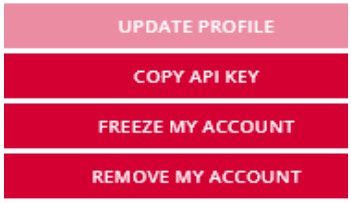
EVDS Web Service and API Usage

To use the EVDS web service, you must be a registered user (refer to the User Operations Guide). Click the "My Page" link, enter your username and password. After logging in, click on your username to access the menu, and select "Profile." At the bottom of the page, use the "Copy API Key" option to obtain your API key (Figure 1). The API Key (key=XXXXXXX) is unique for each user. Note: In web service calls, you must add the "key" value to the HTTP Request Header. Users who do not send the key value or send it incorrectly will receive a 403 Forbidden error.

Figure-1: API Key



Parameters for different functions are separated by the "&" symbol.

Data in EVDS is typically updated at a daily frequency. Therefore, when retrieving data via the web service method, the data will be pulled once per day. Additionally, it is beneficial to encode series from the same data group together, enabling data retrieval in a single request.

The date range for web service requests is limited to a maximum of 1000 observation values. If a range higher than this is entered, the system will retrieve the data by going backward from the End Date for 1000 observation values and display these data on the screen.

I. Series Parameters

Parameter Name	Description
Series	Displays series codes. When multiple series are selected, the number of parameters matches the number of series, and the series codes are separated by the "-" sign.

I.a. Date Parameters

Parameter Name	Description
startDate	Specifies the start date. All dates must be written in the dd-mm-yyyy format. For the full display of the preferred frequency, the first day of that frequency should be written in the start date field. For example, for Q2 of 2025, the start date should be 01-04-2025.
endDate	Specifies the end date. All dates must be written in the dd-mm-yyyy format. **Note**: *For continuous data retrieval, write a far future date. For example, use 01-01-2999.*

All queries will be made in the **SERIE_DATA** table.

Example: The series with code TP.DK.USD.S.YTL (USD Dollar (Currency Sale)) with a start date of 01-01-2005, using the formula LEVEL and annual frequency, calculates the annual average data.

https://evds3.tcmb.gov.tr/igmevdsms-dis/series=TP.DK.USD.S.YTL&startDate=01-01-2005&endDate=01-02-2017&type=xml&aggregationTypes=avg&formulas=1&frequency=8 *(key=xxxxxx header will be provided)*

While 2005 data can be displayed in the result made with this search, when the start date is changed to 02-01-2005 by keeping all parameters constant for the same series;

https://evds3.tcmb.gov.tr/igmevdsms-dis/series=TP.DK.USD.S.YTL&startDate=02-01-2005&endDate=01-02-2017&type=xml&aggregationTypes=avg&formulas=1&frequency=8 *(key=xxxxxx will be given as header)* listing starts with 2006 data. For this reason, the first day of the relevant frequency should be written in order to display the desired frequency.

I.b. Format Parameters

Parameter Name	Description
type	The return type of the web service is csv, xml, or a json object.
decimalSeperator	Specifies the decimal separator: "," or ".". The default value is a dot. A comma needs to be entered as a parameter.

I.c. API Key Parameter

Parameter Name	Description
key	This is the unique API key assigned to the user. The API key is different for each user (see the Membership Operations Guide). To use web service calls, you need to add the "key" value to the HTTP Request Header. If the "key" is not sent or is incorrect, a 403 Forbidden error will be returned.

I.d. Observation Parameters

Parameter Name	Description
aggregationTypes	When multiple series are selected, the number of parameters corresponds to the number of series, and they are separated by the "-" sign. Arithmetic Average: avg Minimum: min Maximum: max First: first Last: last Cumulative: sum If not entered by the user, the original observation parameters for the series will be applied.

Arithmetic Average: The simple arithmetic mean, with zero values included.

Minimum: The minimum value for each period in the transformed frequency.

Maximum: The maximum value for each period in the transformed frequency.

First: The first value for each period in the transformed frequency.

Last: The last value for each period in the transformed frequency.

Cumulative: The sum of all values for each period in the transformed frequency.

