# WITS API USER GUIDE

# **VERSION 1.4.1**

Date	Version	Comments
Apr-05-2016	1.0	Initial Version
Apr-19-2016	1.1	Update to the Data Structure Definition (DSD) to eliminate measures and dimensions parameter (the last parameter) on the SDMX tariff data request call
Apr-22-2016	1.2	Appropriate HTTP status response status codes are returned as Error Message. Support for Details Parameter on SDMX query added
May-05-2016	1.3	TradeStat data added
Feb-21-2017	1.4	JSON support added for SDMX data request and URL based data request
Nov-11-2024	1.4.1	Enabled https. Note API calls work only in https

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# Overview

Use WITS REST API to programmatically access databases in WITS. At present the UNCTAD TRAINS dataset and Trade Stats are available through our API module. We are planning to add more dataset in the near feature. If you are interested in a specific dataset that are currently available through WITS, please let us know by email at <a href="wits@worldbank.org">wits@worldbank.org</a> The WITS API module supports two request format: <a href="mailto:SDMX">SDMX</a> and URL based structure. The data response structure for both the requests are identical and available currently in XML format.

# **UNCTAD TRAINS Data**

Preferential and most-favored-nation (MFN) tariff rates are available in this dataset. Data are harmonized across the countries at 6-digit level of the Harmonized System. Tariff data (traded and non-traded tariff lines) can be downloaded by specifying values for the below dimensions:

**Reporter**: The Reporter ISO Country Code. Refer metadata section for list of Reporter Code and name.

**Partner:** Country or group of countries to which the (preferential) tariff rate applies. Refer metadata section for list of single partner code and alpha-numeric code that represents a group of countries.

**Product Code:** 6-digit HS code. Refer metadata section for list of Reporter Codes. Refer metadata section for list of product Codes and description.

**Year:** Year in which the tariff was valid. Refer metadata section for available years.

**Data Type:** Reported Tariff rate only or Reported tariff rate and all specific duty expression estimated using UNCTAD method.

# Limitation on Data Request

To avoid server overload request for entire database is not possible in one query. The following are the options to request data.

- All products tariff schedules can be requested for a single reporter, partner, and year.
- Tariff schedule for a single reporter, partner, and product can be requested for a range of years.
- Tariff schedule for one or more reporters, one or more partners, one or more products can be requested for a single year.
- Either reported or AVE estimated data type can be requested in a single request

# **Basic Call structure**

The base URL to access WITS API is <a href="https://wits.worldbank.org/API/V1">https://wits.worldbank.org/API/V1</a>. The following section provides overview on call structure for URL based structure query request and SDMX query request. Note, Data Availability can be queried only in URL based structure request and not in SDMX Queries.

### URL based structure Queries.

To access Meta data and data availability, the base URL is <a href="https://wits.worldbank.org/API/V1/WITS">https://wits.worldbank.org/API/V1/WITS</a>.

The data availability API's returns the available country periods in UNCTAD TRAINS tariff datasets. Also, this API returns the available partner codes and whether estimated duty rate for specific duty expression is available for a specific country-period. Using the information available on data availability response, tariff data request can be framed.

The base URL for tariff data request is https://wits.worldbank.org/API/V1/SDMX/V21/. To obtain country and partner names, use Reporter-Partner API's. To obtain the nomenclature name and product description use the nomenclature API's and Product APIs, respectively. To obtain the tariff data in JSON format include "?format=JSON" on the data request query.

The access data for more than one value for a parameter, the use the delimiter ";" to separate the values.

#### **SDMX Queries**

The base URL to access data flow, code list and Data Structure Definition (DSD) is.

http://wits.worldbank.org/API/V1/SDMX/V21/rest/. The base URL to access Trade Stats-Trade dataset is http://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_trade, Trade Stats-Tariff dataset is http://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_tariff and development data is http://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_development

# **Response Format**

Let us consider a sample request format for Reporter=840 (USA); Partner=000 (World); Product=020110; year=2000 and reported tariff only.

 $\frac{\text{https://wits.worldbank.org/API/V1/SDMX/V21/datasource/TRN/reporter/840/partner/000/product/020110/year/2000/datatype/reported}{\text{2000/datatype/reported}} \\$ 

#### Part of the response for the above request looks like below.

The following measures are available on the response along with the requested dimension values.

**SimpleAverage**: Simple average of ad valorem tariff rates from all national tariff lines within the corresponding HS 6-digit code. OBS\_Value denotes the simple average on the response.

TARIFFTYPE: Identifies whether the tariff rate is Preferential (PREF) or most-favored-nation (MFN).

**TOTALNOOFLINES**: Total number of national tariff lines within the corresponding HS 6-digit code.

**NBR\_PREF\_LINES:** Number of national tariff lines within the corresponding HS 6-digit code for which preferential rates are applicable.

