

**CENTRAL BANK OF
THE REPUBLIC OF TURKEY**



THE ELECTRONIC DATA DELIVERY SYSTEM

EVDS Web Service Usage Guide

April 2024

1. EVDS Series Data Services

The parameters of web service methods are defined in this document.

Different function parameters are separated by "&" sign.

The data in EVDS are updated most frequently in daily frequency. Therefore, data collection once a day is very important in terms of overall system performance with Web service method. It may also be useful to encode the data for the same data group together with the data needed by a single call.

Serial Parameters

Parameter Name	Description
series	The serial codes are displayed. If more than one series is selected, it takes up parameters as the number of series, the serial codes are separated by a "-" sign.

Date Parameters

Parameter Name	Description
startDate	The start date is given.
endDate	The end date is given.

In order to display the frequency of the desired series, the first day of the corresponding frequency must be stated in the start date as dd-mm-yyyy format.

Example:

The series of (USD) US Dollar (Selling) coded as TL.DK.USD.S.YTL with starting date 01-01-2005 and annual frequency is calculated as follows:

```
https://evds2.tcmb.gov.tr/service/evds/series=TP.DK.USD.S.YTL&startDate=01-01-2005&endDate=01-02-2017&type=xml&key=XXXXXXXXX&aggregationTypes=avg&formulas=1&frequency=8
```

The year of 2005 is displayed as the start date of this search.

However, when all parameters are fixed for the same series and only the start date is changed as 02-01-2005;

https://evds2.tcmb.gov.tr/service/evds/series=TP.DK.USD.S.YTL&startDate=02-01-2005&endDate=01-02-2017&type=xml&key=XXXXXXXXX&aggregationTypes=avg&formulas=1&frequency=8

the list starts with the year of 2006. For this reason, the first day of the corresponding frequency must be indicated in order to display the desired frequency as in the example.

The End Date format will be also dd-mm-yyyy.

Format Parameters

Parameter Name	Description
type	The return types of web service are as csv, xml or json Object.
decimalSeperator	“,”, “.”. Default value is period.

API Key Parameters

Parameter Name	Description
key	API key is defined on the user. “key” parameter will be added to the http request header. If not, 403 Forbidden error will be taken.

*** The API Key (key=XXXXXXXX) is defined differently for each user and given with registration.

You can see the API Key with these steps:

- Sign in
- Click your username
- Select Profile menu
- Select API Key option

Observation Parameters

Parameter Name	Description
aggregationTypes	If more than one series is selected, it takes up parameters as the number of series, the serial codes are separated by a "-" sign. Average: avg, Minimum: min, Maximum: max Beginning: first, End: last, Cumulative: sum

	If this parameter is not entered by the user, the original observation parameter is applied for the relevant series.
--	--

Formula Parameters

Parameter Name	Description
formulas	<p>If more than one series is selected, it takes up parameters as the number of series, the serial codes are separated by a "-" sign.</p> <p>Level: 0 Percentage change: 1 Difference: 2 Year-to-year Percent Change: 3 Year-to-year Differences: 4 Percentage Change Compared to End-of-Previous Year: 5 Difference Compared to End-of-Previous Year : 6 Moving Average: 7 Moving Sum: 8</p> <p>If this parameter is not entered by the user, the level formula parameter is applied for the relevant series.</p>

Frequency Parameters

Parameter Name	Description
frequency	<p>This parameter takes a single value.</p> <p>Daily: 1 Business: 2 Weekly(Friday): 3 Twicemonthly: 4 Monthly: 5 Quarterly: 6 Semiannual: 7 Annual: 8</p> <p>If this parameter is not entered by the user, the common frequency of the series is taken. If you enter a higher frequency (eg monthly) than the common frequency of the series (eg: annually), the common frequency of the series is taken into account (eg: annually).</p>

2. Sample Links from the Most Frequently Used Series

2.1. Level Values Requests

Category: Exchange Rates

Data group: Exchange Rates(*)

Series: (USD) US Dollar (Buying)- TP.DK.USD.A, Series: (EUR) Euro (Buying)- TP.DK.EUR.A, series: (CHF) Swiss Franc (Buying) - TP.DK.CHF.A, Series: (GBP) Pound Sterling (Buying)- TP.DK.GBP.A, Series: (JPY) 100 Japanese Yen (Buying) - TP.DK.JPY.A

The link displays the series with formula level, output format xml and start date: 01-10-2017 and end date: 01-11-2017.

<https://evds2.tcmb.gov.tr/service/evds/series=TP.DK.USD.A-TP.DK.EUR.A-TP.DK.CHF.A-TP.DK.GBP.A-TP.DK.JPY.A&startDate=01-10-2017&endDate=01-11-2017&type=xml>

2.2. The exemplified links are generated from the most commonly used series with frequency formulas:

Category: Exchange Rates

Data group: Exchange Rates(**)

Series: (USD) US Dollar (Buying)- TP.DK.USD.A.YTL series start date: 01-02-2005 and end date: 01-02-2017,format parameter xml, observation value average, formula percentage change and frequency annually are calculated as follows:

<https://evds2.tcmb.gov.tr/service/evds/series=TP.DK.USD.A.YTL&startDate=01-02-2005&endDate=01-02-2017&type=xml&aggregationTypes=avg&formulas=1&frequency=8>

Series: (USD) US Dollar (Selling)- TP.DK.USD.S.YTL series start date: 01-02-2005 and end date: 01-02-2017,format parameter xml, observation value average, formula percentage change and frequency annually are calculated as follows:

<https://evds2.tcmb.gov.tr/service/evds/series=TP.DK.USD.S.YTL&startDate=01-02-2005&endDate=01-02-2017&type=xml&aggregationTypes=avg&formulas=1&frequency=8>

Series: (EUR) Euro (Buying)- P.DK.EUR.A.YTL series start date: 01-02-2005 and end date: 01-02-2017,format parameter xml, observation value average, formula percentage change and frequency annually are calculated as follows:

<https://evds2.tcmb.gov.tr/service/evds/series=TP.DK.EUR.A.YTL&startDate=01-02-2005&endDate=01-02-2017&type=xml&aggregationTypes=avg&formulas=1&frequency=8>

Series: (EUR) Euro (Selling)- P.DK.EUR.S.YTL series start date: 01-02-2005 and end date: 01-02-2017, format parameter xml, observation value average, formula percentage change and frequency annually are calculated as follows:

<https://evds2.tcmb.gov.tr/service/evds/series=TP.DK.EUR.S.YTL&startDate=01-02-2005&endDate=01-02-2017&type=xml&aggregationTypes=avg&formulas=1&frequency=8>

3. All Series Data By Given Data Group

This web service presents data from the all connected series based on the selected data group.

Data Group Parameters

Parameter Name	Description
datagroup	data group code

Sample Links

https://evds2.tcmb.gov.tr/service/evds/datagroup=bie_yssk&startDate=01-06-2017&endDate=07-09-2017&type=csv

4. EVDS Metadata Web Services

4.1. Category Service

This web service presents all categories in EVDS. “categories” must be added after the web definition “https://evds2.tcmb.gov.tr/service/evds”.

Sample Link:

<https://evds2.tcmb.gov.tr/service/evds/categories/type=xml>

The web service contains:

CATEGORY_ID	Category Code
TOPIC_TITLE_TR	Category Name
TOPIC_TITLE_ENG	Category Name English

4.2.Data Group Service

This web service presents data groups in EVDS. “datagroups” must be added after the web definition “https://evds2.tcmb.gov.tr/service/evds”.

Mode Parameters

Parameter Name	Description
mode	The data group listing is based on the following filtering: mode=0 Returns all data groups under all categories. mode=1 Returns data group information according to a data group selection. mode=2 Returns all data groups information according to a category.

Code Parameters

Parameter Name	Description
code	For mode=1; code=data group code For mode=2; code=category code

Sample Links:

https://evds2.tcmb.gov.tr/service/evds/datagroups/mode=1&code=bie_yssk&type=json

<https://evds2.tcmb.gov.tr/service/evds/datagroups/mode=2&code=2&type=xml>

The web service contains:

Code	Description
DATAGROUP_CODE	Data Group Code
DATAGROUP_NAME	Data Group Name (Turkish)
DATAGROUP_NAME_ENG	Data Group Name (English)
START_DATE	Data Start Date
END_DATE	Date End Date
FREQUENCY	Original Frequency
FREQUENCY_STR	Original Frequency Desc.
DATASOURCE	Data Source (Turkish)
DATASOURCE_ENG	Data Source (English)
METADATA_LINK	Metadata Link (Turkish)
METADATA_LINK_ENG	Metadata Link (English)
REV_POL_LINK	Revision Policy Link (Turkish)

REV_POL_LINK_ENG	Revision Policy Link (English)
APP_CHA_LINK	Application Change Link (Turkish)
APP_CHA_LINK_ENG	Application Change Link (English)
NOTE	Information Note (Turkish)
NOTE_ENG	Information Note (English)

4.3. Series Service

This web service presents the series list based on data group and series code in EVDS. “serieList” must be added after the web definition “https://evds2.tcmb.gov.tr/service/evds”.

Code Parameters

Parametre Adı	Açıklama
code	code= category code or data group code

Sample Links

<https://evds2.tcmb.gov.tr/service/evds/serieList/type=xml&code=TP.DK.USD.A>

https://evds2.tcmb.gov.tr/service/evds/serieList/type=csv&code=bie_ysk

The web servis contains:

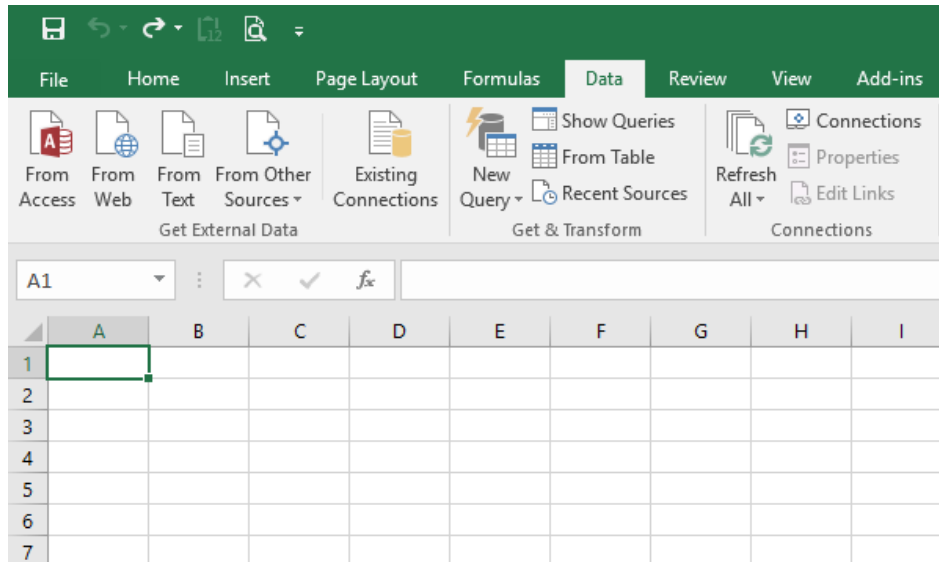
Code	Description
SERIE_CODE	Series Code
DATAGROUP_CODE	Data Group Code
SERIE_NAME	Series Name (Turkish)
SERIE_NAME_ENG	Series Name (English)
FREQUENCY_STR	Original Frequency Desc.
DEFAULT_AGG_METHOD_STR	Default Conversion Method Desc.
DEFAULT_AGG_METHOD	Default Conversion Method
TAG	Tag (Turkish)
TAG_ENG	Tag (English)
DATASOURCE	Data Source (Turkish)
DATASOURCE_ENG	Data Source (English)

