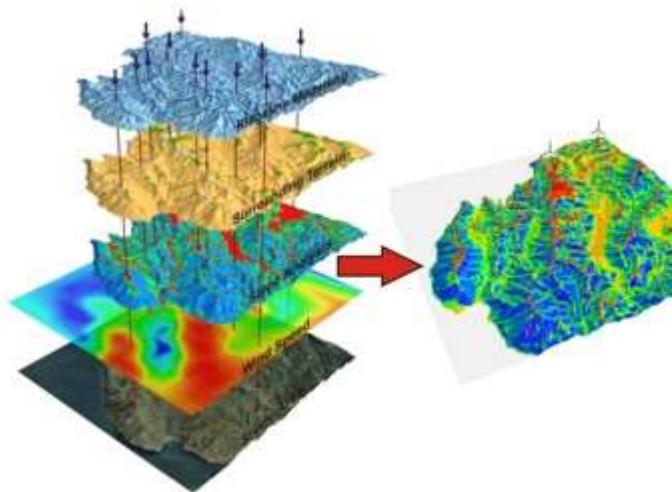


GISCO - the Geographic Information System of the Commission

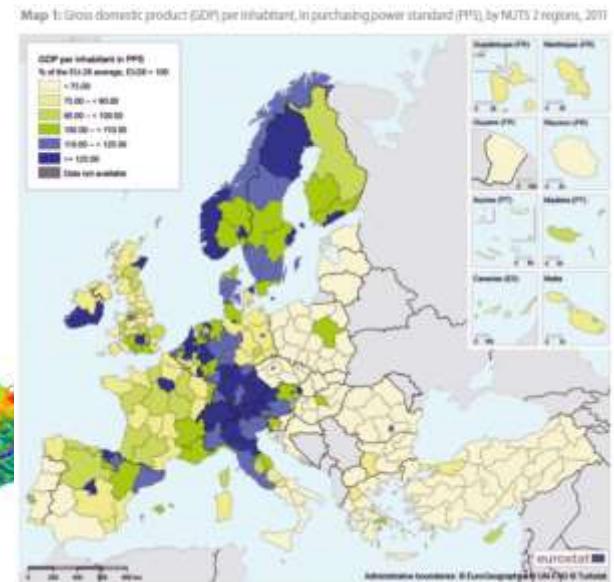
localise



analyse

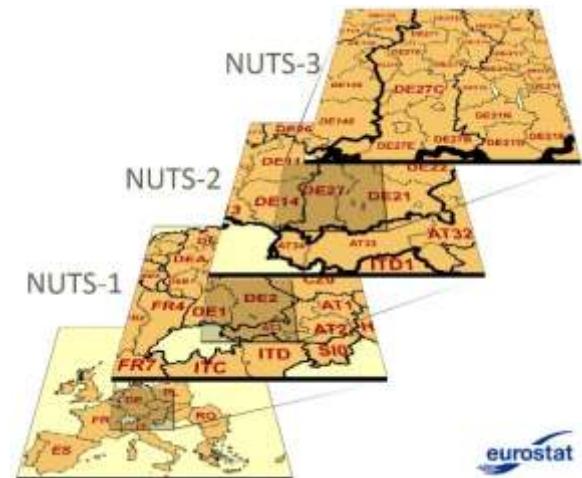


visualise



Service provider to Eurostat and the European Commission+

- *Map making*
- *Spatial analysis projects*
- *Support statistical production*
- *Provision of Commission wide geospatial data, software and services*
- *GISCO reference database*
- *GISCO as coordinator of geospatial information use within the European Commission and Agencies*
- *Disputed Areas WIKI*





What is GISCO? - triple role

"GISCO is a permanent service of Eurostat that answers the needs of Eurostat and the European Commission for geographical information at the level of the European Union (EU), its Member States and regions."

- *Service provider for Eurostat*
- *Service provider for the European Commission (and the EU)*
- *Coordination and partnership with Member States*



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**Where are the most densely
populated places in the EU ?**

**Figure 8.1: The most densely populated places in the EU, 2011 (1)
(inhabitants/km²)**

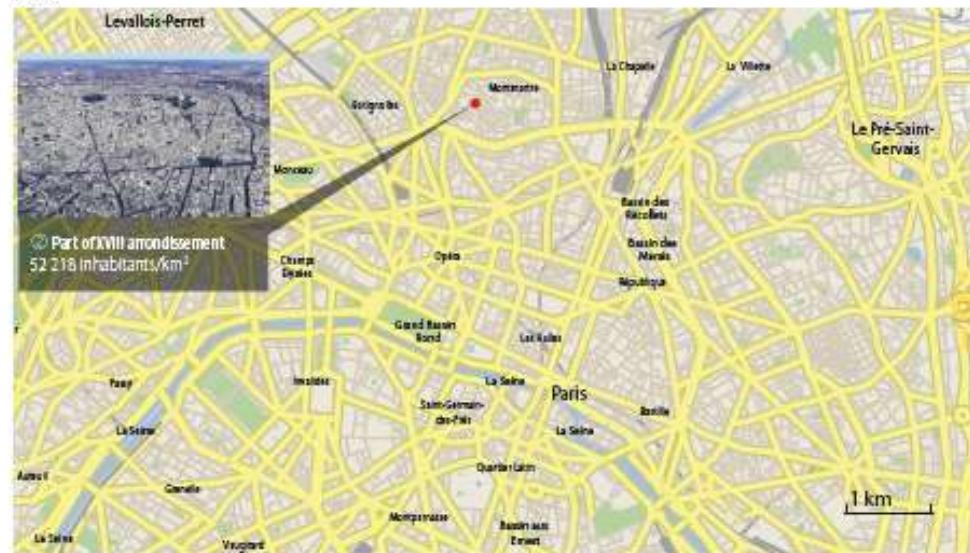


Figure 8.1: The most densely populated places in the EU, 2011 (¹)
(inhabitants/km²)

Barcelona



Paris



¹) The maps show the position of the three most densely populated 1 km² grid cells in the EU: France: 2010.

Source: Eurostat, GEOSTAT Population Grid 2011 (<http://ec.europa.eu/eurostat/web/gisco/geodata/reference-data/population-distribution-demography>)

***Every information has
a geographic
component***

(even a legal text)

Geospatial data is essential for ...

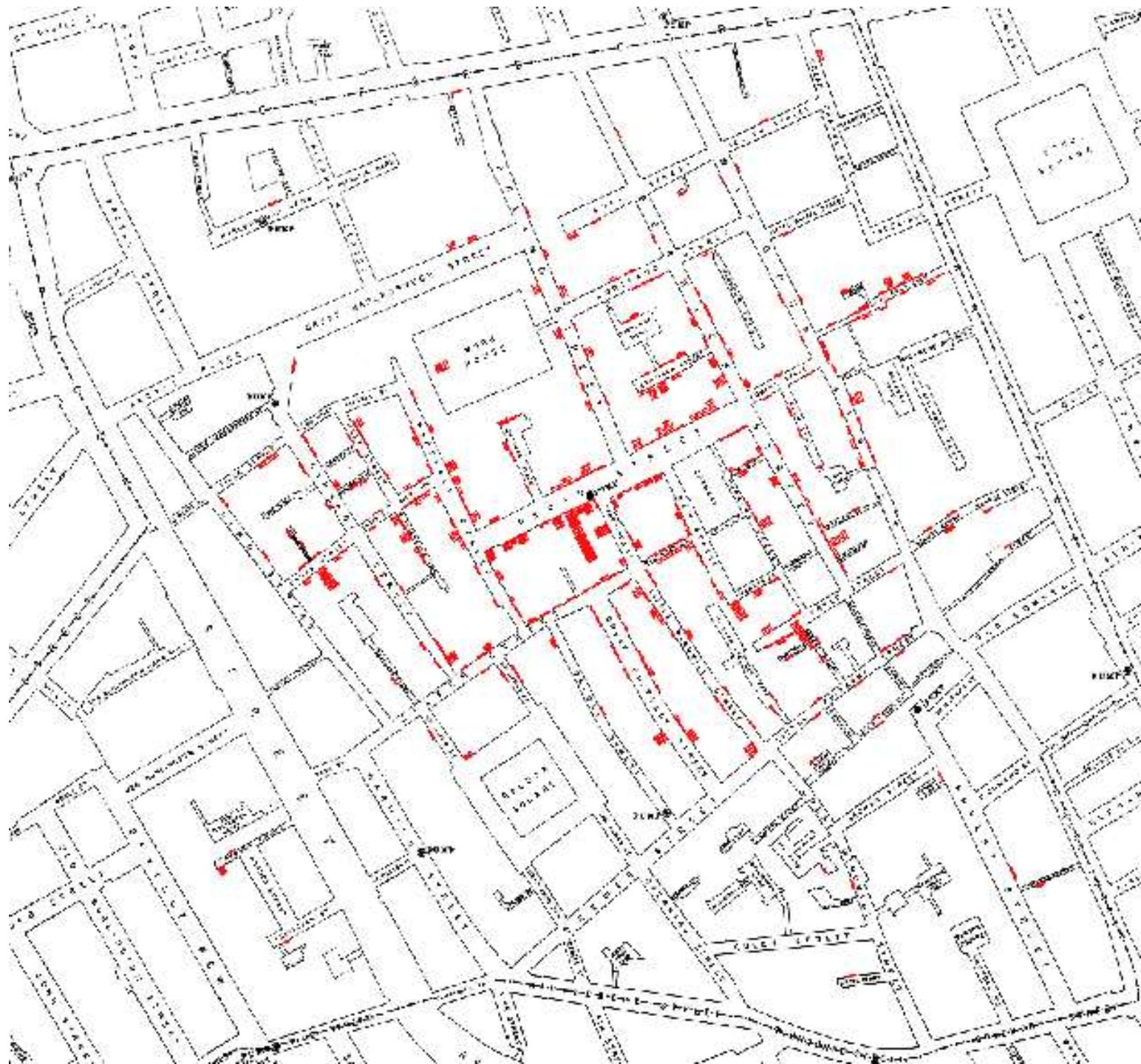
Location - just as time - is a key factor in statistics for:

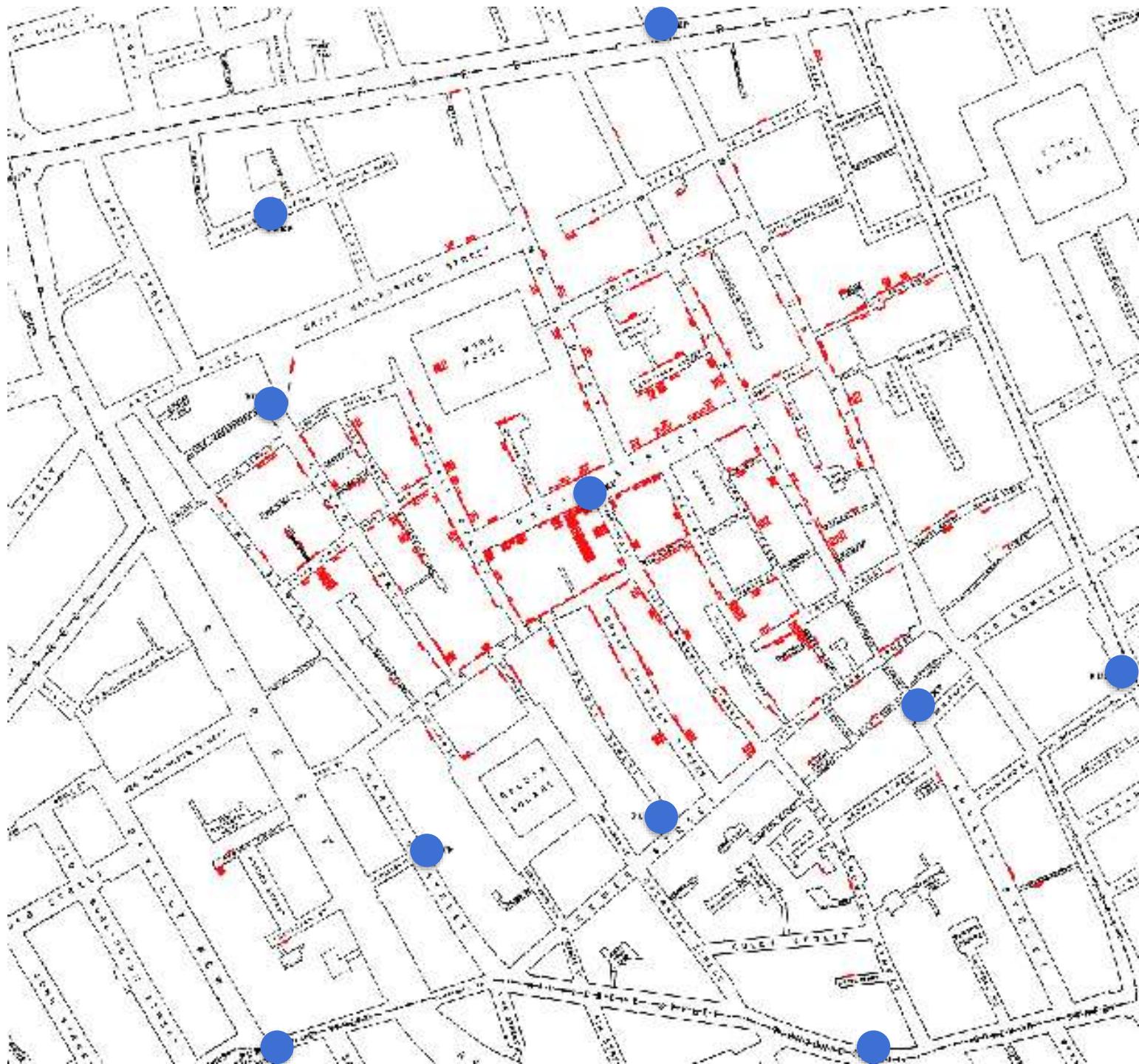
- collecting,**
- processing,**
- storing,**
- analysing and**
- aggregating data.**

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

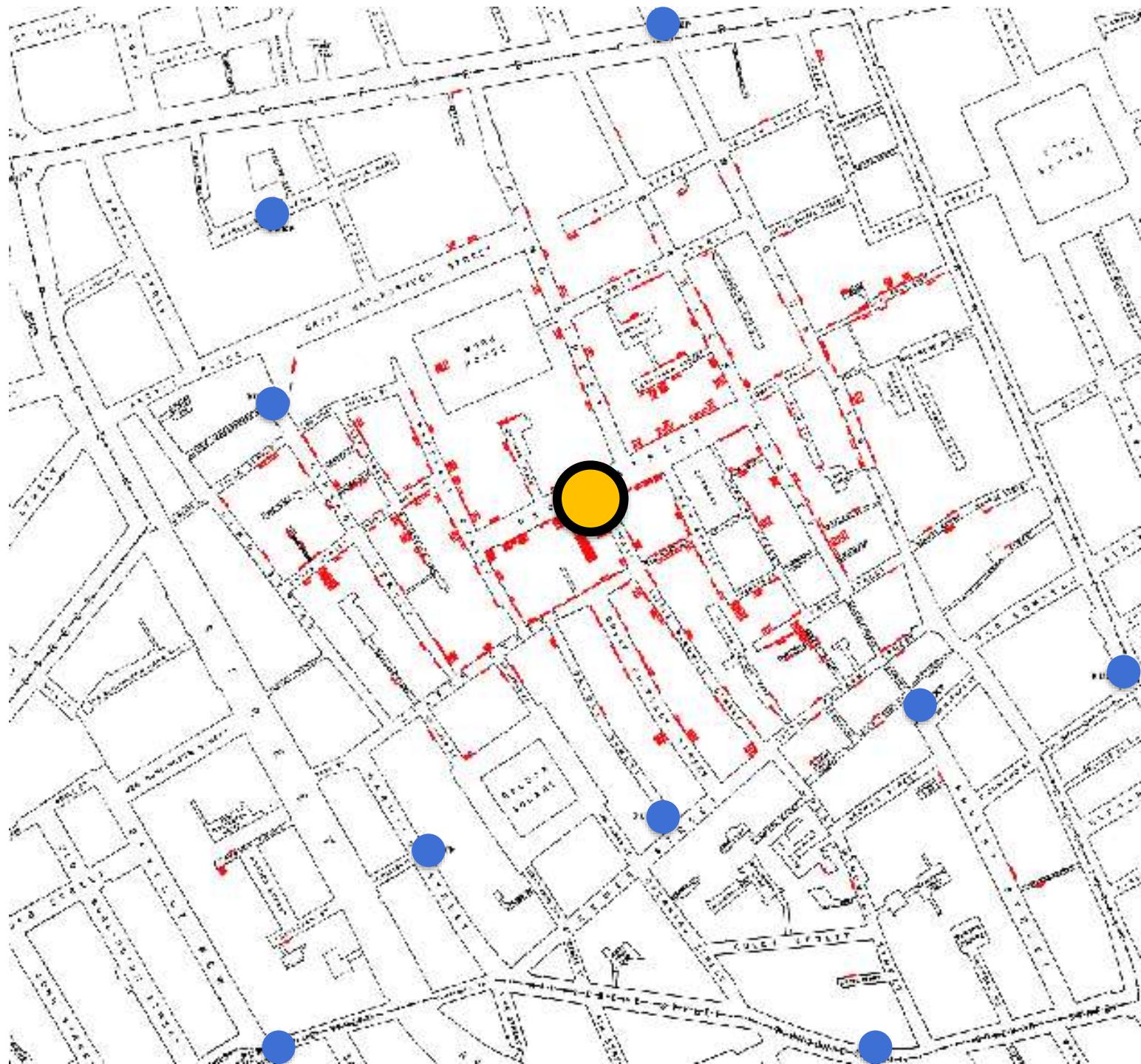
Application domains

- *Urban planning*
 - *Resource management*
 - *Geo-marketing*
 - *Transport & mobility*
 - *Logistic*
 - *Civil engineering*
 - *Environmental impact assessment*
 - *Emergency situation management*
 - *Communication/cartography*
- Demography
 - Social sciences
 - Epidemiology
 - Agriculture
 - Energy
 - Defense/intelligence
 - Policy analysis (support to decision making)
 - **Audit?**
 - Etc.
- Geographical information science



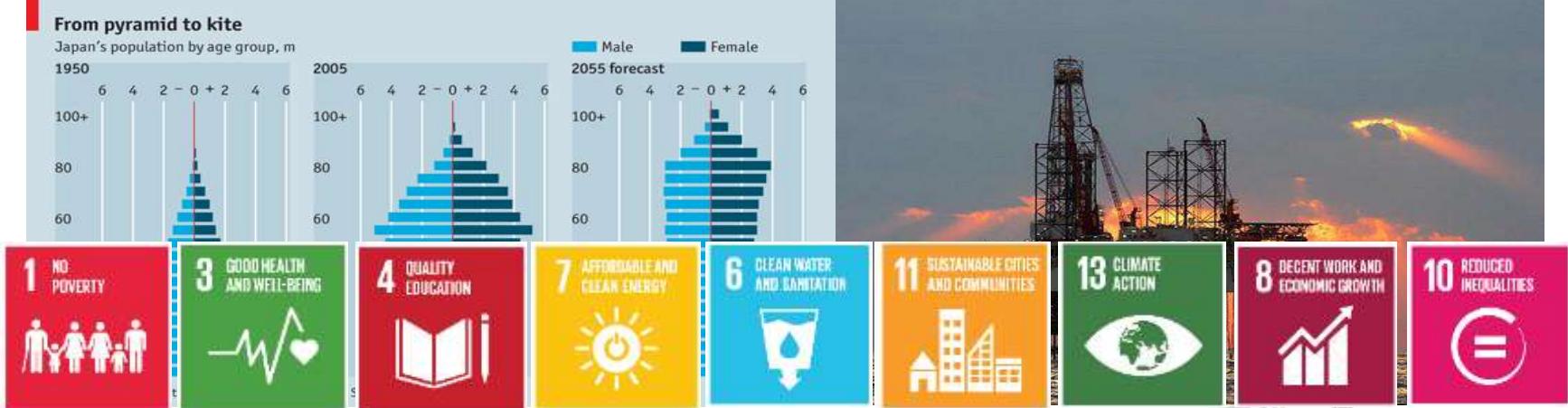


pean
mission



pean
mission

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





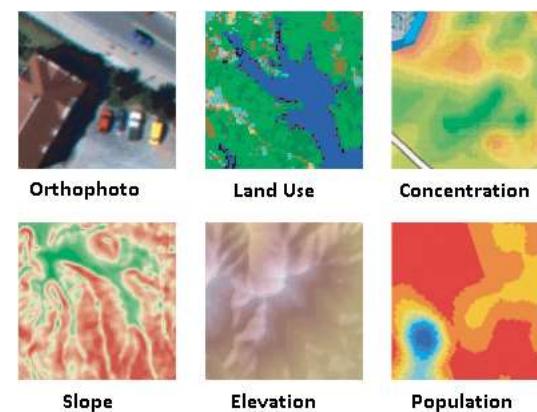
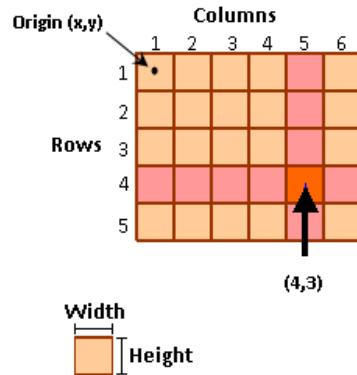
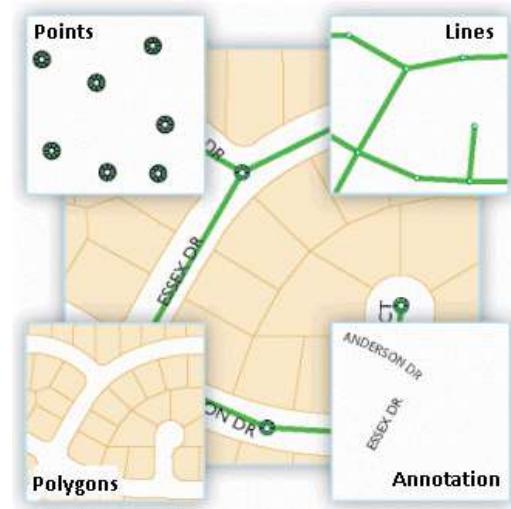
Overview

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- Describe analytical use case(s)

Data types

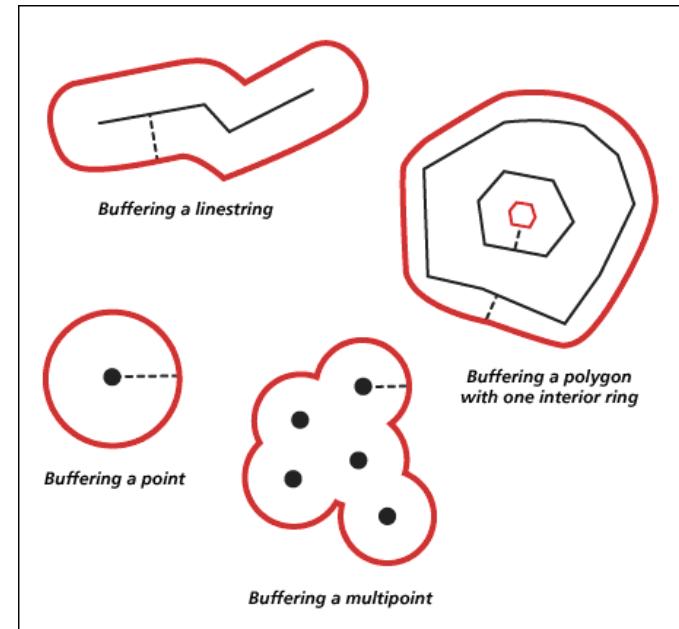
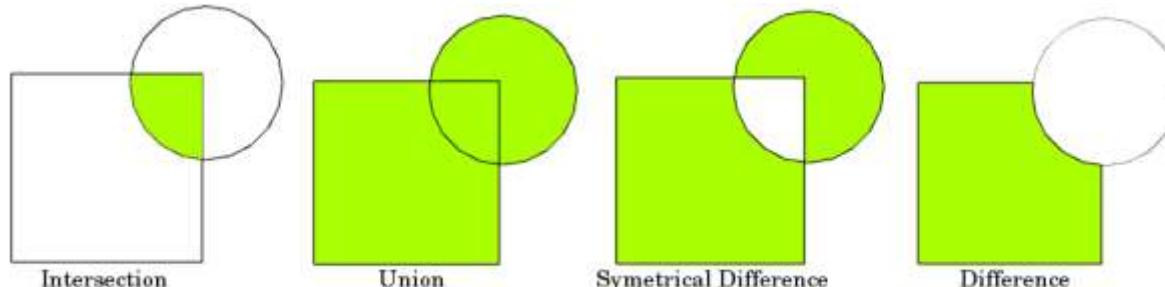
How to represent geographic information?

- As features
 - Vector geometry
 - Properties/attributes
- As a grid
 - Gridded data, like an image



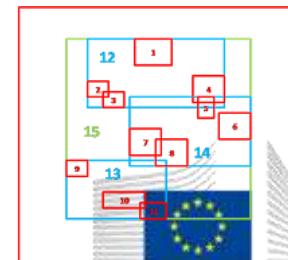
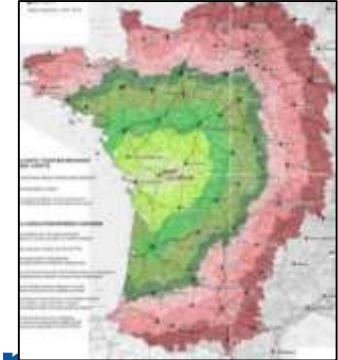
GIS capabilities

- *Basic geometrical operations:*
 - Distances, length, area
 - Intersection, union, difference
 - Buffering
 - ...



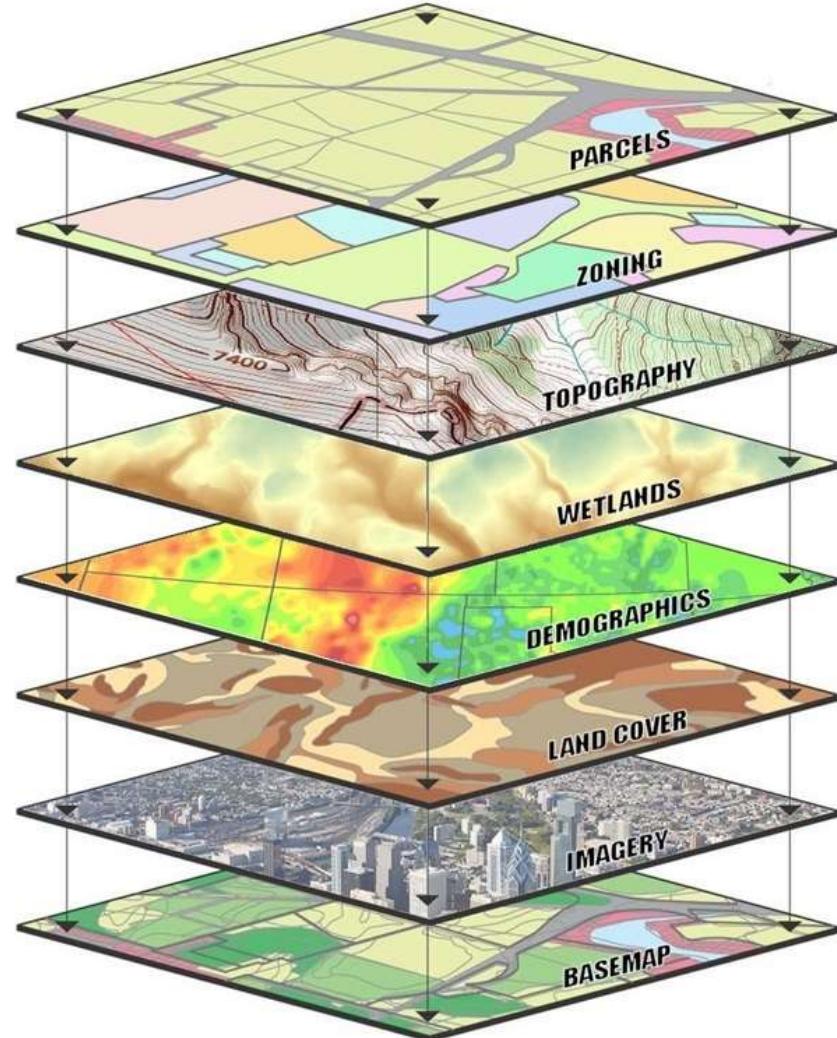
GIS capabilities

- *Network analysis*
 - **Topological queries**
 - **Routing: Shortest path computation, isochrone computation, etc.**
 - **Connectivity analysis**
- *Spatial interpolation*
- *Image processing*
- *Spatio-temporal and 3D analyses*
- *Spatial query optimisations*
(storage, spatial indexing, etc.)



GIS capabilities

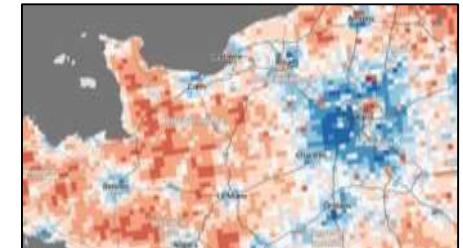
- *Spatial correlation*
- *Cross-thematic analyses*
- *Information value is not on layer but rather in their combination*
- *Data "mash-up"*



Data Sources

GIS data sources

- *Topographic and cadastral data*
 - NMCAs, [GISCO](#) and [EuroGeographics](#)
- *Statistical data*
 - NSIs and [Eurostat](#)
- *Environmental data*
 - National environmental agencies, [EEA](#)
- *Geoportals and geocatalogues*
 - National, European [EC](#)
- *Open data portals*
 - Example for [Luxembourg, European Data Portal](#)
- ...

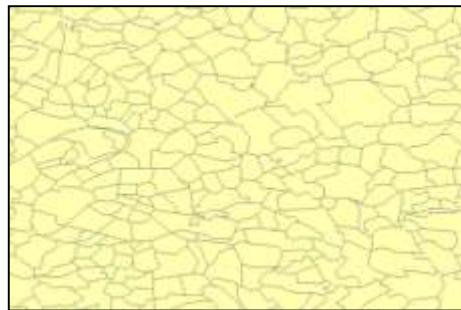


What kind of data does GISCO have ?

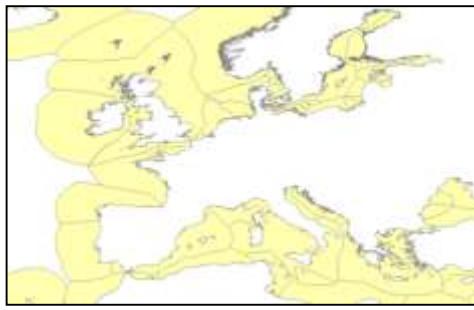
The GISCO database (Internal EC usage)

- **Administrative and statistical units**
- **Settlements, transport network, hydrography**
- **Land cover**
- **Elevation (EuroDEM)**
- **EU action zones**
- **Many more datasets .. See GISCO WIKI**
- **Street Network for Europe based on commercial supplier**
- **OpenStreetMap**
- **Public datasets:** <http://ec.europa.eu/eurostat/web/gisco>
- **API:**
<http://ec.europa.eu/eurostat/cache/GISCO/distribution/v2/>

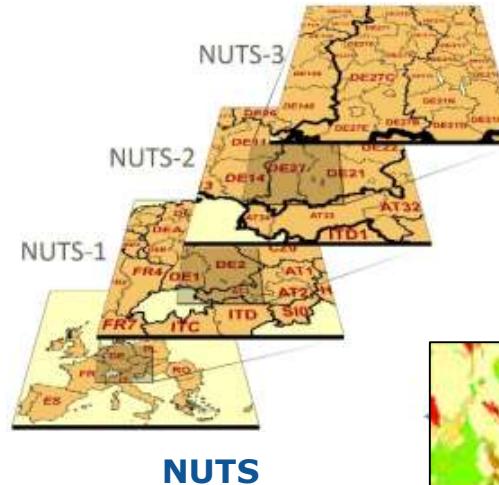
The GISCO database



Municipalities



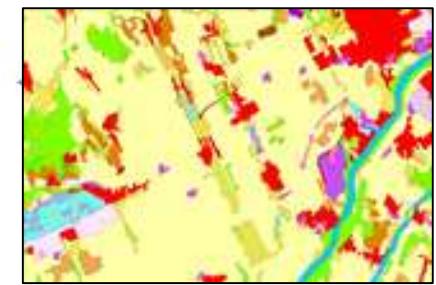
EEZ



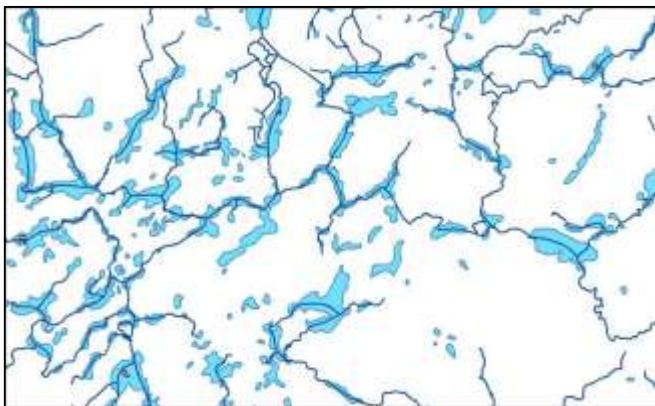
NUTS



Urban regions



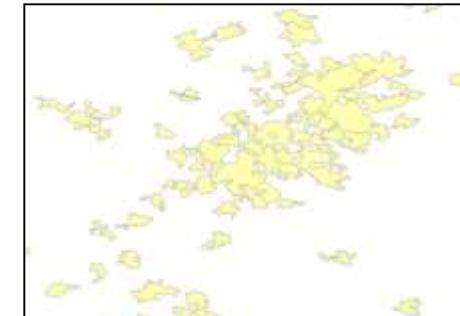
Land cover



Water bodies and rivers



Euro Regional Map
(Eurogeographics)



Access to Database

Direct Access from ArcGIS

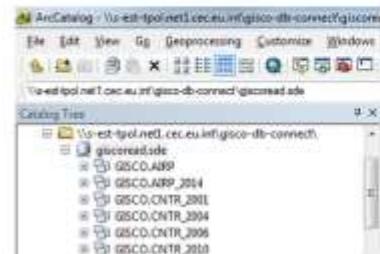
Shape File download

Access via ArcGIS

Prerequisites: You need to have ArcGIS Desktop and Oracle client installed on your Windows 7/10 machine.

There are two ways to get connection file:

- * **copy and paste connection file path** `\\\est-tpol.net\ceceu\gisco-db-connect\giscoread.sde` into Location field in your ArcCatalog/ArcMap



- * **download connection file from web page**

(1) Copy and paste the link <http://infragis.ec.europa.eu/gisco/gisco-db-connect/giscoread.sde> into browser.



(2) Save the file locally on your computer (for example, on desktop).

(3) Double click on file in your ArcCatalog/ArcMap.



GeoJSON/TopoJSON Dissemination

http://ec.europa.eu/eurostat/statistical-atlas/gis/vimara/distribution/1.0/

Most Visited Latest Headlines EC_tools ITRA OSM Dimbox EC People with no kids do... Traffic Rosetta

GISCO data distribution API

Documents GISCO data distribution REST API version 1.0

Datasets request

Datasets request is the root request of the API. It lists available datasets. Request format: http GET. Response format: JSON.

Dataset description in the response JSON points to the list of files ("files") and to the dataset metadata ("documentation"). References are relative to the root URL.

- Request: [datasets.json](#)
- Response: {"ref-countries-2014": {"files": "ref-countries-2014.json", "documentation": "ref-countries-2014.txt"}}

Files request

Files request ("files" in dataset response) point to the list of files in the dataset. Request format: http GET. Response format: JSON.

References to files are relative to the root URL.

- Request (example): [ref-countries-2014.json](#)
- Response (example): {"CNTR_RG_60M_2014": "geojson/countries-2014/CNTR_RG_60M_2014.geojson", "CNTR_RG_60M_2014_CLIP_EU": "geojson/countries-2014/CNTR_RG_60M_2014_CLIP_EU.geojson"}

Metadata request

Dataset is accompanied by a metadata file ("documentation" in dataset response). Request format: http GET. Response format: text.

Reference to file is relative to the root URL.

- Request (example): [ref-countries-2014.txt](#)
- Response:
Countries 2014

Sources: ...
Formats: ...
Extents: ...
Resolutions: ...

Data files requests

Data files request (items in the files response) point to the files in the dataset. Request format: http GET. Response format are geo/topoJSON and is indicated by file extension .geojson/.json

References to files are relative to the root URL.

- Request (example): [geojson/countries-2014/CNTR_RG_60M_2014.geojson](#)
- Response (example, not complete):

```
{  
  "type": "FeatureCollection",  
  "crs": {  
    "type": "name",  
    "properties": {}  
  },  
  "features": [  
    {  
      "type": "Feature",  
      "geometry": {  
        "type": "Polygon",  
        "coordinates": [...]  
      },  
      "properties": {}  
    }  
  ]  
}
```

<http://ec.europa.eu/eurostat/cache/GISCO/distribution/v2/>



Spatial data sharing infrastructures

- *INSPIRE - sharing geospatial information*
- *Open Data – sharing EU wide open data including geospatial information*



Geoportal of the EC (EC internal data)

Search | Map | Add new record | Admin console | About | Legal notice | Contact | Roger Hammes (Administrator) | Sign out

Geoportal of the European Commission

Geoportal of the European Commission

Get started

Search over 1851 data sets, services and maps...

Search ...

EUROSTAT Data Portal

Here you will find data, services and maps and more.

Browse by INSPIRE themes

- Elevation (11)
- Land cover (210)
- Orthoimagery (1)
- Statistical units (10)
- Buildings (15)
- Soil (16)
- Land use (353)
- Human health a... (21)
- Utility and gove... (26)
- Geographical gr... (264)
- Environmental ... (43)
- Production and... (15)

Browse resources

- Dataset (411)
- Series (158)
- Service (21)
- Map (1)
- Static map (2)

<https://webgate.ec.europa.eu/inspire-sdi/>

INSPIRE Geoportal (MS data – JRC)

European Commission > INSPIRE > Geoportal

Home Priority Data Sets Viewer INSPIRE Thematic Viewer Harvesting status Find out more about

Welcome to the INSPIRE Geoportal

The INSPIRE Geoportal is the central European access point to the data provided by EU Member States and several EFTA countries under the INSPIRE Directive. The Geoportal allows:

- monitoring the availability of INSPIRE data sets;
- discovering suitable data sets based on their descriptions (metadata);
- accessing the selected data sets through their view or download services.

The metadata used in the Geoportal are regularly harvested from the discovery services of EU Member States and EFTA countries. The status of harvesting is available [here](#).

Feedback regarding the functionality as well as data set availability is welcome [here](#).

Priority Data Sets Viewer

Legend: High priority datasets, Medium priority datasets, Low priority datasets

The application displays the availability and provides access to the selected priority data sets used for environmental reporting. It allows filtering by environmental domain, environmental legislation and country.

INSPIRE Thematic Viewer

Legend: High priority datasets, Medium priority datasets, Low priority datasets

The application displays the availability and provides access to all EU MS data sets falling under the scope of INSPIRE Directive filtered by data themes and countries (i.e. Annex I, II and III).

<http://inspire-geoportal.ec.europa.eu/>

Current Situation

The screenshot shows the INSPIRE Geoportal interface with two main map-based datasets displayed side-by-side.

Datasets - Buildings of Europe

This dataset displays building footprints across Europe. A map of Europe is shown with buildings highlighted in orange. A legend icon shows a building with a grid pattern. A tooltip says "Hover over a member state".

Datasets - Addresses of Europe

This dataset displays address locations across Europe. A map of Europe is shown with address points highlighted in orange. A legend icon shows a house with a flag. A tooltip says "Hover over a member state".

INSPIRE Geoportal Dataset Statistics

Dataset: Downloadable Viewable

INSPIRE Geoportal Dataset Statistics

Dataset: Downloadable Viewable

2014 **329**

Metadata records Downloadable Datasets

INSPIRE Monitoring & Reporting 2016 (status 2016)

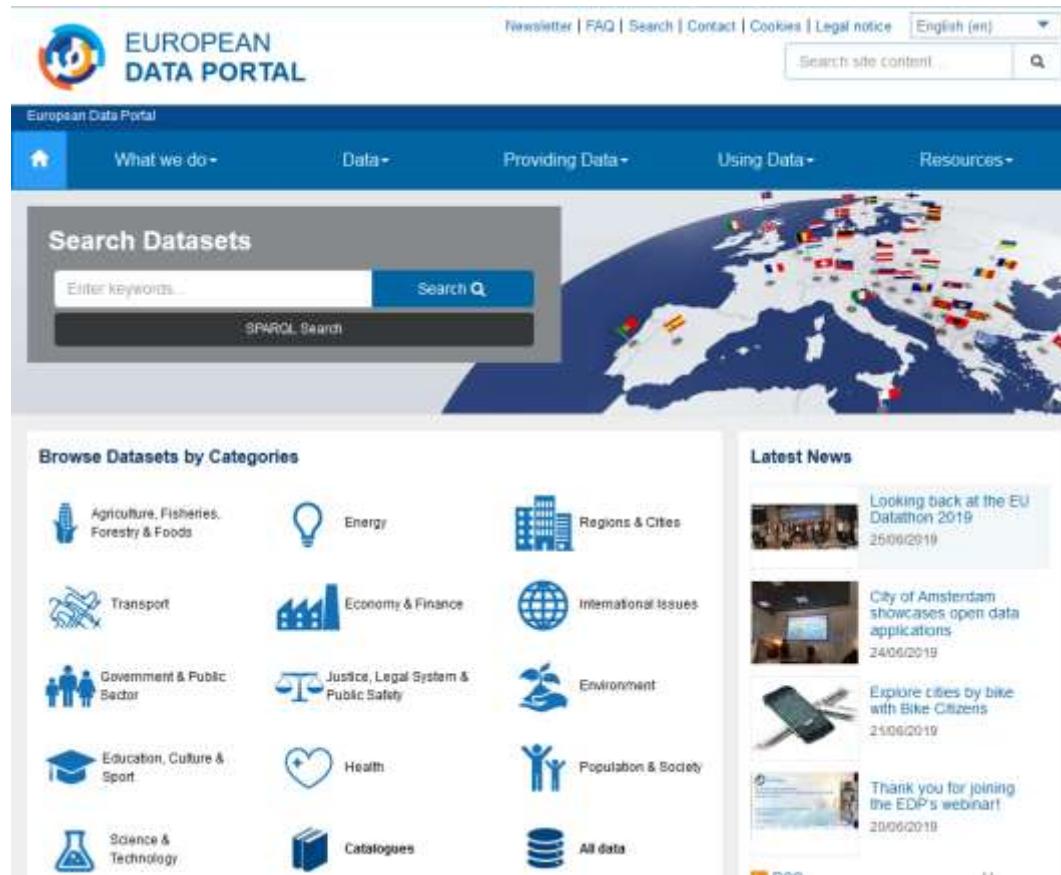
532 Metadata records

Download Report

Select a COUNTRY

European Commission

European Data Portal (MS data-CON)



The screenshot shows the European Data Portal's homepage. At the top, there is a navigation bar with links for Newsletter, FAQ, Search, Contact, Cookies, Legal notice, and a language selector set to English (en). Below the navigation is a search bar with the placeholder "Search site content". The main header features the "EUROPEAN DATA PORTAL" logo. The main content area has a blue header with tabs: "What we do", "Data", "Providing Data", "Using Data", and "Resources". A large search bar with a "Search" button and a "SPARQL Search" button is on the left. To the right is a map of Europe with flags of member states. Below the header are two columns: "Browse Datasets by Categories" on the left and "Latest News" on the right.

Browse Datasets by Categories

- Agriculture, Fisheries, Forestry & Foods
- Energy
- Regions & Cities
- Transport
- Economy & Finance
- International Issues
- Government & Public Sector
- Justice, Legal System & Public Safety
- Environment
- Education, Culture & Sport
- Health
- Population & Society
- Science & Technology
- Catalogues
- All data

Latest News

- Looking back at the EU Datathon 2019 (26/06/2019)
- City of Amsterdam showcases open data applications (24/06/2019)
- Explore cities by bike with Bike Citizens (24/06/2019)
- Thank you for joining the EDP's webinar! (20/06/2019)

<https://www.europeandataportal.eu/en/homepage>

European Union Data Portal (OP)

The screenshot shows the EU Open Data Portal homepage. At the top, there's a search bar with placeholder text "Search datasets..." and a magnifying glass icon. Below it, a sidebar offers search options: "Show results with: ○ all of these words | ● any of these words | • the exact phrase" and a total dataset count of "107705". To the right, a "Suggest a dataset!" section features a "Make a suggestion" button. The main content area includes a "Most viewed datasets" list and a "Browse datasets by subject or groups" grid. The "Most viewed datasets" list contains items like "Tenders Electronic Daily (TED) - public procurement notices from the EU and beyond" and "Consolidated list of persons, groups and entities subject to EU financial sanctions". The "Browse datasets by subject or groups" grid shows categories such as Agriculture, fisheries, forestry and food; Energy; Environment; Government and public sector; Health; International issues; and Justice, legal system and public safety.

- EU Open Data Portal
- Access to European Union open data
- EUROPA | EU Open Data Portal | Data
- Home | Data | Applications | United data | Visualisation Catalog | Developers' corner | About
- Search datasets...
- Show results with:
 - all of these words
 - any of these words
 - the exact phrase
- Total datasets available: 107705
- Most viewed datasets
 - Tenders Electronic Daily (TED) - public procurement notices from the EU and beyond (6545 views)
 - Consolidated list of persons, groups and entities subject to EU financial sanctions (60334 views)
 - CORDIS - EU research projects under Horizon 2020 (2014–2020) (59466 views)
 - GBT – Translation Memory (31122 views)
 - EuroVoc, the EU's multilingual thesaurus (42227 views)
 - CORDIS - EU research projects under FP7 (2007–2013) (21588 views)
 - Transparency Register (21488 views)
 - Tenders-Electronic daily (TED)-csv-silised - public procurement sources (19882 views)
- Browse datasets by subject or groups
 - Agriculture, fisheries, forestry and food
 - Energy
 - Environment
 - Government and public sector
 - Health
 - International issues
 - Justice, legal system and public safety

<http://data.europa.eu/euodp/en/data/>



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What do you want to create ?



Demand	Tool	Interactivity	Corporate
Standard PDF/PNG	IMAGE	N – Static	
Standard WEBMAP	WEBTOOLS	Y – Dynamic	
Customized PDF	ESTAT-GISCO-MAP service	N – Static	
Customized Atlas other Visualizations	ESTAT Dissemination Team Statistical Atlas Eurostat-map.js	Y - Dynamic	

Workflow at your desk

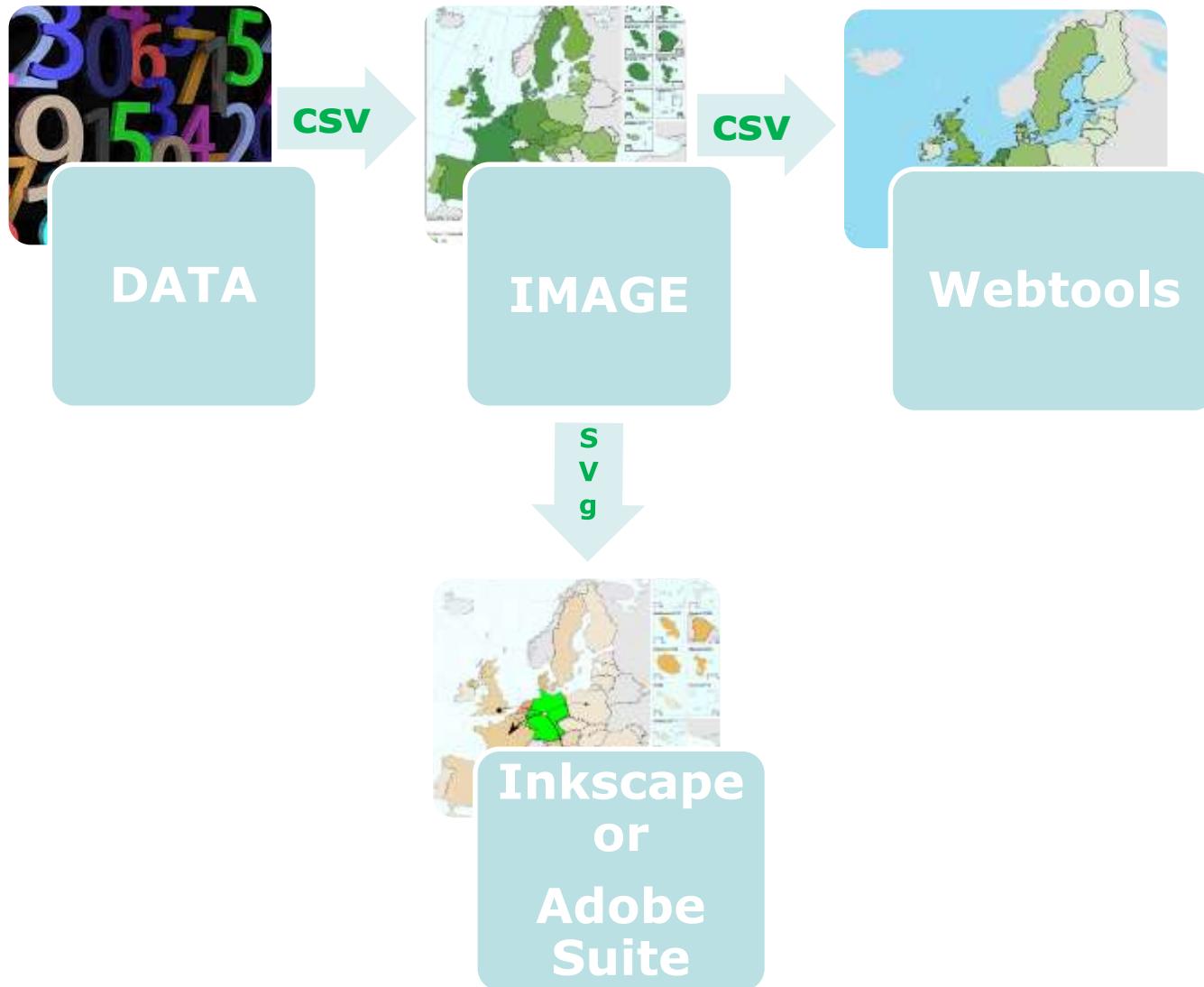
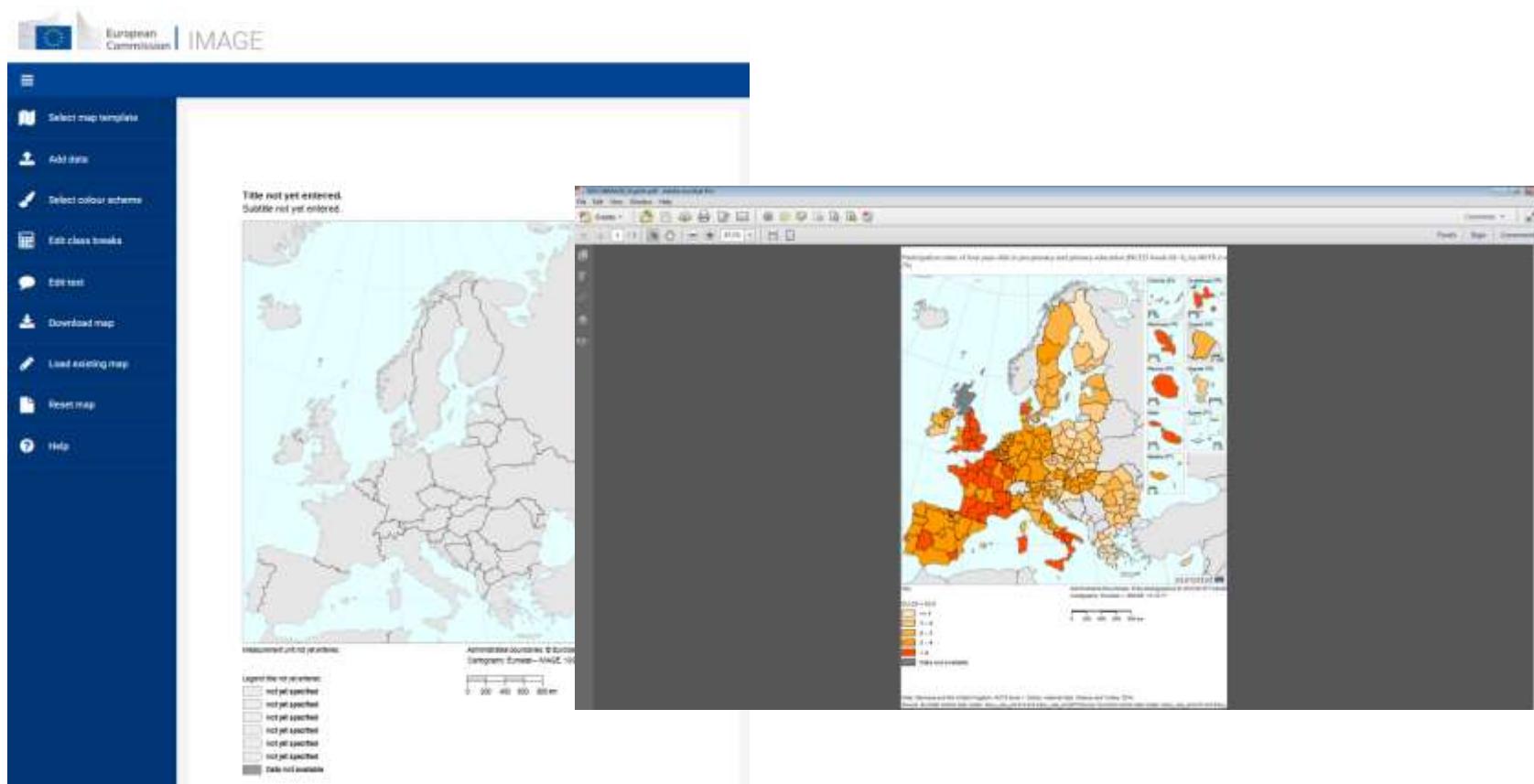


IMAGE – Make your own map for printing



<http://intragate.ec.europa.eu/image/>

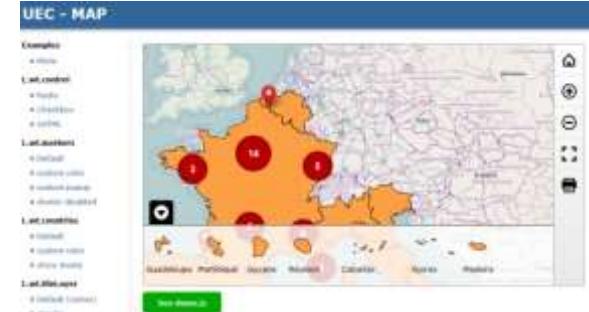
DG's + Agencies + European Institutions

TUROLOGIES

DG COMM WEBTOOLS

~450.000 unique users/month

DG ESTAT (GISCO) & other DGs DATA & SERVICES & GUIDANCE



Geographic Information System of the Commission (GISCO) Home
Updated by: heleny.521000@ec.europa.eu last modified by: heleny.521000 on: Fri 09.01.2015

GISCO - the Geographic Information System of the Commission - localise, analyse, visualise

GISCO is a permanent service of the Commission that answers the needs of the European and the European Commission for geographical information at the level of the European Union, its Member States and regions.

GISCO's main task is to provide reference geographical information and related services for use within the European and the Commission and to the European citizens at large. The GISCO database contains core geographical data for all of Europe such as administrative boundaries, but also thematic geographical information, for instance population grids etc. GISCO also coordinates Commission-wide geographical information activities and common strategies, but has the goal to promote and stimulate the use of geographical information and GIS within the European Statistical System and the Commission.

GISCO activities consist of the following pillars:

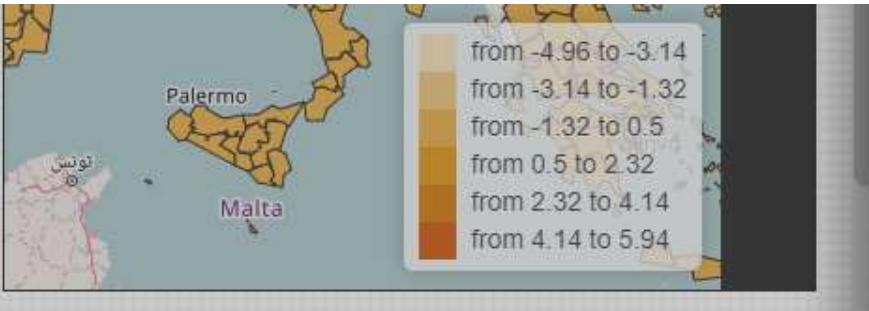
- Management of the geographical reference databases of the Commission;
- provision of the spatial data infrastructure of the European Commission;
- data processing, mainly for thematic mapping, spatial statistics, and data dissemination;
- coordination and collaboration with users and providers of statistical and geographical information (Commission, European agencies, statistical offices);
- data at the working group on thematic statistical methods and thematic mapping and Cartographic Authorities;
- promoting activities to improve geographical information in EU thematic information, notably statistical information;
- active participation in the uni-GISCO initiative;
- cooperation in initiatives for the establishment of a geographical information infrastructure at the European level (EU-GeoSS).



European
Commission

Status of EUROPA Webtools services

– Choropleth wizard (DG COMM)



Choropleth

Define a choropleth layer. This layer can contain regions and display a choropleth map with a gradient or a list legend.

- *Fed by JSON-STAT or CSV*
- *Corporate palette*
- *Automatic ranges or gradient*
- *Define units, thousand separator and decimals*
- *wizard*

Status of EUROPA Webtools services

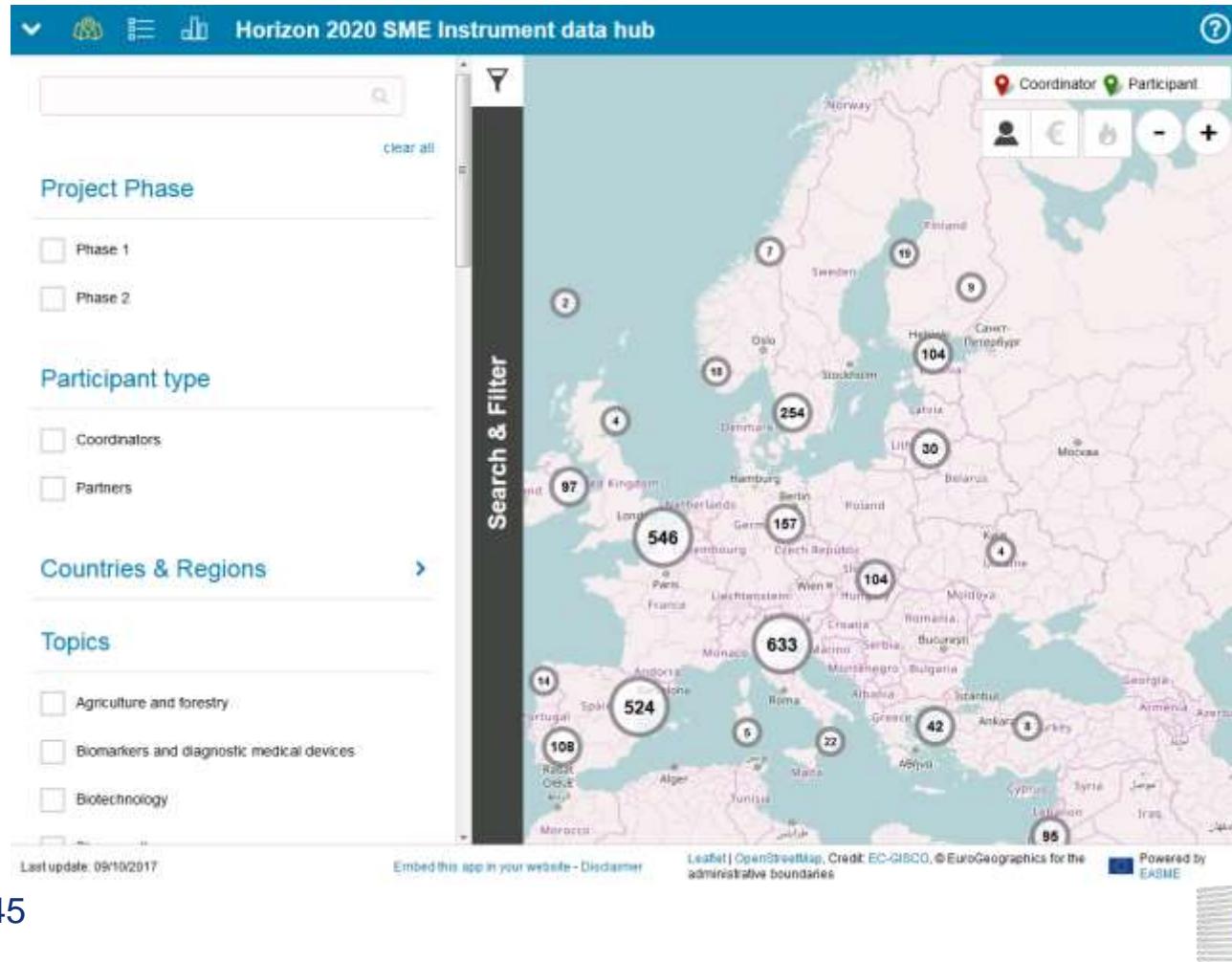
– Maps v2.0 (DG COMM)



Bubble grid maps

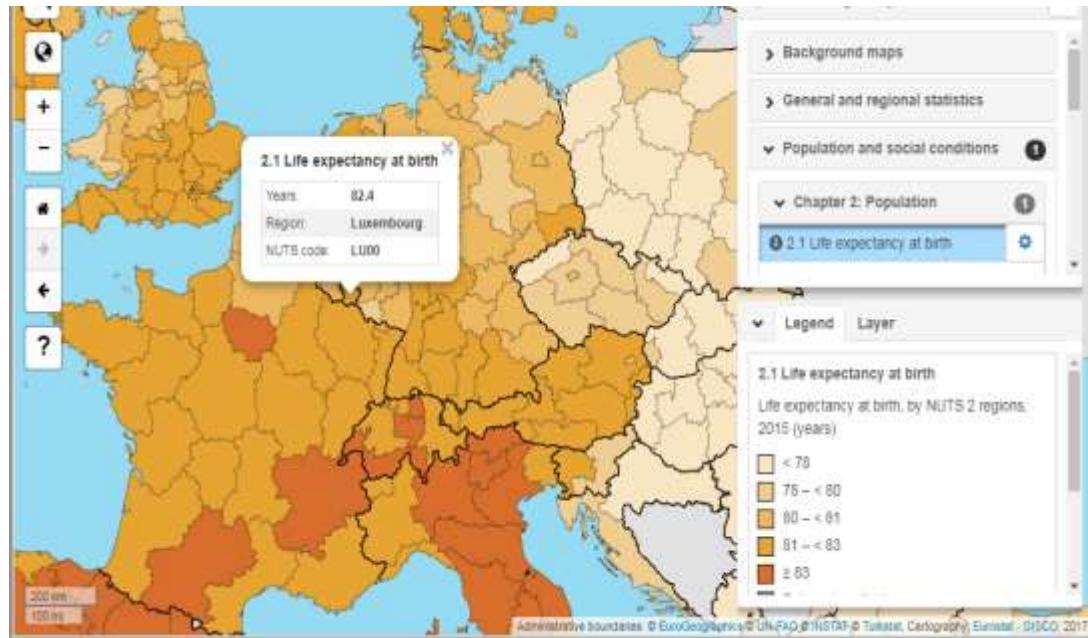


One of many examples in Production



Example of cartographic tool

Statistical atlas (developed by GISCO – Usage for everyone in the EC)



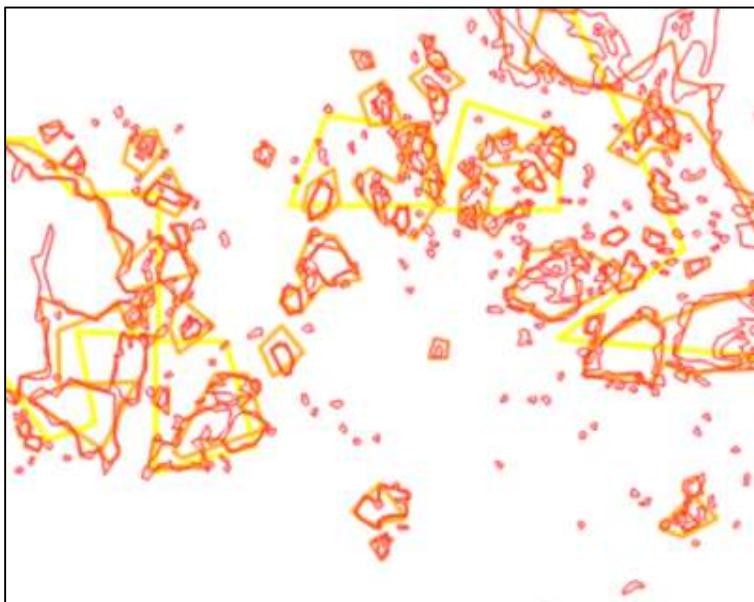
<http://ec.europa.eu/eurostat/statistical-atlas/gis/viewer/>



Overview

- Introduce Eurostat and GISCO services
- Explain that ANY information has a geographic location.
- Introduce GIS, data types, data providers – how to find data
- Showcase Offline and Online Map Making
- **Showcase Examples of GIS Services provided**
- **Describe analytical use case(s)**

Generalization of DATA

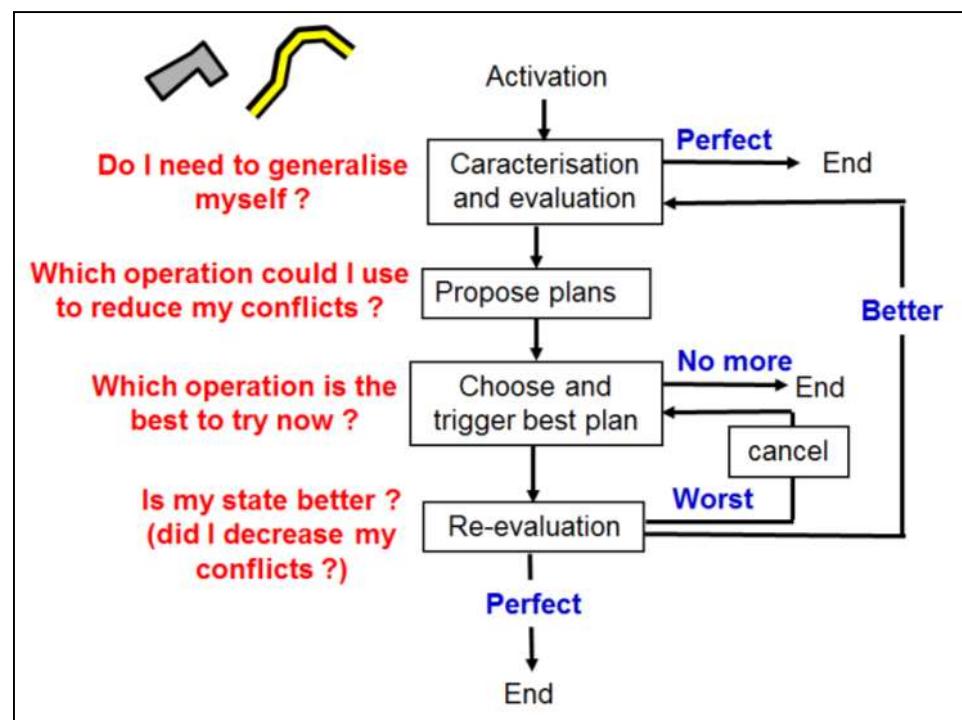
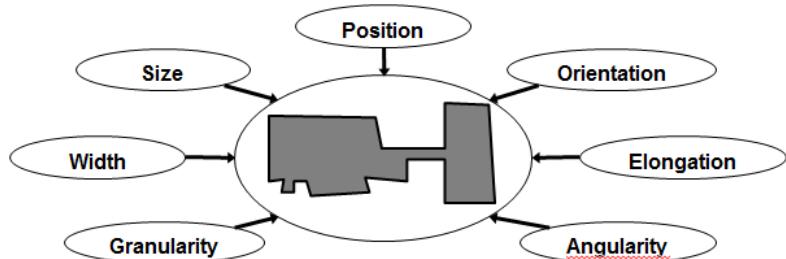


COMMPLUS 100k
124 000 features
43M vertices

Agent-based generalisation

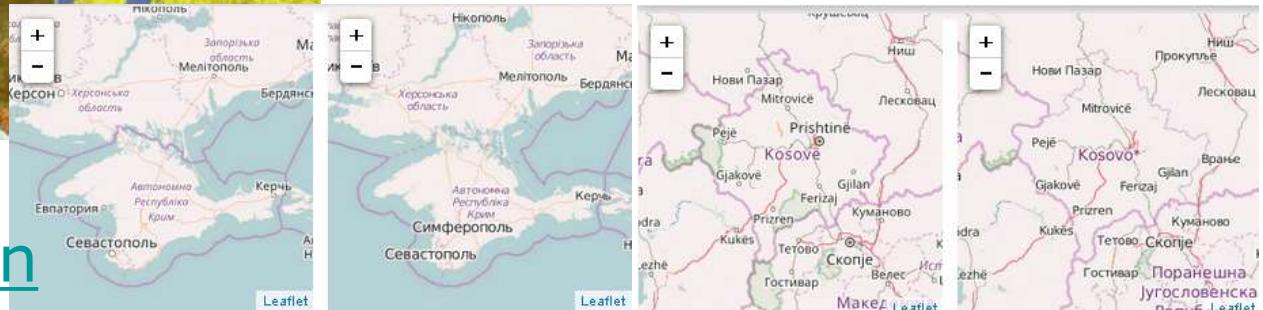
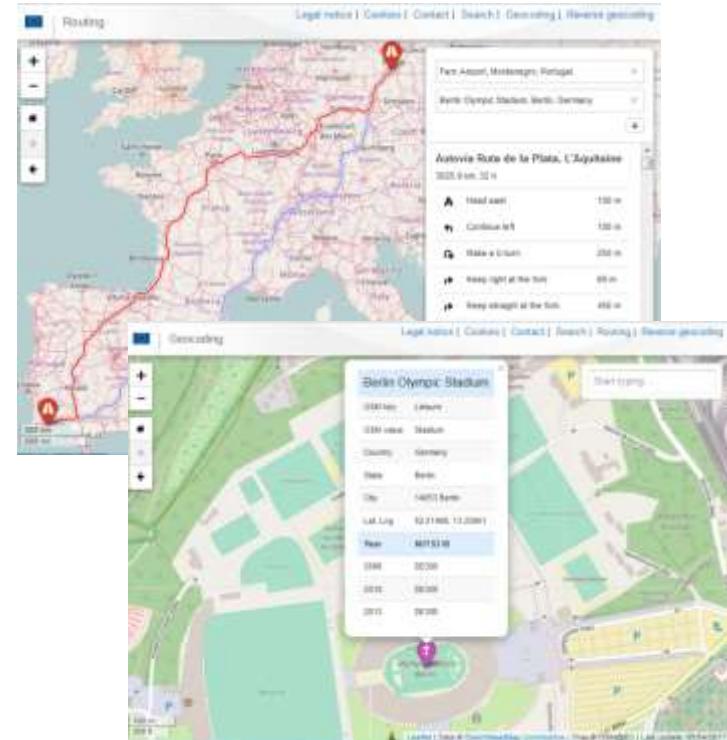
Target state formalised as constraints at object level...

...constraints satisfied iteratively at object level



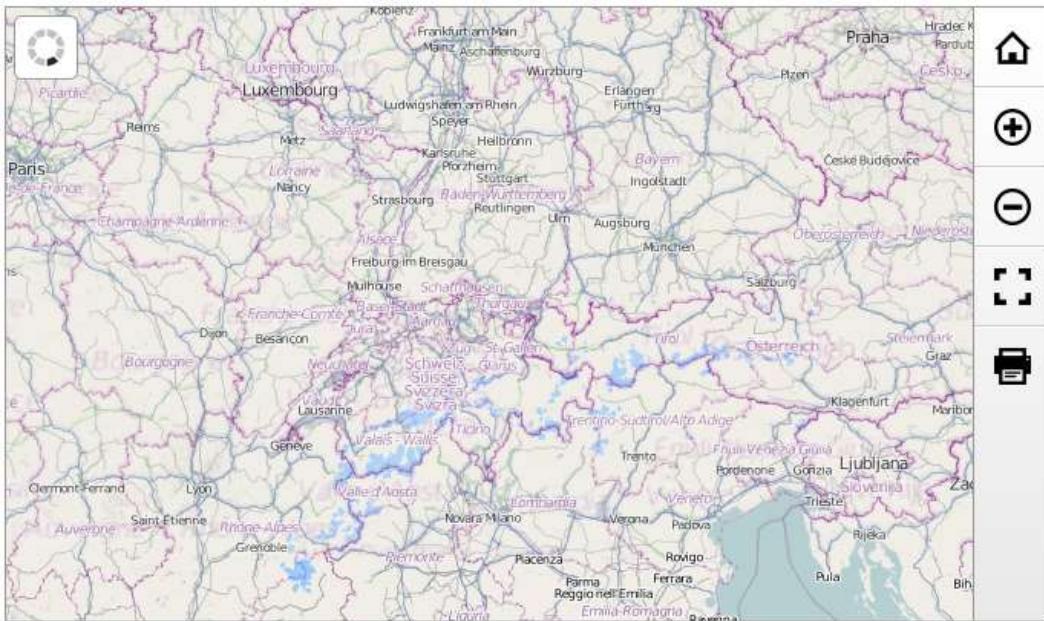
GISCO (web) services

- *Web mapping tools*
- *Map backgrounds*
- *Routing and geocoding*
- *NUTS-ID service*



[API Documentation](#)

GISCO - Background Services (osm@EC)



Customized OSM background maps

In line with the official position of the EU

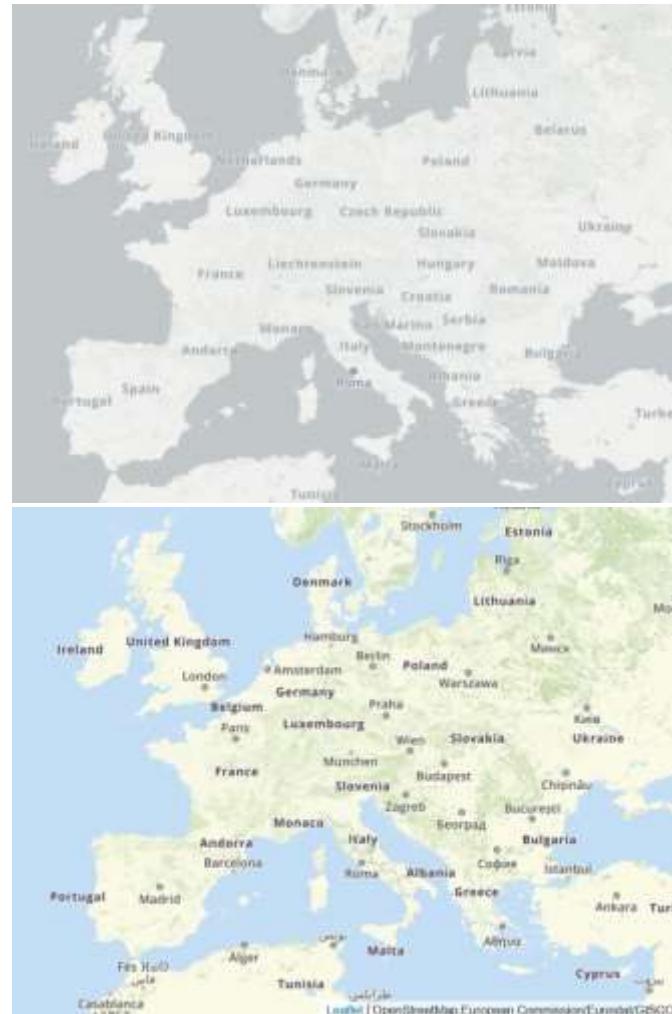
Global extent, 5min update

Up to zoom level 18
(1:2000)

WEBTOOLS or Direct Usage

Corporate Background Services

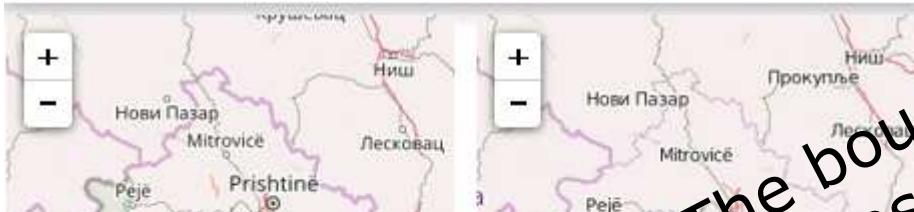
- *Copernicus Core_003 from JRC*
- *Sentinel Cloudless*
- *Eurogeographics Data*
- *Countries*
- *Continents*
- *Positron (grey tones)*
- *Bright (colorfull)*



[API Documentation](#)

Mapping of disputed areas: examples

Kosovo and Macedonia



Mapping of disputed territories

Created by Ekkehard PETRI, last modified just a moment ago

There are numerous [disputed territories](#) around the world and GISCO does not engage in providing an official position on most of them. The purpose of this page is to summarise the opinions of the European Commission on how to show politically sensitive territories on a map that are **particularly relevant for European policies or because they will often show up on maps depicting the EU**. Currently the following countries/ territories are concerned: [Cyprus](#), [the former Yugoslav Republic of Macedonia](#), [India](#) and [Pakistan](#) ([Kashmir](#)), [Serbia](#) and [Kosovo](#), [Taiwan](#), [Western Sahara](#), [South Sudan](#) ([Abyei area](#)), [Palestine](#), [Suriname](#).

As said this list is by no means complete. The GISCO [Countries - \[CNTR_20XX\]](#) dataset can be considered authoritative only for the EU28 and EFTA countries.

The [Countries - \[CNTR_20XX\]](#) dataset outside Europe is based on [UN GAUL](#) (Global Administrative Unit Layers). The boundaries depicted therein normally reflect the UN position except for the examples above. However, GAUL does not have an official authoritative status either endorsed by the UN security council.

In any case before making a map of other than the EU28 and EFTA countries the cartographer must carefully and actively look for the disputed territories falling in the map extent, for instance by using the `SVRG_UN = "sovereignty unsettled"` attribute of the GISCO [Countries - \[CNTR_20XX\]](#) dataset.

The boundaries and names used on this map do not necessarily reflect the official position of the European Commission.

WEBTOOLS

API

Viewer

Embeddable Version

The image shows a multi-panel interface for an OpenStreetMap API viewer. The top left panel displays a map of Europe with several cities labeled. The top right panel contains navigation icons: a house, a plus sign, and a minus sign. Below these are links for "Legal notice", "Cookies", "Contact", "Search", "Routing", and "Geocoding". The middle left panel is titled "Reverse geocoding" and shows details for a location: Country: Belgium, State: Brussels-Capital, City: 1081, Koekelberg, Street: Rue Schmitz - Schmitzstraat 40, Lat., Lng.: 50.8578, 4.3314, OSM key: place. It also lists NUTS3 ID for years 2006, 2010, and 2013. The middle right panel is titled "Routing" and shows a map of a specific area with a red route line. The bottom right panel shows a global map with a red route line from Lisbon, Portugal to Berlin, Germany, with various route instructions listed on the right side.

Rue Schmitz - Schmitzstraat

Country: Belgium
State: Brussels-Capital
City: 1081, Koekelberg
Street: Rue Schmitz - Schmitzstraat 40
Lat., Lng.: 50.8578, 4.3314
OSM key: place

Year	NUTS3 ID
2006	BE100
2010	BE100
2013	BE100

Routing

Faro Airport, Faro, Portugal
Berlin Olympic Stadium, Berlin, Germany

Autovia Ruta de la Plata, L'Aquitaine
3025.9 km, 32 h

- Head east 100 m
- Continue left 100 m
- Make a U-turn 250 m
- Keep right at the fork 60 m
- Keep straight at the fork 450 m
- Enter the roundabout and take the 4th exit onto EN 125-10 4.5 km
- Take the next exit on the right 200 m

Autovia del Sur, Autopista de la Mediterránea
3034.4 km, 34 h

Leaflet | Data © OpenStreetMap Contributors | Tiles © OSM@EC | Last update: 11/25/2017

Commission

Geocoding

Geocoding

Legal notice | Cookies | Contact | Search | Routing | Reverse geocoding

Berlin Olympic Stadium

OSM key	Leisure
OSM value	Stadium
Country	Germany
State	Berlin
City	14053 Berlin
Lat, Lng	52.51468, 13.23951
Year	NUTS3 ID
2006	DE300
2010	DE300
2013	DE300

Olympiastadion Berlin

Leaflet | Data © OpenStreetMap Contributors | Tiles © OSM@EC | Last update: 05/04/2017

WEBTOOLS,
Direct Usage,
Embedable client

Reverse Geocoding

WEBTOOLS,
[Direct Usage](#),
[Embeddable client](#)

Reverse geocoding

Legal notice | Cookies | Contact | Search | Routing | Geocoding

Rue Schmitz - Schmitzstraat

Country: Belgium
State: Brussels-Capital
City: 1081, Koekelberg
Street: Rue Schmitz - Schmitzstraat 40
Lat., Lng.: 50.8578, 4.3314
OSM key: place
Year NUTS3 ID
2006 BE100
2010 BE100
2013 BE100

Search or click on the map ?

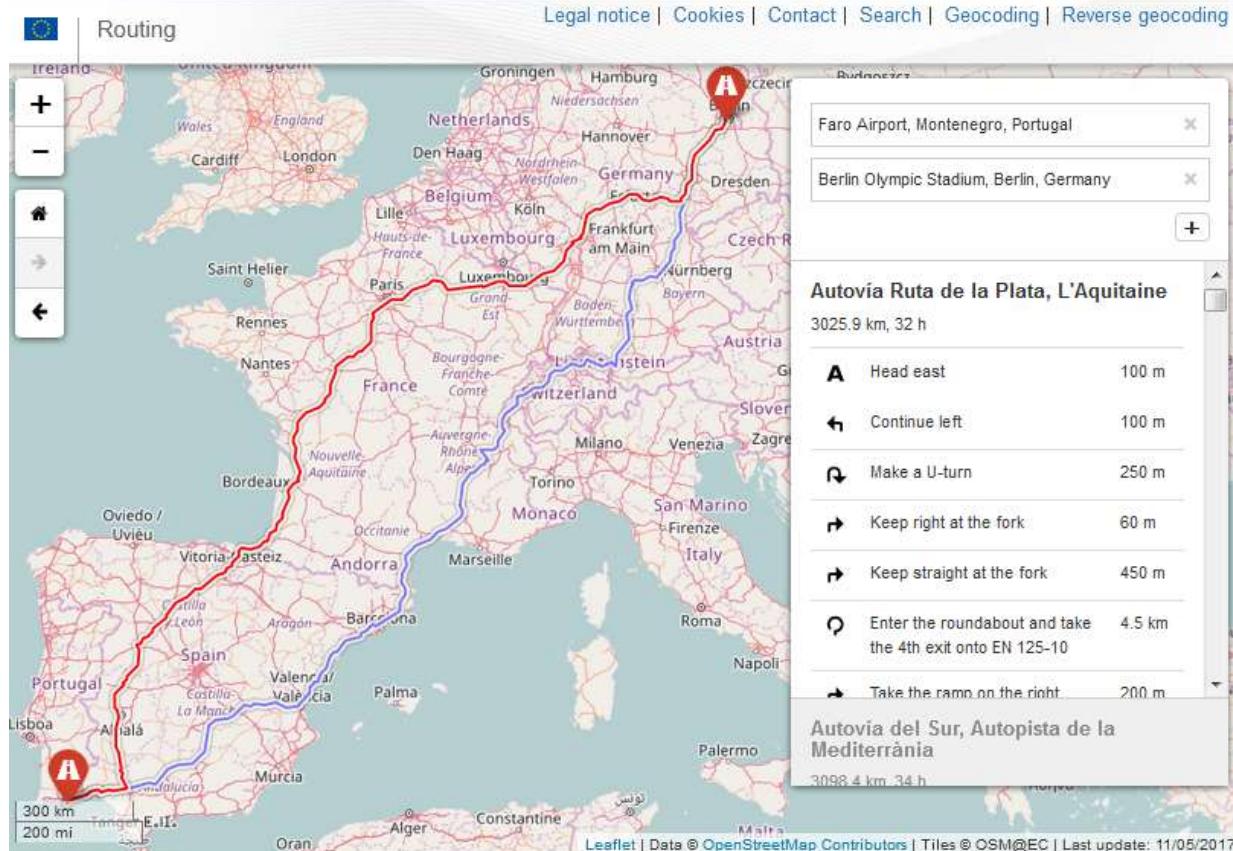
Brussels

Leaflet | Data © OpenStreetMap Contributors | Tiles © OSM@EC | Last update: 05/04/2017

European Commission

Routing (Car, Public(PoC))

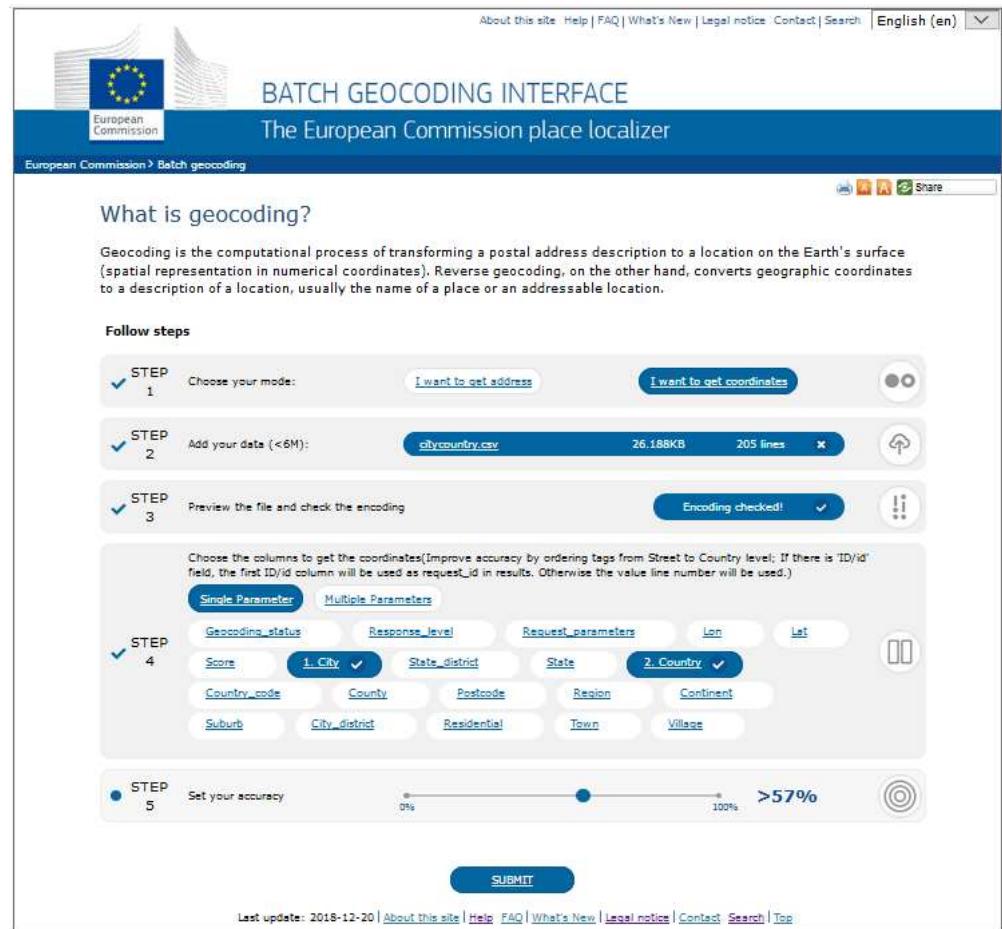
WEBTOOLS,
Direct Usage,
Embeddable client,



- Under 500ms for this route
- Lots of options

Batch Geocoding

- *Support reverse and geocoding*
- *Limits by accuracy*
- *Garbage in -> Garbage out. 2-3 iterations usually help clean data*
- *On top of API's*



The screenshot shows the 'BATCH GEOCODING INTERFACE' page from the European Commission. The interface is a five-step process:

- STEP 1:** Choose your mode: I want to get address I want to get coordinates
- STEP 2:** Add your data (<6M): 26.188KB 205 lines
- STEP 3:** Preview the file and check the encoding: Encoding checked!
- STEP 4:** Set parameters:

Single Parameter		Multiple Parameters	
Geocoding_status	Response_level	Request_parameters	Lat
Score	1. City	State_district	Lon
Country_code	County	State	2. Country
Suburb	City_district	Postcode	Region
		Residential	Continent
		Town	Village
- STEP 5:** Set your accuracy: A slider set at >57%

At the bottom, there is a 'SUBMIT' button and a note: 'Last update: 2018-12-20 | [About this site](#) | [Help](#) | [FAQ](#) | [What's New](#) | [Legal notice](#) | [Contact](#) | [Search](#) | [Top](#)'.

<http://europa.eu/webtools/rest/gisco/batchgeocoding/>



Overview

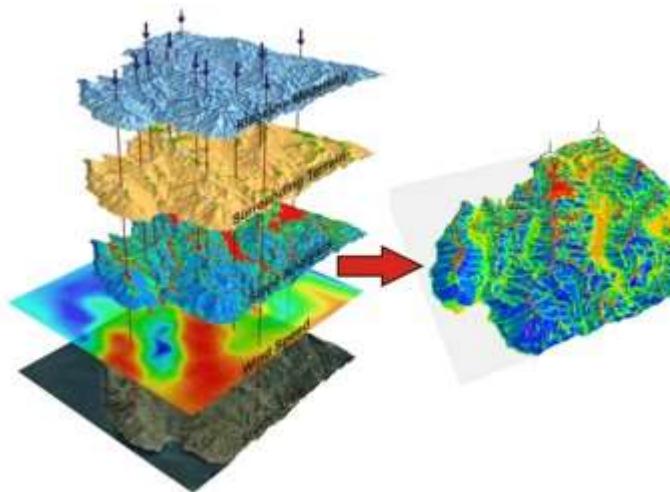
- Introduce Eurostat and GISCO services
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- **Describe analytical use case(s)**

GISCO - the Geographic Information System of the Commission

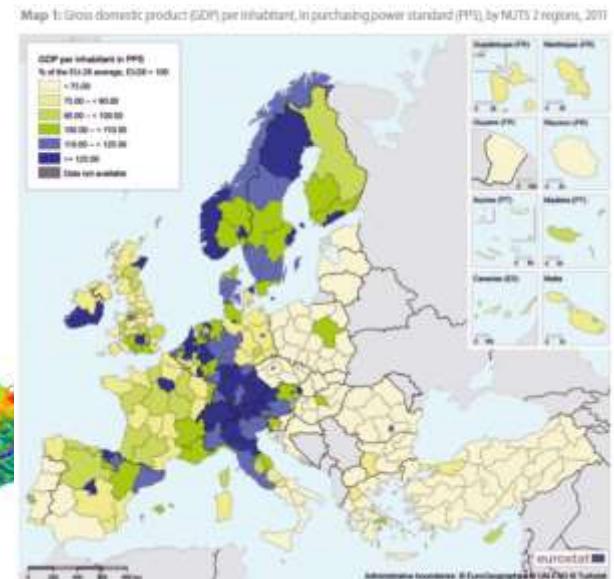
localise



analyse



visualise



Spatial Analytics Capabilities

- *Road / Railway / Maritime Distance Matrices*
- *Accessibility analysis*
- *Generalization of map products*

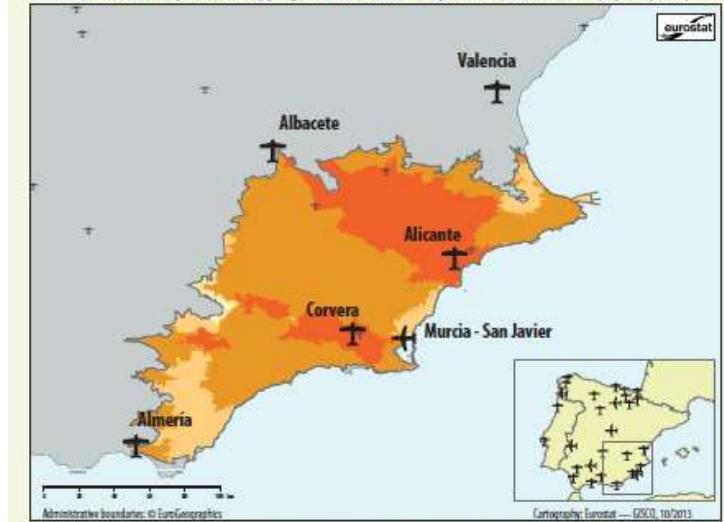
Empty and unused airport infrastructures

The cargo project at Thessaloniki airport in Greece involved building two new cargo terminal buildings, the renovation of two existing cargo buildings and the construction of a parking area. The two newly built cargo terminals have a capacity of 150,000 tonnes per year. They will help to increase the regional cargo handling in regular use at the time of the inauguration (EU funds issuing 7 million euro). There was no evidence of any study being carried out to demonstrate a need to extend capacity for air cargo in the region.



Picture 7 — One of the two new cargo buildings at Thessaloniki airport which were empty at the time of the audit.

Number of airports overlapping with the audited airport Murcia - San Javier, Spain (LELC)



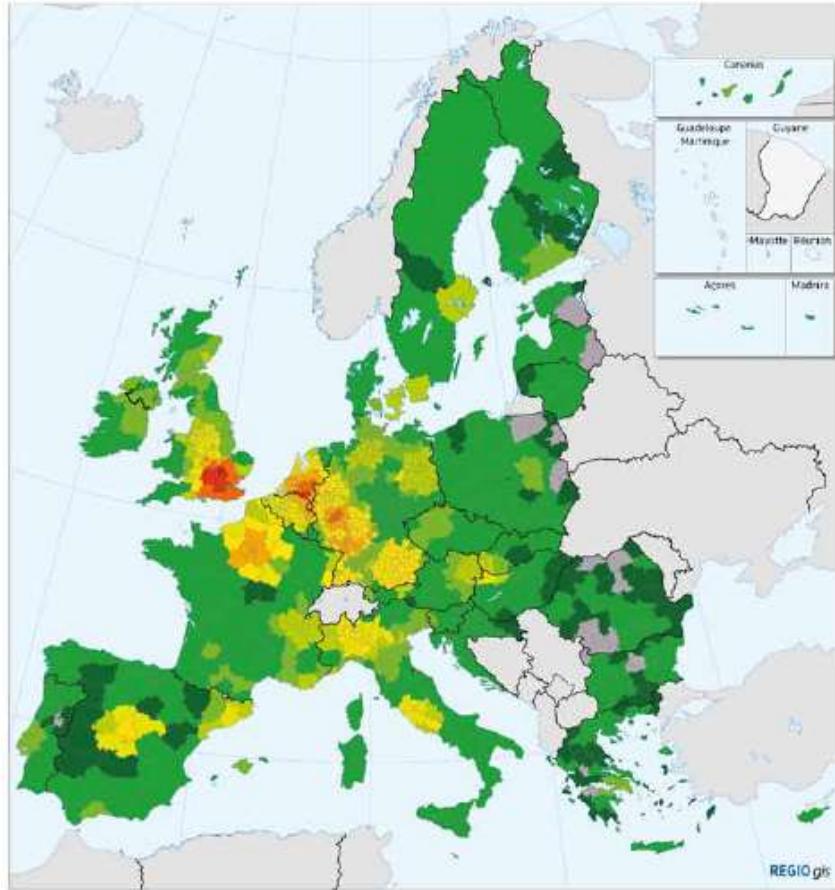
Legend	Murcia (LELC) overlap with airport (ICAO code)	No of residents in the overlap area per airport	Residents in overlap (%)	Distance to competitor airport (km)	Time to competitor airport (minutes)
■ 2-hour travel time from audited airport	Albacete (LEAB)	2 451 970	66,39	183	121
■ Audited airports	Alicante (LEAL)	3 532 000	95,64	69	52
■ Competitor airports	Almeria (LEAM)	691 125	18,71	201	118
■ Non-competitor airports	Granada (LEGR)	77 610	2,10	307	200
	Valencia (LEVC)	1 733 710	46,94	232	149
	Corvera (LEMI)	3 433 170	92,91	36	31
Number of overlapping airports	No of residents within 2 hours of audited airport	Total No of residents in overlap with access to multiple airports (%)	Residents in overlap with access to multiple airports (%)	Distance to rail station (km)	Distance to rail line (km)
■ 0 overlaps	3 693 100	3 692 610	99,99	13,78	13,02
■ 1					
■ 2					
■ 3					
■ > 4					
■ County border					

Source: Eurostat population (2006) and tourism data (2006/10).

https://www.eca.europa.eu/Lists/ECADocuments/SR14_21/QJAB14021ENC.pdf

Spatial analysis

- Delineate areas*



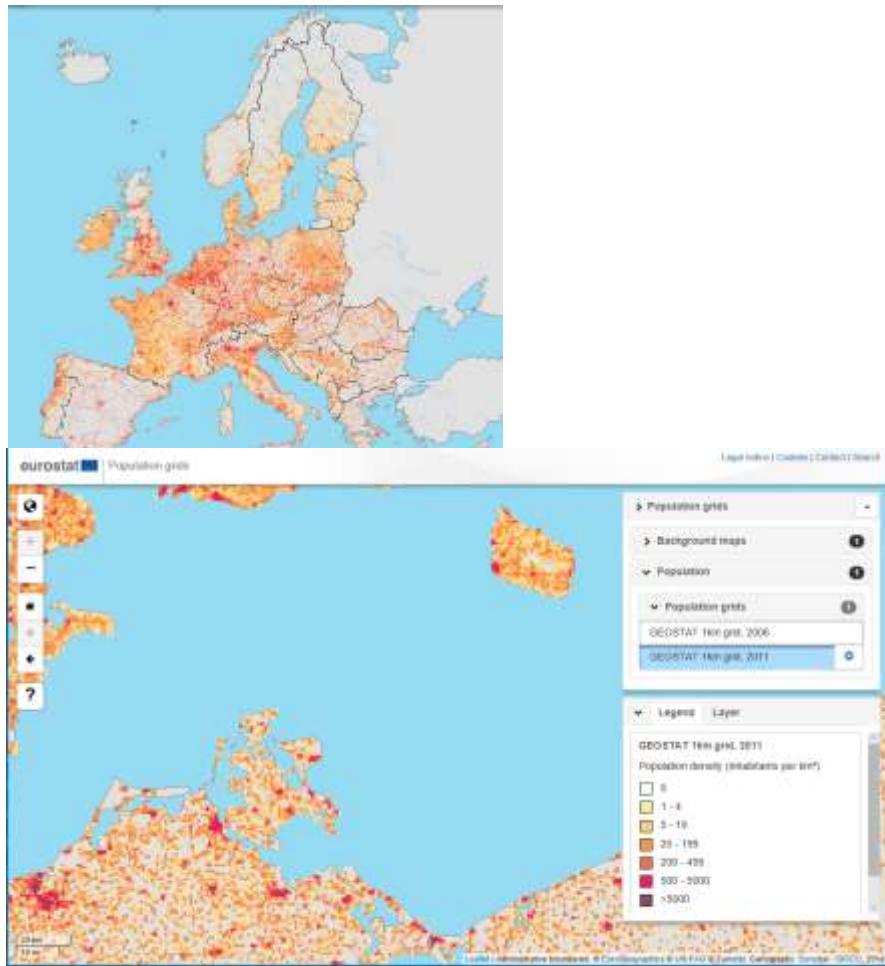
Providing spatial context

- *Location of EU projects*
- *Location of infrastructure*



European
Commission

How many people are affected by sea level rise in this area ?



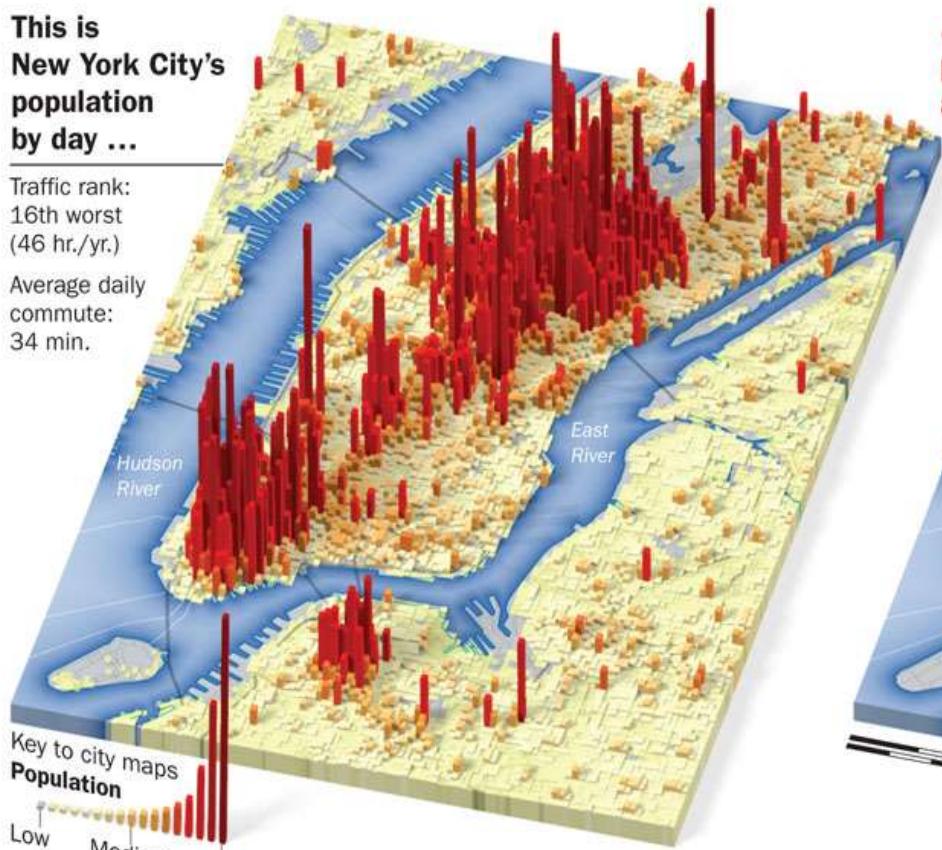
European
Commission

This is
New York City's
population
by day ...

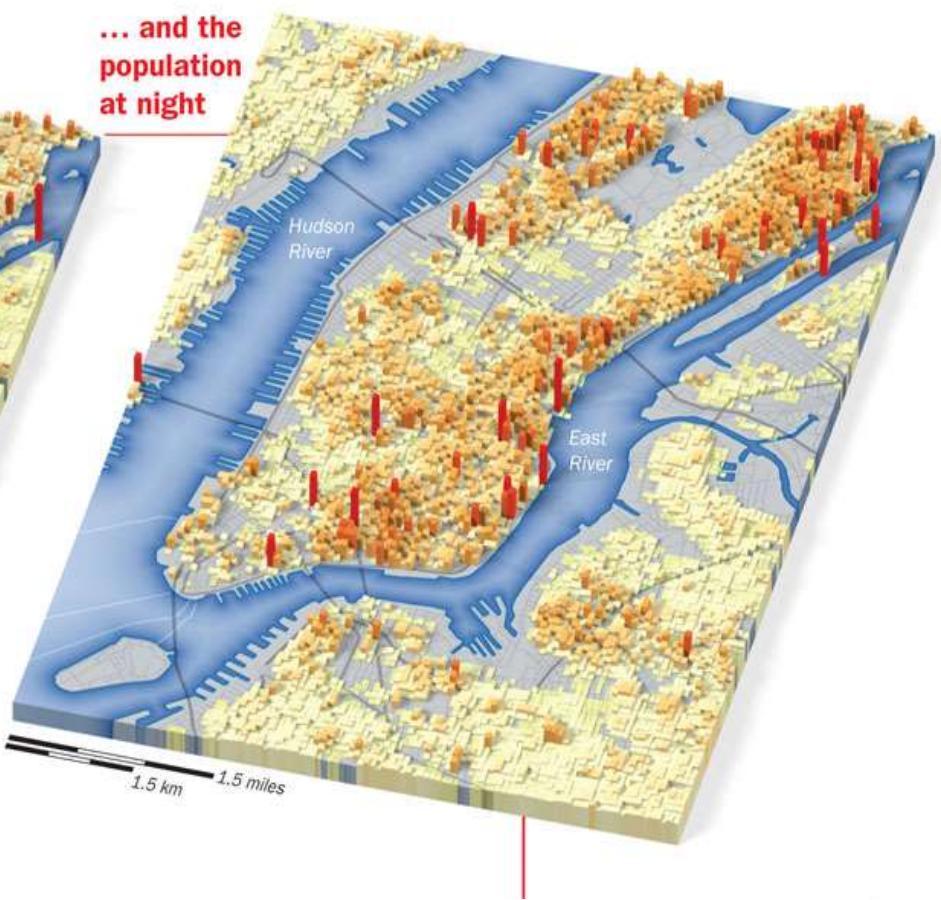
Traffic rank:
16th worst
(46 hr./yr.)

Average daily
commute:
34 min.

Key to city maps
Population
Low Medium High



... and the
population
at night



**Day-and-nighttime in New York City (Source Time
magazine, Issue Nov. 26, 2007).**



European
Commission

Road / Railway / Maritime Distance Matrices

 Eurostat | Links | Contact | Important legal notice

TERCET - Postal Codes & Locations Search English

European Commission > Eurostat > Regions and cities > TERCET

NUTS3 LAU Postal Codes & Locations Distances Flat Files

NUTS version: NUTS-2016

Postal Code/Location: Postal codes

Country: AUSTRIA

Search string: (Postal codes code begins with)

Search

The usage of these data is subject to the acceptance of the following clauses:
The Commission agrees to grant the non-exclusive and non-transferable right to use and process the Eurostat data acquired from this page (the "data").
The permission to use the data is granted on condition that the data will not be used for commercial purposes.

Help PDF Datei erneut: 21.06.2014

A	B
1 NUTS3	CODE
2 'ES213'	'01468'
3 'ES213'	'39880'
4 'ES213'	'48001'
5 'ES213'	'48002'
6 'ES213'	'48003'
7 'ES213'	'48004'
8 'ES213'	'48005'
9 'ES213'	'48006'
10 'ES213'	'48007'
11 'ES213'	'48008'
12 'ES213'	'48009'
13 'ES213'	'48010'
14 'ES213'	'48011'
15 'ES213'	'48012'
16 'ES213'	'48013'
17 'ES213'	'48014'
18 'ES213'	'48015'
19 'ES213'	'48070'
20 'ES213'	'48071'
21 'ES213'	'48080'
22 'ES213'	'48100'
23 'ES213'	'48110'
24 'ES213'	'48111'
25 'ES213'	'48112'
26 'ES213'	'48113'
27 'ES213'	'48114'

<http://ec.europa.eu/eurostat/tercet/postalLocation.do>



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What DID you learn ?

- *Every Information has a location*
- *GISCO + GISCO Reference Database (you can contribute!!) + Generalization*
- *Corporate GI Services (Web Map Services, (Reverse) Geocoding, Routing)*
- *IMAGE / Statistical Atlas / WEBTOOLS*
- *GUTC/COGI as point of GI exchange*
- *IISG – ESTAT Design - IPG - Disputed Area WIKI in GISCO – DIGIT*
- *QGIS + ArcGIS*

GISCO sources of data and information

- *GISCO wiki – single point of information on all Commission internal GISCO activities*
<https://webgate.ec.europa.eu/fpfis/wikis/x/hYvJAw>
- *Functional mailbox for all communication - ESTAT-GISCO@ec.europa.eu*
- *GISCO section on the Eurostat website for download of public data*
- *Shared folders for EuroGeographics and other products*



The screenshot shows the 'Geographic Information System of the Commission (GISCO) Home' page. The main content area features a map of Europe with various regions highlighted in different colors (purple, pink, yellow). Below the map, there is descriptive text about GISCO's mission to provide reference geographical information and related services to the European Commission and its Member States and regions. To the left, there is a sidebar with a navigation menu containing links such as 'Pages', 'File', 'Tags', 'Calendar', 'GISCO instruments', 'Meeting notes', 'Documents', 'Model: Wiki (L1) (201)', 'Discussion (Open access 2 as Listed)', 'File info', and 'How-to guides'. At the bottom of the sidebar, there is a 'Page history' section with links to previous versions of the page.



Thanks !

ESTAT-GISCO@ec.europa.eu
MAP questions: ESTAT-GISCO-MAPS