**NBR\_MFN\_LINES:** Number of national tariff lines within the corresponding HS 6-digit code for which preferential rates are NOT applicable (so that MFN rates are used in the calculation of the simple average)

**NBR\_NA\_LINES:** Number of national tariff lines within the corresponding HS 6-digit code for which preferential rates are NOT in ad valorem form (so that the line is not included in the calculation of the simple average)

**SUM\_OF\_RATES**: Sum of ad valorem tariff rates from all national tariff lines within the corresponding HS 6-digit code

**MIN\_RATE:** Lowest ad valorem tariff rates among all national tariff lines within the corresponding HS 6digit code.

**MAX\_RATE:** Highest ad valorem tariff rates among all national tariff lines within the corresponding HS 6-digit code

**NOMENCODE:** Revision of HS used (H0 = HS 1988/92, H1= HS 1996, H2 = HS 2002, H3 = HS 2007, H4 = HS 2012)

**EXCLUDEDFROM:** Country code of the country excluded from the application of the preferential rate for the corresponding product.

# URL based structure request.

There are two types of requests: One request type is to retrieve the Meta data and other request type is to retrieve the tariff data.

# Meta Data Request

This section helps to get data availability, country list, available partners for a given country period.

# Reporter and Partner:

This API helps to obtain reporter and partner name, alpha numeric code, ISO3 code and other. Meta data about the countries that are available in the UNCTAD TRAINS dataset.

#### **URL:**

https://wits.worldbank.org/API/V1/wits/datasource/trn/country/ALL|:CountryCode|: CountryCodeList

#### Method:

**GET** 

#### **URL Parameter:**

ALL: To retrieve all countries/partners Meta data.

:CountryCode= Three letter alpha numeric country code

:CountryCodeList= List of three letter alpha numeric country codes separated by delimiter(;)

#### Response Format:

XML

# Success Response:

#### **HTTP Response Status Code: 200**

Content: The response has the following information about the requested country/partner

- Country Code
- ISO3 Code
- Name
- Is the country code available as reporter?
- Is the country code available as partner?
- Is it a country code group?
- Group Type
- Notes

#### Sample Request:

To request all countries:

https://wits.worldbank.org/API/V1/wits/datasource/trn/country/ALL To

request a specific country:

https://wits.worldbank.org/API/V1/wits/datasource/trn/country/004

To request list of countries:

https://wits.worldbank.org/API/V1/wits/datasource/trn/country/004;840;G24

### Sample Response Format:

```
r<wits:datasource xmlns:wits="http://wits.worldbank.org" datasourcecode="TRN" datasourcename="WITS - UNTCTAD
TRAINS" language="en" page="1" pages="1" per_page="50" total="1">
    ▼<wits:countries>
    ▼<wits:country countrycode="840" isreporter="1" ispartner="1" isgroup="No" grouptype="N/A">
    <wits:iso3Code>USAc/wits:iso3Code>
    <wits:name>United States</wits:name>
    <wits:notes/>
    </wits:country>
    </wits:countries>
    </wits:datasource>
```

#### Nomenclature

This API helps to obtain information on nomenclatures that are available in the UNCTAD TRAINS dataset.

#### **URL**:

https://wits.worldbank.org/API/V1/wits/datasource/trn/ nomenclature /ALL|:nomenCode|: nomenCodeList

#### Method:

**GET** 

#### **URL Parameter:**

ALL: To retrieve all of nomenclature Meta data available in the dataset

: nomenCode = Two letter alpha numeric nomenclature code

: nomenCodeList = List of two letter alpha numeric nomenclature codes separated by delimiter (;)

### Response Format:

XML

#### Success Response:

#### HTTP Response Status Code: 200

Content: The response has the following information about the requested nomenclature

- Nomenclature code
- Nomenclature description
- Nomenclature Name

# Sample Request:

To request all classifications:

https://wits.worldbank.org/API/V1/wits/datasource/trn/nomenclature/

To request a specific classification:

https://wits.worldbank.org/API/V1/wits/datasource/trn/nomenclature/H0

To request list of classifications:

https://wits.worldbank.org/API/V1/wits/datasource/trn/nomenclature/H0;H4

### Sample Response Format:

# **Product**

This API helps to obtain information on the products that are available in the UNCTAD TRAINS dataset.

# **URL:**

https://wits.worldbank.org/API/V1/wits/datasource/trn/product/ALL|:productCode|:productCodeList

### Method:

**GET** 

#### **URL Parameter:**

ALL: To access all the products metadata available in this dataset

: productCode = Six letter numeric product code

: productCodeList = List of six letter numeric product codes separated by delimiter(;)

#### Response Format:

XML

#### Success Response:

### **HTTP Response Status Code: 200**

**Content:** The response has the following information about the product codes.

- Product code
- Product description
- Is the product code group?
- Product Group Type
- Notes

#### Sample Request:

To request all products: <a href="https://wits.worldbank.org/API/V1/wits/datasource/trn/product/all">https://wits.worldbank.org/API/V1/wits/datasource/trn/product/all</a>