METADATA_LINK	Metadata Link (Turkish)
METADATA_LINK_ENG	Metadata Link (English)
REV_POL_LINK	Revision Policy Link (Turkish)
REV_POL_LINK_ENG	Revision Policy Link (English)
APP_CHA_LINK	Application Change Link (Turkish)
APP_CHA_LINK_ENG	Application Change Link (English)
START_DATE	Data Start Date
END_DATE	Date End Date

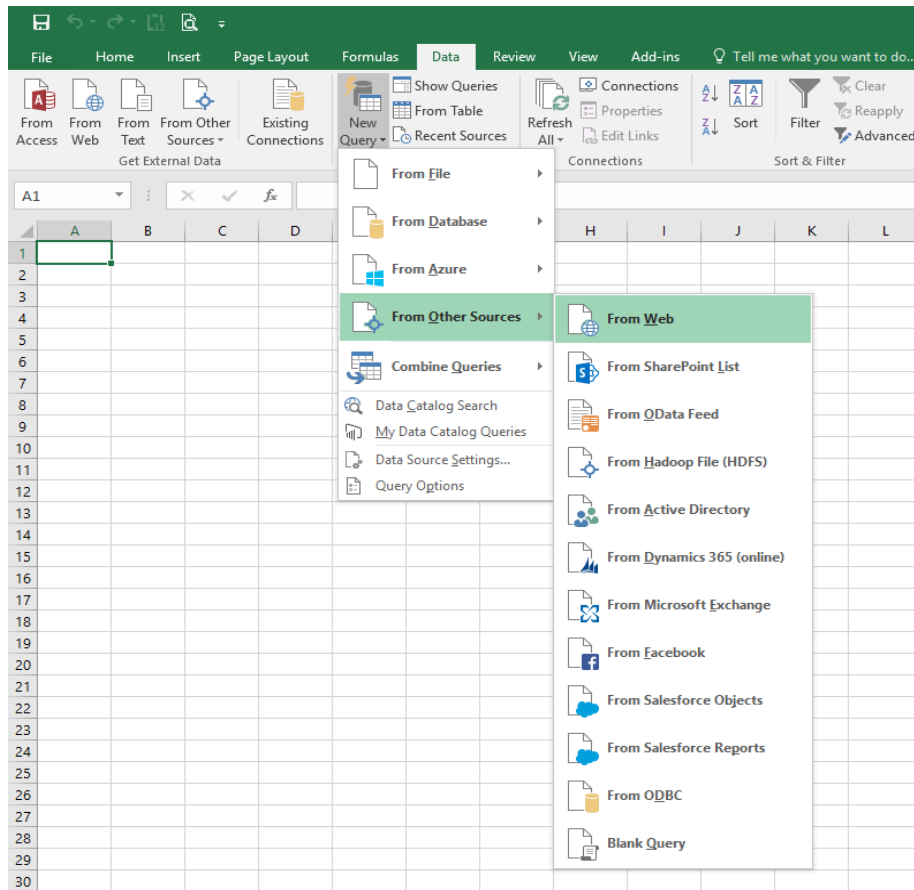
5. Import Data into Excel with Web Service Method

5.1. Excel 2016 version

-Open new workbook and then Click Data Tab



-Click From Other Sources and then Click From Web



-Enter the web service url

From Web

Basic Advanced

URL parts ⓘ

01-02-2017&type=xml&aggregationTypes=avg&formulas=1&frequency=8 ...

Add part

URL preview

...tr/service/evds/series=TP.DK.USD.S.YTL&startDate=01-01-2005&endDate=0

Command timeout in minutes (optional)

HTTP request header parameters (optional) ⓘ

key ▾

xxxxxxxxxx

Add header

OK

Cancel

https://evds2.tcmb.gov.tr/service/evds/series=TP.DK.USD.A-TP...

totalCount	items
32	Table

Load ▾ Edit Cancel

series=TP DK USD A-TP DK EUR A-TP DK CHF A-TP DK GBP A-TP DK JPY - Query Editor

File Home Transform Add Column View

Close & Load Refresh Preview Manage Query

Properties Advanced Editor Manage Columns Remove Columns Keep Rows Sort Split Column Group By Use First Row as Headers Use First Row as Headers Replace Values Merge Queries Append Queries Combine Files Combine Parameters Data source settings Data Sources New Source Recent Sources

totalCount Items

1 32 Table

Expand Aggregate

(Select All Columns)

Tarh

TP_DK_USD_A

TP_DK_EUR_A

TP_DK_CHF_A

TP_DK_GBP_A

TP_DK_JPY_A

UNIXTIME

Use original column name as prefix

OK Cancel

Query Settings

PROPERTIES

Name series=TP DK USD A-TP DK EUR A-TP DK

APPLIED STEPS

Source

Changed Type

series=TP DK USD A-TP DK EUR A-TP DK CHF A-TP DK GBP A-TP DK JPY - Query Editor

File Home Transform Add Column View

Close & Load Refresh Preview Manage Query

Properties Advanced Editor Manage Columns Remove Columns Keep Rows Sort Split Column Group By Use First Row as Headers Use First Row as Headers Replace Values Merge Queries Append Queries Combine Files Combine Parameters Data source settings Data Sources New Source Recent Sources

totalCount Items.Tarh Items.TP_DK_USD_A Items.TP_DK_EUR_A Items.TP_DK_CHF_A Items.TP_DK_GBP_A Items.TP_DK_JPY_A Items.UNIXTIME

	totalCount	Items.Tarh	Items.TP_DK_USD_A	Items.TP_DK_EUR_A	Items.TP_DK_CHF_A	Items.TP_DK_GBP_A	Items.TP_DK_JPY_A	Items.UNIXTIME
1	32	01-10-2017						Table
2	32	02-10-2017	3.5521	4.1924	3.6528	4.7478	3.1495	Table
3	32	03-10-2017	3.5757	4.1992	3.6739	4.754	3.1607	Table
4	32	04-10-2017	3.578	4.2007	3.6589	4.7354	3.1577	Table
5	32	05-10-2017	3.5634	4.1924	3.6548	4.72	3.1599	Table
6	32	06-10-2017	3.5685	4.1964	3.6486	4.6998	3.161	Table
7	32	07-10-2017						Table
8	32	08-10-2017						Table
9	32	09-10-2017	3.6041	4.2168	3.6704	4.7024	3.1828	Table
10	32	10-10-2017	3.6959	4.3383	3.7687	4.8467	3.2733	Table
11	32	11-10-2017	3.681	4.3375	3.7579	4.8454	3.2658	Table
12	32	12-10-2017	3.6753	4.3451	3.7624	4.8411	3.2659	Table
13	32	13-10-2017	3.6448	4.3226	3.7342	4.8073	3.2374	Table
14	32	14-10-2017						Table
15	32	15-10-2017						Table
16	32	16-10-2017	3.6479	4.3142	3.7314	4.8414	3.2468	Table
17	32	17-10-2017	3.6401	4.2933	3.7228	4.8318	3.2486	Table

Query Settings

PROPERTIES

Name series=TP DK USD A-TP DK EUR A-TP DK

APPLIED STEPS

Source

Changed Type

Expanded Items

series=TP DK USD A-TP DK EUR A-TP DK CHF A-TP DK GBP A-TP DK JPY - Query Editor

File Home Transform Add Column View

Close & Load Refresh Preview Manage Query

Properties Advanced Editor Manage Columns Remove Columns Keep Rows Sort Split Column Group By Use First Row as Headers Use First Row as Headers Replace Values Merge Queries Append Queries Combine Files Combine Parameters Data source settings Data Sources New Source Recent Sources

totalCount Items.Tarh Items.TP_DK_USD_A Items.TP_DK_EUR_A Items.TP_DK_CHF_A Items.TP_DK_GBP_A Items.TP_DK_JPY_A Items.UNIXTIME

