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Eurostat regional yearbook goes digital!

- Thursday 9 June 2022
- 11:30 – 12:30 CET



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for European data



Bee swarms, barcodes and bubbles - visual data stories on regional development

Agenda for the webinar

- Starting point (Bianka Fohgrub)
- How we did it? (Teodora Brandmuller)
- What was new in the 2021 edition?
& Lessons learned (Louise Corselli-Nordblad)

Starting point

Eurostat - who we are?

- **Eurostat** is the statistical office of the European Union.
- Our mission is to provide **high quality statistics and data on Europe**.
- We provide official statistics in partnership with the National Statistical Institutes = the **European Statistical System**.
- We have statistics for a wide range of topics **at European, national, regional and local level**.

Find more information about Eurostat visit our website: <https://ec.europa.eu/eurostat>

Eurostat regional
yearbook 2021 edition

New edition 2022

Publications that help to fight disinformation in a post-trust world are essential

- *Eurostat regional yearbook* started in the 1970's
- published in a similar format as print and PDF since 2000 as an annual flagship publication from Eurostat
- one of the most downloaded Eurostat publications in recent years
- **New edition planned for October 2022**

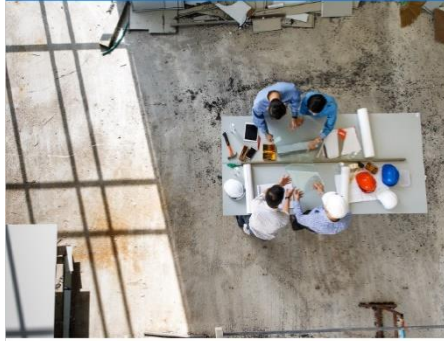
<https://ec.europa.eu/eurostat/en/web/products-statistical-books/-/ks-ha-21-001>

A People and society



1. Population
2. Health
3. Education
4. Labour market
5. Living conditions
6. Digital society

B Economy and business



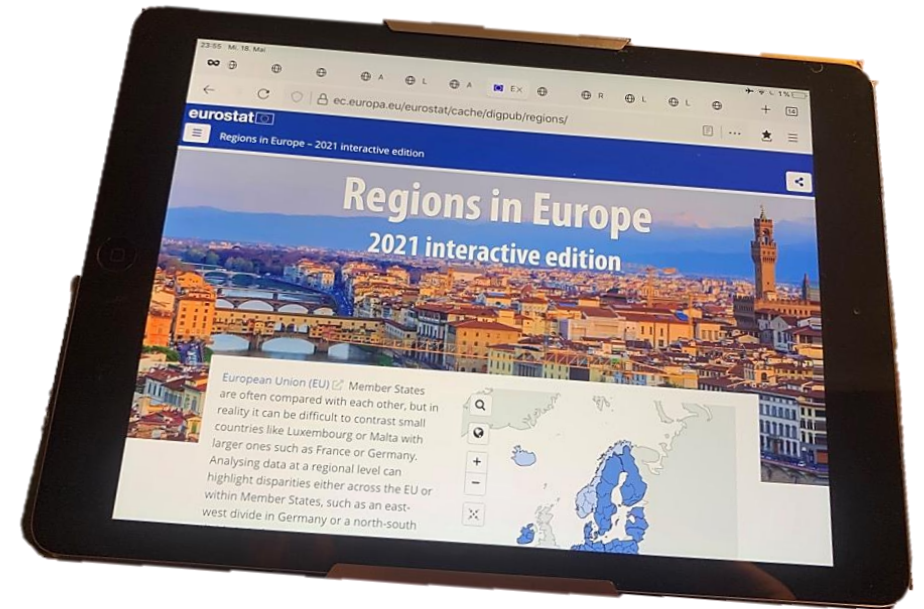
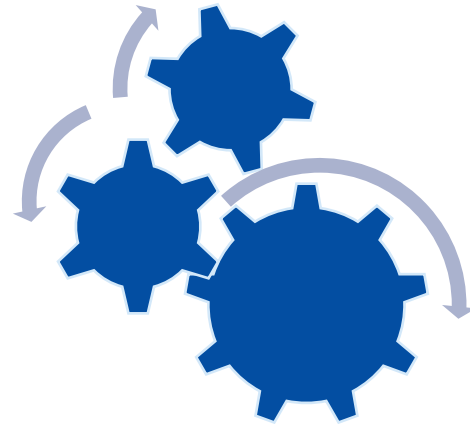
7. Economy
8. Business
9. Research and development
10. Tourism

C Environment and natural resources



11. Transport
12. Environment
13. Agriculture

Digital transformation was both a challenge and an opportunity



Regions in Europe

2021 interactive edition

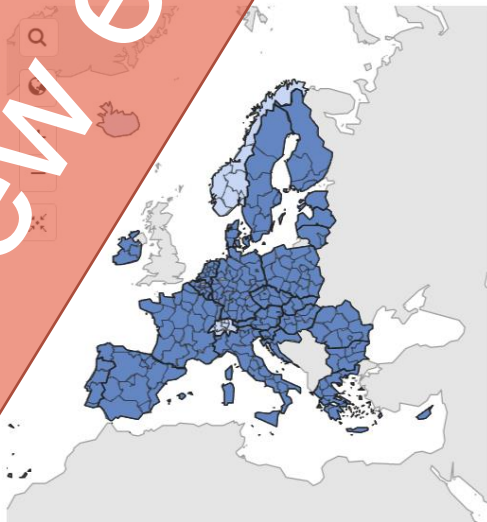
European Union (EU) Member States are often compared with each other, but in reality it can be difficult to contrast small countries like Luxembourg or Malta with larger ones such as France or Germany. Analysing data at a regional level can highlight disparities both across the EU or within Member States, such as an east-west divide in Germany or a north-south divide in Italy.

Regions in Europe — 2021 interactive edition is an interactive publication that presents data for 240 EU regions, as well as 16 regions of the EFTA countries. At the heart of regional statistics is the NUTS classification which aims to ensure that regions can be compared with each other. This classification is composed of different hierarchical levels; this publication is based primarily on NUTS level 2.

Have a closer look at the map to see the names of the regions that are covered.

Regions in Europe — 2021 interactive edition offers a selection of visualisations accompanied by short texts that allow you to get a deeper understanding of the social, economic and environmental situation across European regions. The publication is divided into three principal sections: people and society, economic activities, the environment and natural resources.

Scroll down, play around with the visualisations, or select information for a specific region.



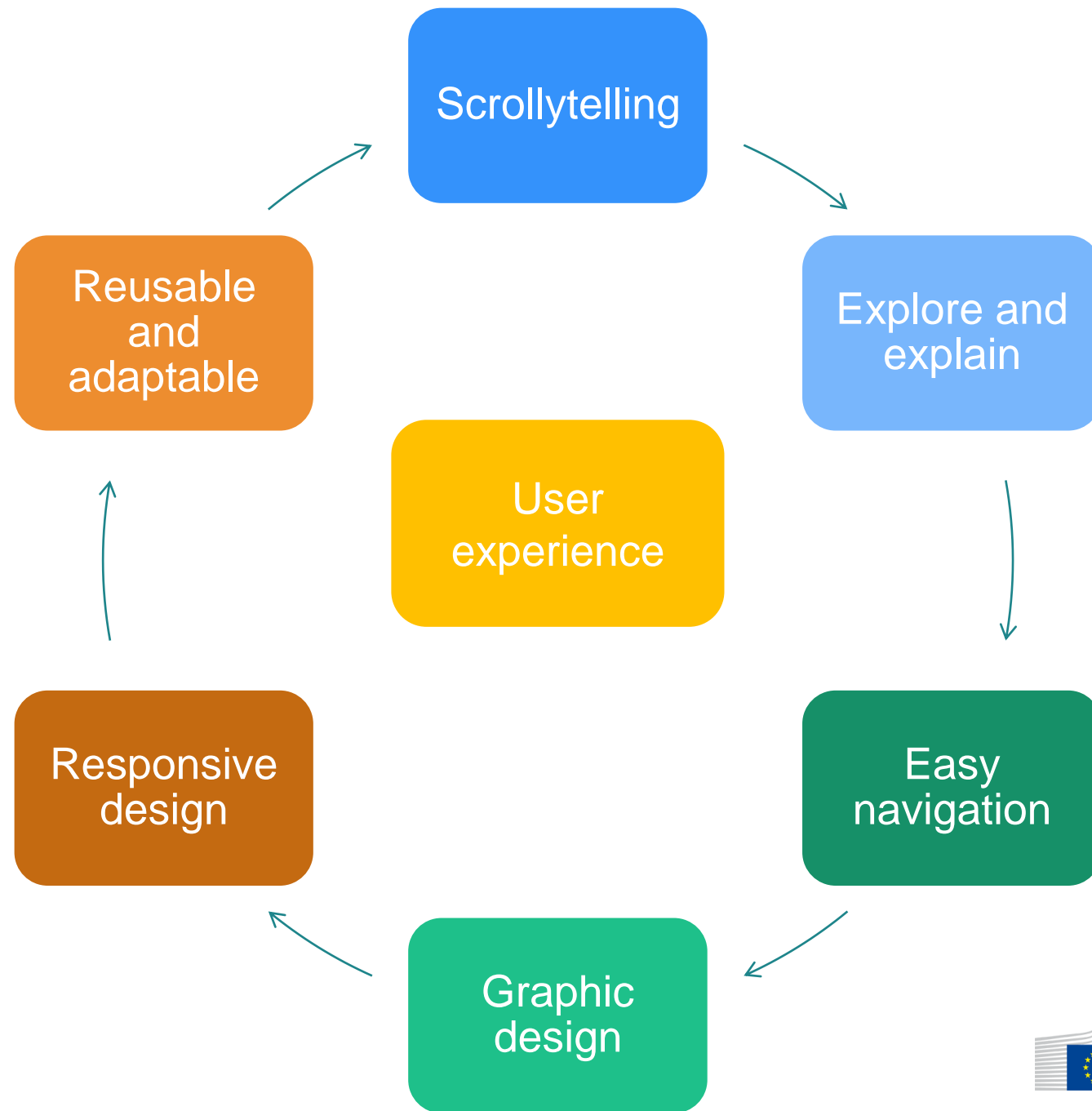
Eurostat regional yearbook interactive edition

- interactive web tool with maps and graphs
- first published in 2020
- Updates and changes in 2021's edition
- **New update planned for October 2022**

<https://ec.europa.eu/eurostat/cache/digpub/regions/>

How we did it?