I.e. Formula Parameters

Parameter Name	Description
Formulas	When multiple series are selected, the number of parameters corresponds to the number of series, and they are separated by the "-" sign. Level: 0 Percentage Change: 1 Difference: 2 Annual Percentage Change: 3 Annual Difference: 4 Percentage Change from the End of the Previous Year: 5 Difference from the End of the Previous Year: 6 Moving Average: 7 Moving Total: 8

Level: If this parameter is not entered by the user, the level parameter is applied for the relevant series.

Percentage Change Compared to the Previous Period: The percentage change of each data compared to the previous observation value is calculated and the result is written for the same period.

Formula: (Series[T] - Series [T-1]) / Series [T-1]) x100.

Difference: The difference of each data compared to the previous observation value is calculated and the result is written for the same period.

The formula is Series [T] - Series [T-1].

Annual Percentage Change: The percentage change of each data according to the observation value in the same period of the previous year is calculated and the result is written to the same period.

Annual Difference: The difference of each data according to the observation value in the same period of the previous year is calculated and the result is written for the same period.

Percentage Change Compared to the End of the Previous Year: The percentage change of each data compared to the last observation value of the previous year is calculated and the result is written for the same period.

Difference Compared to the End of the Previous Year: The difference of each data compared to the last observation value of the previous year is calculated and the result is written to the same period.

Moving Average: Takes the average of all data in a year backwards, including the current observation for each data. For example, the moving average of a monthly data set is calculated by taking the average of the previous twelve months with the current observation, the moving average of a weekly data set is calculated by taking the average of the previous 52 weeks with the current period, and the moving average of a daily data set is calculated by taking the average of the previous 365 days with the current period.

Moving Sum: Takes the sum of all data in a year backwards, including the current observation for each data. For example, the moving sum of a monthly data set is calculated by taking the sum of the previous twelve months with the current observation, the moving sum of a weekly data set is calculated by taking the sum of the previous 52 weeks with the current period, and the moving sum of a daily data set is calculated by taking the sum of the previous 365 days with the current period.

I.f. Frequency Parameters

Parameter Name	Description
frequency	This parameter takes a single value. Daily: 1 Business Day: 2 Weekly: 3 Bi-weekly: 4 Monthly: 5 Quarterly: 6 Semi-Annual: 7 Annual: 8

	If not entered by the user, the common frequency of the series will be used. If a higher frequency (e.g., monthly) than the common frequency (e.g., annual) is entered, the higher frequency is considered.

II. All Parameters

Series	Date Parameters	Format Parameters	Observation Parameters	Frequency Parameters	Formula Parameters
Series Codes	Start Date End Date	csv xml json	Average: avg, Minimum: min, Maximum: max, First: first, Last: last, Cumulative: sum	Daily: 1 Business Day: 2 Weekly: 3 Bi-weekly: 4 Monthly: 5 Quarterly: 6 Semi-Annual: 7 Annual: 8	Level: 0 Percentage Change: 1 Difference: 2 Annual Percentage Change: 3 Yearly Difference: 4 To the end of the previous year Percentage Change Over From: 5 To the end of the previous year Difference According to: 6 Moving Average: 7 Moving Total: 8

III. Frequently Used URL Examples

- https://evds3.tcmb.gov.tr/igmevdsms-dis/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 *(key=xxxxxx header will be provided)*

III.a. Frequency Conversion Example:

- https://evds3.tcmb.gov.tr/igmevdsms-dis/series=TP.DK.USD.A.YTL&startDate=01-02-2005&endDate=01-02-2017&type=xml&aggregationTypes=avg&formulas=1&frequency=8 *(key=xxxxxx header will be provided)*
- https://evds3.tcmb.gov.tr/igmevdsms-dis/series=TP.DK.USD.s.YTL&startDate=01-02-2005&endDate=01-02-2017&type=xml&aggregationTypes=avg&formulas=1&frequency=8 *(key=xxxxxx header will be provided)*
- https://evds3.tcmb.gov.tr/igmevdsms-dis/series=TP.DK.EUR.A.YTL&startDate=01-02-2005&endDate=01-02-2017&type=xml&aggregationTypes=avg&formulas=1&frequency=5 *(key=xxxxxx header will be provided)*

IV. Web Service for All Series Under a Data Group

This service provides the data for all related series under a specific data group. To use it, you should append the datagroup parameter with the data group code.

IV.a. Data Group Parameter

Parameter Name	Description
datagroup	The code for the data group.

Example:

- https://evds3.tcmb.gov.tr/igmevdsms-dis/datagroup=bie_yssk&startDate=01-06-2017&endDate=07-09-2017&type=csv (key=xxxxxx header will be provided)

V. EVDS Metadata Web Services

V.a. Topic Service

This service provides all topic titles. To use it, add categories after the base URL of the service.

Örnek:

- https://evds3.tcmb.gov.tr/igmevdsms-dis/categories/type=xml *(key=xxxxxx will be given as header)*

Sonuç Detayları

Field Code	Field Name
CATEGORY_ID	Topic Title Code
TOPIC_TITLE_TR	Topic Title
TOPIC_TITLE_ENG	Topic Title (English)

V.b. Data Group Service

This service provides metadata information for all data groups under a specific topic title or for a single data group. You can use this service by appending datagroups to the base URL: "datagroups" should be added after "https://evds3.tcmb.gov.tr/igmevdsms-dis/" to represent this service.

V.b.i. Status Parameter

Parameter Name	Description
Mode	Determines the listing type of data groups: mode=0: Lists all data groups under all topic titles. mode=1: Lists the metadata for a specific data group.

V.b.ii. Code Parameter

Parameter Name	Description
Code	The code for the data group (for mode=1)

Examples:

- https://evds3.tcmb.gov.tr/igmevdsms-dis/datagroups/mode=0&type=xml *(key=xxxxxx header will be provided)*
- https://evds3.tcmb.gov.tr/igmevdsms-dis/datagroups/mode=1&code=bie_yssk&type=json *(key=xxxxxx header will be provided)*

Result Details:

Field Code	Field Name
Datagroup_Code	Data Group Code
Datagroup_Name	Data Group Name
Datagroup_Name_Eng	Data Group Name (English)
Start_Date	Data Start Date
End_Date	Data End Date
Frequency	Original Frequency Code
Frequency_Str	Original Frequency Description
Datasource	Data Source
Datasource_Eng	Data Source (English)
Metadata_Link	Metadata Link
Metadata_Link_Eng	Metadata Link (English)
Rev_Pol_Link	Revision Policy Link
Rev_Pol_Link_Eng	Revision Policy Link (English)
App_Cha_Link Uyg.	Application Change Link
App_Cha_Link_Eng	Application Change Link (English)
Uyg. Note	Information Note
Note_Eng	Information Note (English)

V.c. Series List Service

This service provides a list of series based on a specific data group or series code. To use it, append serieList to the base URL: "serieList" should be added after "https://evds3.tcmb.gov.tr/igmevdsms-dis/" to represent this service.

V.c.i. Code Parameter

Parameter Name	Description
Code	The code for the data group or series.

Examples:

- https://evds3.tcmb.gov.tr/igmevdsms-dis/serieList/type=xml&code=TP.DK.USD.A *(key=xxxxxx header will be provided)*
- https://evds3.tcmb.gov.tr/igmevdsms-dis/serieList/type=csv&code=bie_yssk *(key=xxxxxx header will be provided)*

Result Details:

Field Code	Field Name
Serie_Code	Series Code
Datagroup_Code	Data Group Code
Serie_Name	Series Name
Serie_Name_Eng	Series Name (English)
Frequency_Str	Original Frequency Description
Default_Agg_Method_Str	Default Aggregation Method Description
Default_Agg_Method	Default Aggregation Method
Tag	Tags
Tag_Eng	Tags (İngilizce)
Datasource	Data Source

Datasource_Eng	Data Source (İngilizce)
Metadata_Link	Metadata Link
Metadata_Link_Eng	Metadata Link (İngilizce)
Rev_Pol_Link	Revision Policy Link
Rev_Pol_Link_Eng	Revision Policy Link (İngilizce)
App_Cha_Link Uyg.	Application Change Link
App_Cha_Link_Eng	Application Change Link (English)
Start_Date	Data Start Date
End_Date	Data End Date