To request a specific product: <a href="https://wits.worldbank.org/API/V1/wits/datasource/trn/product/010110">https://wits.worldbank.org/API/V1/wits/datasource/trn/product/010110</a>

#### To request list of classification:

https://wits.worldbank.org/API/V1/wits/datasource/trn/product/010110;010120

#### Sample Response Format:

```
v<wits:datasource xmlns:wits="http://wits.worldbank.org" datasourcecode="TRN" datasourcename="WITS - UNTCTAD
TRAINS" language="en" page="1" pages="1" per_page="50" total="2">
v<wits:products>
v<wits:products>
v<wits:product productcode="010110" isgroup="No" nomenclaturecode="HS" grouptype="N/A">
vits:productdescription>(2002-2011) - Pure-bred breeding animals</wits:productdescription>
vits:notes/>
v/wits:product>
v<wits:product productcode="010120" isgroup="No" nomenclaturecode="HS" grouptype="N/A">
vits:productdescription>(-2001) - Asses, mules and hinnies</wits:productdescription>
v/wits:product>
v/wits:product>
v/wits:product>
v/wits:product>
v/wits:datasource>
```

#### **Data Availability**

This API helps to obtain data availability in the UNCTAD TRAINS dataset. This API provide the data availability of entire TRAINS dataset or data availability for one or more reporters or in given year(s) tariff available countries information.

#### **URL**:

https://wits.worldbank.org/API/V1/wits/datasource/trn/dataavailability

https://wits.worldbank.org/API/V1/wits/datasource/trn/dataavailability/country/ALL|:countryCode|:countryCodeList/year/ALL:year|:yearList

Method:

**GET** 

#### **URL Parameter:**

ALL: To access all available entries in this dataset.

:CountryCode= Three letter alpha numeric country code

:CountryCodeList= List of three letter alpha numeric country codes separated by delimiter(;)

: year = {integer}

:yearList= List of years separated by delimiter(;)

Response Format:

XML

Success Response:

### HTTP Response Status Code: 200

**Content:** The response has the following information on data availability

- Country Information (Country name, code, iso3, Is group, group type)
- Year
- Reported Nomenclature
- Number of Preferential Agreement available
- Partner list
- Is the estimated tariff rate available for specific duty expression?
- notes
- Last updated date

# Sample Request:

To request entire (all country periods) data availability:

https://wits.worldbank.org/API/V1/wits/datasource/trn/dataavailability/

To request a specific country and all years:

https://wits.worldbank.org/API/V1/wits/datasource/trn/dataavailability/country/840/year/all

To request all countries and a specific year:

https://wits.worldbank.org/API/V1/wits/datasource/trn/dataavailability/country/all/year/2000 To request list of countries and all years:

https://wits.worldbank.org/API/V1/wits/datasource/trn/dataavailability/country/840;918/year/a

To request all countries and list of years:

https://wits.worldbank.org/API/V1/wits/datasource/trn/dataavailability/country/all/year/2000;2001

To request a specific country and a year:

https://wits.worldbank.org/API/V1/wits/datasource/trn/dataavailability/country/840/year/2000

Sample Response Format:

#### **Error Response:**

The following error response is obtained for invalid parameter values.

WITS Message Code: 160

Content: Data not found

```
▼<wits:error xmlns:wits="http://wits.worldbank.org">
    ▼<wits:message id="160" key="Data not found.">
    The provided parameter value is not valid or data not found.
    </wits:message>
    </wits:error>
```

# **Tariff Data Request**

This API helps to access the traded and non-traded tariff lines tariff data. This API offer variety of options to retrieve the tariff schedule. User can request for a country-period-partner, entire tariff schedule or country-partner-product tariff schedule over period.

#### URL:

https://wits.worldbank.org/API/V1/SDMX/V21/datasource/TRN/reporter/{ALL|Reporter Code list }/partner/ {ALL|Partner Code list }/product/{ALL|Product Code list} /year/{ ALL|Year List}/datatype/{reported|aveestimated}[?format=JSON]

Method:

**GET** 

#### **URL Parameter:**

Data Source: The value for UNCTAD TRAINS dataset is "TRN"

Data Type: The datatype parameter can have "reported" or "aveestimated" as the value.

**Reporter**: The reporter parameter can have the value of "All" or list of country codes from Reporter and Partner metadata request.

**Product**: The product parameter can the value of "All" or list of product codes, which can be obtained from Product Metadata request.

**Partner**: The partner parameter can have the value of "All", or list of partner codes obtained from data availability metadata request call.

**Year**: The year parameter can have the value of "All", or list of values obtained from data availability metadata request call.

**Format:** The format parameter can have the value of "JSON". When a valid format parameter is specified, the data is returned in JSON format.

#### Response Format:

XML for JSON (when format=JSON present on the URL parameter)

# Success Response:

#### HTTP Response Status Code: 200

**Content:** The response has the following information on tariff data. For more information on this measure, refer here.