Regions in Europe: concepts behind the development



Start from "sketch"!

Life expectancy, by sex and NUTS 2 regions

Population density map

Life expectancy by sex:
 - Blue: Female
 - Red: Male

Filter by Text, Circle, Variable

The charts or map layers

Beswimmer animation for the values for high/low life expectancy

Scale:
 - >75 years: #ED
 - 80 years: LIGHT
 - 85 years: BLUE
 - 90 years: DARK

Y-axis: 275 years, 80 years, 85 years, 90 years

Focus on top/bottom varying regions for Male/Female Life expectancy

Male / Female

Low

BUDDLE MAP

SHORT TEXT WITH KEYWORDS LIKE CAPITAL

• SIZE BASED GROUP
 • COLOR BASED ON INDICATOR/CATEGORY

AS WE SCROLL THE TEXT THE MAP CHANGES COULD BE COMBINED WITH PANNED CIRCLE

ANIMATION

DISTRIBUTION PLOT

SHORT TEXT: HIGHEST, LOWEST, DIGEST SPEED

ANIMATION

SHORT TEXT WITH KEYWORDS • CATEGORIES

INDICATOR 1

INDICATOR 2

MAIN SCREEN

Person in region gives a good surprise with automatic on average or an advanced text region X is in Xth position in the world.

Person's regions linked between the two visualizations.

Alternative transition:
 -> switch between age group
 -> highlight capital city region
 -> highlight top X on bottom of region

TABLE BY YEARS: Relative to national average

TABLE: MAN TRANSITION FROM FEMALE DEMOGRAPHIC DATA TO REGION

ANIMATION

SHORT TEXT WITH KEYWORDS • CATEGORIES

INDICATOR 1

INDICATOR 2

ENTRY POINT

ANIMATION

SHORT TEXT WITH KEYWORDS • CATEGORIES

INDICATOR 1

INDICATOR 2

ANIMATION

SHORT TEXT WITH KEYWORDS • CATEGORIES

INDICATOR 1

INDICATOR 2

INTRO TRANSPORT

More journalism-like style than report.
 - short, punchy headlines starting a key theme
 - storytelling with the data
 - easy to understand and remember
 - curiosity increasing
 - story's data is very convincing

Interactive Map:
 - zoomable to different scales
 - layers for each concept of mode - interactive on/off
 - can click on location to get data for that particular location

Interactive Graph:
 - The number of trips by car is 2x more than by bike

Region Rankings

Rankings show an arbitrary image - Bias comparison of the MAUP

MAP

SCROLL DOWN TO ENLARGE TOC

SCROLL DOWN TO ENLARGE TOC

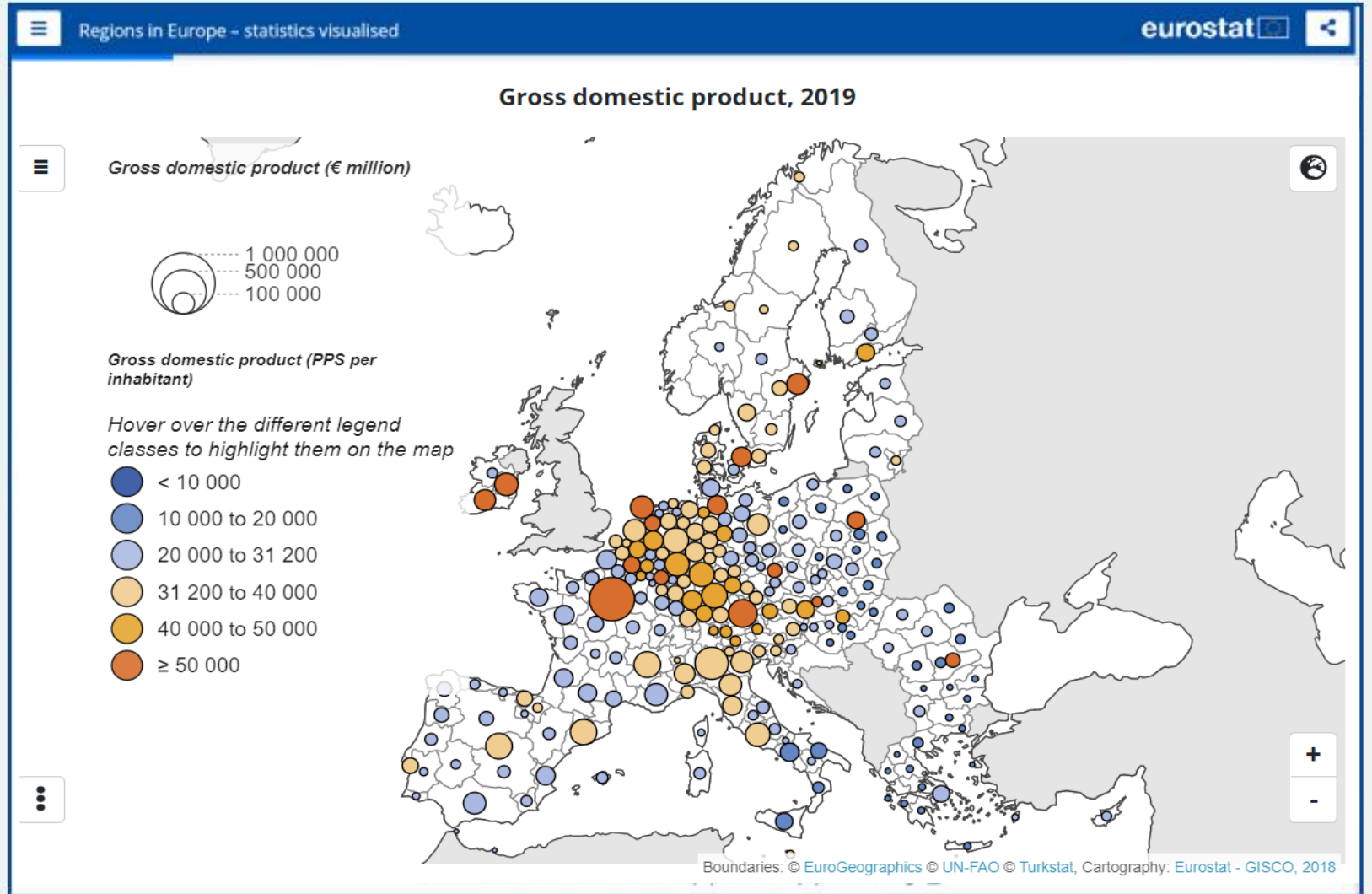
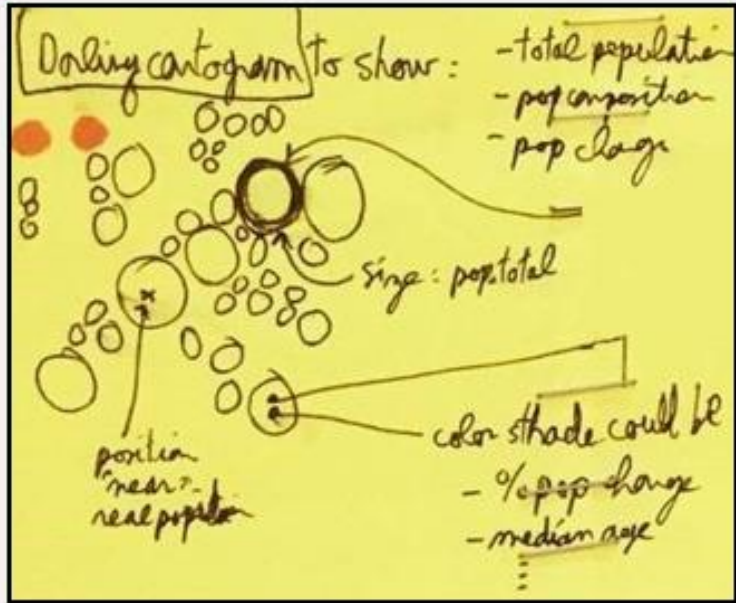
SCROLL UP TO ENLARGE TOC

