The European Data Flow Visualisation Tool – How to Use it

Analysing, mapping, quantifying, and monitoring intra-EU and extra-EU data flows in the area of cloud computing is fundamental to support decision-making, industrial choices and investment decisions. It is also key to assess the competitiveness of the European digital economy based on the analysis of current and future patterns of data flows while monitoring the movement of data against the free flow of non-personal data principle across the EU economy.

To provide economic intelligent in data flows in the area of cloud computing, the Commission created a **Data Flow Visualisation Tool.**

The tool allows to:

1. **Map and estimate volume of main data flows across the EU 27 Member States (i.e. intra-EU data flows) and with Iceland, Norway, Switzerland and the United Kingdom (i.e. extra-EU data flows);**
2. **Forecast data flows up to 2030;**
3. **Analyse volume of data flows per sector and company size.**

The tool is hosted on the EU's Digital Strategy page entitled "The European Data Flow Monitoring" and allows to choose between maps which visualise the flows from and to selected countries and a country overview with charts (see Fig. 1)

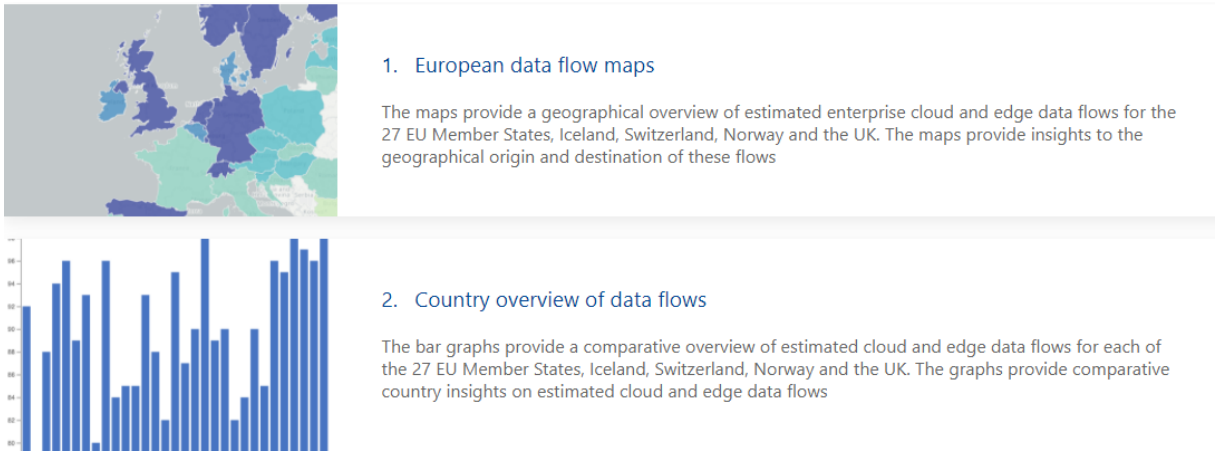


Fig. 1

How to use the tool?

