



Changes in TSV file format in new applications

Migrating from the Bulk Download to the new dissemination API

User Documentation

Table of Contents

| | |
|--|---|
| Eurostat data download – Upcoming changes to Eurostat TSV files format | 3 |
| Changes to TSV - Comparison overview | 3 |
| Changes to TSV - Detailed explanations | 4 |
| Main examples | 4 |
| Bulk Download – Example dataset with a single time series | 4 |
| Dissemination API – Example dataset with a single time series | 4 |
| Bulk Download – Example dataset with multiple time series | 4 |
| Dissemination API – Example dataset with multiple time series | 4 |
| Detailed description of differences | 4 |
| Structural change - Dimension name case | 4 |
| Structural change - Additional FREQ (frequency) column..... | 4 |
| Structural change - Time dimension name..... | 5 |
| Structural change - Time period sorting..... | 5 |
| Change in data - Time period code..... | 6 |
| Change in data: Usage of colons " : " | 7 |
| Eurostat data download – Upcoming changes in the way of consuming data | 7 |
| Automated data download – Changes | 8 |
| Table of Content – XML and TXT formats..... | 8 |
| Table of content – PDF format is no longer supported..... | 8 |
| What is the change? | 8 |

| | |
|--|----|
| Table of content – Structural change for TOC.XML XSD | 8 |
| What is the change? | 9 |
| Automated data download - How to connect and retrieve data from the Dissemination API? | 9 |
| SOAP (Simple Object Access Protocol) Protocol | 9 |
| SOAP endpoint – WSDL | 10 |
| Examples..... | 10 |
| REST (REpresentational State Transfer) Protocol..... | 11 |
| REST endpoint – WADL..... | 11 |
| Examples..... | 12 |
| Specific case of asynchronous response for SOAP and REST protocols | 14 |
| SOAP asynchronous endpoint - WSDL..... | 15 |
| REST asynchronous endpoint – WADL | 15 |
| Examples..... | 15 |
| Manual data download - How to download a TSV file from the Data Browser and open it with Excel?..... | 16 |
| How to download the TSV file? | 16 |
| How to open a TSV file with Excel? | 17 |

Eurostat data download – Upcoming changes to Eurostat TSV files format

Changes to TSV - Comparison overview

[Bulk Download](#) has so far been one of the main dissemination channels for Eurostat data.

In the context of the renovation of the Eurostat dissemination, the Bulk Download is replaced by a new dissemination API, which also exposes TSV as a format.

There are however a number of differences, i.e.

| Item | Difference type | TSV files in Bulk Download | TSV files in the dissemination API |
|------|--|---|--|
| 1 | Structural change Dimension name case | Lower case letters | Upper case letters |
| 2 | Structural change Additional FREQ (frequency) column | There is no column "FREQ" | Additional column: "FREQ" |
| | Import time series with multiple FREQ=A, Q and M (annual, quarterly and monthly) | There is only one time series which includes the annual, quarterly and monthly values | There are three time series. There is one time series for the annual data, one for the quarterly data and one for the monthly data |
| 3 | Structural change Time dimension name | Time dimension is named "time" | Time dimension is named "TIME_PERIOD" |
| 4 | Structural change Time periods | Time periods are sorted in descending order | Time periods are sorted in ascending order |
| 5 | Change in data Time period code | The notation for the <ul style="list-style-type: none"> • semester is YYYYSN (ex. 2015S1) • quarter is YYYYQN (ex. 2015Q4) • month is YYYYMNN (ex. 2015M02) • week is YYYYWNN (ex. 2015W01) • day is YYYYMNNDDNN (ex. 2019M06D13) Characters in bold are fixed. | The notation for the <ul style="list-style-type: none"> • semester is YYYY-SN (ex. 2015-S1) • quarter is YYYY-QN (ex. 2015-Q4) • month is YYYY-MM (ex. 2015-02) • week is YYYY-WNN (ex. 2015-W01) • day is YYYY-MM-DD (ex 2015-12-31) Characters in bold are fixed. |
| 6 | Change in data Usage of colons " : " | The colons mean "not available" | Some cells are "Not applicable" but contain the colon character (see the example in the detailed explanations) |

This document illustrates changes based on a few datasets:

- Population change - Demographic balance and crude rates at national level "DEMO_GIND" (single time series)
- Freight and mail air transport between the main airports of Montenegro and their main partner airports (routes data) "AVIA_GOR_ME" (multiple time series)
- Tropical wood imports to the EU from chapter 44 of the Harmonised System "FOR_TROP" (multiple time series)

Changes to TSV - Detailed explanations

Main examples

Here are two examples with the DEMO_GIND dataset:

Bulk Download – Example dataset with a single time series

| indic_de | geo\time | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | ... |
|----------|----------|------|----------|----------|----------|----------|----------|----------|----------|-----|
| AVG | BE | : | 11538604 | 11488980 | 11427054 | 11375158 | 11331422 | 11274196 | 11209057 | ... |

Dissemination API – Example dataset with a single time series

| freq | indic_de | geo\TIME_PERIOD | ... | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|------|----------|-----------------|-----|----------|----------|----------|----------|----------|----------|----------|------|
| A | AVG | BE | ... | 11209057 | 11274196 | 11331422 | 11375158 | 11427054 | 11488980 | 11538604 | : |

Bulk Download – Example dataset with multiple time series

Here are two examples with AVIA_GOR_ME dataset:

| unit | tra_meas | airp_pr\time | ... | 2019Q4 | 2019Q3 | 2019Q2 | 2019Q1 | 2019M12 | 2019M11 | 2019M10 | ... | 2019M02 | 2019M01 | 2019 | ... |
|------|----------|-----------------|-----|--------|--------|--------|--------|---------|---------|---------|-----|---------|---------|------|-----|
| T | FRM_BRD | ME_LYPG_AT_LOWW | ... | 21.4 | 19.2 | 15.2 | 14.7 | 5.8 | 6.7 | 8.9 | ... | 4.4 | 5.1 | 70.6 | ... |

Dissemination API – Example dataset with multiple time series

| freq | unit | tra_meas | airp_pr\TIME_PERIOD | ... | 2019 | 2019-Q1 | 2019-Q2 | ... | 2019-10 | 2019-11 | 2019-12 | 2019-Q1 | 2019-Q2 | 2019-Q3 | 2019-Q4 | ... |
|------|------|----------|---------------------|-----|------|---------|---------|-----|---------|---------|---------|---------|---------|---------|---------|-----|
| A | T | FRM_BRD | ME_LYPG_AT_LOWW | ... | 70.6 | : | : | ... | : | : | : | : | : | : | : | ... |
| M | T | FRM_BRD | ME_LYPG_AT_LOWW | ... | : | 5.1 | 4.4 | ... | 8.9 | 6.7 | 5.8 | : | : | : | : | ... |
| Q | T | FRM_BRD | ME_LYPG_AT_LOWW | ... | : | : | : | ... | : | : | : | 14.7 | 15.2 | 19.2 | 21.4 | ... |

Detailed description of differences

Structural change - Dimension name case

What is the change?

- First column-Header line: in the New API the “dimension name case” **may be** written in upper case letters.

Bulk Download – Example

| unit | Tra_meas | airp_pr\time |
|------|----------|--------------|
|------|----------|--------------|

Dissemination API – Example

| FREQ | UNIT | TRA_MEAS | AIRP_PR\TIME_PERIOD |
|------|------|----------|---------------------|
|------|------|----------|---------------------|

Structural change - Additional FREQ (frequency) column

What is the change?

- Header line: in the New API, the “FREQ” is added in the series keys. The letter in the column “FREQ” represents the frequency.
- With a multiple time series: If there are three frequencies “A, Q and M”, there will be three time series. There is one time series for the annual data, one for the quarterly data and one for the monthly data

Changes in TSV file format in new applications

Bulk Download – Example with a single time series: series keys

| | |
|----------|----------|
| indic_de | geo\time |
| AVG | BE |

Dissemination API – Example with a single time series: series keys

| | | |
|------|----------|-----------------|
| freq | indic_de | geo\TIME_PERIOD |
| A | AVG | BE |

Bulk Download – Example with a multiple time series: series keys

| | | | | | | | | | | | | | | | |
|------|----------|-----------------|-----|--------|--------|--------|--------|---------|---------|---------|-----|---------|---------|------|-----|
| unit | tra_meas | airp_pr\time | ... | 2019Q4 | 2019Q3 | 2019Q2 | 2019Q1 | 2019M12 | 2019M11 | 2019M10 | ... | 2019M02 | 2019M01 | 2019 | ... |
| T | FRM_BRD | ME_LYPG_AT_LOWW | ... | 21.4 | 19.2 | 15.2 | 14.7 | 5.8 | 6.7 | 8.9 | ... | 4.4 | 5.1 | 70.6 | ... |

Dissemination API – Example with a multiple time series: series keys

| | | | | | | | | | | | | | | | | |
|------|------|----------|---------------------|-----|------|---------|---------|-----|---------|---------|---------|---------|---------|---------|---------|-----|
| freq | unit | tra_meas | airp_pr\TIME_PERIOD | ... | 2019 | 2019-01 | 2019-02 | ... | 2019-10 | 2019-11 | 2019-12 | 2019-Q1 | 2019-Q2 | 2019-Q3 | 2019-Q4 | ... |
| A | T | FRM_BRD | ME_LYPG_AT_LOWW | ... | 70.6 | : | : | ... | : | : | : | : | : | : | : | ... |
| M | T | FRM_BRD | ME_LYPG_AT_LOWW | ... | : | 5.1 | 4.4 | ... | 8.9 | 6.7 | 5.8 | : | : | : | : | ... |
| Q | T | FRM_BRD | ME_LYPG_AT_LOWW | ... | : | : | : | ... | : | : | : | 14.7 | 15.2 | 19.2 | 21.4 | ... |

Structural change - Time dimension name

What is the change?

- Dimension 'time' becomes 'TIME_PERIOD'

Bulk Download – Example

| | |
|----------|----------|
| indic_de | geo\time |
|----------|----------|

Dissemination API – Example

| | | |
|------|----------|-----------------|
| FREQ | INDIC_DE | GEO\TIME_PERIOD |
|------|----------|-----------------|

Structural change - Time period sorting

What is the change?