	totalCount	Items.Tarh	Items.TP_DK_USD_A	Items.TP_DK_EUR_A	Items.TP_DK_CHF_A	Items.TP_DK_GBP_A	Items.TP_DK_JPY_A	Items.UNIXTIME
1	32	01-10-2017						Table
2	32	02-10-2017	3.5521	4.1924	3.6528	4.7478	3.1495	Table
3	32	03-10-2017	3.5757	4.1992	3.6739	4.754	3.1607	Table
4	32	04-10-2017	3.578	4.2007	3.6589	4.7354	3.1577	Table
5	32	05-10-2017	3.5634	4.1924	3.6548	4.72	3.1599	Table
6	32	06-10-2017	3.5685	4.1964	3.6486	4.6998	3.161	Table
7	32	07-10-2017						Table
8	32	08-10-2017						Table
9	32	09-10-2017	3.6041	4.2168	3.6704	4.7024	3.1828	Table
10	32	10-10-2017	3.6959	4.3383	3.7687	4.8467	3.2733	Table
11	32	11-10-2017	3.681	4.3375	3.7579	4.8454	3.2658	Table
12	32	12-10-2017	3.6753	4.3451	3.7624	4.8411	3.2659	Table
13	32	13-10-2017	3.6448	4.3226	3.7342	4.8073	3.2374	Table
14	32	14-10-2017						Table

Query Settings

PROPERTIES

Name series=TP DK USD A-TP DK EUR A-TP DK

APPLIED STEPS

Source

Changed Type

Expanded Items

The screenshot shows the Microsoft Excel interface with the 'Table Tools' ribbon active. The 'Refresh' button is highlighted in the 'External Table Data' group. Below the ribbon, a table is displayed with the following data:

	A	B	C	D	E	F	G
1	totalCount	items.Tarih	items.TP_DK_USD_A	items.TP_DK_EUR_A	items.TP_DK_CHF_A	items.TP_DK_GBP_A	items.TP_DK_JPY_A
2	32	01-10-2017					
3	32	02-10-2017	3.5521	4.1924	3.6528	4.7478	3.1495
4	32	03-10-2017	3.5757	4.1992	3.6739	4.754	3.1607
5	32	04-10-2017	3.578	4.2007	3.6589	4.7354	3.1577
6	32	05-10-2017	3.5634	4.1924	3.6548	4.72	3.1599
7	32	06-10-2017	3.5685	4.1964	3.6486	4.6998	3.161
8	32	07-10-2017					
9	32	08-10-2017					
10	32	09-10-2017	3.6041	4.2168	3.6704	4.7024	3.1828
11	32	10-10-2017	3.6959	4.3383	3.7687	4.8467	3.2733
12	32	11-10-2017	3.681	4.3375	3.7579	4.8454	3.2658
13	32	12-10-2017	3.6753	4.3451	3.7624	4.8411	3.2659
14	32	13-10-2017	3.6448	4.3226	3.7342	4.8073	3.2374
15	32	14-10-2017					
16	32	15-10-2017					
17	32	16-10-2017	3.6479	4.3142	3.7314	4.8414	3.2468
18	32	17-10-2017	3.6401	4.2933	3.7228	4.8318	3.2486
19	32	18-10-2017	3.6546	4.2989	3.7294	4.8302	3.2499
20	32	19-10-2017	3.6748	4.3184	3.7393	4.832	3.2543
21	32	20-10-2017	3.66	4.3258	3.7348	4.814	3.2405
22	32	21-10-2017					
23	32	22-10-2017					
24	32	23-10-2017	3.6595	4.3219	3.7198	4.8038	3.2228
25	32	24-10-2017	3.6985	4.3445	3.7413	4.8657	3.2411
26	32	25-10-2017	3.7111	4.3637	3.7537	4.8852	3.2562
27	32	26-10-2017	3.7309	4.3909	3.752	4.9115	3.2634
28	32	27-10-2017	3.7661	4.4468	3.7938	4.9721	3.3049

You can use Refresh button to retrieve new data in the given date range.