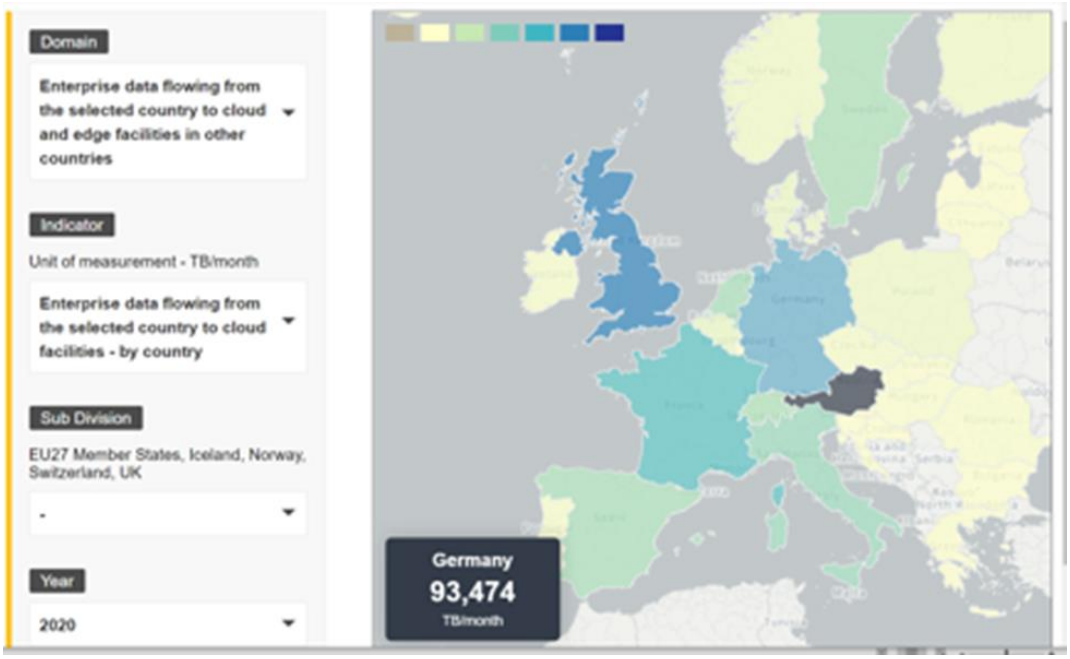
1. European Data Flow Maps

Using the tool **to visualise the volume of data flows across Europe**

Examples:

Which amount of enterprise data was flowing in 2020 from Germany to other countries in the EU and Iceland, Switzerland, UK, Norway?

- **Select domain/indicator/year** (sub-division does not apply in this example)
- Hoover on Germany on the map to see that **in 2020 93.474 TB of enterprise data were transferred from Germany to other countries in Europe** *(see screenshot below)*



Which is the forecast for 2025?

- **Change year to 2025**
- Hoover on Germany on the map to see that, based on data collected from previous years, **in 2025, 424,732 TB of enterprise data are likely to be transferred from Germany to other countries in Europe**

Selected indicators for the above screenshots and further options:

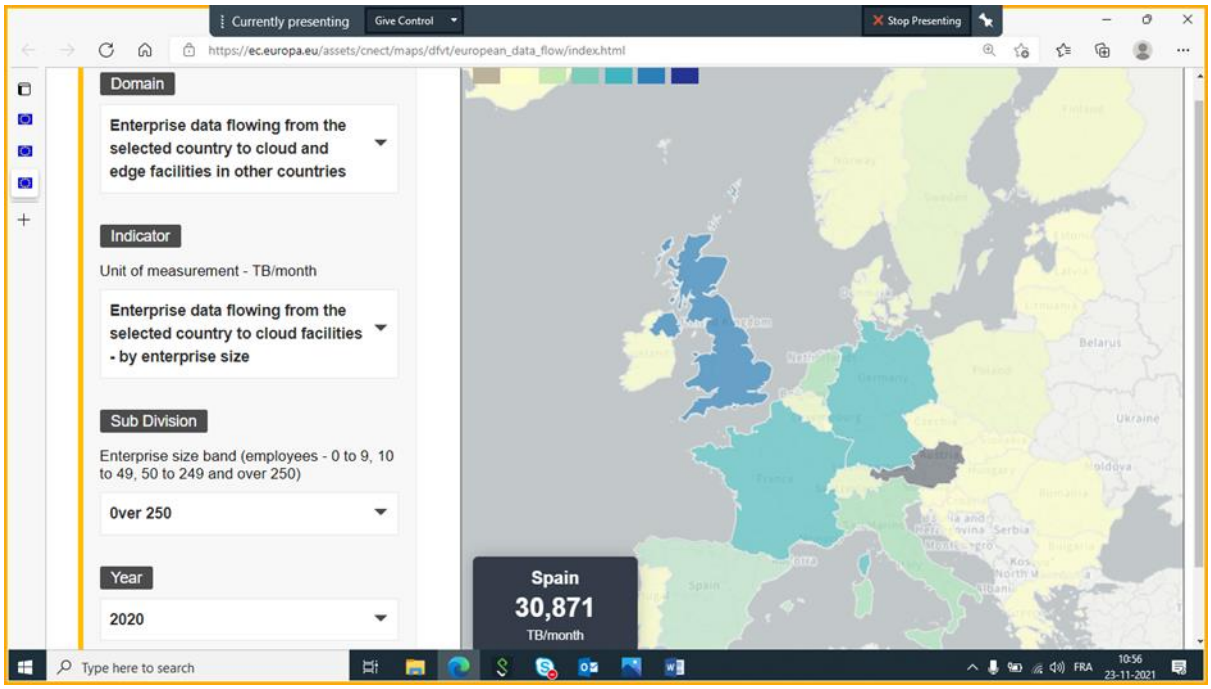
Domain	**"Enterprise data flowing from the selected country to cloud facilities"**	*Other domain options are (roll-out menu):* Enterprise data flowing to cloud and edge facilities in the selected country from other countries Enterprises buying cloud services used over the internet Workforce employed in enterprises buying cloud services used over the internet
Indicator	**"Enterprise data flowing from the selected country to cloud facilities"**	*Other indicator options are (roll-out menu):* Enterprise data flowing from the selected country to cloud facilities – by sector Enterprise data flowing from the selected country to cloud facilities – by enterprise size Enterprise data flowing from the selected country to cloud facilities – by services utilised
Sub-division	n/a	n/a in this particular setting
Year	**2020**	*Options:* 2016 – 2030 (*) (*) some years might show no data because data might not be available for certain years.