- Simple Average
- Tariff type
- Total number of lines
- Number of preferential lines
- Number of MFN lines
- Number of Specific duty rate tariff lines
- Sum of rates
- Min Rate
- Max Rate
- Reported Nomenclature

### Sample Request:

To request one reporter-one partner-one product- one year-reported tariff rate:

https://wits.worldbank.org/API/V1/SDMX/V21/datasource/TRN/reporter/840/partner/000/product/020 110/year/2000/datatype/reported

To request one reporter-one partner-all product- one year-reported tariff rate:

https://wits.worldbank.org/API/V1/SDMX/V21/datasource/TRN/reporter/840/partner/000/product/All/year/2000/datatype/reported

To request one reporter-one partner-one product-all available years-reported tariff rate:

https://wits.worldbank.org/API/V1/SDMX/V21/datasource/TRN/reporter/840/partner/000/product/020 110/year/all/datatype/reported

To request all reporters-one partner-one product-all available year-reported tariff rate:

https://wits.worldbank.org/API/V1/SDMX/V21/datasource/TRN/reporter/840/partner/000/product/All/year/2000/datatype/reported

To request multiple reporters-all partners-one product-one year-reported tariff rate:

https://wits.worldbank.org/API/V1/SDMX/V21/datasource/TRN/reporter/840;918/partner/all/product/020110/year/2000/datatype/reported

To request multiple reporters-all partners-one product-all available years--reported tariff rate and estimated tariff rates:

https://wits.worldbank.org/API/V1/SDMX/V21/datasource/TRN/reporter/840;918/partner/000/product/020110/year/all/datatype/aveestimated

To request multiple reporters-all partners-one product-all available years--reported tariff rate and estimated tariff rates in JSON format:

https://wits.worldbank.org/API/V1/SDMX/V21/datasource/TRN/reporter/840;918/partner/000/product/020110/year/all/datatype/aveestimated?format=JSON

### Sample Response Format:

```
{ ▼ 3 properties, 13 KB
  "header": { ▼ 4 properties,
     "id": "DF_WITS_Tariff_TRAINS",
    "prepared": "2017-02-21T10:42:48",
     "test": false,
    "sender": { ¥ 2 prop
"id": "WBG_WITS",
       "name": "World Bank Group - WITS"
     1
   "dataSets": [ ▼ 1 item, 2 KB
    { ▼ 3 properties, 2 KB "action": "Information",
       "attributes": [ ▼ 1 item, 3 bytes
       ],
       "series": { > 2 properties, 2 KB }
    }
    , structure": { V 5 properties, 11 KB "name": "WITS - UNCTAD TRAINS Tariff Data", "description": "Data flow to access WITS - UNCTAD TRAINS Preferential and most-favored-nation (MFN) tariff rates",
     "dimensions": { V 3 properties, 3 KB
       "dataset": [],
       "series": [ > 5 items, 652 bytes ],
       "observation": [ > 1 item, 2 KB ]
    }.
     "attributes": { > 3 properties, 7 KB },
     "annotations": []
```

#### Error Response:

The following error response are returned for invalid parameter values or when return data is too large.

HTTP Response Status Code: 400

WITS Message Code: 150

Content: Invalid reporter code

**HTTP Response Status Code: 400** 

WITS Message Code: 150

Content: Invalid partner code

**HTTP Response Status Code: 400** 

WITS Message Code: 150

Content: Invalid product code

**HTTP Response Status Code: 400** 

WITS Message Code: 150

Content: Invalid data type

```
▼<wits:error xmlns:wits="http://wits.worldbank.org">
    ▼<wits:message id="150" key="Invalid Data Type Code.">
        The provided data type parameter value is not valid.
        </wits:message>
        </wits:error>
```

HTTP Response Status Code: 400

WITS Message Code: 150

Content: Invalid year

HTTP Response Status Code: 400

WITS Message Code: 150

**Content:** The request yield large data to return.

# **SDMX Query Request**

There are two types of requests: One request type is to retrieve the Meta data and other request type is to retrieve tariff data. The following two SDMX response format are supported.

**SDMX-ML 2.1 generic schema:** The response is provided by default.

**SDMX-ML 2.1 structure specific schema:** The structure specific schema is more suited for processing of large data amounts. To get the response in this format, modify the HTTP request header field "Accept: application/vnd.sdmx.structurespecificdata+xml" on the SDMX query request. More information about SDMX-ML formats is available in document <u>SDMX guidelines for the use of web services</u>

**JSON Format:**\_To get the data in JSON format, modify the HTTP request header field "Accept: application/vnd.sdmx.data+json;version=1.0.0-wd" on the SDMX data query request

# Meta Data Request

This section explains the call to get dataflow, code list and Data Structure Definition (DSD).

#### Data Flow

This API retrieves the unique dataset code for UNCTAD TRAINS dataset.

URL: https://wits.worldbank.org/API/V1/SDMX/V21/rest/dataflow/wbg\_wits/

Method:

**GET** 

**URL Parameter:** 

None

Response Format:

**XML** 

Success Response:

HTTP Response Status Code: 200

**Content:** The response has the data flow code to access the UNCTAD TRAINS traded and nontraded tariff lines tariff schedule

# Sample Request:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/dataflow/wbg\_wits/

#### Sample Response Format:

```
▼<Structure xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/message">
           <ID>World Bank Group - WITS</ID>
            <Test>true</Test>
            <Pre><Prepared>2016-03-28T10:30:47-04:00</Prepared>
         ▼<Sender id="WBG_WITS":
               <Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">World Integrated Trade Solution</Name>
                    <Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">WITS Admin</Name>
<Department xml:lang="en">Statistics</Department>
<Role xml:lang="en">WITS Admin</Role>
                   <Email>wits@worldbank.org</Email>
<URI>http://WITS.Worldbank.org</URI>
                 </Contact>
           </Sender>
         ▼<Receiver id="Unknown">
                <Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">Unknown</Name>
             ▼ < Contact>
                   <Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">Unknown</Name>
<Department xml:lang="en">Unknown</Department>
                     <Role xml:lang="en">Unknown</Role>
                </Contact>
            </Receiver>
           <Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">Unknown</Name>
            <Source xml:lang="en">WITS</Source>
       </Header>
     ▼<Structures>
         v<Dataflows xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/structure">
            ▼<Dataflow id="DF_WITS_Tariff_TRAINS" urn="urn:sdmx:org.sdmx.infomodel.datastructure.Dataflow=WBG_WITS:DF_WITS_Tariff_TRAINS(1.1)"
agencyID="WBG_WITS" version="1.1" isFinal="false">
agencyID="WBG_WITS" version

<Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">WITS - UNCTAD TRAINS Tariff Data</Name>
                 ▼<Description xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">
Data flow to access WITS - UNCTAD TRAINS Preferential and most-favored-nation (MFN) tariff rates
                     </Description>
                 ▼ <Structure>
                        <Ref xmlns="" id="TARIFF TRAINS" version="1.1" agencyID="WBG WITS" package="datastructure" class="DataStructure"/>
                     </Structure>
                </Dataflow>
            </Dataflows>
       </Structures>
   </Structure>
```

#### Code List

This API retrieves the code list for the entire datasets in WITS API.

URL: https://wits.worldbank.org/API/V1/SDMX/V21/rest/codelist/all

Method:

**GET** 

**URL Parameter:** 

None

Response Format:

**XML** 

Success Response:

# **HTTP Response Status Code: 200**

**Content:** The response has the code list available for various dimension in UNCTAD TRAINS traded and non-traded tariff lines tariff schedule

Sample Request:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/codelist/all/

# Sample Response Format:

```
▼<Structure xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/message">
  ▼ <Header>
     <ID>World Bank Group - WITS</ID>
     <Test>true</Test>
     <Prepared>2016-03-28T10:30:47-04:00</Prepared>
   ▼ <Sender id="WBG WITS">
      <Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">World Integrated Trade
      Solution</Name>
     ▶ <Contact>...</Contact>
     </Sender>
   ▼ < Receiver id="Unknown">
      <Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">Unknown</Name>
     ▶ <Contact>...</Contact>
    <Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2 1/common" xml:lang="en">Unknown</Name>
     <Source xml:lang="en">WITS</Source>
   </Header>
  ▼ <Structures>
   > <Codelists xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/structure">...</Codelists>
   </Structures>
 </structure>
```

### Data Structure Definition (DSD)

This API retrieves the Data Structure Definition (DSD) for the UNCTAD TRAINS dataset.

URL:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/datastructure/WBG WITS/TARIFF TRAINS/

Method:

**GET** 

#### **URL Parameter:**

None

Response Format:

**XML** 

# Success Response:

HTTP Response Status Code: 200

**Content:** The response has the Data Structure Definition (DSD) for UNCTAD TRAINS traded and non-traded tariff lines tariff schedule

#### Sample Request:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/datastructure/WBG WITS/TARIFF TRAINS/

#### Sample Response Format:

```
v<ftructure xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/message">
v<ftruet="center-of-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-section-sectio
```

#### Error Response:

The following error response is returned for invalid parameter value.

HTTP Response Status Code: 404

Content: Invalid structure code

<string xmlns="http://schemas.microsoft.com/2003/10/Serialization/">No structures found for the specific query</string>

# Tariff Data Request

This API helps to access the traded and non-traded tariff lines tariff data. This API offer variety of options to retrieve the tariff schedule. User can request for a country-period-partner entire tariff schedule or country-partner-product tariff schedule over period.

**URL:** 

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/DF\_WITS\_Tariff\_TRAINS/<Freq>.<Reporter>.<Partner>.cproductCode>.<datatype>/?startperiod=<year>&endperiod=<year>&detail=Full | DataOnly | SeriesKeysOnly |
NoData

#### Method:

**GET** 

# **URL Parameter:**

Freq: The possible value for frequency is "A". If no value is specified, it is considered as all frequencies.

**DataType:** The datatype parameter can have "reported" or "aveestimated" as the value.

**Reporter**: The reporter parameter can have a single country code or list of country codes from the code list. If no value is specified, it is considered as all available reporters.

**Product**: The product parameters can a one product code or list of product codes, which can be obtained from code list Metadata request. If no value is specified, it is considered as all available product codes.

**Partner**: The partner parameter can a one partner code or list of partner codes obtained from the code list Meta data request.

**StartPeriod**: This is a year parameter and can have the value from 1988 onwards. If ignored, tariff data for available years will be returned.

**EndPeriod**: This is a year parameter and can have the value from 1988 onwards. If ignored, the tariff data available from the start period to the latest available years will be returned.

**Detail**: This is an optional parameter and specifies the desired amount of information to be returned. It can take one of the below values.

- Full: all data and documentation, including annotations (default)
- **DataOnly**: attributes and therefore groups will be excluded.
- SeriesKeysOnly: only the series elements and the dimensions that make up the series keys.
- NoData: returns the groups and series, including attributes and annotations, without observations.

#### Response Format:

XML- SDMX-ML 2.1 generic schema, XML- SDMX-ML 2.1 structure specific schema or JSON

#### Success Response:

### HTTP Response Status Code: 200

**Content:** The response has the following information on tariff data. For more information on this measure, refer <a href="here">here</a>.

- Simple Average
- Tariff type
- Total number of lines
- Number of preferential lines
- Number of MFN lines
- Number of Specific duty rate tariff lines
- Sum of rates
- Min Rate
- Max Rate
- Reported Nomenclature

#### Sample Request:

To request one reporter-one partner-one product- one year-reported tariff rate:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/DF\_WITS\_Tariff\_TRAINS/.840.000.020110.reported/?startperiod=2000&endperiod=2000

To request one reporter-one partner-all product- one year-reported tariff rate:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/DF\_WITS\_Tariff\_TRAINS/.840.000..reported/?startperiod=2000&endperiod=2000

To request one reporter-one partner-one product-all available years-reported tariff rate:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/DF\_WITS\_Tariff\_TRAINS/.840.000.020110.reported/

To request all reporters-one partner-one product-one year-reported tariff rate:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/DF\_WITS\_Tariff\_TRAINS/..000.020110.reported /?startperiod=2000&endperiod=2000

To request multiple reporters-all partners-one product-one year-reported tariff rate:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/DF\_WITS\_Tariff\_TRAINS/.840+918..020110.rep orted/?startperiod=2000&endperiod=2000

To request multiple reporters-all partners-one product-all available years--reported tariff rate and estimated tariff rates:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/DF\_WITS\_Tariff\_TRAINS/.840+918..020110.ave estimated/?startperiod=2000&endperiod=2000

To request series elements and the dimension the makeup the series key for one reporter-one partner one product- one year-reported tariff rate

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/DF\_WITS\_Tariff\_TRAINS/.840.000.020110.reported/?startperiod=2000&endperiod=2000&detail=serieskeysonly

To request groups and series, including attributes and annotations without observations for one reporterone partner-one product- one year-reported tariff rate

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/DF\_WITS\_Tariff\_TRAINS/.840.000.020110.reported/?st\_artperiod=2000&endperiod=2000&detail=nodata

# Sample Response Format:

#### SDMX-ML 2.1 generic schema

```
w<message:GenericData xmlns:message="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/message"</pre>
 xmlns:generic="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/data/generic" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/message SDMXMessage.xsd">
  ▼<message:Header>
     <message:ID>DF_WITS_Tariff_TRAINS</message:ID>
     <message:Test>false</message:Test>
     <message:Prepared>2016-04-19T12:10:07</message:Prepared>
   <message:DataSetAction>Information</message:DataSetAction>
     <message:DataSetID>DF WITS Tariff TRAINS WBG WITS 2016-04-19T121007</message:DataSetID>
     <message:Extracted>2016-04-19T12:10:07</message:Extracted>
   </message:Header>
  ▼<message:DataSet structureRef="WBG_WITS_TARIFF_TRAINS_1_1">
    ▼ <generic:Attributes>
       <generic:Value id="DATASOURCE" value="TRN"/>
     </generic:Attributes>
    ▼ <generic:Series>
     ▶ <generic:SeriesKey>...</generic:SeriesKey>
      ▼<generic:Obs>
         <generic:ObsDimension id="TIME_PERIOD" value="1997"/>
         <generic:ObsValue value="10"/>
        ▼<generic:Attributes>

<
           <generic:Value id="TOTALNOOFLINES" value="1"/>
<generic:Value id="NBR_PREF_LINES" value="0"/>
           <generic:Value id="NBR_MFN_LINES" value="1"/>
           <generic:Value id="NBR_NA_LINES" value="0"/>
<generic:Value id="SUM_OF_RATES" value="10"/>
           <generic:Value id="MIN_RATE" value="10"/>
<generic:Value id="MAX_RATE" value="10"/>
           <generic:Value id="NOMENCODE" value="H1"/>
         </generic:Attributes>
       </generic:Obs>
     </generic:Series>
   </message:DataSet>
 </message:GenericData>
```

#### SDMX-ML 2.1 structure specific schema

```
{ ▼ 3 properties, 13 KB "header": { ▼ 4 properties,
     "id": "DF WITS Tariff TRAINS",
    "prepared": "2017-02-21T10:42:48",
     "test": false,
    "sender": { \ 2 properties, bu bytes
   "id": "WBG WITS",
   "name": "World Bank Group - WITS"
   "dataSets": [ ▼ 1 item, 2 KB
       "action": "Information",
       "attributes": [ ▼ 1 item, 3 bytes
       1,
       "series": { > 2 properties, 2 KB }
    }
    structure": { ▼ 5 properties,
     "name": "WITS - UNCTAD TRAINS Tariff Data",
"description": "Data flow to access WITS - UNCTAD TRAINS Preferential and most-favored-nation (MFN) tariff rates",
     "dimensions": { \ 3 properties, 3 KB
        "dataset": [],
       "series": [ > 5 items, 652 bytes ],
       "observation": [ > 1 item, 2 KB ]
     "attributes": { > 3 properties, 7 KB },
     "annotations": []
```

#### **Error Response:**

The following error response are returned for invalid parameter values or when the data is too large to return.

**HTTP Response Status Code: 400** 

WITS Message Code: 150

Content: Invalid reporter code

```
vwits:error xmlns:wits="http://wits.worldbank.org">
vwits:message id="150" key="Invalid Reporter Code.">
The provided reporter parameter value is not valid.
</wits:message>
</wits:error>
```

HTTP Response Status Code: 400

WITS Message Code: 150

Content: Invalid partner code

```
\\Text{\substraint} \text{\substraint} \text{\
```