- In the Dissemination API, time periods are sorted in ascending order.

Bulk Download – Example with a single time series

| | | | | |
|------|------|------|------|------|
| 2013 | 2012 | 2011 | 2010 | 2009 |
|------|------|------|------|------|

Dissemination API – Example with a single time series

| | | | | |
|------|------|------|------|------|
| 2009 | 2010 | 2011 | 2012 | 2013 |
|------|------|------|------|------|

Bulk Download – Example with multiple time series

| | | | |
|--------|--------|--------|--------|
| 1999Q4 | 1999Q3 | 1999Q2 | 1999Q1 |
|--------|--------|--------|--------|

Changes in TSV file format in new applications

| | | | | | | | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|
| 1999M12 | 1999M11 | 1999M10 | 1999M09 | 1999M08 | 1999M07 | 1999M06 | 1999M05 | 1999M04 | 1999M03 | 1999M02 | 1999M01 | 1999 |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|

Dissemination API – Example with multiple time series

| | | | | | | | | | | | | |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1999 | 1999-01 | 1999-02 | 1999-03 | 1999-04 | 1999-05 | 1999-06 | 1999-07 | 1999-08 | 1999-09 | 1999-10 | 1999-11 | 1999-12 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|

| | | | |
|---------|---------|---------|---------|
| 1999-Q1 | 1999-Q2 | 1999-Q3 | 1999-Q4 |
|---------|---------|---------|---------|

Change in data - Time period code

What is the change?

Notation **YYYYSN** for the semester in Bulk Download becomes **YYYY-SN** in the dissemination API

Notation **YYYYQN** for the quarter in Bulk Download becomes **YYYY-QN** in the dissemination API

Notation **YYYYMNN** for the month in Bulk Download becomes **YYYY-MN** in the dissemination API

Notation **YYYYWNN** for the week in Bulk Download becomes **YYYY-WNN** in the dissemination API

Notation **YYYYMNNDDNN** for the day in Bulk Download becomes **YYYY-MM-DD** in the dissemination API

Characters in bold are fixed.

Bulk Download – Example

The notation for the semester is **YYYYSN**: 2015**S2**

The notation for the quarter is **YYYYQN**: 2015**Q1**

The notation for the month is **YYYYMNN**: 2015**M01**

The notation for the week is **YYYYWNN**: 2015**W01**

The notation for the day is **YYYYMNNDDNN**: 2019**M06D13**

| |
|----------------|
| 2015 S2 |
|----------------|

| | | | | |
|--------|--------|--------|--------|---------|
| 1999Q4 | 1999Q3 | 1999Q2 | 1999Q1 | 1999M12 |
|--------|--------|--------|--------|---------|

Dissemination API – Example

The notation for the semester is **YYYY-SN**: 2015-**S1**

The notation for the quarter is **YYYY-QN**: 2015-**Q1**

The notation for the month is **YYYY-MN**: ex. 2015-01

The notation for the week is **YYYY-WNN**: ex. 2015-**W01**

The notation for the day is **YYYY-MM-DD**: ex. 2015-12-31

| |
|-----------------|
| 2015- S2 |
|-----------------|

| | | | | |
|---------|---------|---------|---------|---------|
| 1999-12 | 1999-Q1 | 1999-Q2 | 1999-Q3 | 1999-Q4 |
|---------|---------|---------|---------|---------|

Change in data: Usage of colons " : "

What is the change?

In Bulk Download the colons mean "**not available**", while in the dissemination API the colons can have two meanings: "**not available**" or "**not applicable**".

Bulk Download – Example with multiple time series

| unit | tra_meas | airp_pr\time | 2019Q1 | 2019M01 | 2019 |
|------|----------|-----------------|--------|---------|------|
| T | FRM_BRD | ME_LYPG_AT_LOWW | 14.7 | 5.1 | 70.6 |

| currency,post,stk_flow,s_adj,partner,geo\time | 1999 | 1999M01 | 1999Q1 |
|---|---------|---------|--------|
| MIO_EUR_010,CRE,NSA,EXT_EA16,EA16 | 1353651 | 100001 | 311078 |

Dissemination API – Example with multiple time series

A cell contains a colon if no value is available for a time period i.e. the colon means "not available".

For a time period that does not match the frequency indicated in the series key, the colon means "not applicable". As an example, if the series key indicates "A" (annual) as a frequency, there cannot be a value for a monthly time period.

| freq | unit | tra_meas | airp_pr\TIME_PERIOD | 2019 | 2019-01 | 2019-Q1 |
|------|------|----------|---------------------|------|---------|---------|
| A | T | FRM_BRD | ME_LYPG_AT_LOWW | 70.6 | : | : |
| M | T | FRM_BRD | ME_LYPG_AT_LOWW | : | 5.1 | : |
| Q | T | FRM_BRD | ME_LYPG_AT_LOWW | : | : | 14.7 |

is to be understood as

| freq | unit | tra_meas | airp_pr\TIME_PERIOD | 2019 | 2019-01 | 2019-Q1 |
|------|------|----------|---------------------|----------------|----------------|----------------|
| A | T | FRM_BRD | ME_LYPG_AT_LOWW | 70.6 | Not applicable | Not applicable |
| M | T | FRM_BRD | ME_LYPG_AT_LOWW | Not applicable | 5.1 | Not applicable |
| Q | T | FRM_BRD | ME_LYPG_AT_LOWW | Not applicable | Not applicable | 14.7 |

Eurostat data download – Upcoming changes in the way of consuming data

There are mainly two use cases:

- Automated and
- Manual

data consumption.

| | Automated download | Manual download |
|----------------------------------|---|---|
| Renovated Eurostat dissemination | Dissemination API (Web Services : REST and SOAP) | Data Browser |
| Legacy Eurostat dissemination | Bulk download Navigation Tree | Data Explorer Tables Graphs and Maps |

Automated data download – Changes

Table of Content – XML and TXT formats

The Eurostat Table of Content

- Contains the Eurostat dataset catalogue hierarchically organized as in the [Navigation Tree](#).
- Is generated every day at 11 AM and 11 PM with latest information both in TXT and XML formats.

It is up to (automated) data consumers to parse this Table of Content every day at 11 AM and 11 PM, in order to get a list of datasets updated.

The URL of the legacy web service where the TOC can be downloaded at:

http://ec.europa.eu/eurostat/estat-navtree-portlet-prod/BulkDownloadListing?sort=1&file=table_of_contents.xml

What is the change?

In the Dissemination API, the XML and the TXT version of the Table of Content remain, yet:

- They both contain the last update date per dataset.
- The XML version has one file that contains the 3 languages (EN, DE, FR).
- The TXT version consists of three separate files i.e. one per language.
- The URL to get the Table of Content will change

Table of content – PDF format is no longer supported

What is the change?

The table of content of Eurostat data for download in PDF format is no longer supported in the Dissemination API, i.e. the Bulk Download files

- table_of_contents_de.pdf
- table_of_contents_en.pdf
- table_of_contents_fr.pdf

are no longer supported.

Table of content – Structural change for TOC.XML XSD

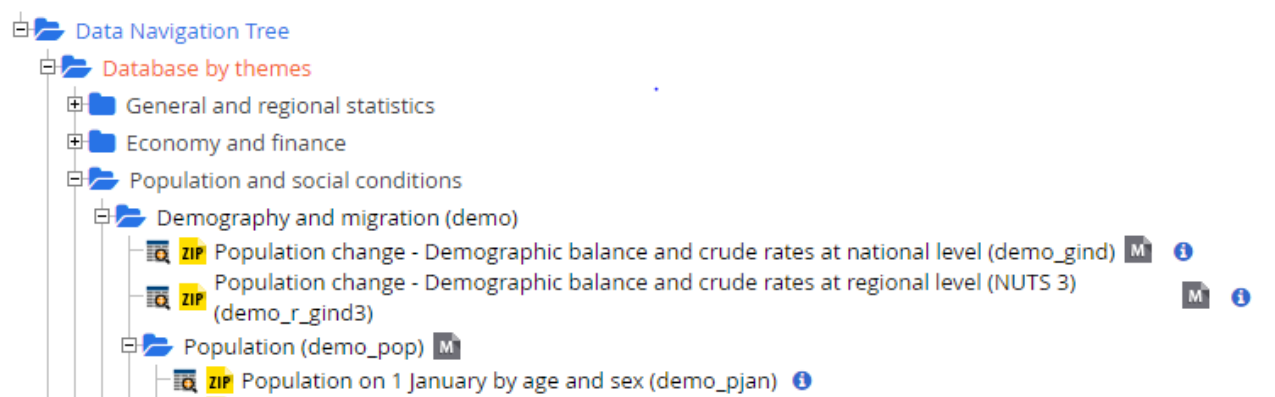
The XML schema definition (XSD) for the Table of Content reflects the structure of the navigation tree

The legacy XSD is available at:

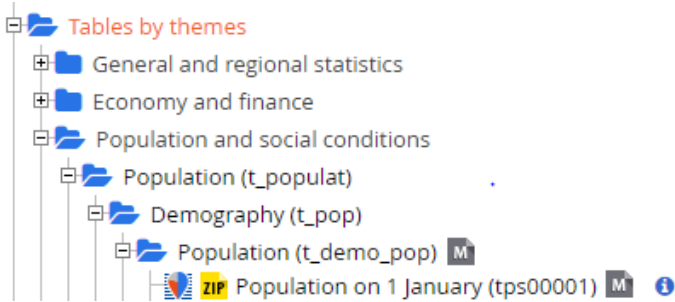
<http://ec.europa.eu/eurostat/estat-navtree-portlet-prod/xsd/TableOfContent.xsd>

The navigation tree in legacy Eurostat dissemination is structured in

- Database by themes



- Tables by themes



What is the change?

In the renovated Eurostat dissemination, there is no distinction anymore between "Database by themes" and "Tables by theme", as a dataset can be the parent of one or more data subset(s) called "extraction(s)".

Example:

- The "Population on 1 January (tps00001)" extraction is located under the "Population on 1 January by age and sex (demo_pjan)" dataset.

The structure i.e. XSD for the "table_of_contents.xml" (TOC) file is consequently modified.

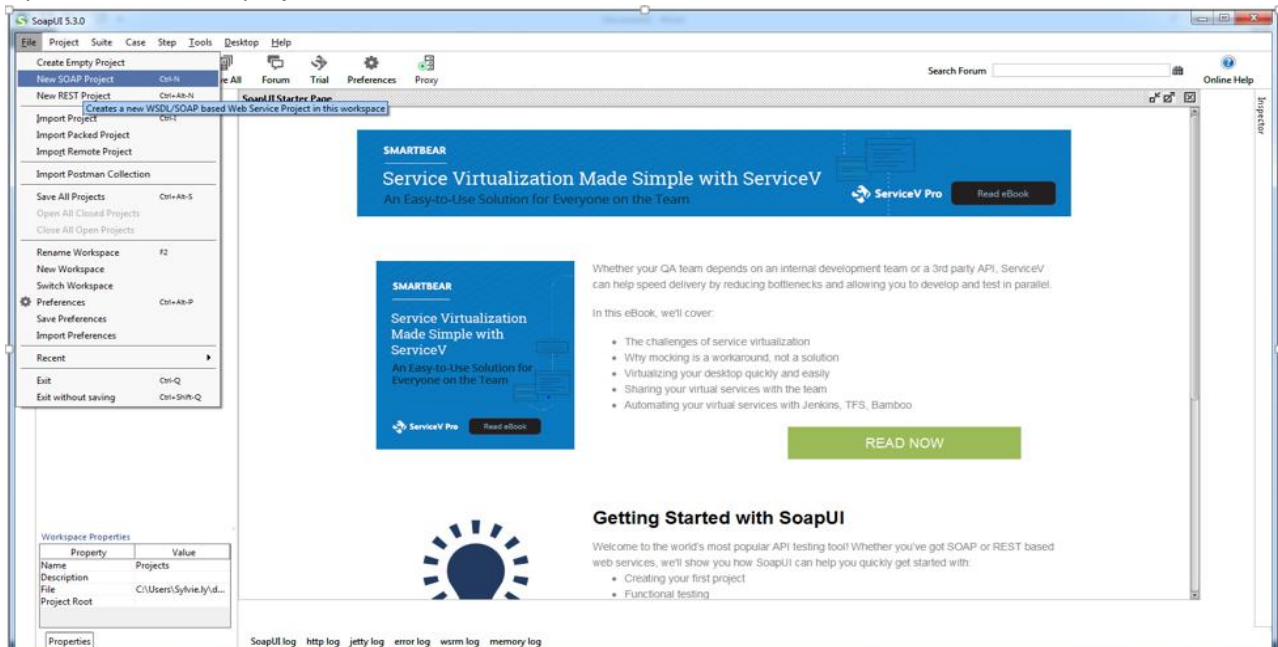
The XSD for the renovated Eurostat dissemination is not yet available at this stage.

Automated data download - How to connect and retrieve data from the Dissemination API?

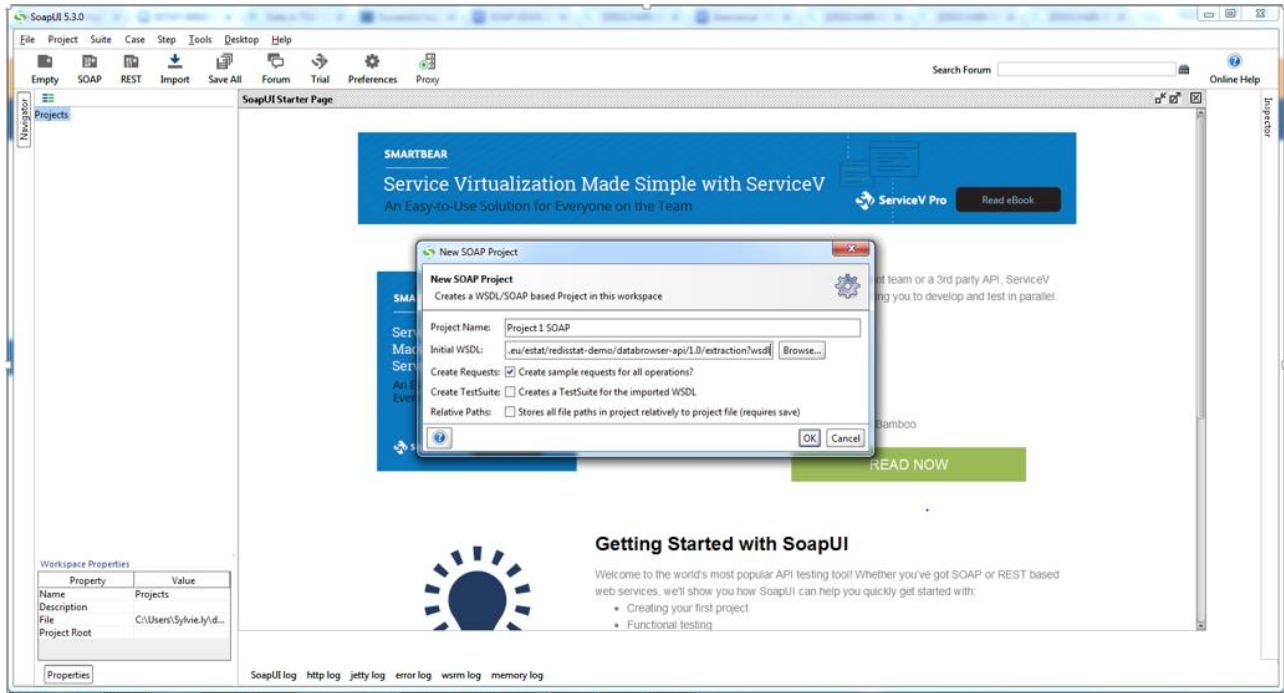
SOAP (Simple Object Access Protocol) Protocol

We detail the next steps using [SoapUI](#) API testing tool.

Open a "New SOAP project".



Add a WSDL link to create a project.



SOAP endpoint – WSDL

An endpoint describes the type of messages and responses that can be expected from the web service.

| | |
|--|--|
| <p>Dissemination (public access to data not under embargo)</p> | <p>https://ec.europa.eu/eurostat/api/dissemination/sdmx/2.1/sdmx-ws?wsdl</p> |
|--|--|

Examples

Example of SOAP request for the dataset “AVIA_GOR_ME” and format name=“TSV”

The Query request message contains two main sections:

- Header
- QueryRequest

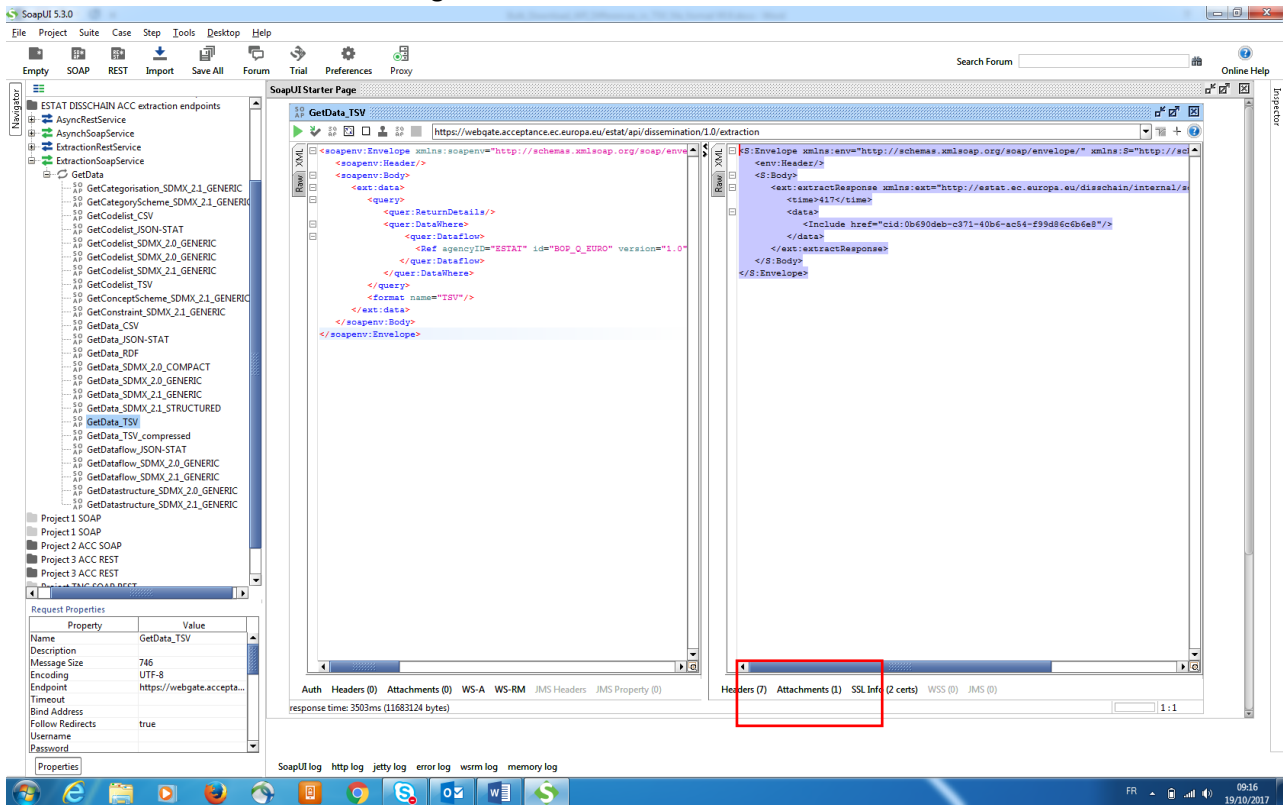
```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ext="http://estat.ec.europa.eu/disschain/soap/extraction"
xmlns:quer="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/query"
xmlns:ext1="http://estat.ec.europa.eu/disschain/extraction"
xmlns:com="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common">
  <soapenv:Header/>
  <soapenv:Body>
    <ext:data>
      <query>
        <quer:ReturnDetails/>
        <quer:DataWhere>
          <quer>Dataflow>
            <Ref agencyID="ESTAT" id=" AVIA_GOR_ME" version="1.0" />
          </quer>Dataflow>
        </quer>DataWhere>
      </query>
      <format name="TSV"/>
    </ext:data>
  </soapenv:Body>
</soapenv:Envelope>
```

Changes in TSV file format in new applications

Example of SOAP response for the dataset "AVIA_GOR_ME" and format name="TSV":

```
<S:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Header/>
  <S:Body>
    <ext:extractResponse
xmlns:ext="http://estat.ec.europa.eu/disschain/internal/soap/extraction">
      <time>417</time>
      <data>
        <Include href="cid:0b690deb-c371-40b6-ac54-f99d86c6b6e8"/>
      </data>
    </ext:extractResponse>
  </S:Body>
</S:Envelope>
```

The API should return a valid message with the dataset as an attachment



REST (REpresentational State Transfer) Protocol

REST endpoint – WADL

An endpoint describes the type of messages and responses that can be expected from the web service.

Dissemination
(public access to data not under embargo)

<https://ec.europa.eu/eurostat/api/dissemination/sdmx/2.1/sdmx-rest.wadl>

The query request message contains sections:

- A Method
- An Endpoint
- A Resource
- Parameters

Changes in TSV file format in new applications

Examples

Example of REST request for full TSV file download for the dataset “DEMO_GIND”

Provide in a web browser a valid http call with the name of the dataset and the relevant format:

https://ec.europa.eu/eurostat/api/dissemination/sdmx/2.1/data/DEMO_GIND?format=TSV

The dissemination API returns the dataset data file: estat_demo_gind.tsv.

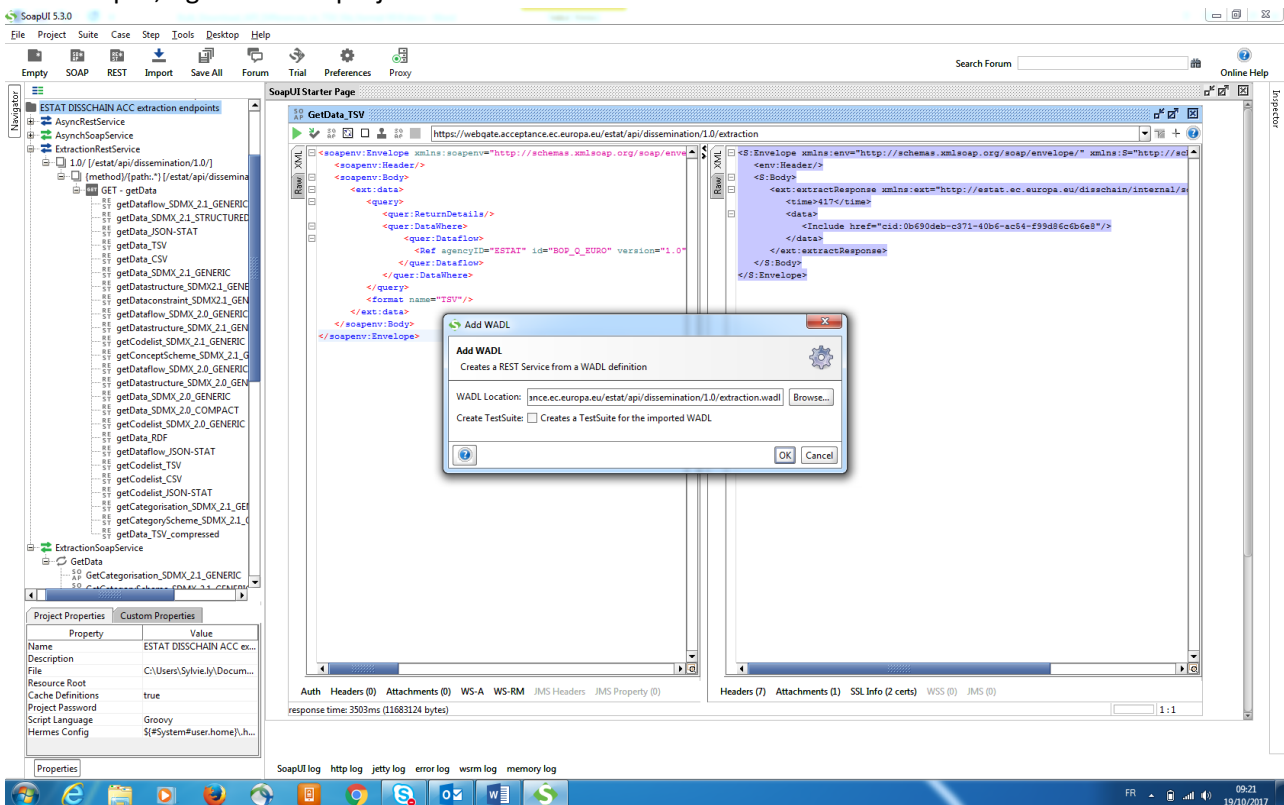
Example of REST request for full compressed TSV file download

The parameter “Compressed” is recommended for large datasets:

https://ec.europa.eu/eurostat/api/dissemination/sdmx/2.1/data/DEMO_GIND?format=TSV&compressed=true

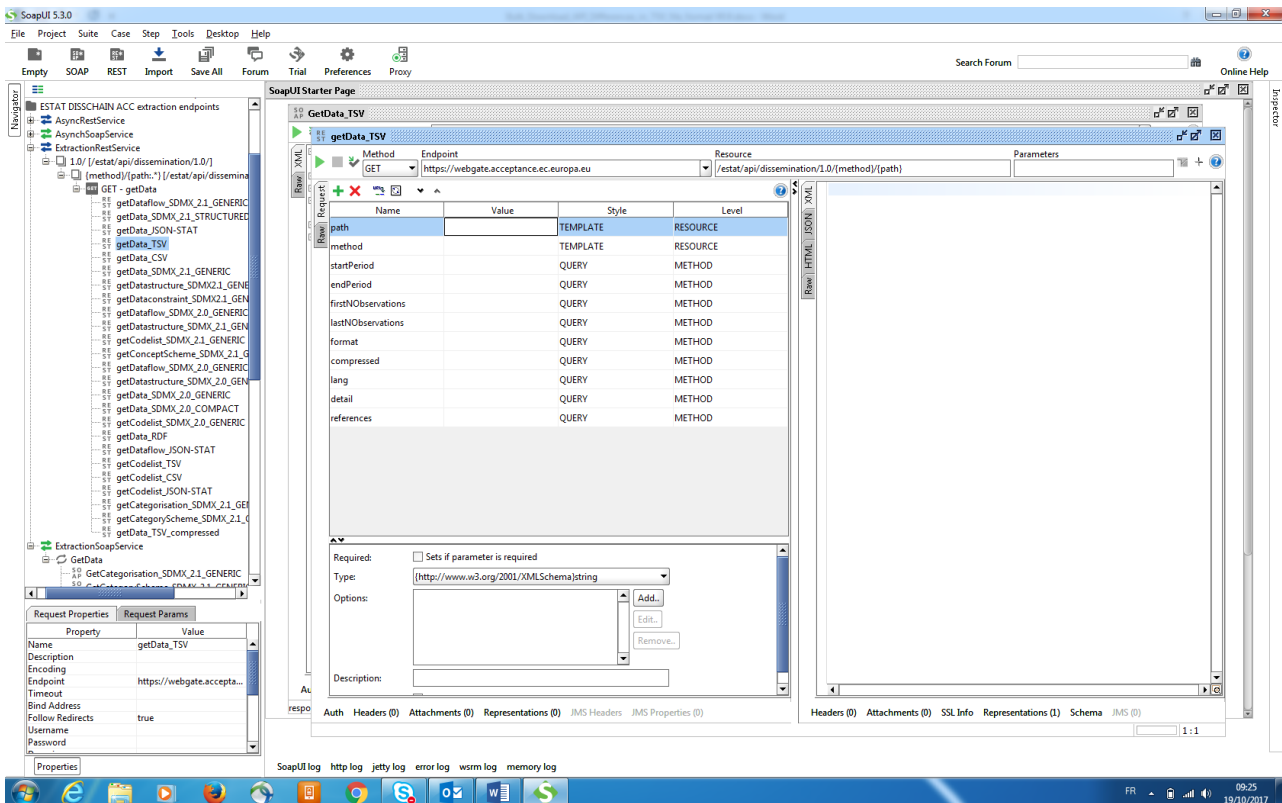
Example of REST request for a query of dataset “DEMO_GIND” and format name=“TSV”:

With SoapUI, right click the project to add a WADL link. It creates a REST service from a WADL definition



Open the request

Changes in TSV file format in new applications



Fill in the values of resource path

- -path (data / dataflow / datastructure /)
- -method (AVIA_PAOA / DEMO_GIND / ...)

You can fill in the values of different parameters:

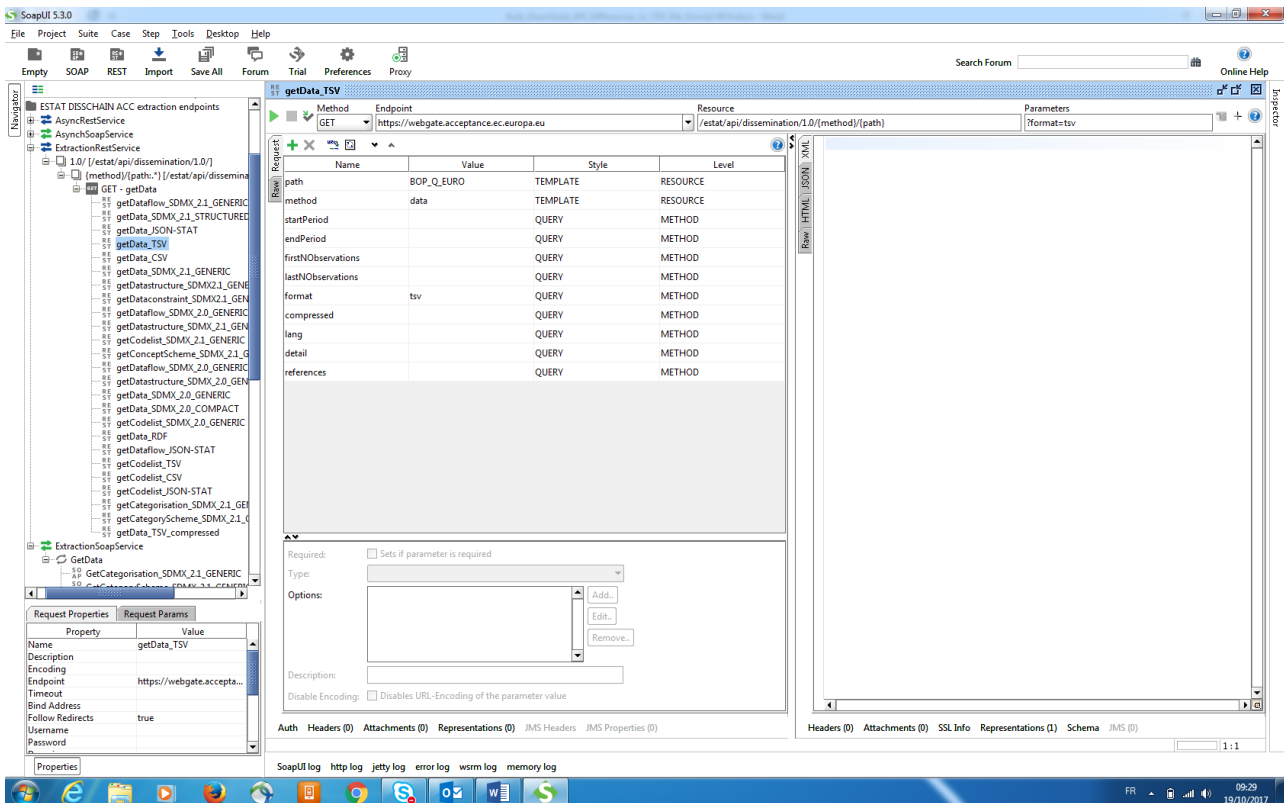
- startPeriod
- endPeriod
- firstNObservations
- lastNObservations
- detail
- references
- format
- compressed
- lang

In this example, we provide:

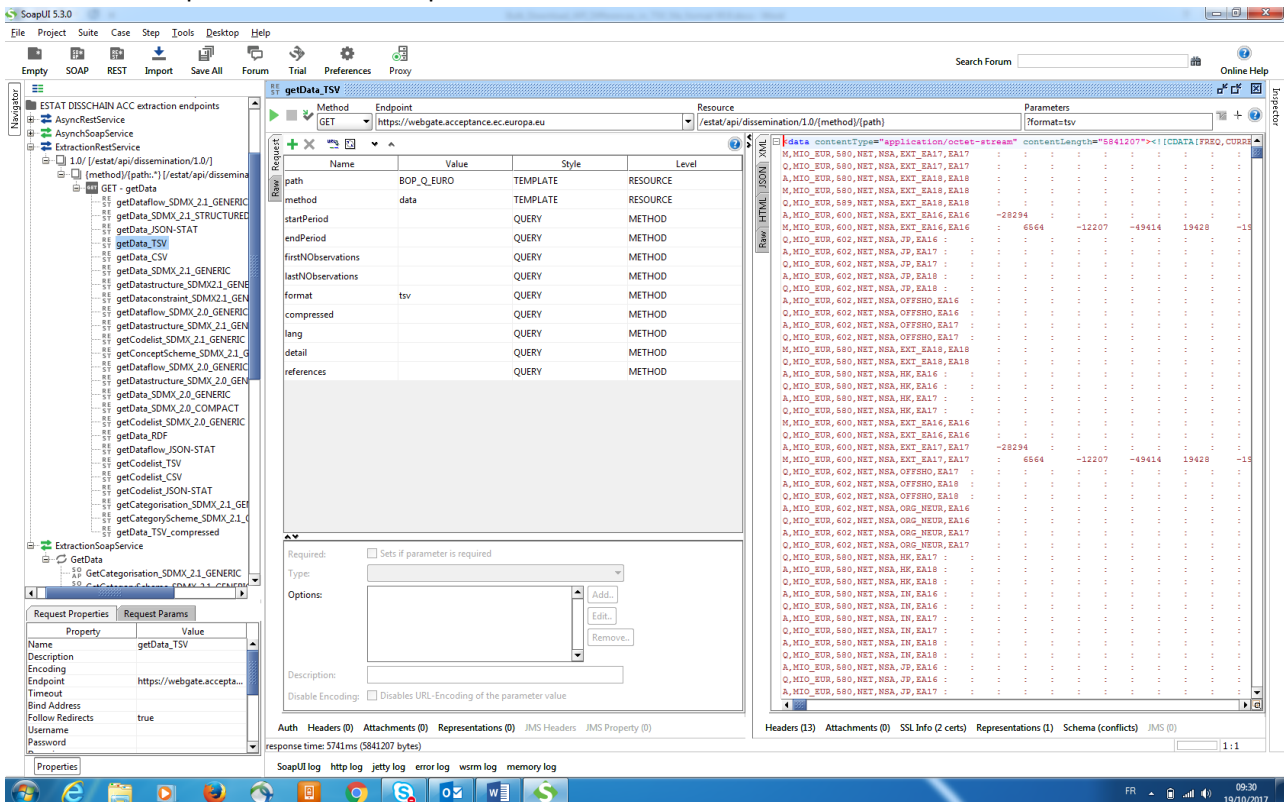
- Path=BOP_Q_EURO
- Method =data
- Format=TSV

Note that several other file formats are available i.e. CSV / JSON-stat / SDMX 2.1 or SDMX 2.

Changes in TSV file format in new applications



Execute the request to view the response content



Specific case of asynchronous response for SOAP and REST protocols

The dissemination API behaves asynchronously if the query is too complex or the size of the response data is too large. This mechanism applies equally both to REST and SOAP.

An Endpoint describes the type of messages and responses that can be expected from the web service.

SOAP asynchronous endpoint - WSDL

| | |
|--|---|
| Dissemination (public access to data not under embargo) | https://ec.europa.eu/eurostat/api/dissemination/1.0/async?wsdl |
|--|---|

REST asynchronous endpoint – WADL

| | |
|--|---|
| Dissemination (public access to data not under embargo) | https://ec.europa.eu/eurostat/api/dissemination/1.0/async/async.wadl |
|--|---|

Examples

Example of asynchronous response for full TSV file download for the dataset “BOP_Q_EURO”

Step 1:

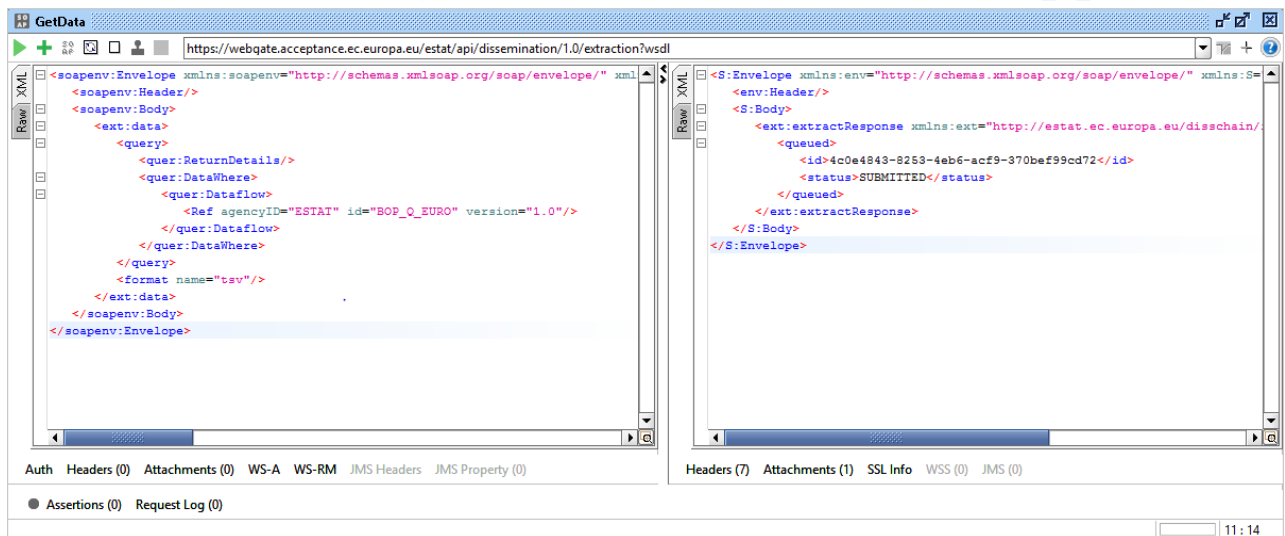
Issue a request to the API with a data query.

The API returns as response an ID and the status of the query is “SUBMITTED”

For information:

1. The ID allows the data consumer to retrieve from the API
 - a. the status of the generation, and ultimately
 - b. the data.
2. The API is generating the requested data extraction.

Example of SOAP asynchronous response for full TSV file download for the dataset “BOP_Q_EURO”

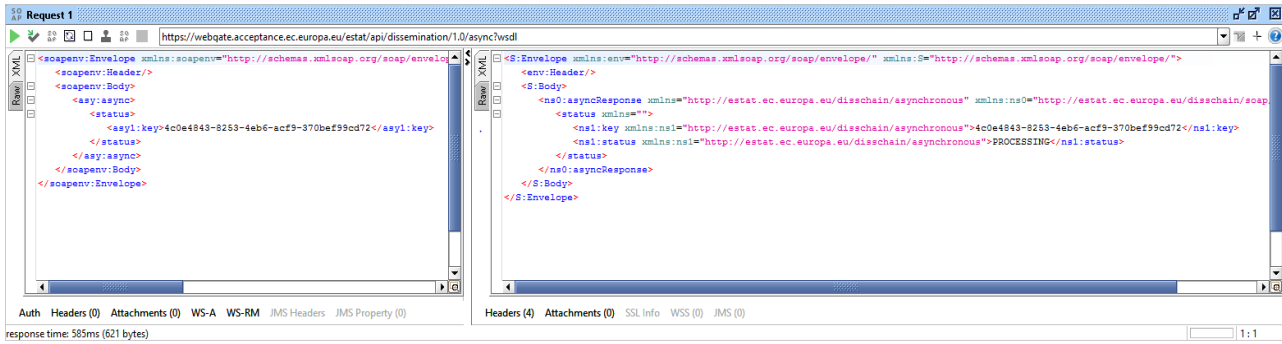


Step 2:

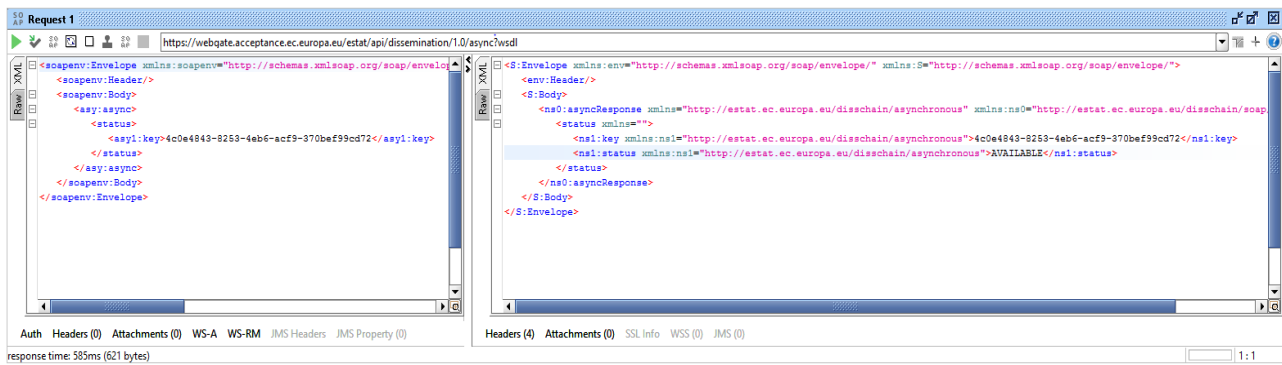
Issue a request to the API to get the status for the relevant ID.

The API returns as response the status, e.g. “PROCESSING”

Changes in TSV file format in new applications



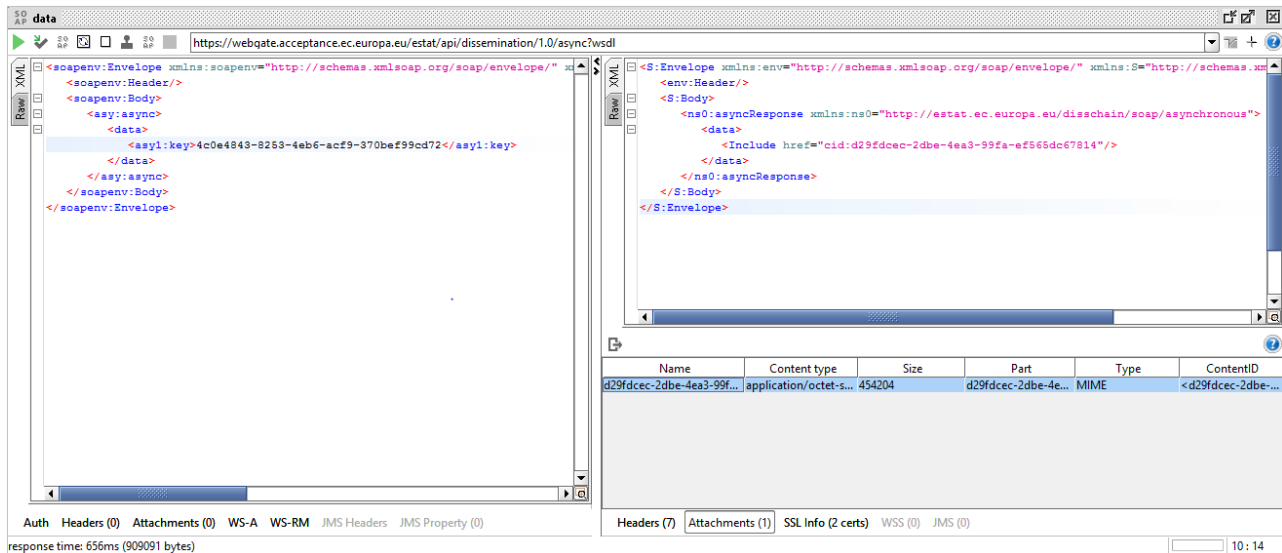
Repeat step 2 until the status is "AVAILABLE", then proceed with step 3



Step 3:

Issue a request to the API to get the extracted data.

The API returns the extracted data (in the example below this is the attachment)



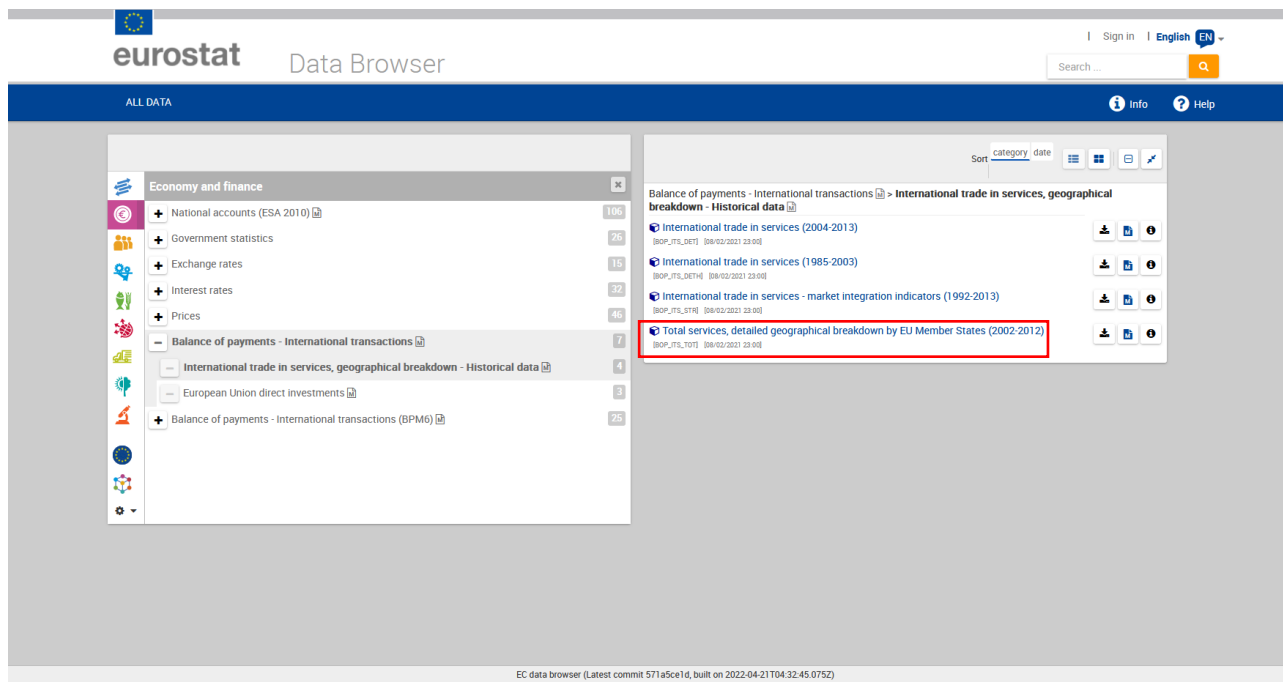
Manual data download - How to download a TSV file from the Data Browser and open it with Excel?

How to download the TSV file?

Go to the data Browser:

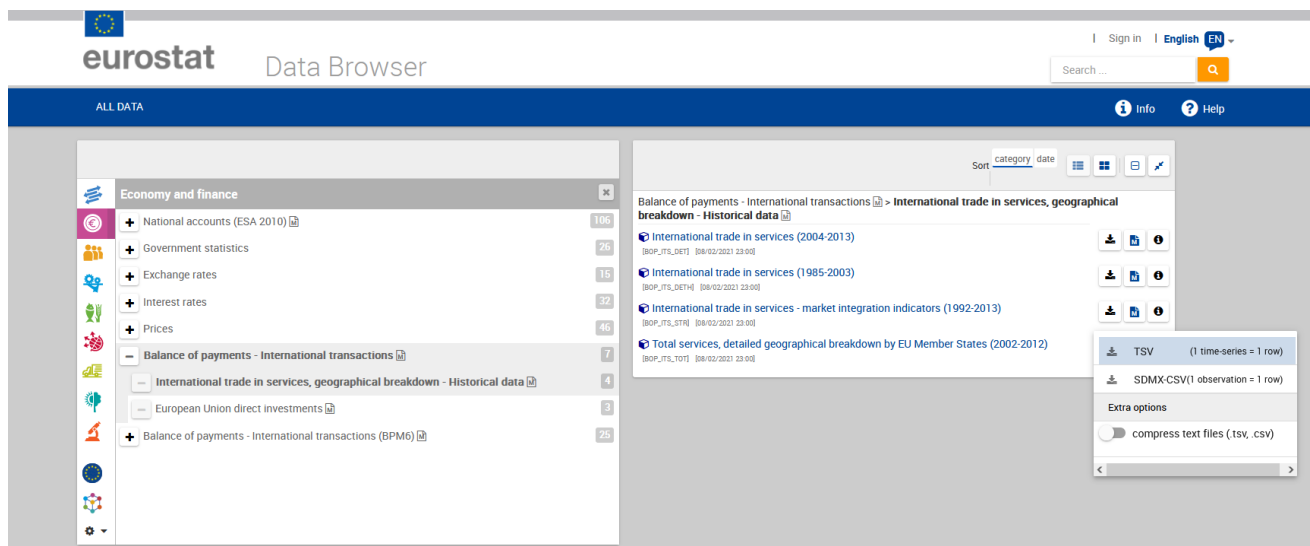
<https://ec.europa.eu/eurostat/databrowser/>

Changes in TSV file format in new applications



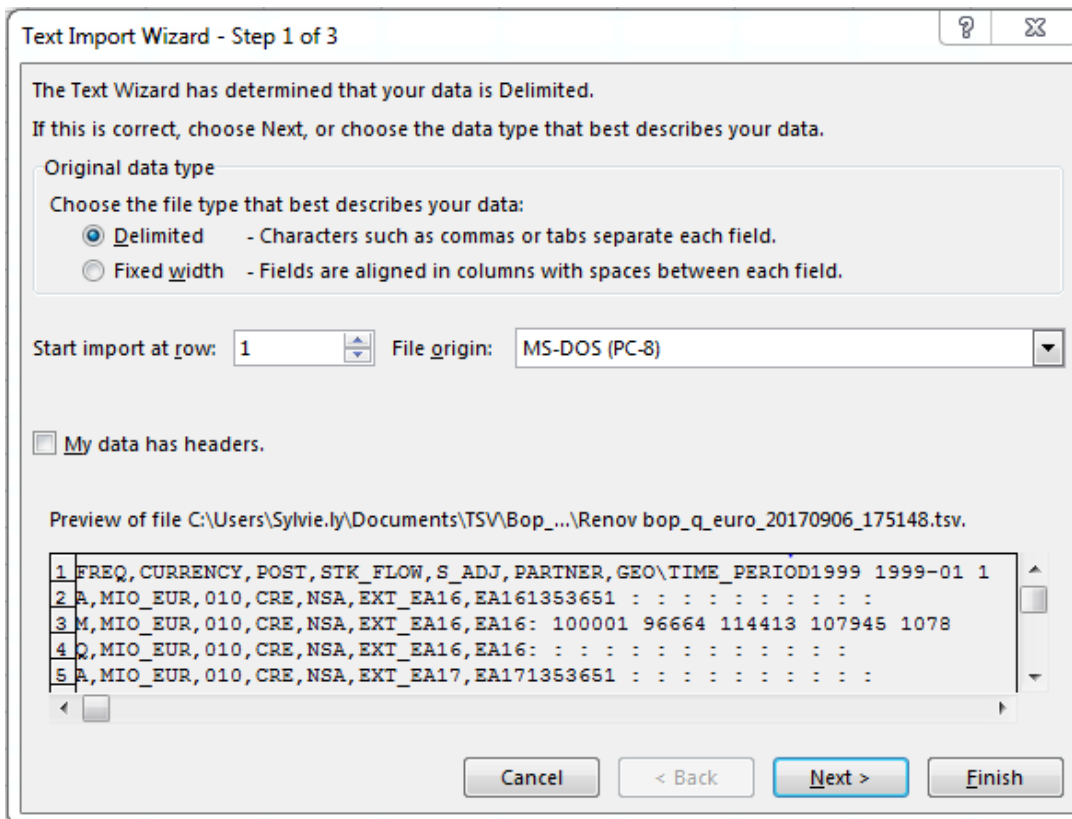
Navigate to the relevant dataset, e.g. “Total services, detailed geographical breakdown by EU Member States (2002-2012)” (BOP_ITS_TOT)

On the right side of the page, the list of available data is displayed. Click on the download action arrow and choose “TSV”.



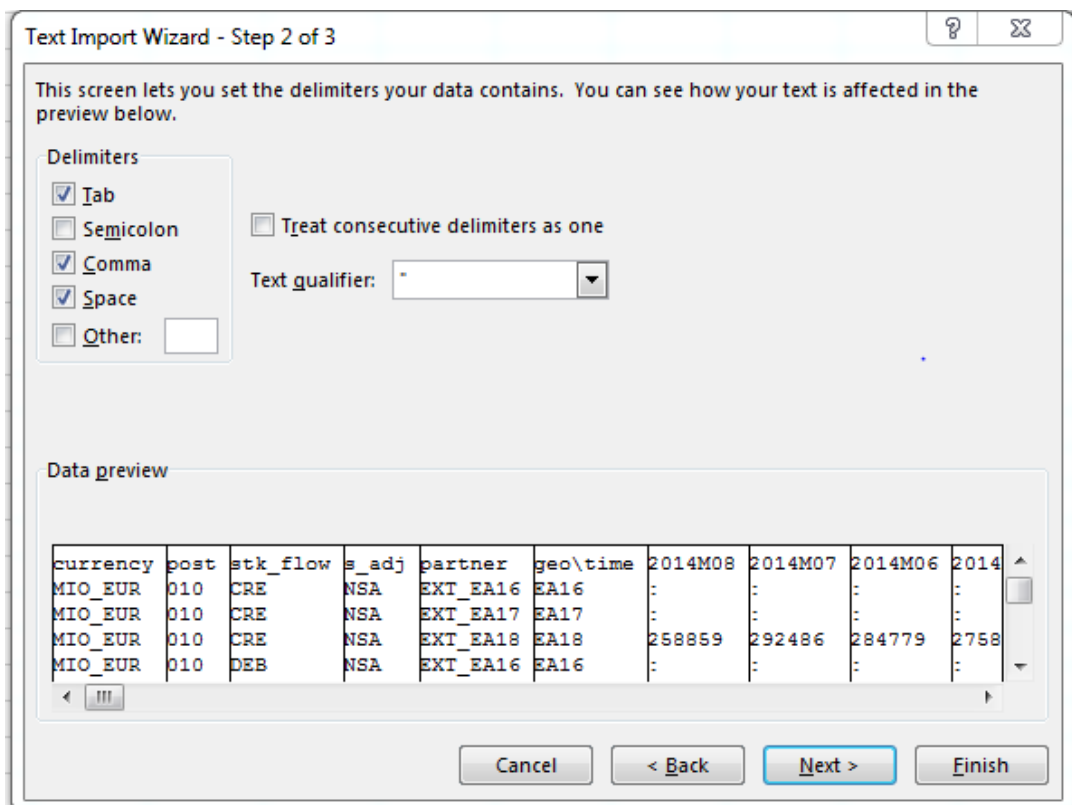
How to open a TSV file with Excel?

Open Excel and then import the “TSV” file.



Step 1

The text import wizard defaults to the data delimited option. Simply click "Next".



There are different ways of setting the delimiters option, and **we would recommend the following one:**

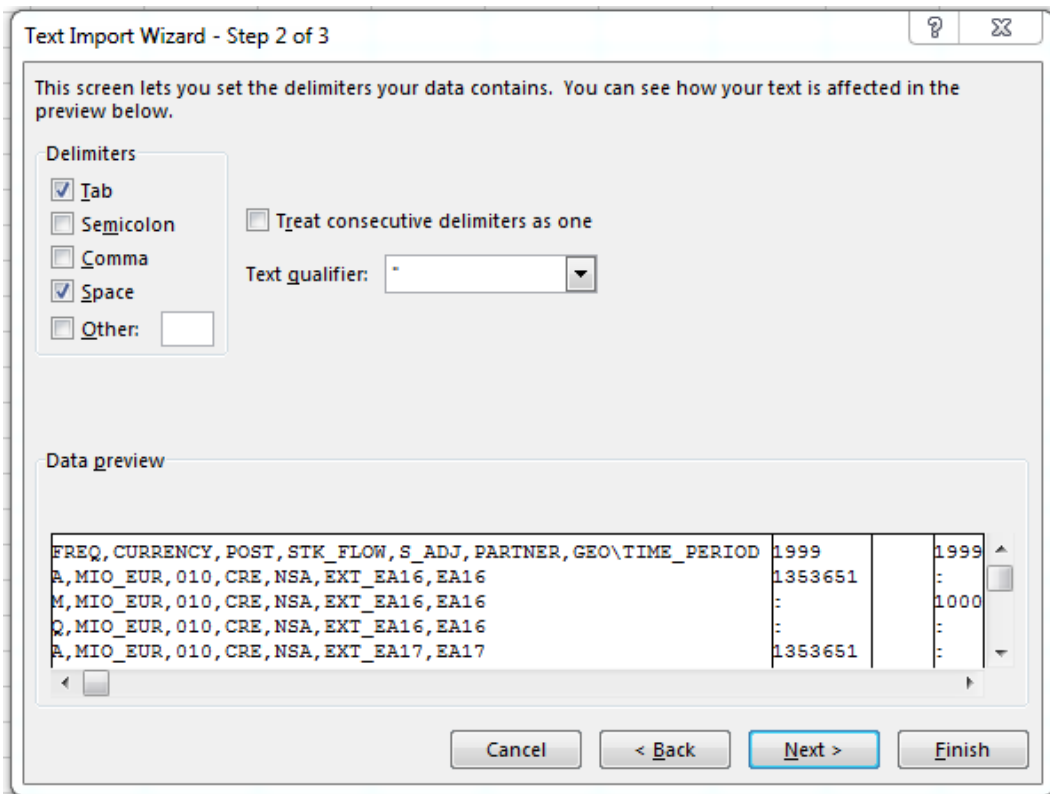
Option 1 - The Tab, the Comma and the Space as Delimiters, without the option “Treat consecutive delimiters as one”

The “Tab” Delimiters is already checked by default, check the “Comma” and the “Space” delimiters boxes.

Next, uncheck the option “Treat consecutive delimiters as one”.

Dimensions and their items are in separate columns (except the dimension “GEO\TIME_PERIOD”). Values and flags can be seen in separate columns.

Click “Next >”.



Alternatively:

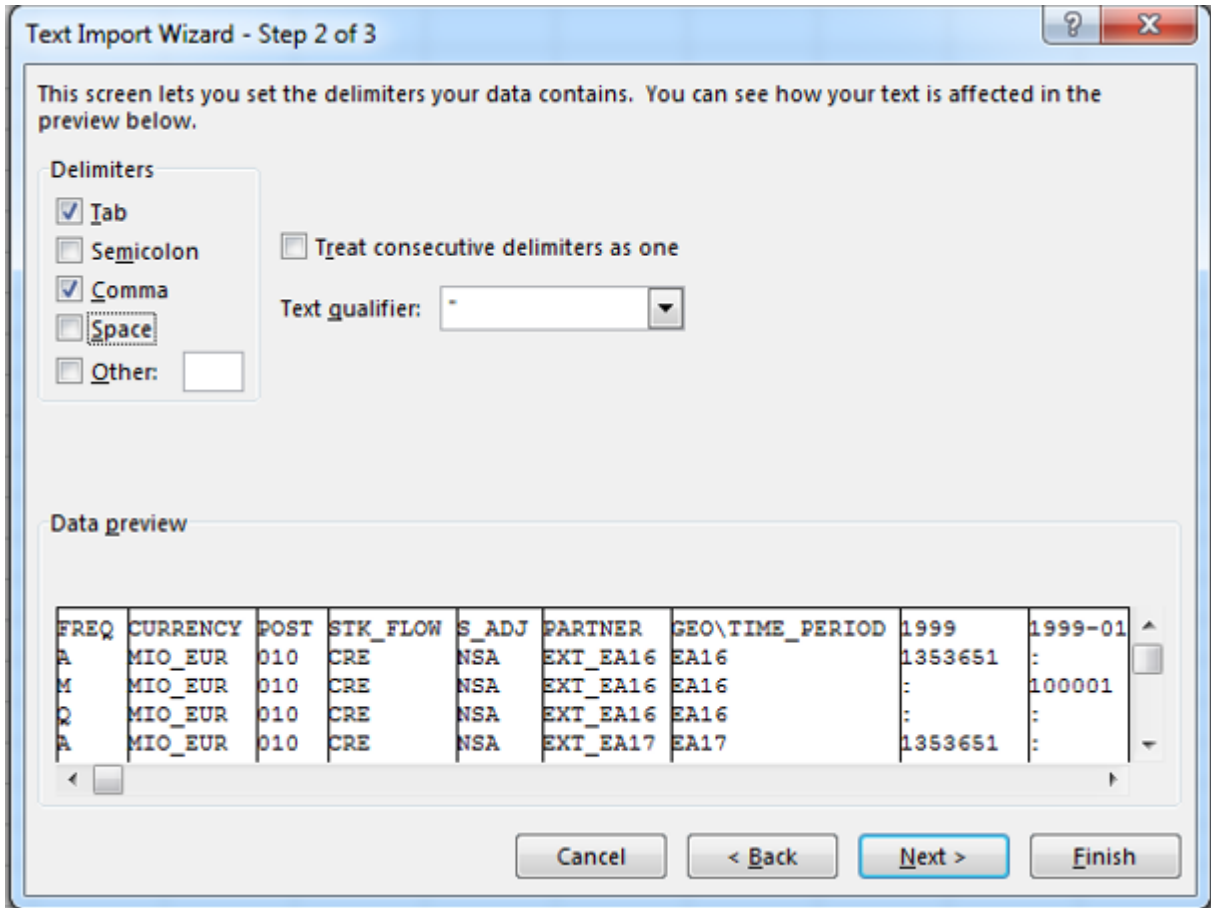
Option 2 - The Tab and the Space as Delimiters, without the option “Treat consecutive delimiters as one”

The “Tab” Delimiters is already checked by default, check the “Space” delimiter box.

Next, uncheck the option “Treat consecutive delimiters as one”.

Values and flags can be seen in separated columns.

Click “Next >”.



Alternatively

Option 3 - The Tab and the Comma as Delimiters, without the option “Treat consecutive delimiters as one”

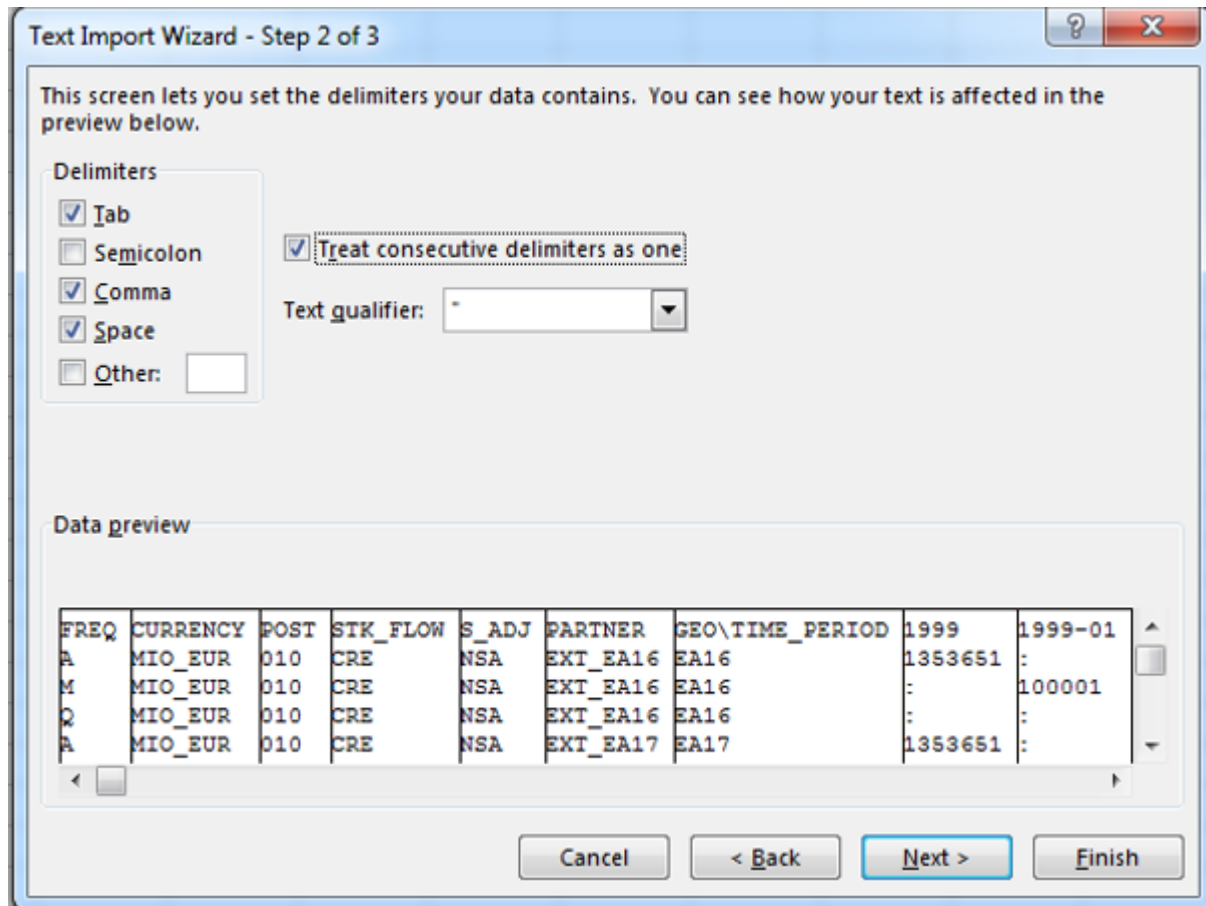
The “Tab” Delimiters is already checked by default, check the “Comma” delimiter box.

Uncheck the option “Treat consecutive delimiters as one”.

Codes stand in separated columns. Values and flags can be seen in the same column.

Dimensions and their items are in separate columns (except the dimension “GEO\TIME_PERIOD”).

Click “Next >”.



Alternatively:

Option 4 - The Tab, the Comma and the Space as Delimiters, with the option “Treat consecutive delimiters as one”

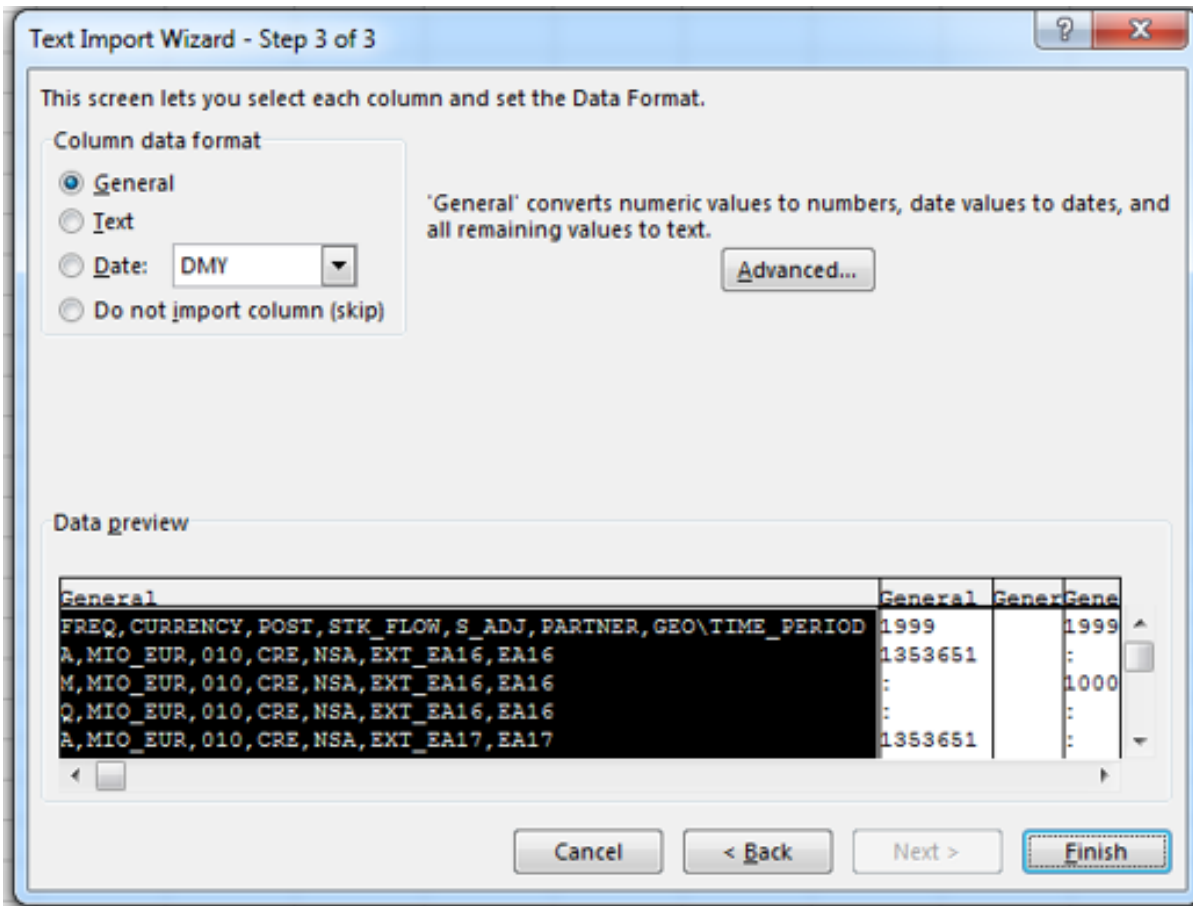
The “Tab” Delimiters is already checked by default, check the “Comma” and the “Space” delimiter boxes.

Then, the option “Treat consecutive delimiters as one” must be checked.

Codes are separate columns. Values and flags can be seen in the same column.

Dimensions and their items are in separate columns (except the dimension “GEO\TIME_PERIOD”).

Click “Next >”.



Step 3

Click the “Advanced...” button and choose the dot “.” (the decimal symbol used in the “TSV” file).

Click the “Finish” button.