MAP

SCROLL DOWN TO ENLARGE TOC

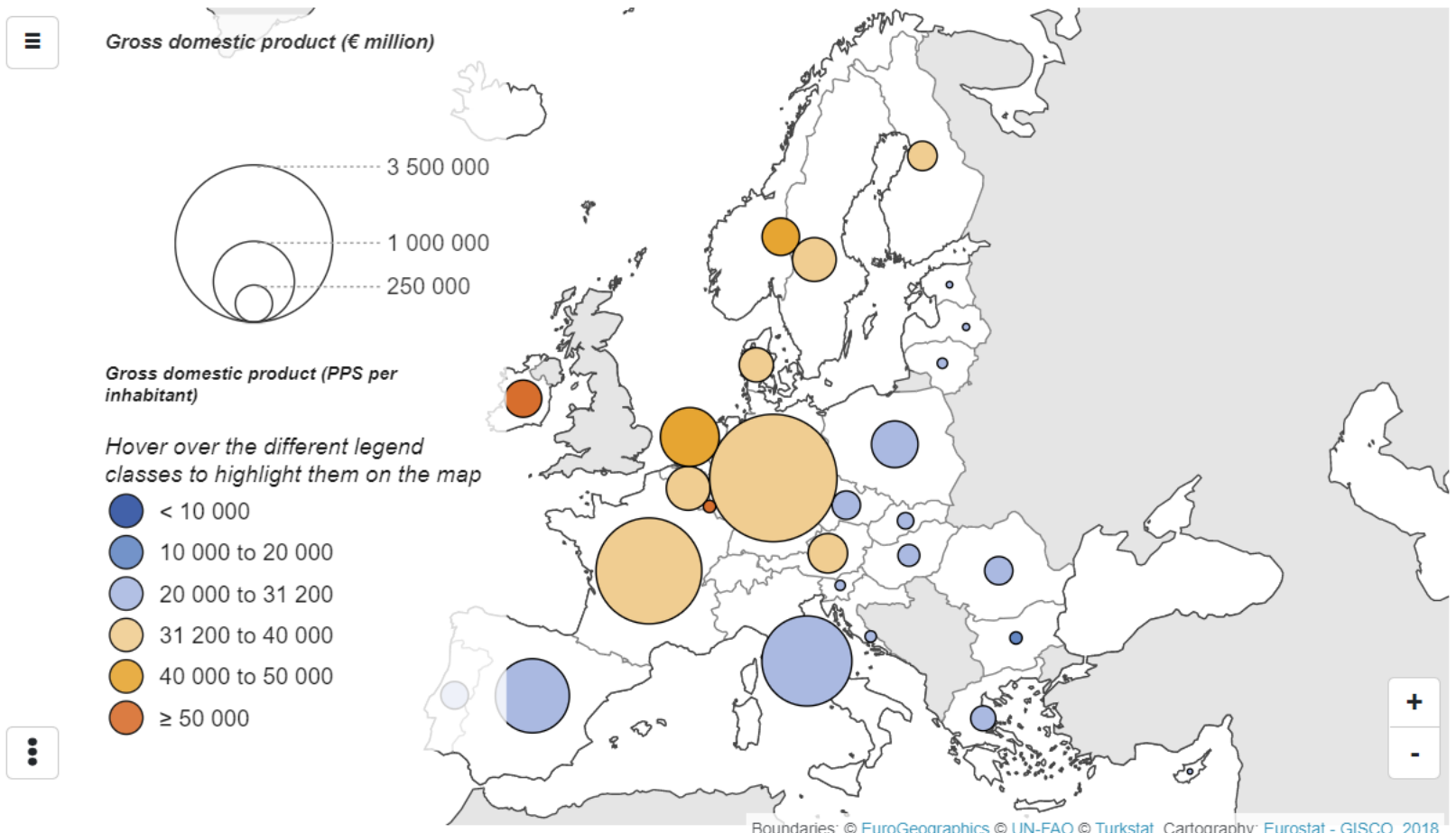
SCROLL DOWN TO ENLARGE TOC

SCROLL UP TO ENLARGE TOC



Read more

Gross domestic product, 2019



Boundaries: © EuroGeographics © UN-FAO © Turkstat, Cartography: Eurostat - GISCO, 2018

Data for NUTS level 3 regions is for 2018.

Source: Eurostat - [access to dataset](#)

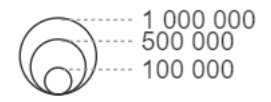


>> Read more

Gross domestic product, 2019



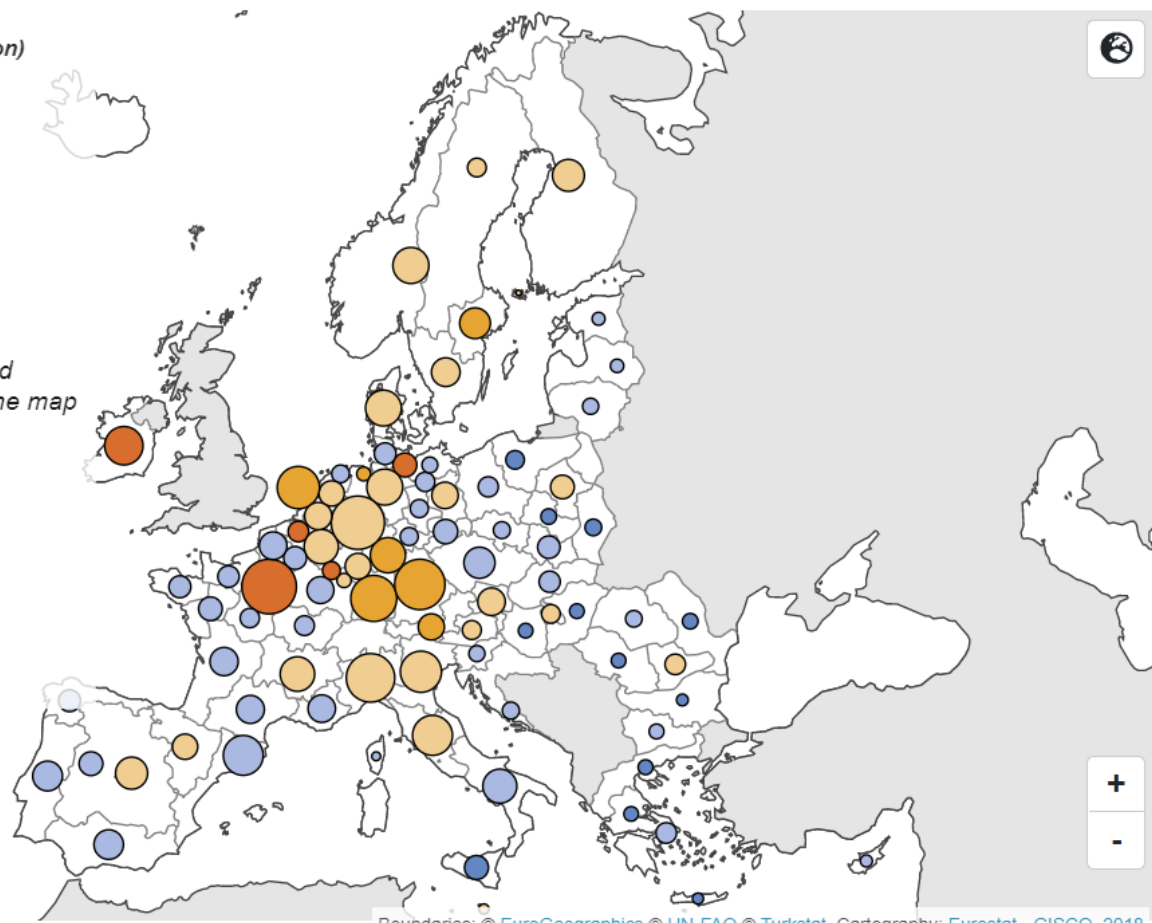
Gross domestic product (€ million)



Gross domestic product (PPS per inhabitant)

Hover over the different legend classes to highlight them on the map

- < 10 000
- 10 000 to 20 000
- 20 000 to 31 200
- 31 200 to 40 000
- 40 000 to 50 000
- ≥ 50 000



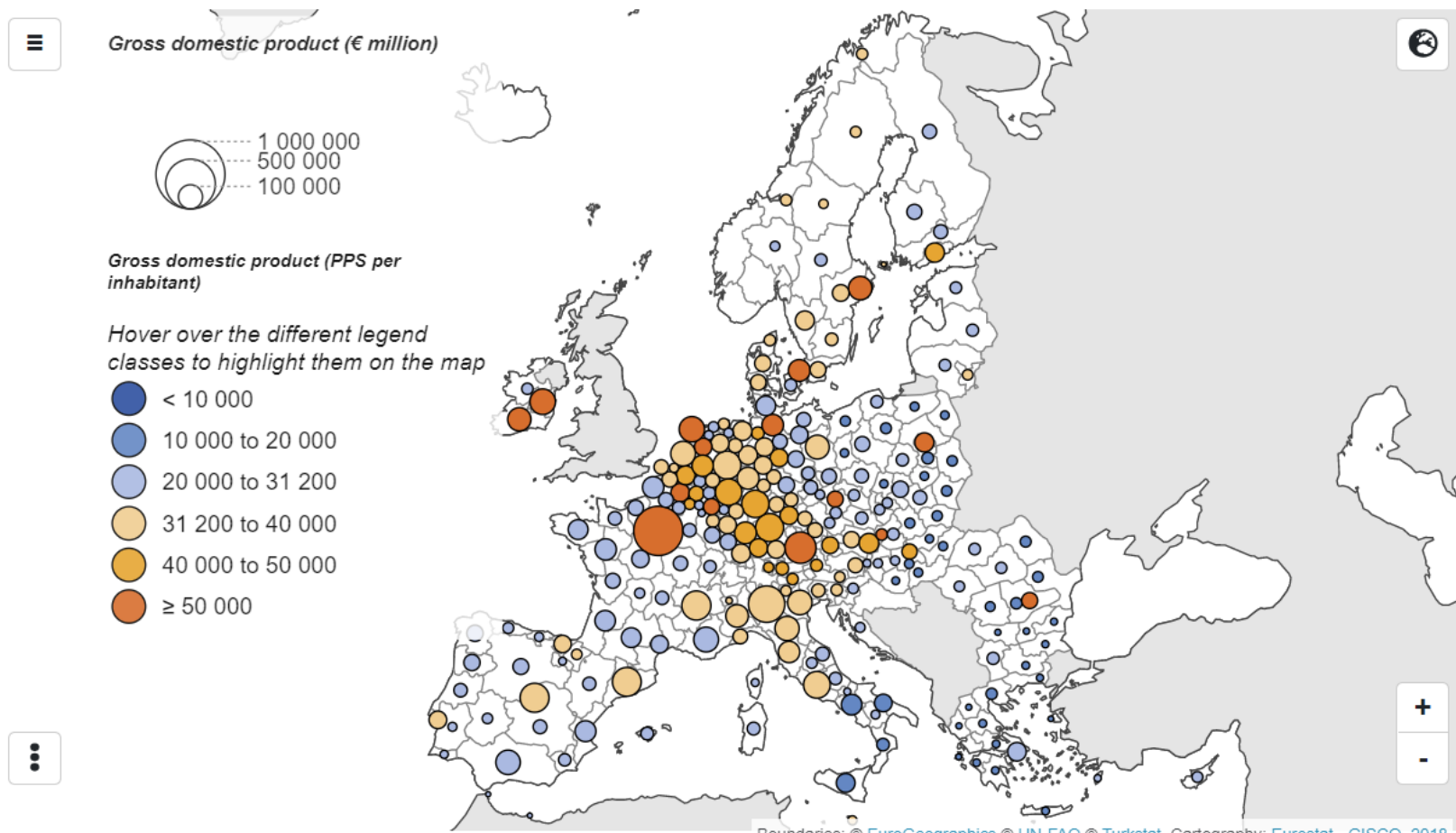
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[Read more](#)