HTTP Response Status Code: 400

WITS Message Code: 150

Content: Invalid product code

HTTP Response Status Code: 400

WITS Message Code: 150

Content: Invalid data type
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```
vwits:error xmlns:wits="http://wits.worldbank.org">
vwits:message id="150" key="Invalid Data Type Code.">
The provided data type parameter value is not valid.
</wits:message>
</wits:error>
```

HTTP Response Status Code: 400

WITS Message Code: 150

Content: Invalid year

HTTP Response Status Code: 413

WITS Message Code: 150

**Content:** The request yield large data to return.

#### TRADE Stats Data

Aggregate trade and tariff data, plus trade related and relevant development indicators are available through this API.

**Trade Stats – Trade:** Trade data such as total exports, number or products exported, exporting, and importing partner countries and exported and imported product groups are available. Trade indicators like Hirschman Herfindahl market concentration index, index of market penetration, world growth and country growth in percentage.

**Trade Stats – Tariff:** Tariff information like number of trade agreements, simple and weighted average tariff, duty free imports value and duty-free goods share in percentage are available.

**Trade Stats – Development:** Development indicators such as GDP, GNI per capita, Trade Balance, Trade and Services trade as percentage of GPD is available from WDI.

Trade, Tariff and Development indicator data can be downloaded by specifying values for the below dimensions:

**Reporter:** The Reporter ISO3 Country/Region Code. Refer metadata section for list of ISO3 Code and name for Countries/Region

**Partner:** The Partner ISO3 Country/Region Code. Refer metadata section for list of ISO3 Code and name for Countries/Region. Use "999" as partner for indicators where Partner dimension is not applicable.

**Product Code:** The product group code that belongs to Sector, Stage of Processing or SITC Rev2 Standard groups can be used. Refer metadata section for list of Product Group Codes and description. Use "999999" as Product for indicators where Product dimension is not applicable.

**Year:** Year for which data is needed. Refer metadata section for available years. Note Starting year is 1988.

**Indicator:** The value can be a Trade, Tariff or Development indicator code. Refer metadata section for list of Indicator and description.

# Limitation on Data Request

To avoid server overload, request for entire database is not possible in one query. The following are the options to request data.

- Maximum of two dimension with "All" value is allowed.
- Data request with All Reporter and All Partners is not allowed.
- When two of the dimensions have "All", then rest of the dimension should have a specific value.
- Trade Stats data for a single reporter, partner, Indicator, and product can be requested for a range of years.

# **Basic Call structure**

The base URL to access WITS API is https://wits.worldbank.org/API/V1. The following section provides overview on call structure for URL based structure query request and SDMX query request. Note, Data Availability can be queried only in URL based structure request and not in SDMX Queries.

#### **URL** based structure Queries.

To access Meta data and data availability, the base URL is https://wits.worldbank.org/API/V1/WITS.

The data availability API's returns the available country periods in Trade Stats –

Trade/Tariff/Development datasets. The Indicator API returns whether partner, product dimension are required for an indicator and the data request can be framed based on this response. To obtain country and partner names, use Reporter-Partner API's. To obtain the nomenclature name and product description use the nomenclature API's and Product APIs, respectively.

The base URL for data request is https://wits.worldbank.org/API/V1/SDMX/V21/. To access data for more than one value for a parameter, use the delimiter ":" to separate the values. To access data in JSON format, include "?format=JSON" on the data request query.

# **SDMX Queries**

The base URL to access data flow, codes list and Data Structure Definition (DSD) is https://wits.worldbank.org/API/V1/SDMX/V21/rest/. The base URL to access Trade Stats-Trade dataset is https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_trade, Trade Stats-Tariff dataset is https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_tariff and development data is

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_development

To access Trade Stats data for more than one value for a parameter, the use the delimiter "+" to separate the parameter values.

# **Response Format**

<u>Trade Stats – Trade:</u> The data source value for Trade Stats – Trade indicator dataset is tradestats-trade. Let us consider a sample request format for Reporter=USA; Partner=WLD; Product=fuels; year=2000 and Indicator= XPRT-TRD-VL (Export Trade Value)

https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestatstrade/reporter/usa/year/2000/partner/wld/product/fuels/indicator/XPRT-TRD-VL

Part of the response for the above request looks like below.

<u>Trade Stats – Tariff:</u> The data source value for Trade Stats – Tariff indicator dataset is radestats-tariff. Let's consider a sample request format for Reporter=USA; Partner=WLD; Product=fuels; year=2000 and Indicator= AHS-SMPL-AVRG (AHS Simple Average (%))

https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-tariff/reporter/usa/year/2000/partner/wld/product/fuels/indicator/AHS-SMPL-AVRG

Part of the response for the above request looks like below.

<u>Trade Stats – Development:</u> The data source value for Trade Stats – Development indicator dataset is tradestats-development. Let us consider a sample request format for Reporter=USA; year=2005 and Indicator= BG-GSR-NFSV-GD-ZS (Trade in services (% of GDP))

https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-development/reporter/usa/year/2005/indicator/BG-GSR-NFSV-GD-ZS

Part of the response for the above request looks like below.

On all the above response, OBS\_VALUE has the indicator value along with the requested dimension values.

# URL based structure request.

There are two types of requests: One request type is to retrieve the Meta data and other request type is to retrieve the trade stats data.

# Meta Data Request

This section helps to get data availability, country list, available partners for a given country period.

#### Reporter and Partner:

This API helps to obtain reporter and partner name, alpha numeric code, ISO3 code and other Meta data about the countries that are available in each Trade Stats trade, tariff, and development datasets.

#### **URL**:

https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade|tradestatstariff|tradestats-development/country/ALL|:CountryCode|: CountryCodeList

#### Method:

**GET** 

#### **URL Parameter:**

ALL: To retrieve all countries/partners Meta data.

:CountryCode= Three letter ISO3 code

:CountryCodeList= List of ISO3 codes separated by delimiter(;)

#### Response Format:

XML

#### Success Response:

#### **HTTP Response Status Code: 200**

Content: The response has the following information about the requested country/partner

- Country Code
- ISO3 Code
- Name
- Is the country code available as reporter? 
   Is the country code available as partner?
- Does the country code refer to a group?
- Group Type
- Notes

#### Sample Request:

# To request all countries:

Trade: https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/country/ALL

Tariff: https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/country/ALL

**Development:** <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/country/ALL">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/country/ALL</a>

# To request a specific country:

Trade: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/country/usa">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/country/usa</a>

Tariff: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/country/usa">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/country/usa</a>

**Development:** <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/country/usa">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/country/usa</a>

#### To request list of countries:

<u>Irrade</u>: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/country/jpn;eas">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/country/jpn;eas</a>

Tariff: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/country/jpn;eas">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/country/jpn;eas</a>

# Development:

https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/country/jpn;eas

### Sample Response Format:

#### Nomenclature

This API helps to obtain information on nomenclatures that are available in the Trade Stats dataset. Note: Only Trade Stats-Trade and Trade Stats-Tariff dataset has nomenclature information

Note: The nomenclature is for identifying base nomenclature, but the product codes are at a higher level of aggregation. For example, in HS the product is aggregated above the 2-digit level Animals (01 to 05)

URL: https://wits.worldbank.org/API/V1/wits/datasource/ tradestats-trade|tradestats-tariff
/ nomenclature /ALL|:nomenCode|: nomenCodeList

#### Method:

**GET** 

#### **URL Parameter:**

ALL: To retrieve all of nomenclature Meta data available in the dataset

: nomenCode = Two letter alpha numeric nomenclature code

: nomenCodeList = List of two letter alpha numeric nomenclature codes separated by delimiter(;)

# Response Format:

XML

#### Success Response:

# **HTTP Response Status Code: 200**

Content: The response has the following information about the requested nomenclature

- Nomenclature code
- Nomenclature description
- Nomenclature Name

#### