



# GeoVisualization in ESTAT and EC

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GISCO TEAM - ESTAT**

## Key points

What is the type of data that is being visualised?

**EVERYTHING WITH A SPATIAL COMPONENT**

What kind of variables do the data sets usually contain?

**EVERYTHING**

What is the intended audience?

**PRESS, PRINT, WEB, INTERNAL, EXTERNAL**

What is the data format(s) used? –

**DEPENDS**

# Table Graph Maps (TGM) - ONLINE

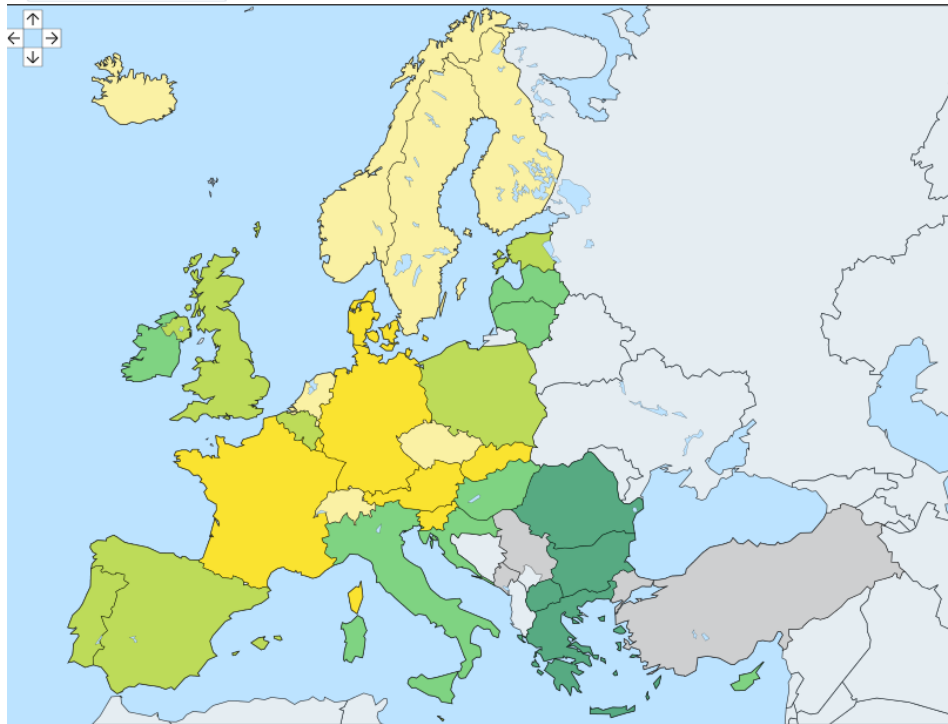
Table Graph Map

## People at risk of poverty or social exclusion

and 1 000 persons

The Europe 2020 strategy promotes social inclusion, in particular through the reduction ... [more](#)

Unit: Percentage of total population



Click on map to:  
 Recenter  Zoom In/Recenter  Zoom Out/Recenter

Hide toolbox

Types Data Classes Layers

time 2013

Most recent data

geo

- Belgium
- Bulgaria
- Czech Republic
- Denmark
- Germany
- Estonia
- Ireland
- Greece
- Spain
- France
- Croatia
- Italy
- Cyprus

Refresh

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Data for 2013

| Legend  | Cases |
|---|-------|
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #fff9c4; border: 1px solid #ccc;"></span> 13 to 16.4         | 7     |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #fff176; border: 1px solid #ccc;"></span> 16.4 to 20.4       | 7     |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #c8e6c9; border: 1px solid #ccc;"></span> 20.4 to 27.5       | 7     |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #81c784; border: 1px solid #ccc;"></span> 27.5 to 35.1       | 7     |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #43a047; border: 1px solid #ccc;"></span> 35.1 to 48.1       | 5     |
| <span style="display: inline-block; width: 15px; height: 15px; background-color: #bdbdbd; border: 1px solid #ccc;"></span> Data not available | 1     |

Minimum value: 13  
 Maximum value: 48.1  
 : = not available  
 e = estimated

# ESTAT's Dissemination Portal (2017) - ONLINE

eurostat statistical data

Population change - Demographic balance and cr

All data / Population and social conditions / Demography and m

Presentation: **Demographic indicator** [5]: Population on 1 January - tot

**Time period** [10]: All values

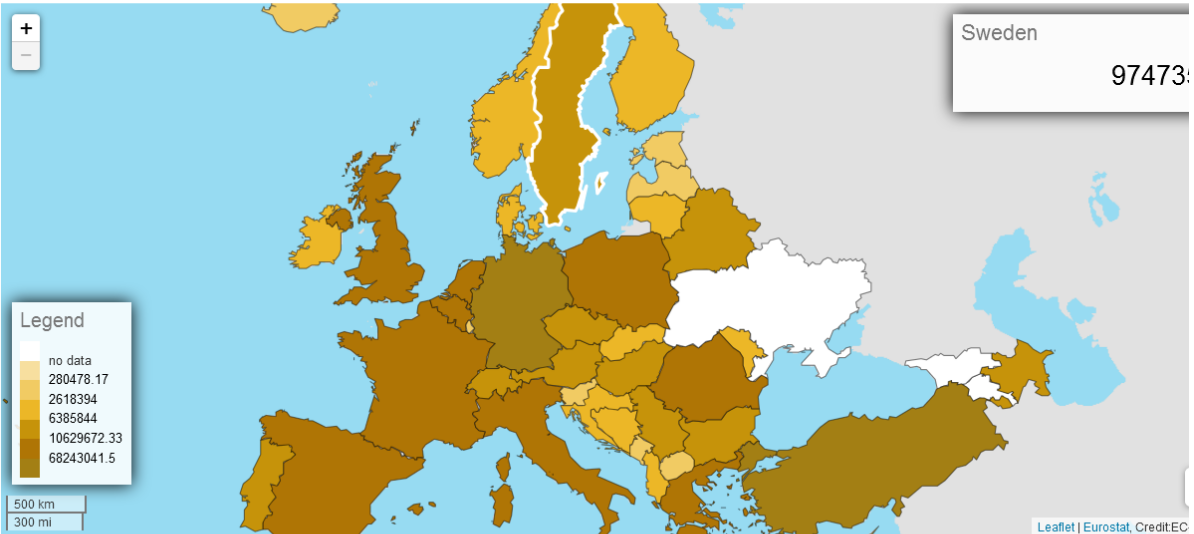
| Time period                   | 2006        | 2007        | 2008        | 2009        |
|-------------------------------|-------------|-------------|-------------|-------------|
| European Union (28 countries) | 496,543,994 | 498,408,547 | 500,418,320 | 502,186,144 |
| European Union (27 countries) | 492,231,507 | 494,095,017 | 496,106,353 | 497,876,348 |
| Euro area (19 countries)      | 329,792,335 | 331,312,351 | 333,218,062 | 334,566,164 |
| Euro area (18 countries)      | 326,502,500 | 328,062,368 | 330,005,457 | 331,382,308 |
| Euro area (17 countries)      | 324,274,626 | 325,853,528 | 327,813,647 | 329,219,474 |
| Euro area (16 countries)      | 322,923,926 | 324,510,608 | 326,475,207 | 327,883,734 |
| Belgium                       | 10,511,382  | 10,584,534  | 10,666,866  | 10,753,080  |
| Bulgaria                      | 7,629,371   | 7,572,673   | 7,518,002   | 7,467,119   |
| Czech Republic                | 10,223,577  | 10,254,233  | 10,343,422  | 10,425,783  |
| Denmark                       | 5,427,459   | 5,447,084   | 5,475,791   | 5,511,451   |
| Germany (until 1990 ...)      | 82,437,995  | 82,314,906  | 82,217,837  | 82,002,356  |
| Germany (including f...       | 82,437,995  | 82,314,906  | 82,217,837  | 82,002,356  |
| Estonia                       | 1,350,700   | 1,342,920   | 1,338,440   | 1,335,740   |
| Ireland                       | 4,208,156   | 4,340,118   | 4,457,765   | 4,521,322   |
| Greece                        | 11,112,113  | 11,143,780  | 11,182,224  | 11,190,654  |
| Spain                         | 44,009,971  | 44,784,666  | 45,668,939  | 46,239,273  |
| France                        | 63,229,635  | 63,645,065  | 64,007,193  | 64,350,226  |
| France (metropolitan)         | 61,399,733  | 61,795,238  | 62,134,866  | 62,465,709  |
| Croatia                       | 4,312,487   | 4,313,530   | 4,311,967   | 4,309,796   |
| Italy                         | 58,064,214  | 58,223,744  | 58,652,875  | 59,000,586  |
| Cyprus                        | 744,013     | 757,916     | 776,333     | 796,930     |
| Latvia                        | 2,227,874   | 2,208,840   | 2,191,810   | 2,162,834   |
| Lithuania                     | 3,289,835   | 3,249,983   | 3,212,605   | 3,183,856   |
| Luxembourg                    | 469,086     | 476,187     | 483,799     | 493,500     |

eurostat statistical data

Population change - Demographic balance and crude rates at national level

All data / Population and social conditions / Demography and migration

Presentation: **Demographic indicator** [5]: Population on 1 January - total (JAN) **Geopolitical entity (reporting)** [60]: All values **Time period** [10]: (2015)



Legend

- no data
- 280478.17
- 2618394
- 6385844
- 10629672.33
- 68243041.5

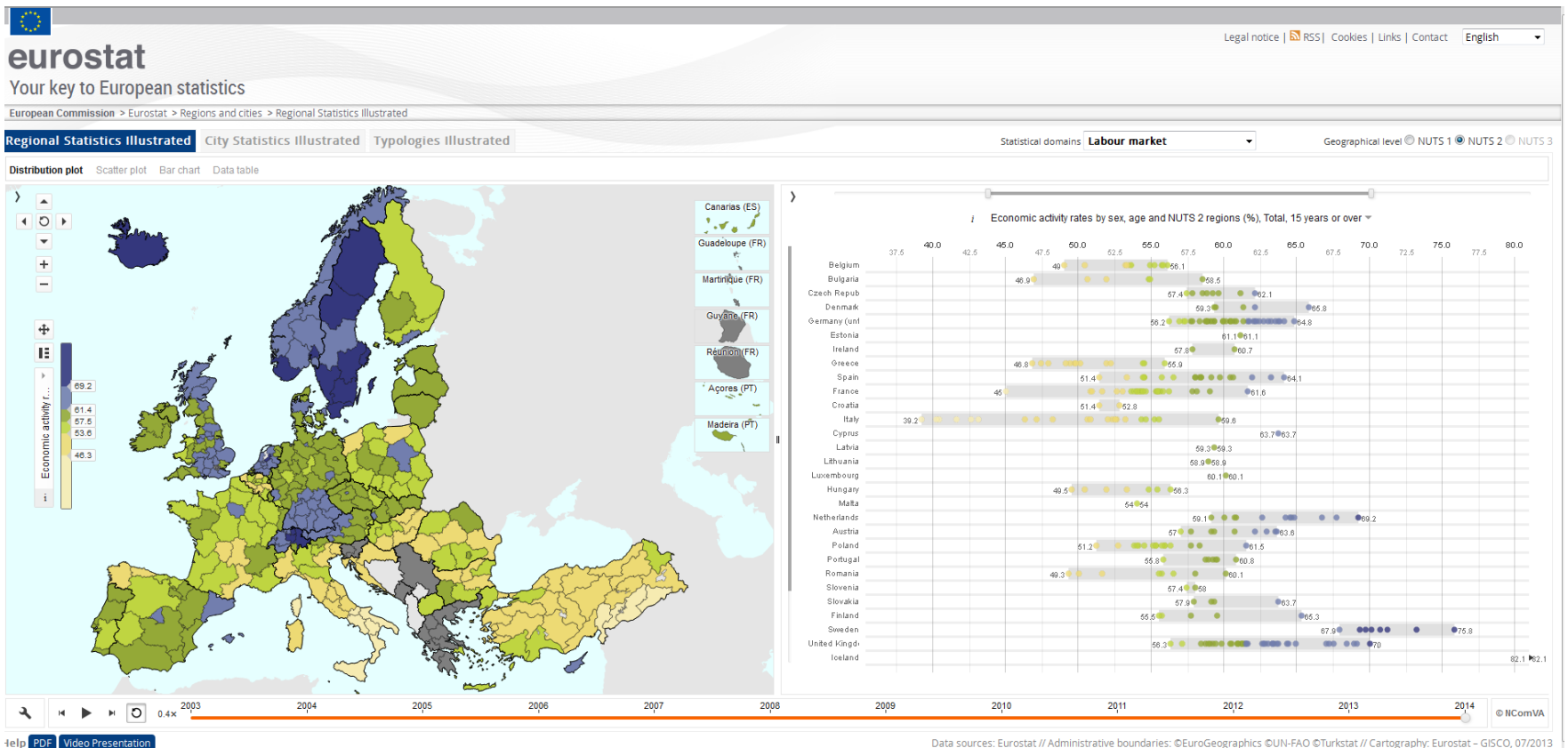
500 km  
300 mi

Leaflet | Eurostat, Credit:EC

The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the European Union concerning the legal status of any country, territory, city or area or of its authorities concerning the delimitation of its frontiers or boundaries. Kosovo\*: This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence. Palestine\*: This designation shall not be construed as recognition of a State of Palestine and is without prejudice to the individual positions of the Member States on this issue.

Selected time period: 2015

# Regional Statistics Illustrated - ONLINE

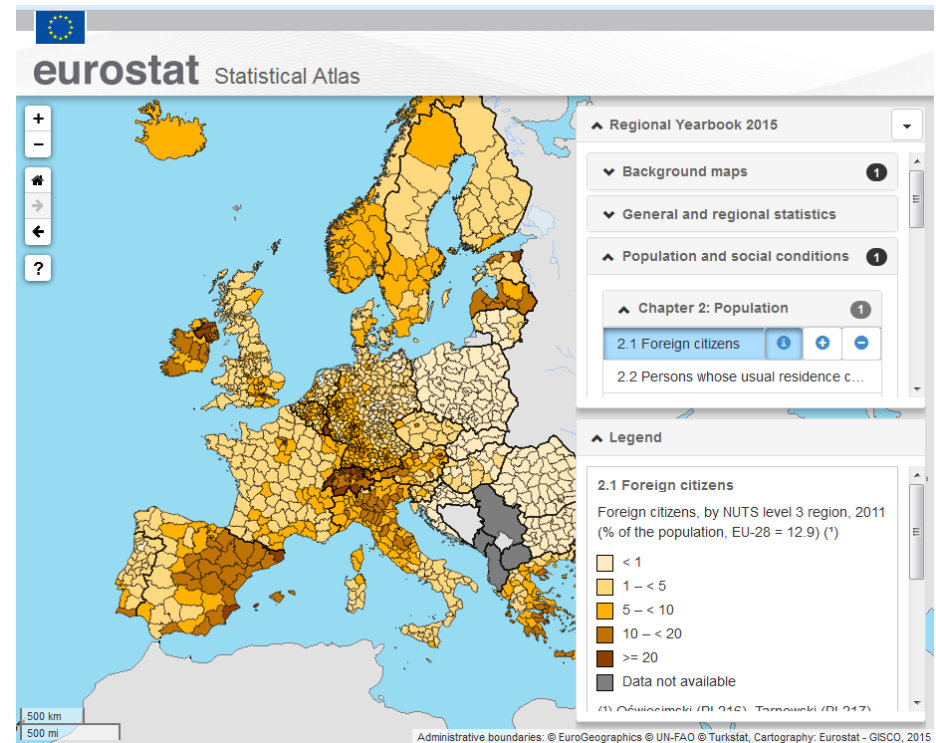


# Statistical Atlas - ONLINE

Based on Leaflet JS library  
Uses GeoJSON & JSON for  
data visualization  
Cooperate Level Background  
Services

TOC, Legend

Pendant to printed  
[Eurostat Regional Yearbook](#)



# IMAGE tool - OFFLINE

## *IMAGE*



[IMAGE Quick Start Guide](#) | [IMAGE manual](#) | [Converter](#) | [Help](#)

### Step 2: Select input Data

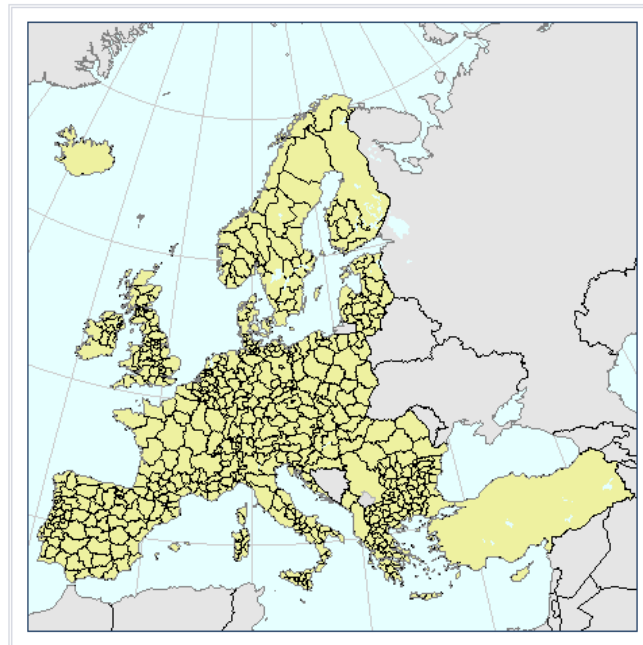
Example Excel file



Use Map Templates



Use Dynamic Area Selection



Back

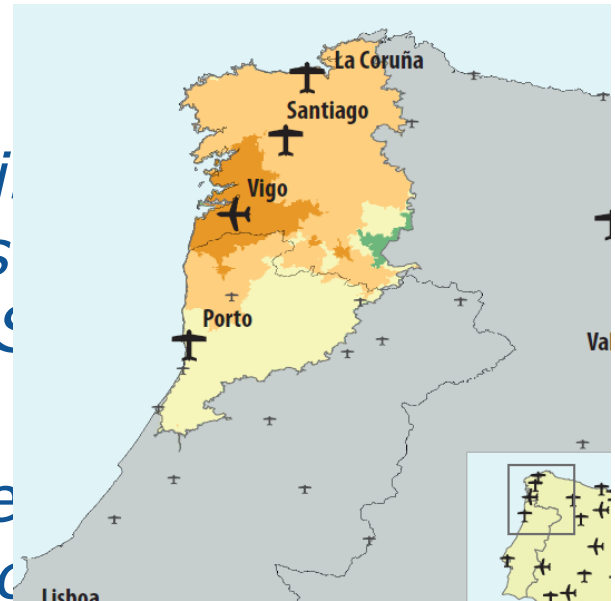
Next

# GISCO

*EUROSTAT service which coordinates, promotes and stimulates the use of GIS within the European Statistical System and the European Commission.*

*It is responsible for the management and dissemination of the Geographic Information reference database of the Commission. (Maps, spatial analysis, geo-referencing of statistics, user support).*

*GISCO also works on implementing the INSPIRE initiative within the Commission and within the ESS.*





DG COMM  
WEBTOOLS

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

**UEC - MAP**

**Examples**

- Mixe

**L.wt.control**

- Radio
- Checkbox
- HTML

**L.wt.markers**

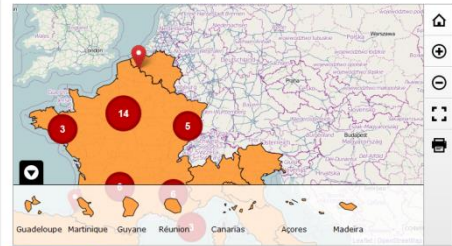
- Default
- custom color
- custom popup
- cluster disabled

**L.wt.countries**

- Default
- custom color
- show insets

**L.wt.tileLayer**

- Default (some)
- grayig




Guadeloupe Martinique Guyane Réunion Canaries Açores Madeira

[See demo.js](#)

**Geographic Information System of the Commission (GISCO) Home**

Created by Anthony SCHWARTZ, last modified by Hannes REUTER on Feb 09, 2015



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

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.

GISCO's main task is to provide reference geographical information and related services for use within Eurostat 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 geospatial information, for instance population grid data. GISCO also coordinates Commission-wide geographical information activities and common strategies and 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 database of the Commission;
- operation of the spatial data infrastructure of the European Commission;
- data processing, mainly for thematic mapping, spatial analysis, and data dissemination;
- coordination and relationships with users and producers of statistical and geospatial information (Commission, European agencies, statistical offices);
- chair of the GISCO working group of National Statistical Institutes and National Mapping and Cadastral Authorities;
- promoting activities to integrate geographical information with thematic information, notably statistical information;
- active participation in the UN-GGM initiative;
- cooperation in initiatives for the establishment of a geographical information infrastructure at the European level (INSPIRE).

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CORVELEYN Laurent Jacques (COMM-EXT) [<Laurent-Jacques.CORVELEYN@ext.ec.europa.eu>](mailto:Laurent-Jacques.CORVELEYN@ext.ec.europa.eu)



European  
Commission

# Background Services



+ *several  
more*

10

Contact: REUTER Hannes (ESTAT) <Hannes.REUTER@ec.europa.eu>

ESTAT

# Solutions

*Webtools mapping framework.*

*Background services.*

*Vector datasets.*

*Mapping issues – (Sensitive + Overseas regions)*

*Copyright declarations.*



# EC Webtools mapping framework

*Based on Leaflet.js*

*Mobile first; responsive*

*Dynamic customizable markers plus clustering*

*Clickable, stylable country and region outlines*

*Outermost regions*

*Implementable on europa.eu and any sub domain*

[Documentation](#)

[Example TAXUD](#)

[Example BUDGET FOR RESULTS](#)

# Thanks for your attention

WEBTOOLS @COMM

<https://webgate.ec.europa.eu/fpfis/wikis/display/webtools/Maps>

DATA+SERVICES @ESTAT (GISCO)

<http://ec.europa.eu/eurostat/web/gisco/overview>

# Vector Datasets – Webtools maps

*Border vector data for all countries in the world*

*Border vector data for NUTS regions level 1 to 3*

*Supplied and maintained by ESTAT*

[Demo page](#)

[Tax good governance in the world](#)

# Sensitive Areas

*Cyprus*

*The former*

*Yugoslav Republic  
of Macedonia*

*Serbia and Kosovo*

*India and Pakistan*

*Golan heights*

*Sudan and South*

*Sudan - Abyei  
region*

*Taiwan*

*Western Sahara*

*Palestine*

# Copyright Declaration

*In general*

*EN: © EuroGeographics for the administrative boundaries*

*FR: © EuroGeographics pour les limites administratives*

*DE: © EuroGeographics bezüglich der Verwaltungsgrenzen*

*Depending on the dataset (NUTS, worldwide cover)*

© UN-FAO © Turkstat



# Vector Datasets – GISCO Reference Database (I)

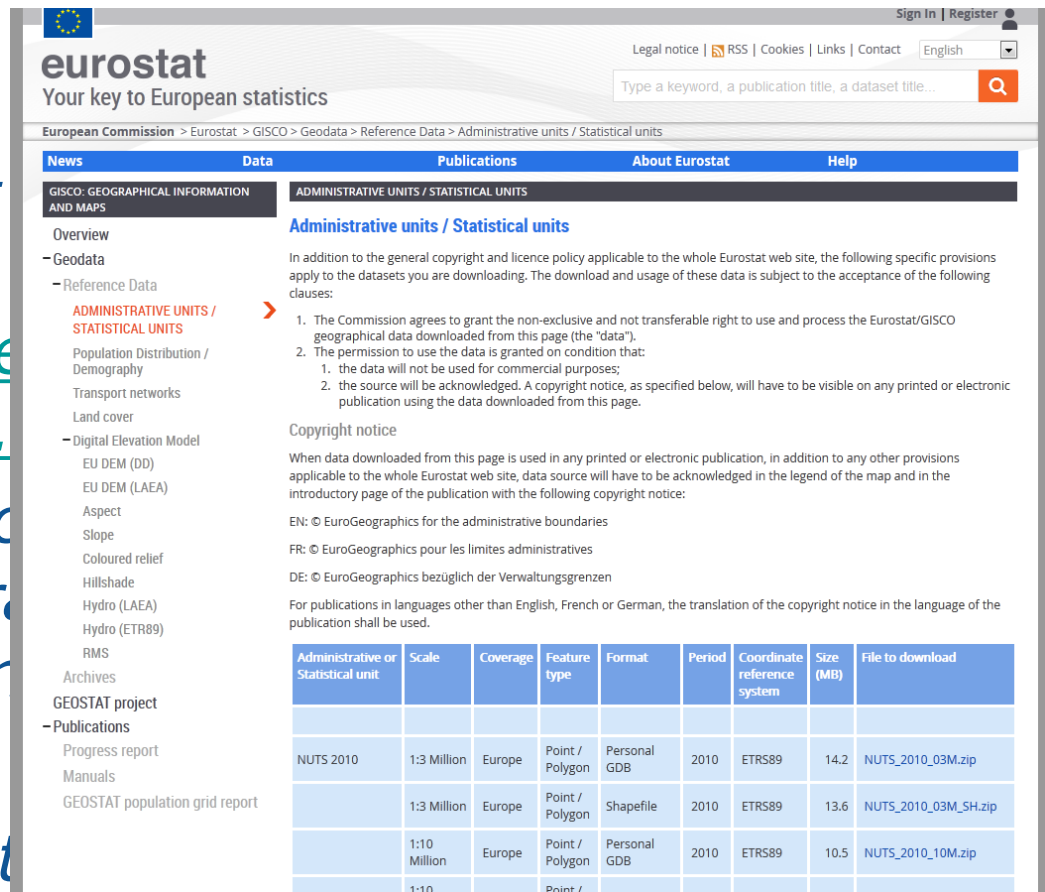
*GISCO Database – ArcGIS*

[\\s-tpol.net1.com  
connect\giscoread.](https://s-tpol.net1.com/connect/giscoread/)

<https://webgate.ec.europa.eu/GISCO/The+geography+of+the+Commission>

*Administrative Units*

[http://ec.europa.eu/eurostat/web/gisco/geodata/reference-data/administrative-units-statistical-](http://ec.europa.eu/eurostat/web/gisco/geodata/reference-data/administrative-units-statistical/)



The screenshot shows the Eurostat website interface for the GISCO Reference Database. The page title is "eurostat Your key to European statistics". The breadcrumb trail is: European Commission > Eurostat > GISCO > Geodata > Reference Data > Administrative units / Statistical units. The main navigation menu includes News, Data, Publications, About Eurostat, and Help. The left sidebar contains a tree view with categories like "Reference Data", "Digital Elevation Model", "Archives", and "Publications". The main content area is titled "Administrative units / Statistical units" and contains a copyright notice and a table of datasets.

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| Administrative or Statistical unit | Scale        | Coverage | Feature type    | Format       | Period | Coordinate reference system | Size (MB) | File to download     |
|------------------------------------|--------------|----------|-----------------|--------------|--------|-----------------------------|-----------|----------------------|
| NUTS 2010                          | 1:3 Million  | Europe   | Point / Polygon | Personal GDB | 2010   | ETRS89                      | 14.2      | NUTS_2010_03M.zip    |
|                                    | 1:3 Million  | Europe   | Point / Polygon | Shapefile    | 2010   | ETRS89                      | 13.6      | NUTS_2010_03M_SH.zip |
|                                    | 1:10 Million | Europe   | Point / Polygon | Personal GDB | 2010   | ETRS89                      | 10.5      | NUTS_2010_10M.zip    |
|                                    | 1:10         |          | Point /         |              |        |                             |           |                      |

# Background Services

## ***EC Webtools (DG COMM)***

- [Maps - Plugins - L.wt.tileLayers](#)
- [Demo page](#)
- [Standard Open Street Maps](#)

## ***INSPIRE@EC (EC geoportal – DG ESTAT):***

- <https://webgate.ec.europa.eu/estat/inspireec/gis/arcgis/rest/>

## ***Statistical Atlas: (DG ESTAT)***

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