Using the tool **to analyse volume of data flows per sector and per company size** :

Examples:

What is the data volume of enterprise data (enterprises > 250) flowing in 2020 from Spain to cloud and edge facilities in other countries in Europe?

- **Select domain/indicator/subdivision/year**
- Hoover on Spain on the map to see that **in 2020 30,871 TB of enterprise data (enterprises > 250) were flowing each month from Spain to other countries in Europe** *(see screenshot below)*

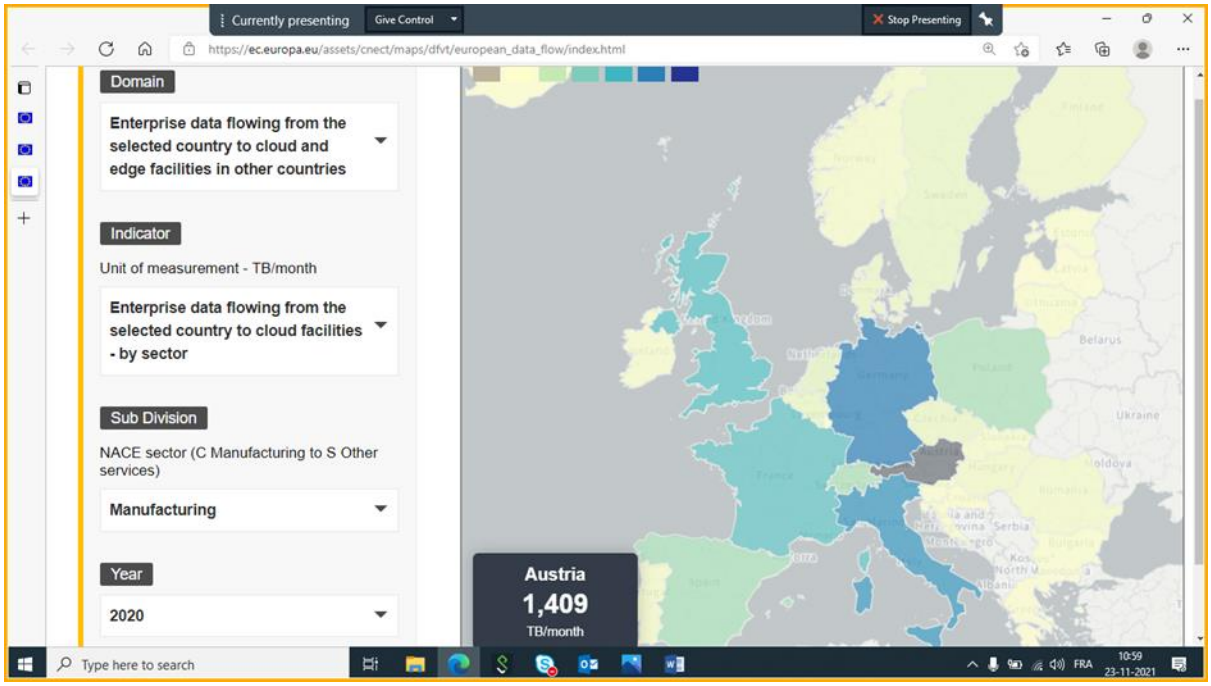


Options for sub-division (enterprise size):

0-9
10-49
50-249
Over 250

In 2020, what was the data volume of enterprise data in the manufacturing sector flowing from Austria to cloud and edge facilities in other countries in Europe?

- **Select domain/indicator/subdivision/year**
- Hoover on Spain on the map to see that **in 2020 30,871 TB of enterprise data from the manufacturing sector were flowing each month from Spain to other countries in Europe** *(see screenshot below)*



Options for sub-division (economic sector):

Manufacturing
Electricity and Gas
Water Supply Sewerage
Construction
Wholesale and Retail Trade
Transportation and Storage
Accommodation and Food Service Activities
Information and Communication
Financial and Insurance Activities
Real Estate Activities
Professional, Scientific and Technical Activities
Administrative and Support Service Activities
Public admin and defence
Education
Human health and social
Arts and entertainment
Other services

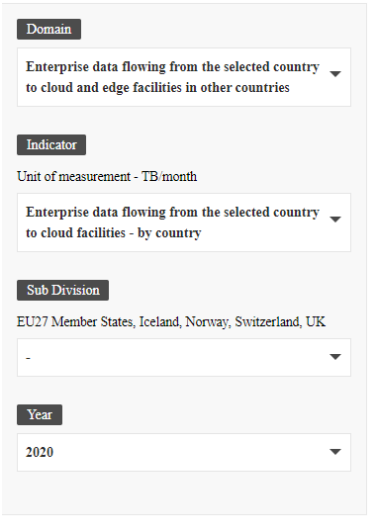
2. Country overview of data flows

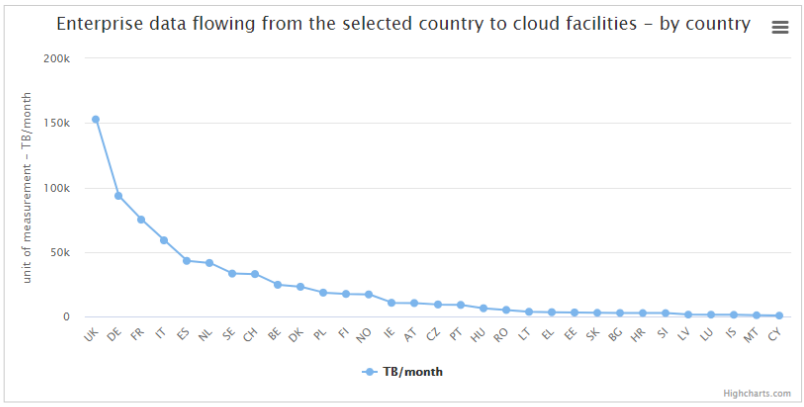
The tool offers also an integrated feature for country comparative overviews of data flows (see screenshot below) and data flow forecast up to 2030.

Domains/indicators/subdivisions/year: same as for previous examples. To be selected accordingly.

Example:

In 2020:





In 2030: