

ESIF Open Data – User guide to platform functionalities V 2018-10

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1. What is "Open Data"

Open data and content can be freely used, modified, and shared by anyone for any purpose¹

2. How to access the platform

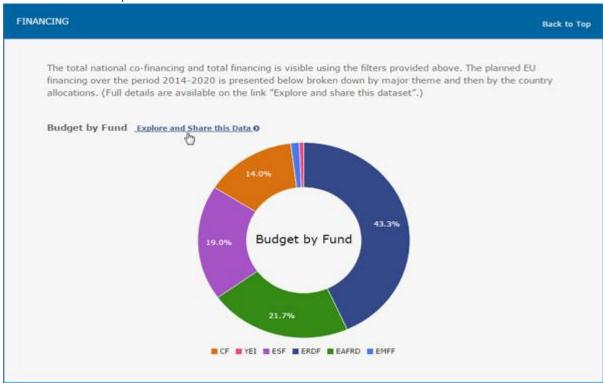
Direct link: https://cohesiondata.ec.europa.eu/

Also accessible from Inforegio under "Information sources" – "ESIF Open Data"

3. How to access the data

The data behind the ESIF visualisations can be accessed and downloaded from the platform in two ways:

1. Use the "Explore and Share this Data" function to access it.

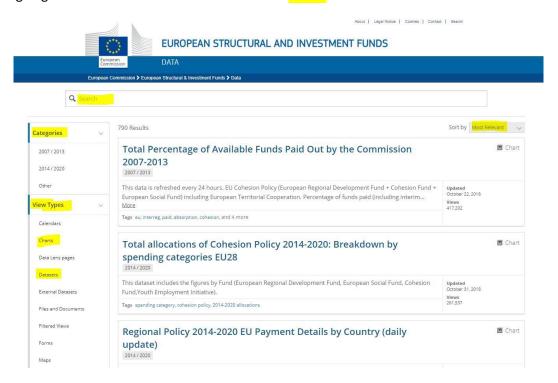


2. If you know which dataset you want to manipulate or are searching for data or charts, there is a link to the "Catalogue" in the footer => https://cohesiondata.ec.europa.eu/browse



¹ http://opendefinition.org/

The catalogue gives access to a search tool with various filters.



4. What is a Metadata page?

Each dataset has a metadata page (with its own URL). It gives you access to important information about the dataset as follows:

- Data description;
- Date of Last update;
- Featured content, i.e. graphs created by the data owner;
- Key details about the dataset: Usage, owner, contact, licence, etc.;
- Structure of the data;
- Related content (i.e. graphs created by other users).

Before you start reusing the data it is essential to understand what the data relates to and how it is structured in order to make useful interpretations and charts. The METADATA is there for that purpose. For instance the metadata highlights important characteristics as follows:

- In all cases for 2014-2020 the values are expressed cumulatively. Some other datasets have annualised values;
- The data may be presented in annual snapshots. In those cases you can compare annual timeseries but never aggregated them;
- Financial values are always expressed in current prices.

5. Create a profile to fully exploit the platform functionalities

Create a profile with you own password by enrolling on this site: https://cohesiondata.ec.europa.eu/login

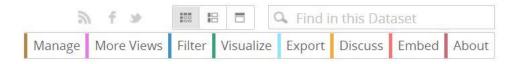
With a profile you can filter and create objects on the platform for reuse by you and other users.

6. Manipulating the data

Once you "view the data" from the metadata page the platform offers several ways to interact with the data.

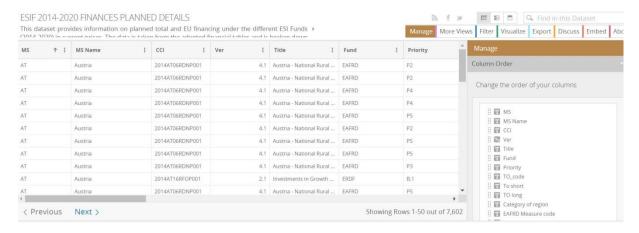
You can for instance filter a dataset to keep just one country, one Thematic Objective, one fund; you can create charts or other types of visualisations to illustrate a report or to embed on a webpage.

All the functionalities are accessible in the toolbar on the top right.



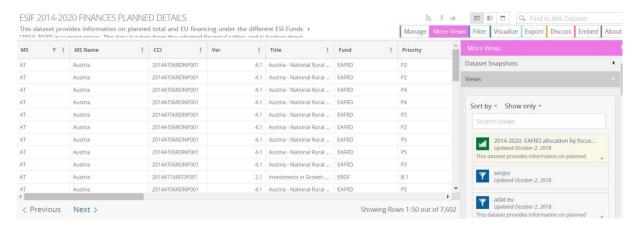
a. Manage

This function allows you to reorder the columns with a view to exporting.



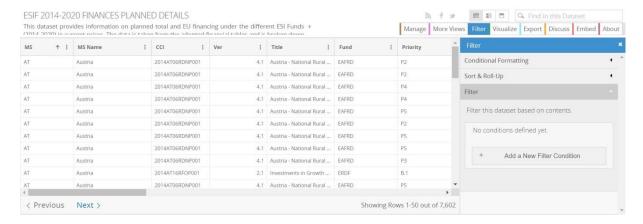
b. More views

All the filtered views or visualisation created from a dataset will be listed here.



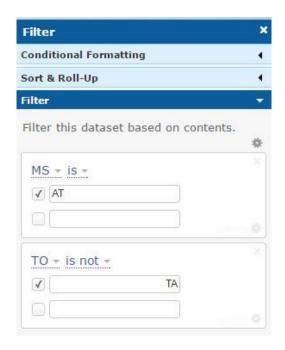
c. Filter

This tool works like the pivot table in Excel. You must first define the filter condition.



Select "MS" (1st column) "is" and choose a country code "AT" to keep one Member State

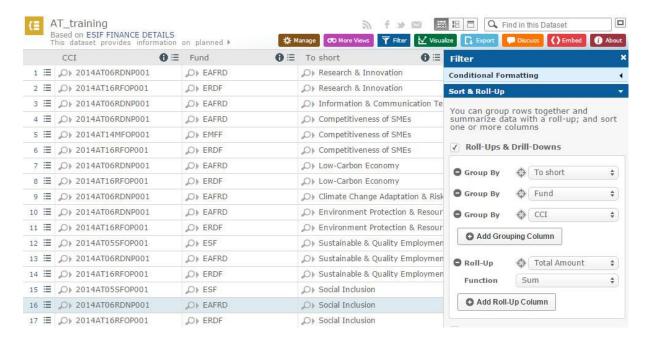
You can add as much filter conditions as you want. Let's filter out the Technical Assistance



To aggregate the data, you must use the Roll-Ups and Drill-Downs function.

To group similar data (in our example: display the amount allocated for each OP by Fund, by TO) use "Group by"

"Roll-up" allows the mathematical functions (Sum, average, Maximum...).

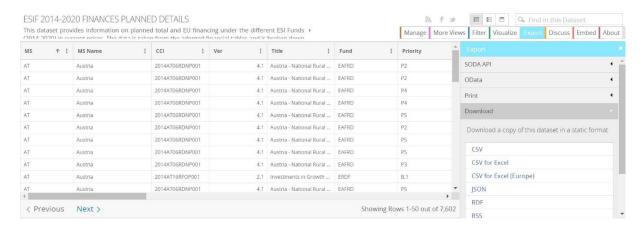


"Saving" changes the type of file. You are now working on a grouped view and not directly on the dataset anymore. The grouped view will continue to update as the parent dataset is updated.

Important: Do not save the modifications on the dataset. Use "Save as".

d. Export

The "Export" section offers the possibility to export a dataset or a filtered/ grouped view as data file of as pdf.

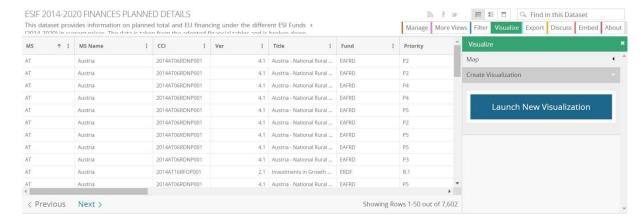


When exporting data file there are two typical challenges that users face if using MS Excel:

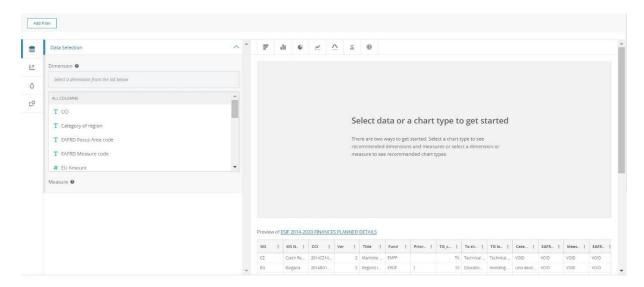
- 1. The <u>number and financial amounts with commas and decimal formatting are not accurately</u> <u>imported</u> into Excel giving false results when checked against reference values on the platform:
 - => See Annex 1 to correct set your default excel settings for numbers and financial amounts
- 2. The .csv file is **not formatted in columns**:
 - => see Annex 2 to see how to reformat the .csv format in excel columns and cells.

e. Visualize

This function allows you to create and save a chart (graph) with or without filters for other users.



Clicking "launch new visualization" leads to the chart design screen:



- Set the filters

This function allow you to set public or hidden filters, by fund, Member States, themes, etc., to focus the chart on the desired topic. Public filters allow users to change Member State, theme, etc.

- Data selection

There are several steps:

- Select the dimension to be presented in the chart i.e. Member State, Fund, Year, etc.
- Chose the chart type from the central menu. The menu suggests which chart style is most appropriate;
- Chose the measure to display;
- If needed, choose a second measure (or more) per dimension

Scale (change the scale)

This allow you to adjust the scale.

General (labelling, formatting, colours)

Label the chart, change the formatting and colours used for the different measures displayed.

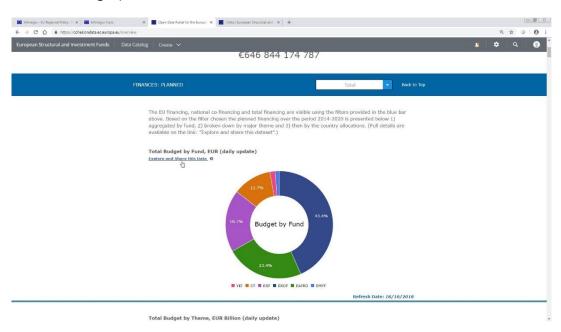
Formatting legends and flyouts

Automatically display the legend; format the flyouts to display a relevant measurement unit.

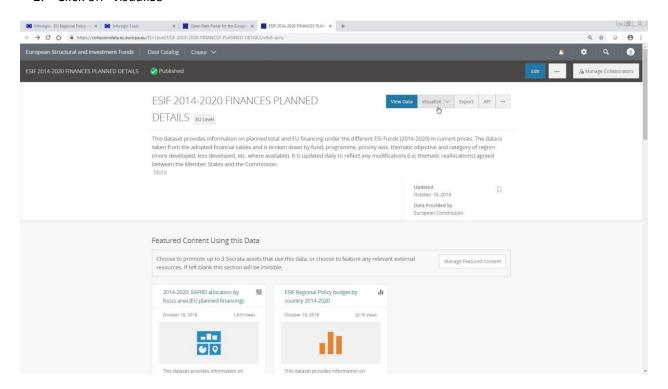
f. Example of visualisation

In this exercise, we will create a pie chart showing a breakdown by fund of the total EU contribution, using the dataset ESIF 2014-2020 finances planned details

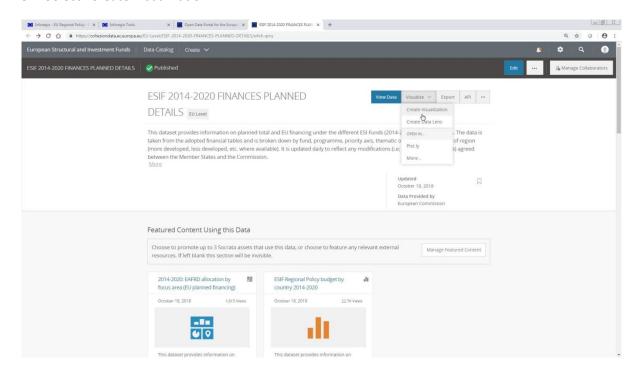
1. Access the dataset: Use the "Explore and Share this Data" function to access it (or choose a dataset from the catalogue).



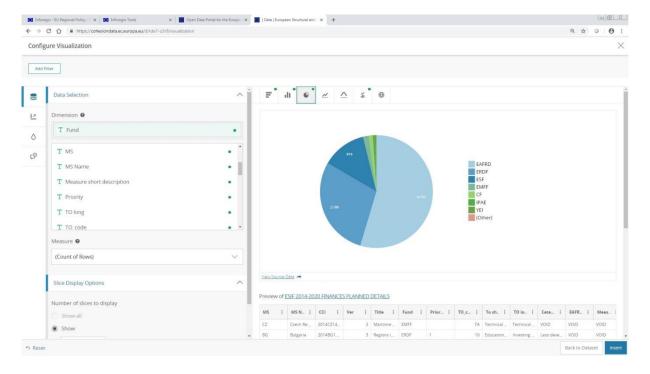
2. Click on "visualize"



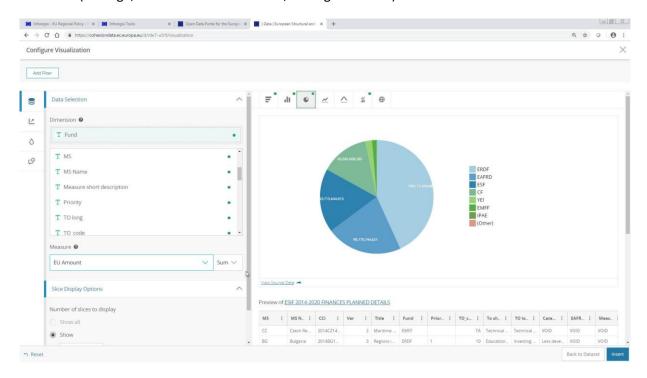
3. Select "Create Visualization"



4. Select a type of chart (here a pie chart). Then, choose the **dimension** under "**Data selection**". Here, we will do a breakdown by Fund so **Fund** is the dimension

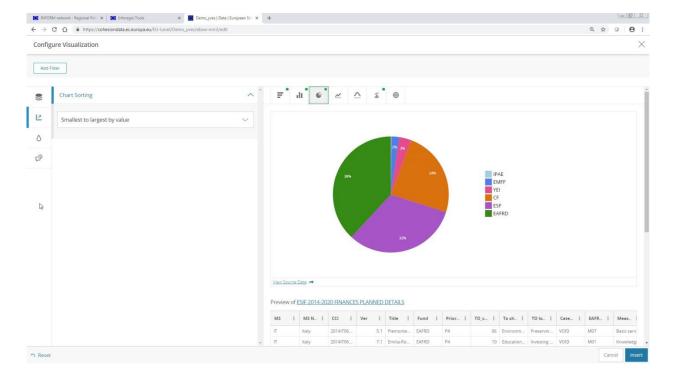


5. Select a Measure (the element you want to compare in your breakdown by Fund). Here we will compare the EU contribution for the period 2014-2020 for each ESI Fund so the measure will be EU Amount. "Sum" on the right is used to add all amounts for all OPs related to one fund. Other options exist (average, minimum and maximum, average or count).



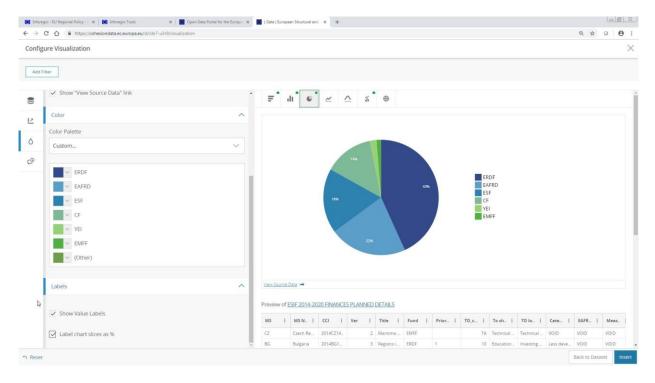
In the **Slice Display Options**, we can choose how many elements to display in the chart. Here we will exclude the last 2 elements, IPAE and (Other). Important, the selection will retain the elements from the largest to the smallest. To change this, you go in "**Axis**" and change "**Chart sorting**" to "**Smallest to largest by value**".

You can notice that the selection of funds has changed.

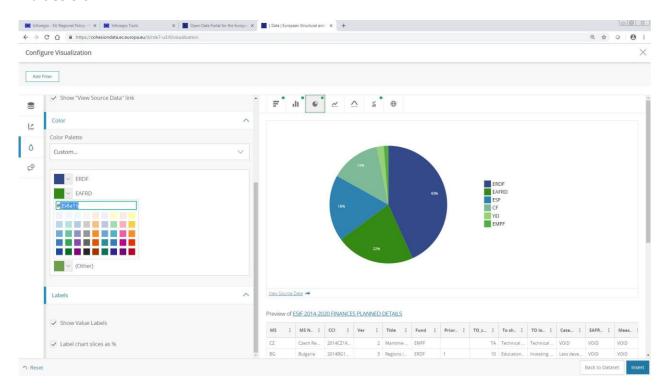


6. In "**Presentation**", you can edit the colours, display % (for pie charts only) add or remove title, description, as follows:

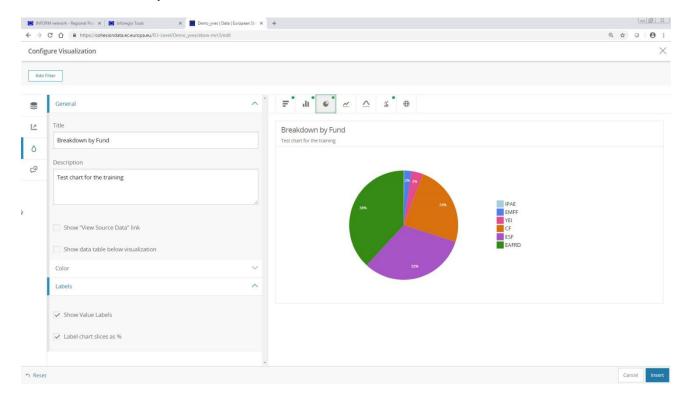
... Switch to %



... Edit Colors

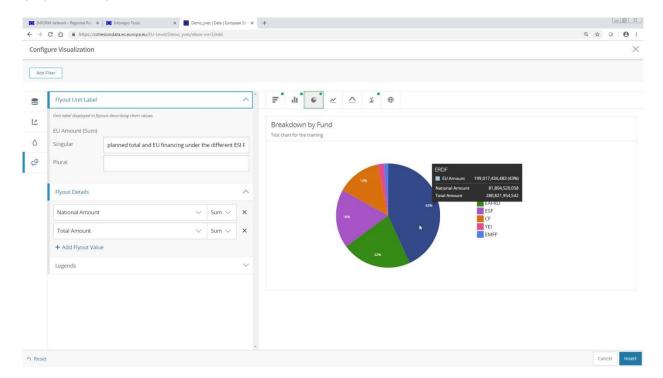


... Add Title and Description; show a link to the dataset or the dataset under the chart



7. Add Flyout information

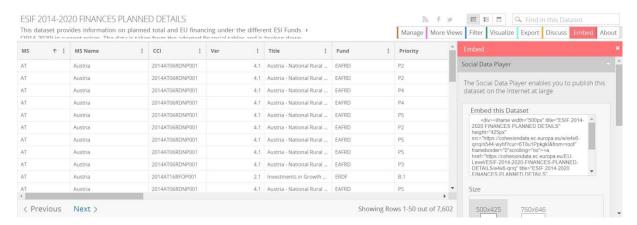
In the section "**Legends & Flyouts**", you can add, remove or edit the legend of the graph and the information displayed when your mouse cursor hovers over a slice of the chart.



g. Embed

Embedding allows the charts to be published on webpages by providing an "embed code".

Choose the size or customize it, use the "Preview" button and copy the embed code.



h. Share

You have the possibility to share any dataset, views or chart via Twitter, Facebook or email.

i. About = Metadata

It gives you access to the information about data description, owner, contact and last update.

7. Resources + Contacts

DG REGIO:

- ESIF ODP: https://cohesiondata.ec.europa.eu/
- VIDEO intro: https://youtu.be/Q6ohALHldtg
- FAQ / Q+A: http://ec.europa.eu/regional-policy/en/faq/about-open-data/
- Twitter: @RegioEvaluation => #ESIFOpenData
- E-newsletter: http://ec.europa.eu/newsroom/index.cfm?service_id=788
- **E-mail**: regio-webmaster@ec.europa.eu

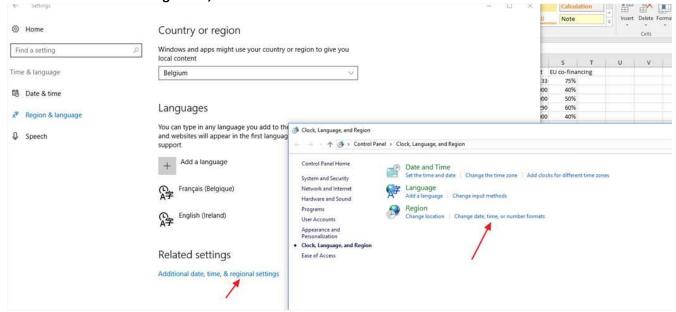
SOCRATA:

- Socrata Technical Support: support@socrata.com
- How to articles: https://support.socrata.com/hc/en-us
- Socrata Developer Platform: https://support.socrata.com/hc/en-us/categories/200172986-
 Developer-Tools
- Twitter: @socrata

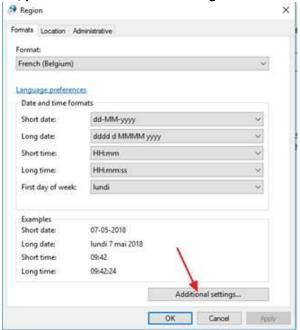
Annex 1: Setting the correct number format to open and read an exported ".CSV (for excel)" file

In WINDOWS10:

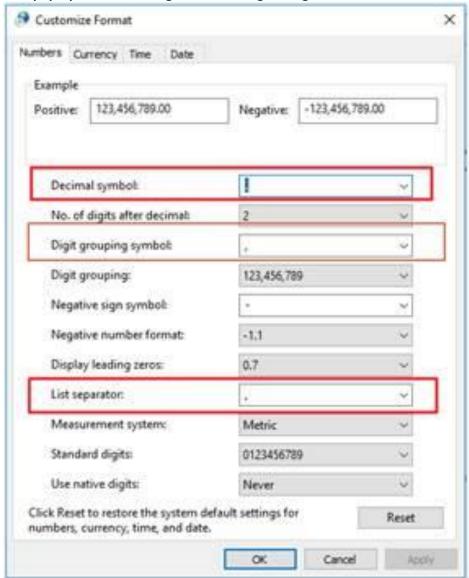
- 1. open windows settings (In Windows not in EXCEL)
- 2. then open regional settings
- 3. then select 'additional date, time & regional settings'
- 4. then select 'change date, time or number formats'



5. in the next pop-up window, press button 'additional settings'



6. In the next pop-up window, change the following settings



7. Decimal symbol : dot '.'

8. Digit grouping symbol: comma

9. List separator: comma

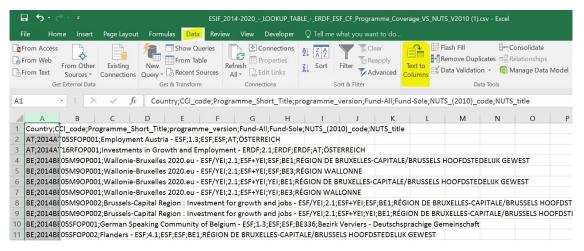
10. Apply

Annex 2: Reformatting an exported ".CSV (for excel)" file to display data in cells

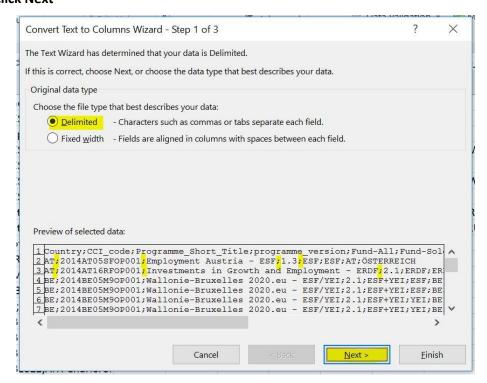
Is your date exported in "CSV for excel" format presenting strangely with data rows all grouped in the first cell of each row?

Follow these step in Excel:

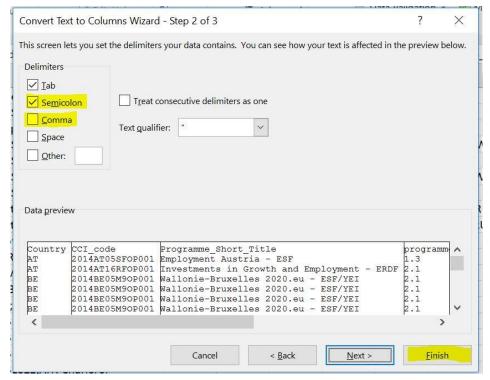
- 1. Select the Column A
- 2. In the menu select "Data" => "text to columns"



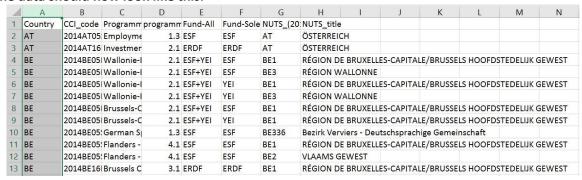
- 3. In the task window Step 1 of 3:
 - a. Choose delimited
 - b. Take note of which character is used to delimit the data elements either ";" or ","
 - c. Click Next



- 4. In the task window Step 2 of 3:
 - a. Choose either "Semicolon" or "Comma" depending on the format of the source data
 - b. That should now show you column formatted data in the Data Preview
 - c. Click "Finish" to see the dataset reformatted in an excel readable format.



5. The data should now look like this.



6. Save the file in an .xls or other Excel format NOT as .csv