Gross domestic product, 2019



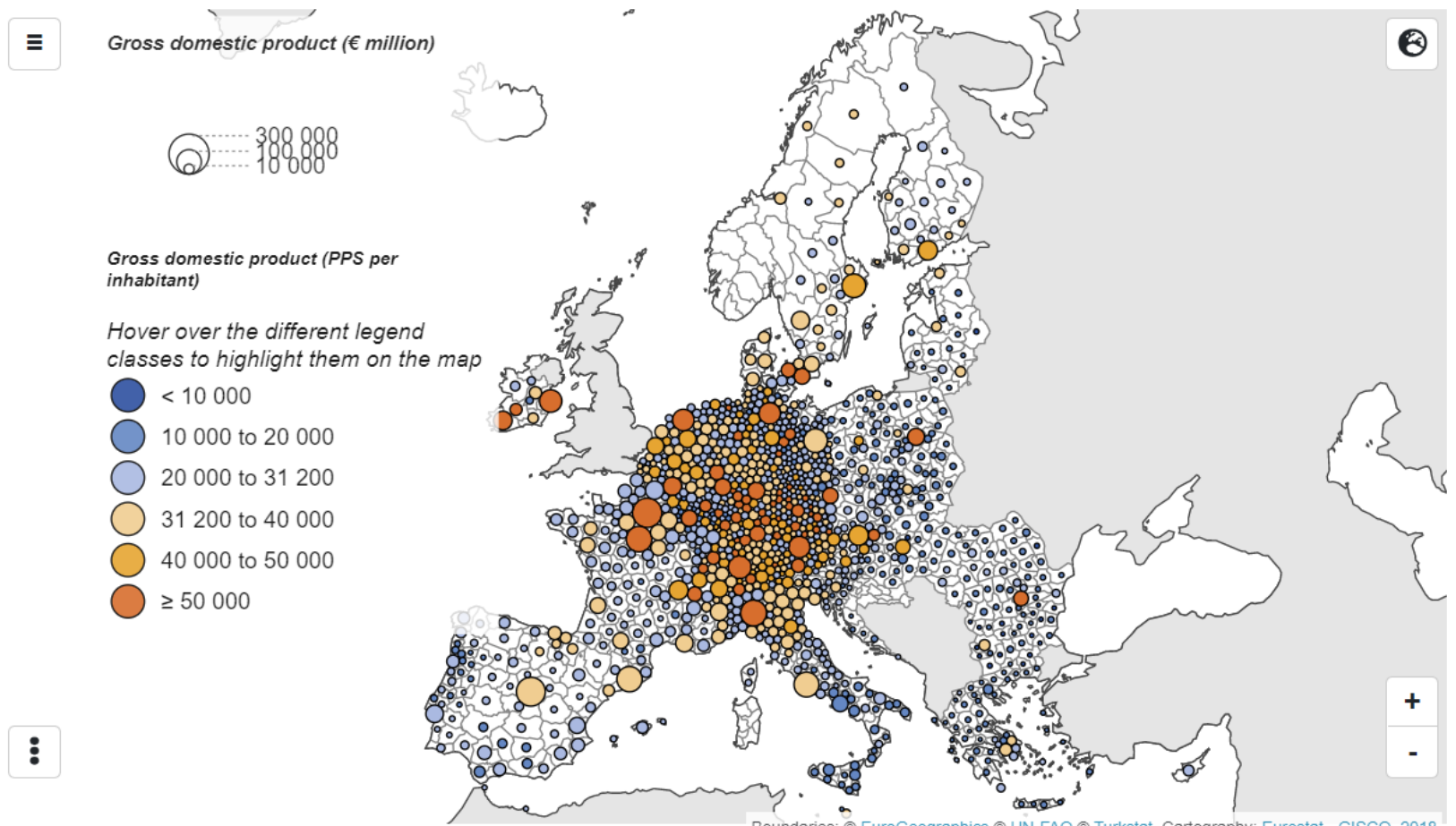
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Source: Eurostat - [access to dataset](#)

[Read more](#)

Gross domestic product, 2019



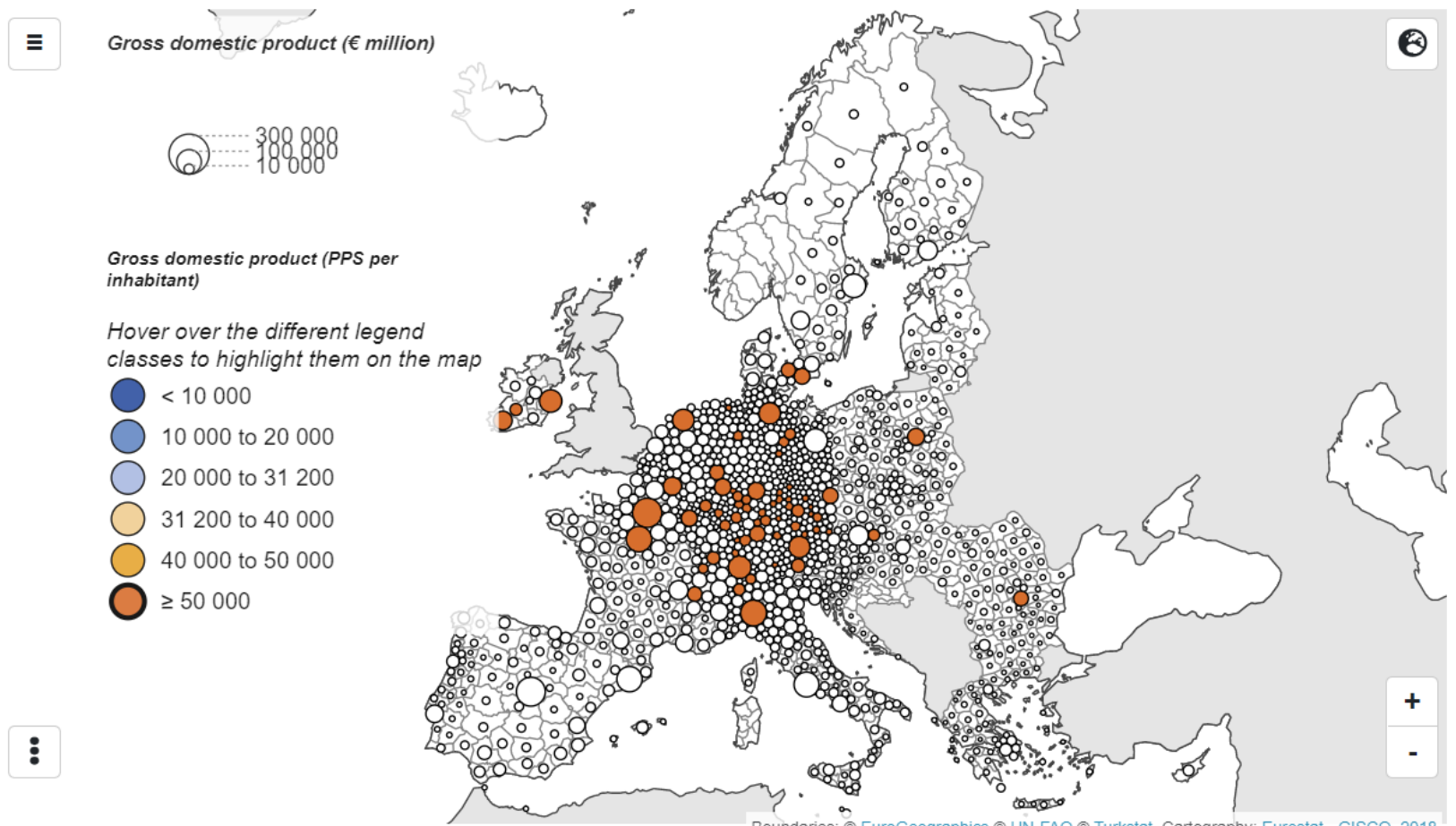
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>> Read more

Gross domestic product, 2019



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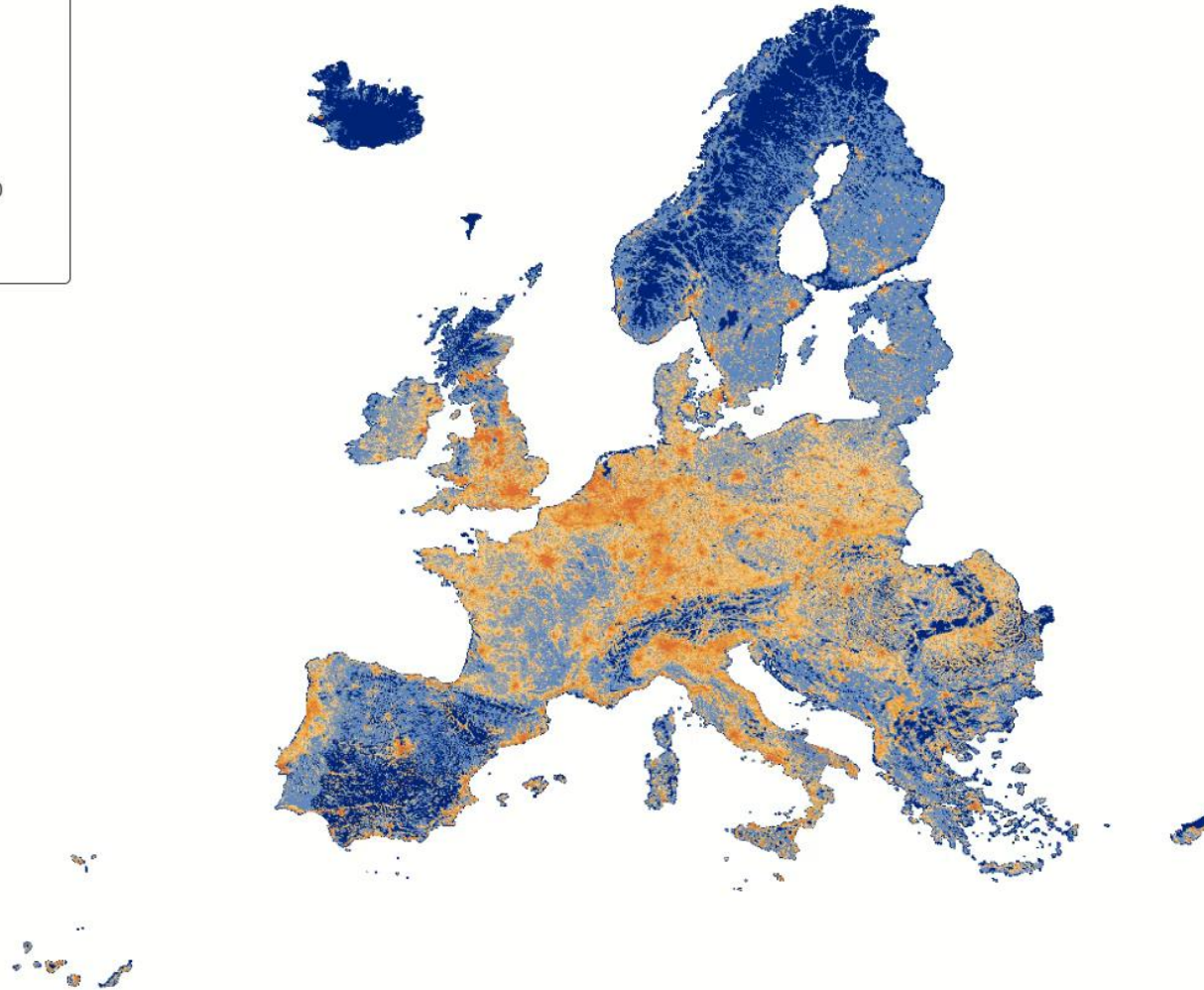
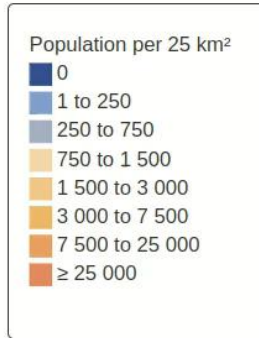
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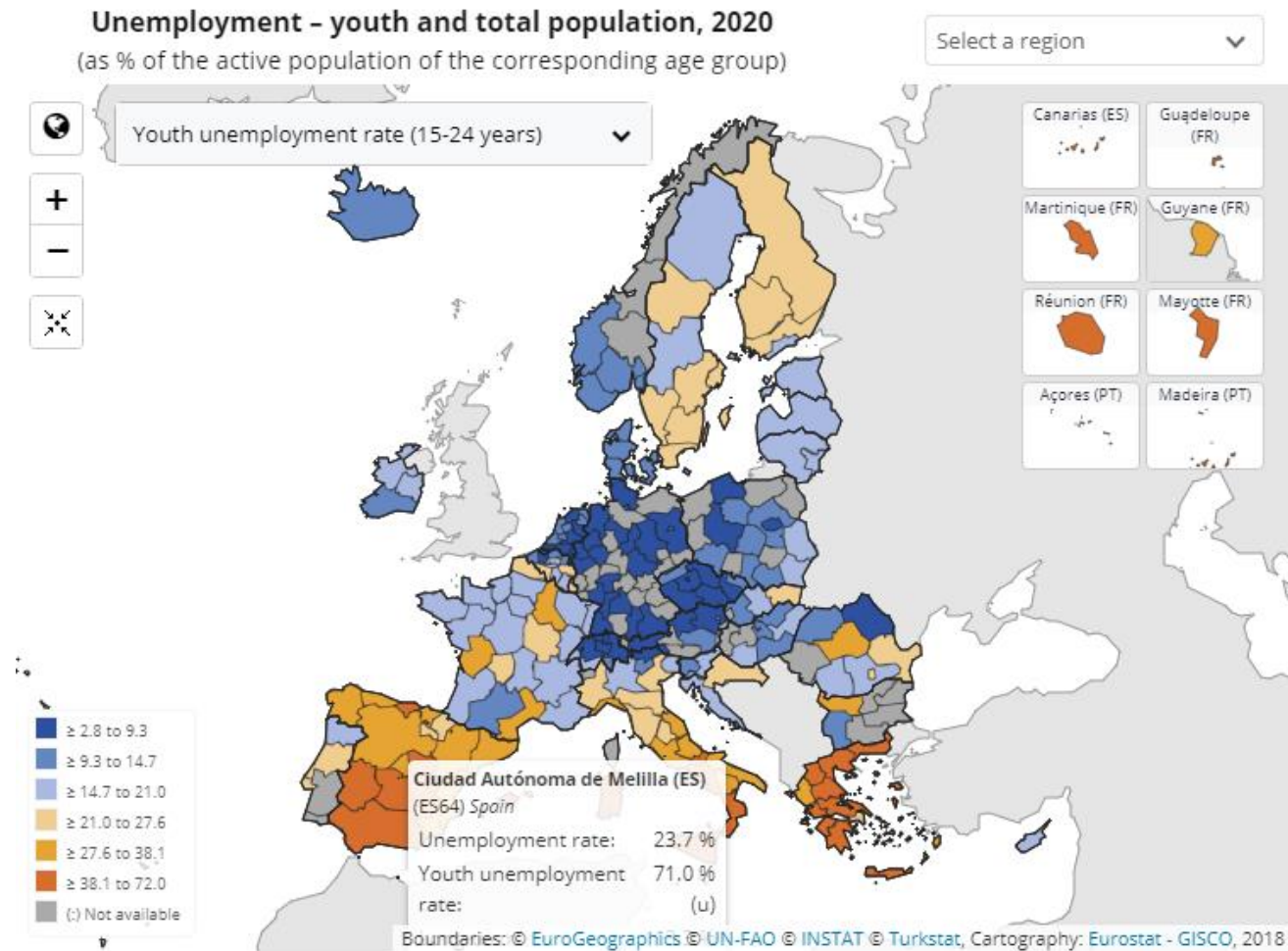


Attract attention

Population density



Unemployment rate





“Combine the
“bird’s eye”
statistical
perspective ...

... with the “worm’s
eye” view from
personal
experience”

by Tim Harford

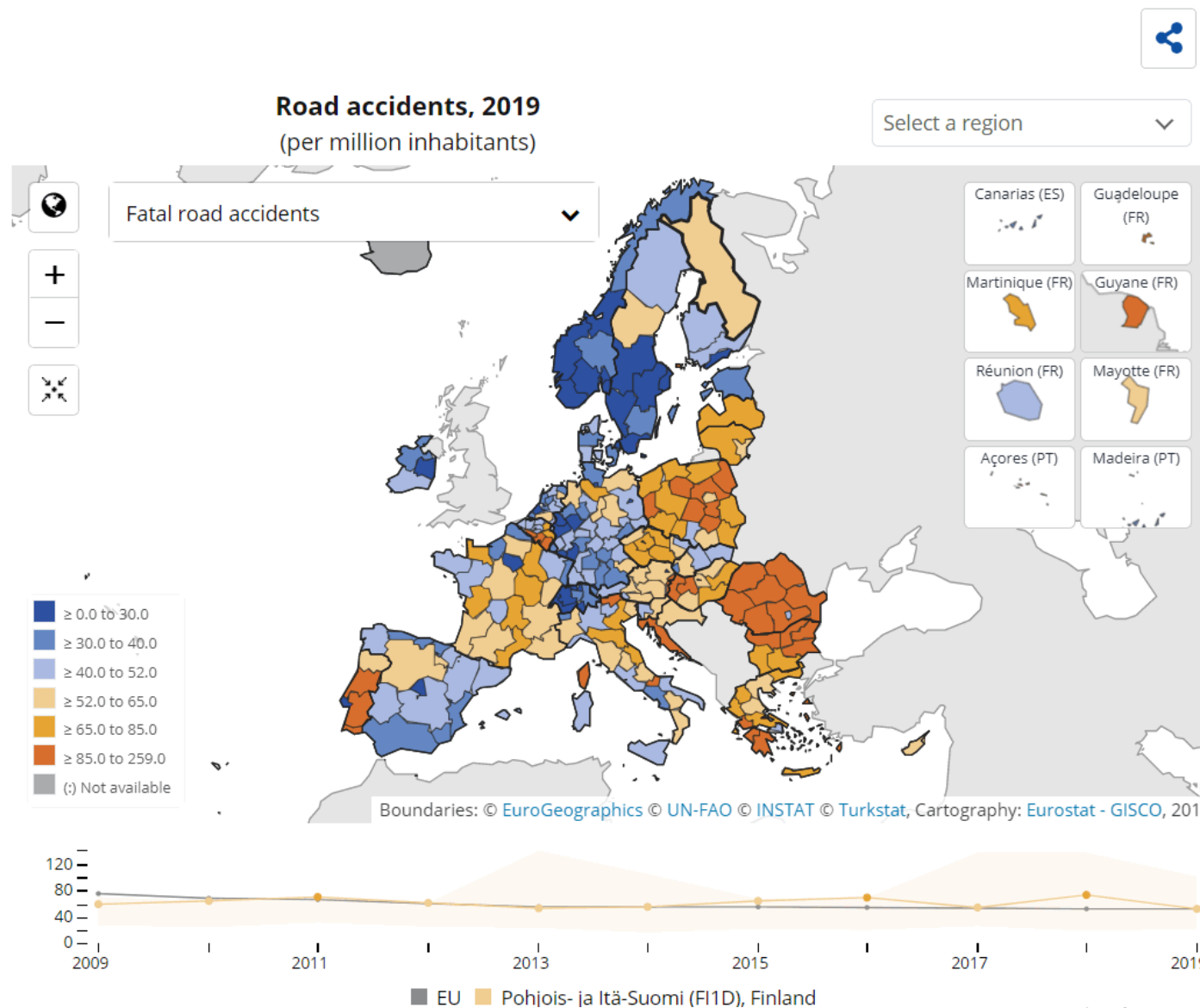


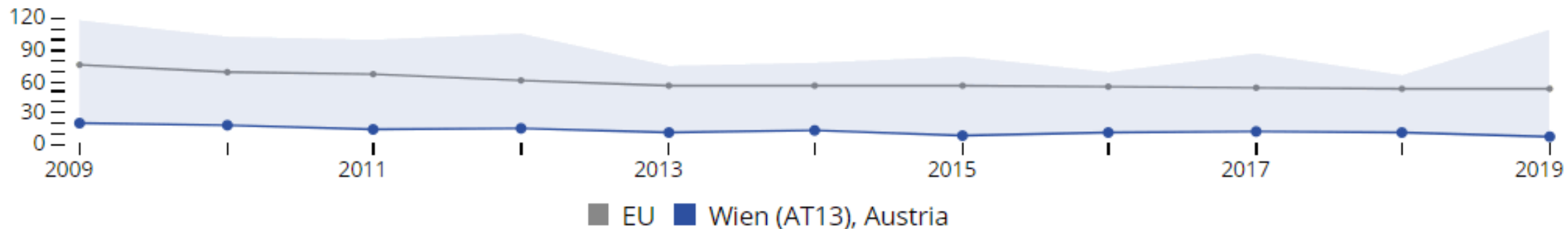
Road safety

During the last decade, the incidence of road fatalities fell in over 90 % of EU regions

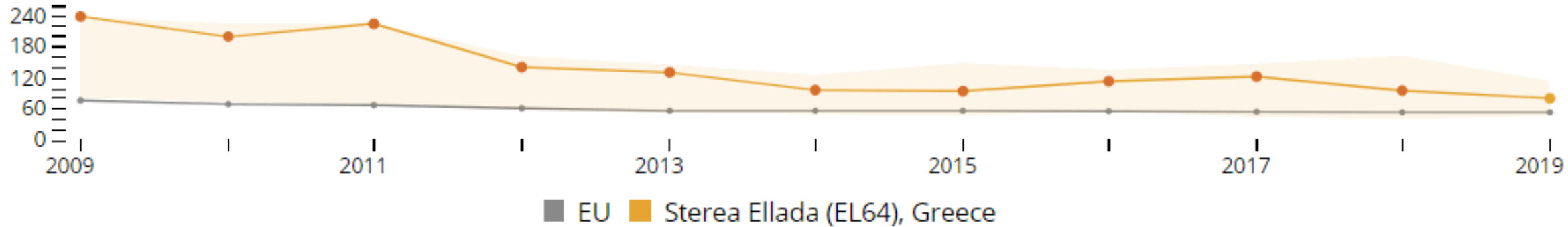
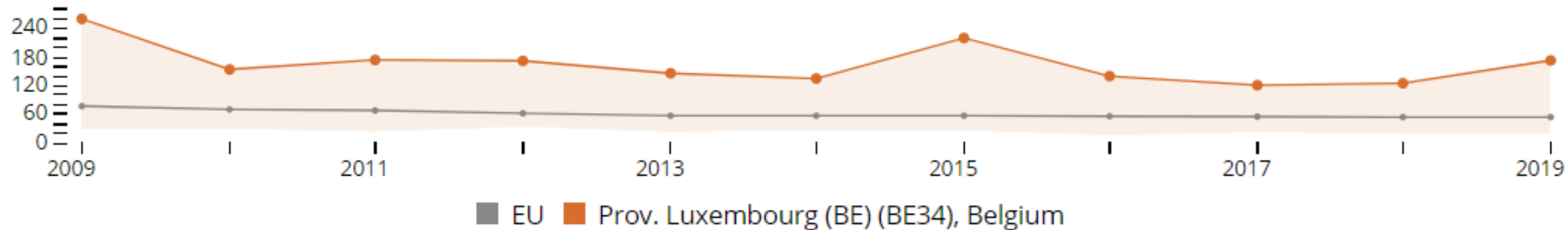
The EU's roads are among the safest in the world and have generally become safer over time. That said, road safety remains a major societal issue: in 2019, there were an estimated 23 051 road fatalities in the EU; this latest figure includes 2018 data for Spain. Have a look at the map to see how your region compares in terms of both road fatalities and road injuries.

There were, on average, 52 road fatalities per million inhabitants across the EU in 2019. At a regional level, the highest incidence rates were recorded in [Prov. Luxembourg](#) in Belgium (171 road fatalities per million inhabitants), [Região Autónoma da Madeira](#) (165) and [Alentejo](#) (156) in Portugal, and [Mazowiecki regionalny](#) (133) in Poland.





Austria's lowest value: 19.0 per million inhabitants, highest value: 118.0 per million inhabitants



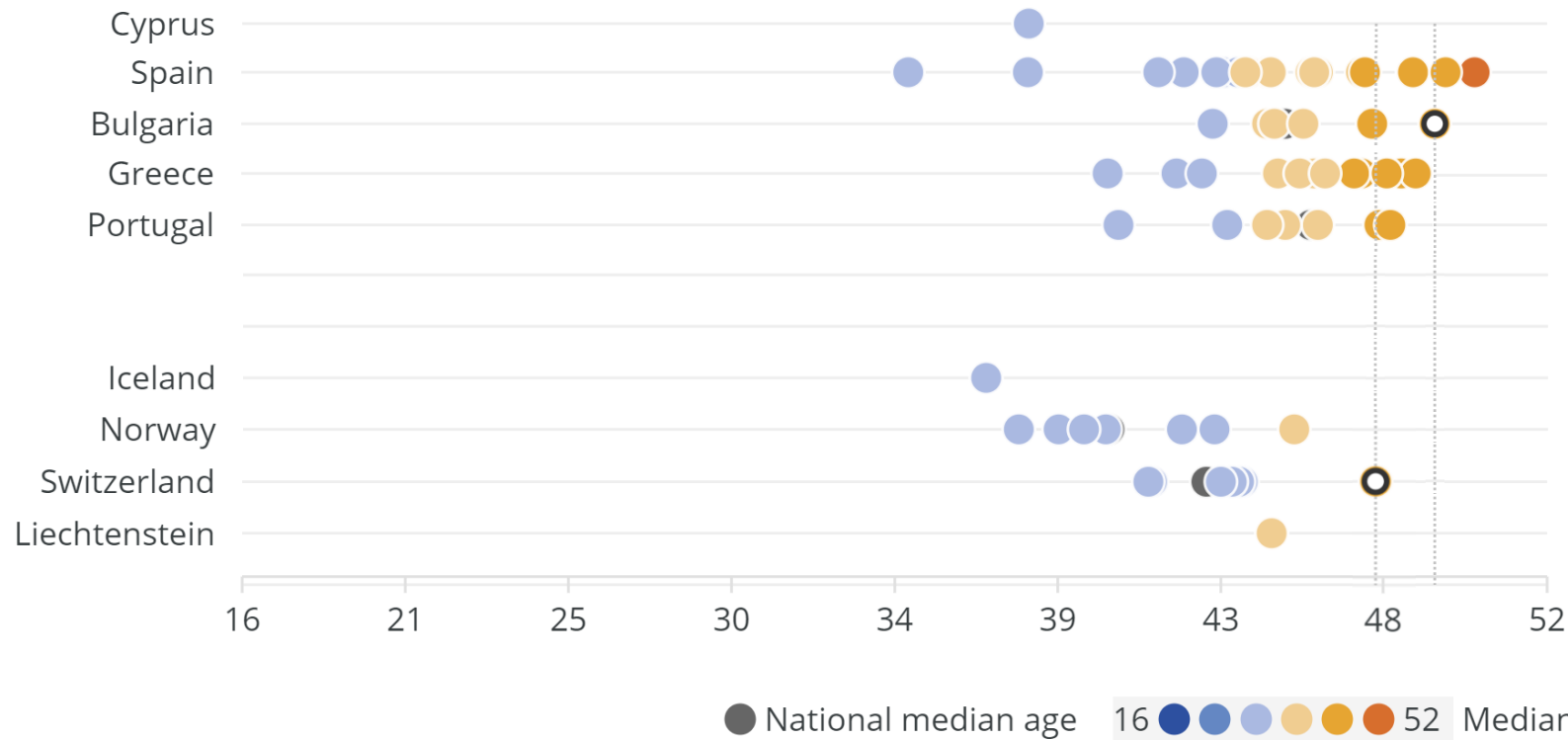


Be curious, keep
an open mind

Demographic change – a regional perspective

Median age of population, 2020
(years)

Severozapaden (BG31) ▼



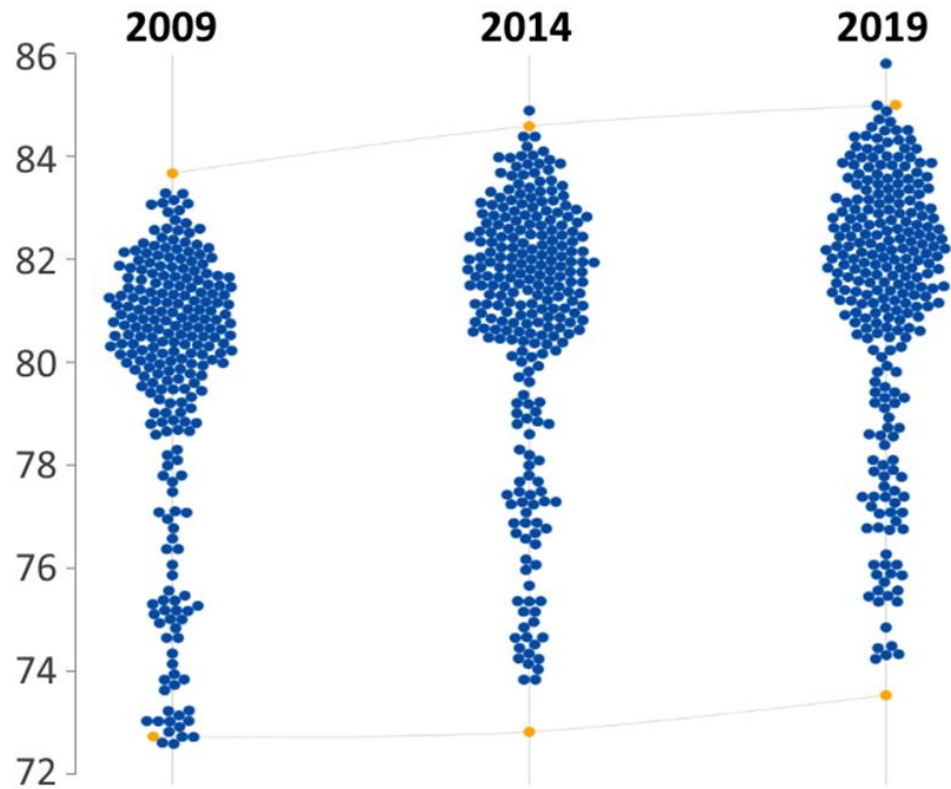
Severozapaden (BG31) Bulgaria
Median age of population: 48.9 years

Ticino (CH07) Switzerland
Median age of population: 47.3 years



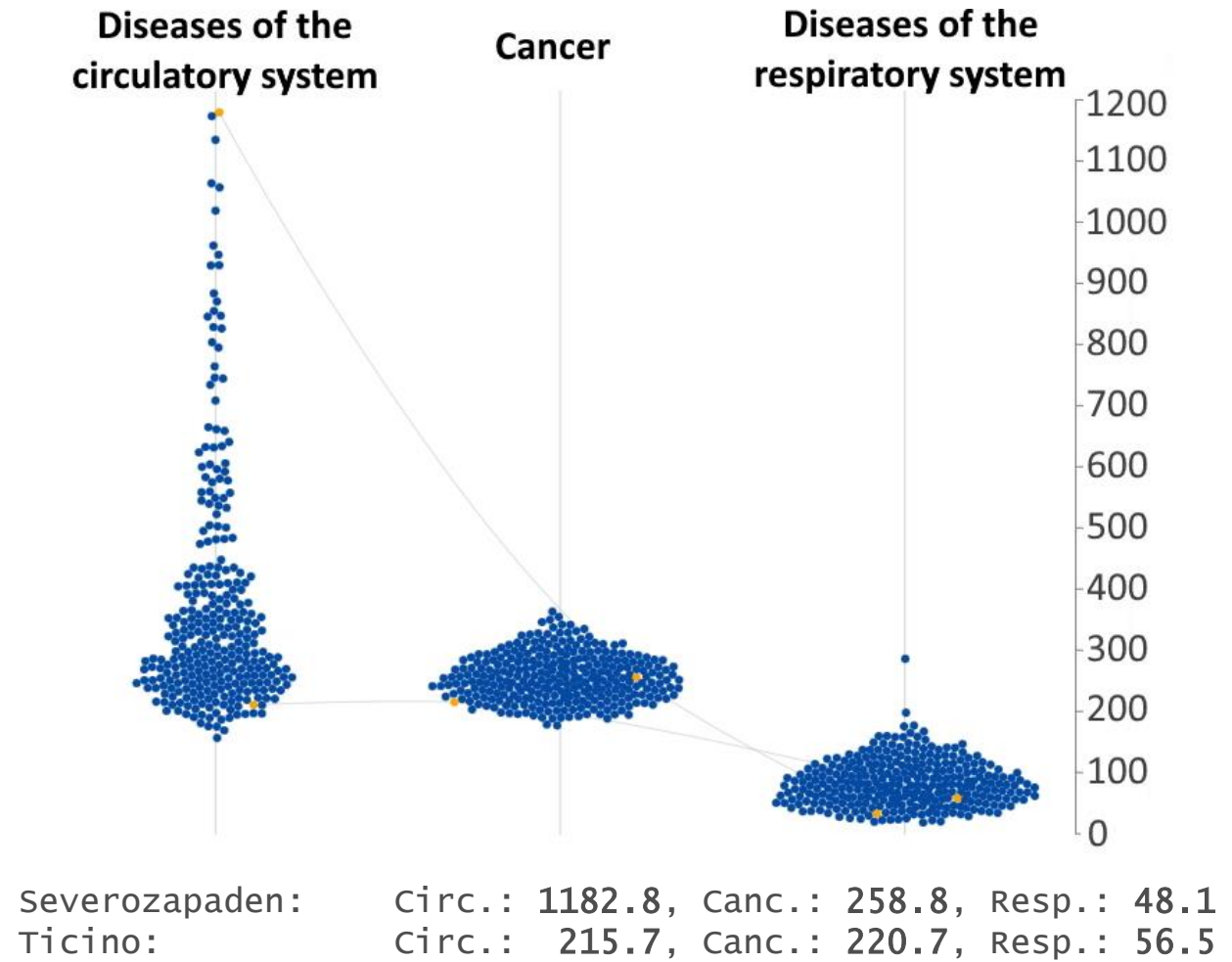
Life expectancy

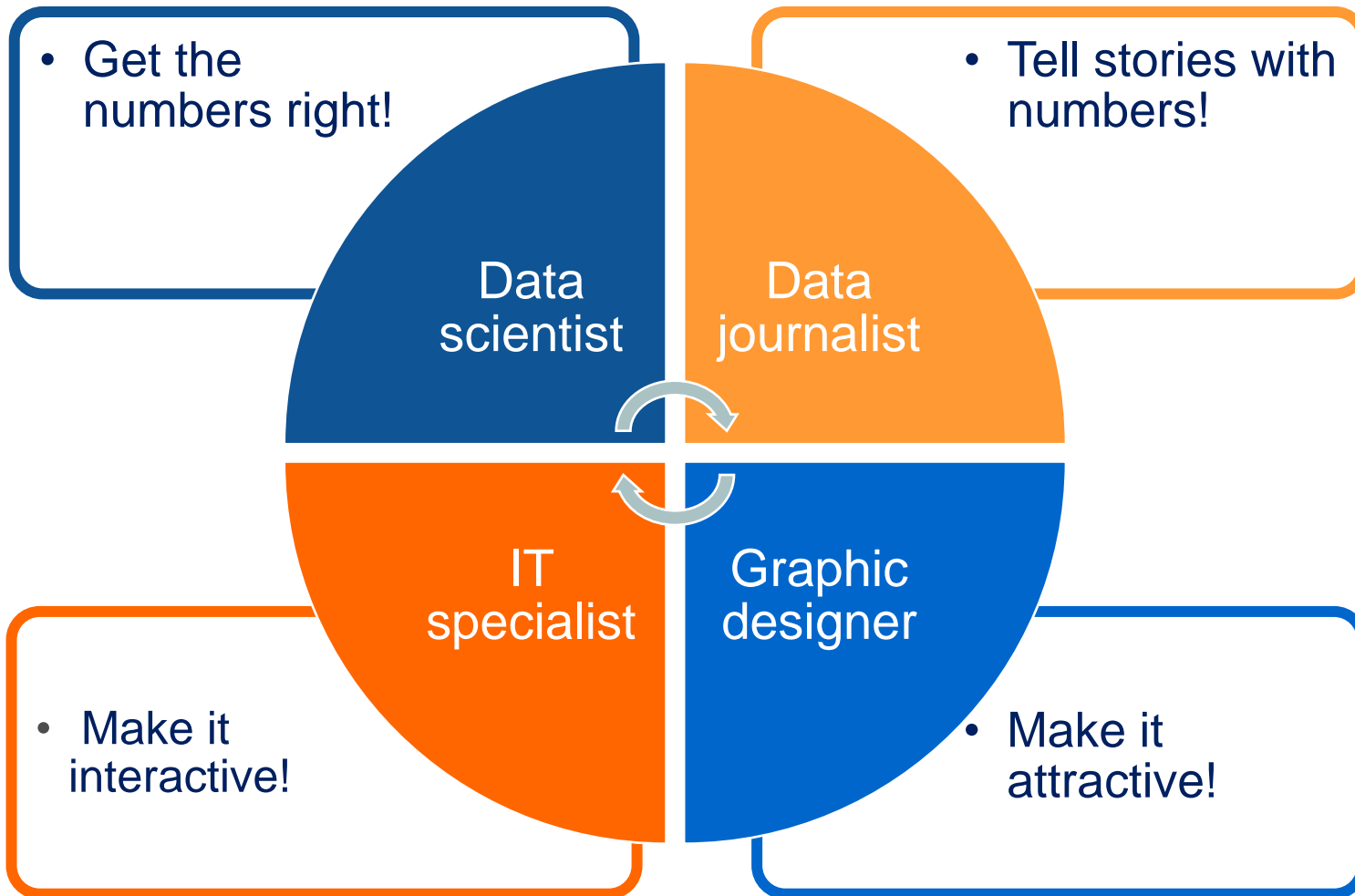
(years)



Main causes of death

(per 100.000 inhabitants, 2016)





The team:
Teodora Brandmüller
Kimberly Clemons
Louise Corselli-Nordblad
Joe Davies
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Bianka Fohgrub
Julien Gaffuri
Markos Giannopoulos
Alexander Hepp
Nina Jere
Maarten Lambrechts
Åsa Önnerfors
Lucie Peterkova
Andrew Redpath
Petronela Reinecke

Technical development

- Layout/interface: [Bootstrap](#) with [jQuery](#)
- Navigation: [Infinite Scroll](#) and [Scrollspy](#)
- Data visualisations: [Billboard.js](#), [ApexCharts](#) and [D3.js](#)
- Icons: [Font Awesome](#)
- Localisation library: [I10n.js](#) and Webpack as build lifecycle tool (node, npm)
- **The Eurostat GitHub** contain the code for ["map to chart" animation](#), [Dorling cartogram](#), [Bee swarm](#) and [Barcode generator](#).

What was new in the 2021 edition?

Main results of the user testing

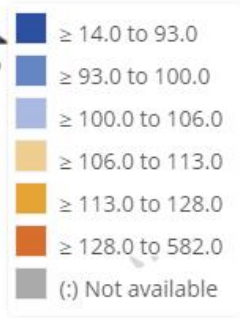
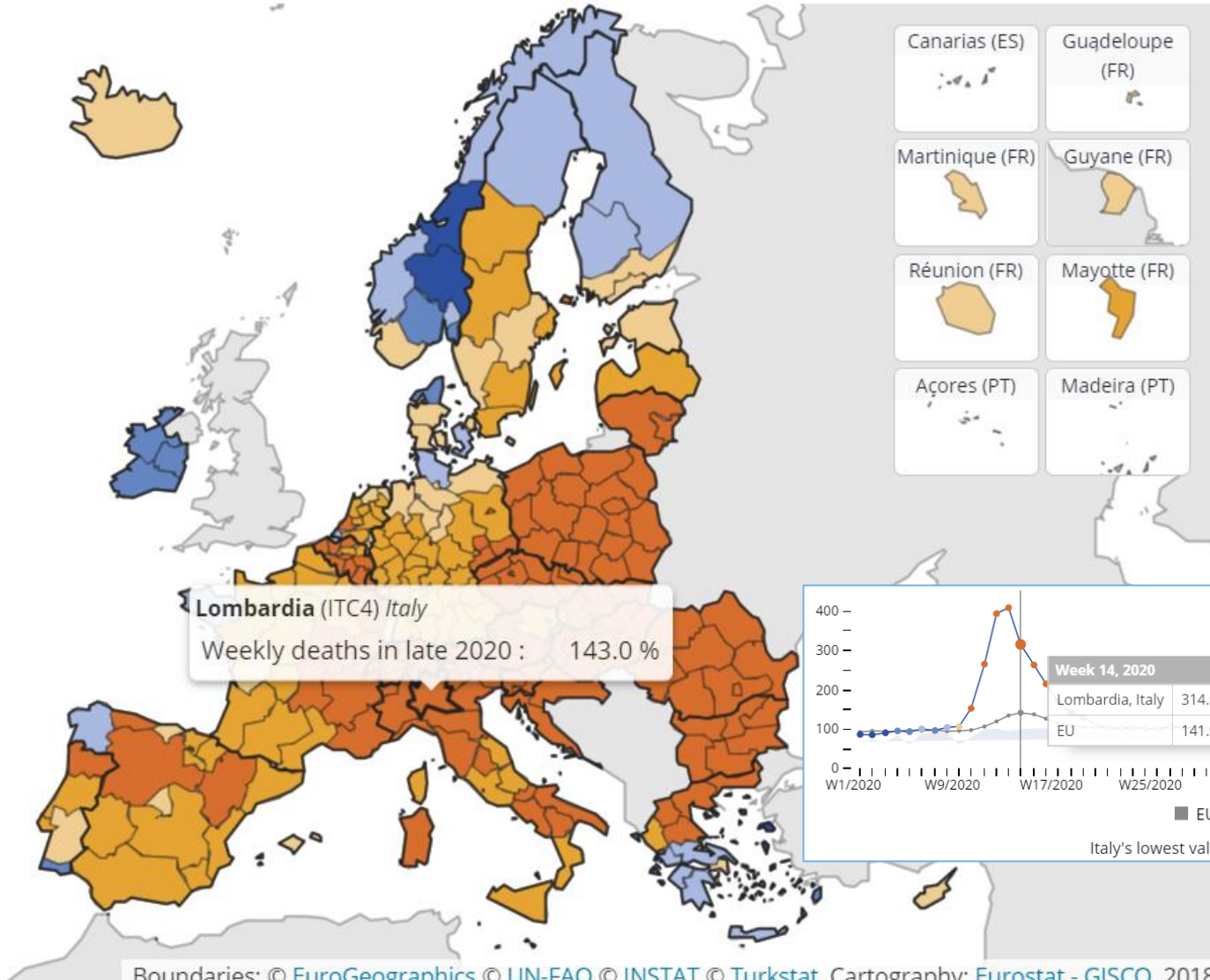
- Enhanced navigation:
 - The url was changed and shows now the chapter the user is visiting
 - Some mouse over to improve visibility was added
- Clearer embed/share functions:
 - The share function by each chapter and the embed by each visulisation
- Add search fields for the choropleth maps
 - « Select a region »

Deaths in weeks 43-52 of 2020

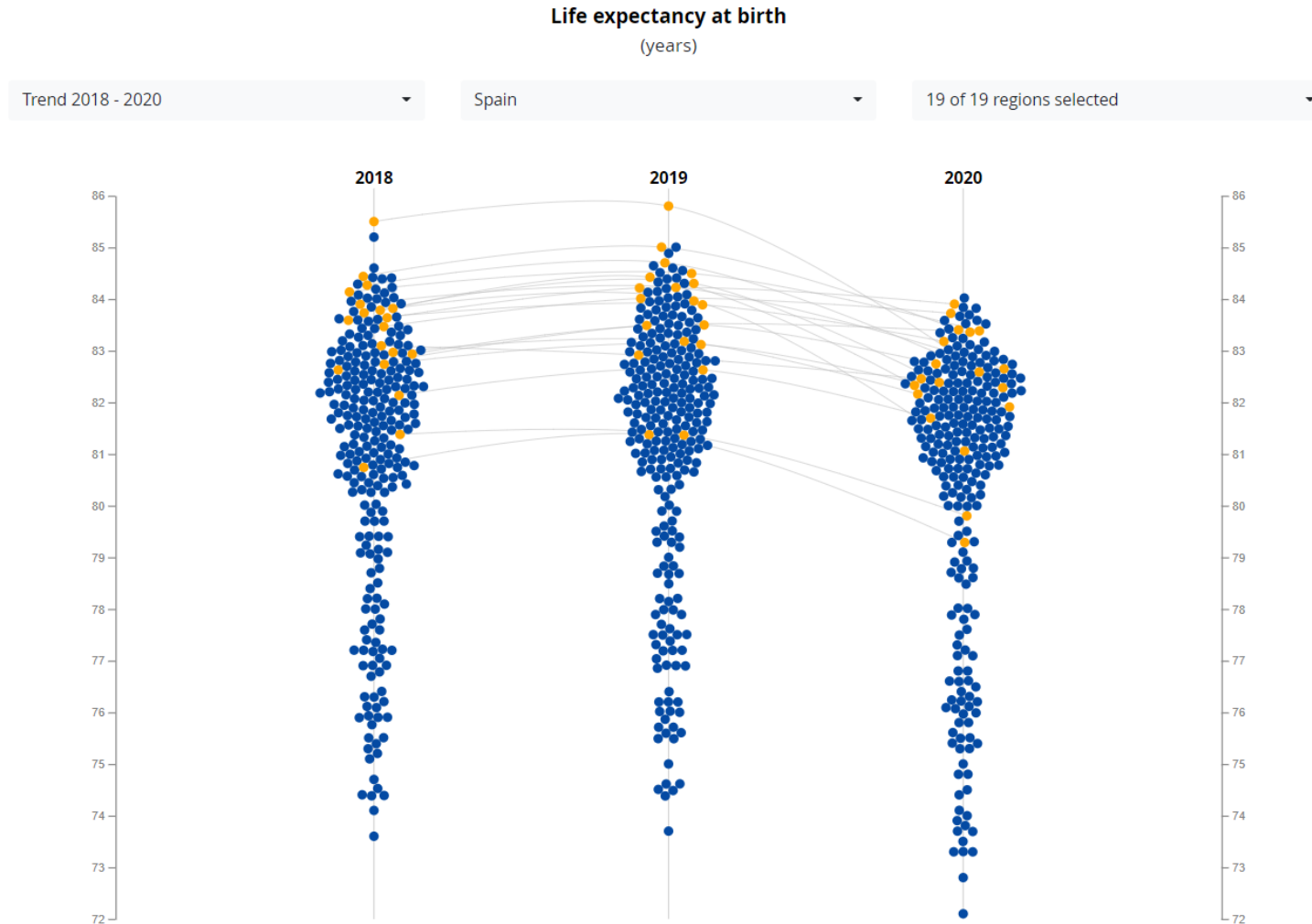
(average of 2016-2019 = 100)

Select a region

COVID-19 pandemic – new indicators



Sneak preview of 2022 edition



Life expectancy

Lessons learned

Lessons learned: Editorial dilemmas

- Point of frustration in April 2020 due to Covid-19 lockdown
- Choice of indicators – sometimes you have more data than can be shown
- Editing of text – so much to be said, but the text needs to remain short and clear

Clear writing award in 2021



„I’m proud to present the third award for external communications to a maybe less expected winner. Statisticians can often be criticised for presenting dry and technical subject, but I am glad to announce that this is not the case for DG ESTAT. Congratulations for Regions in Europe – 2021 interactive edition.”

Commissioner Hahn

Lessons learned: What went well?

- Well received – many visits

RYP 2020 PDF
version (09/2020 –
12/2021):
43.754 visits

RYP 2021 PDF
version (09/2021 –
12/2021):
20.000 visits

Regions in Europe -
interactive version
(2020 and 2021):
467.730 visits

- Multi-disciplinary team (a combination of developers, communication experts, designers and statisticians)

Find out more?

- [Eurostat regional yearbook - 2021 edition](#), also available as a set of [Statistics Explained articles](#), containing the underlying data
- [Regions in Europe - 2021 interactive edition](#)
- [Regions and cities](#), overview page on the Eurostat website
- Eurostat [Statistical atlas](#)
- Eurostat [Regions and cities illustrated](#)
- Eurostat application “[My Region](#)” (web and mobile app)
- Latest COVID-19 developments: [COVID-19: Statistics serving Europe](#)
- [Eurostat's database](#)

Follow Eurostat in social media



EU_Eurostat @EU_Eurostat · Sep 11

In 2019, there were 95 million #pupils and #students enrolled across the #EU in all levels of education. What was the share in your region? Click here to find out in the Eurostat regional yearbook: europa.eu/!YNUTbW

2/16: Regional yearbook snippet
#EURegions

Education Level	Share of total educational establishments (%)	Share of total educational establishments (%)	Enrolled pupils and students (million)
Early childhood education	48.5%	53.3%	15.6
Primary education	43.6%	51.4%	24.5
Secondary and post-secondary non-tertiary education	48.9%	51.1%	37.3
Tertiary education	52.7%	46.3%	17.8

4 retweets, 10 likes

Eurostat October 11 at 1:00 AM

In 2020, 80% of adults (16 to 74-year-olds) in the #EU used the #internet daily during the three months prior to the survey. The highest shares of adults making daily use of the internet were recorded in:

- Helsinki-Uusimaa (96%)
- Hovedstaden & Stockholm (both 95%) ... See more

Daily internet users, 2020
(% of population aged 16-74 years, by NUTS 2 regions)

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992 likes, 125 Comments, 182 Shares

Like Comment Share

Which EU regions had the highest number of nights spent in tourist accommodation?

(million nights, 2019 data)

96.1	1	Spain	Canarias
86.2	2	Croatia	Jadranska Hrvatska
84.7	3	France	Ile-de-France

ec.europa.eu/eurostat

601 likes, 2 DAYS AGO

Add a comment... Post

Spread the word and try it out for yourself!



<https://ec.europa.eu/eurostat/cache/digpub/regions/>

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Thank you very much!

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data.europa.eu The official portal
for European data

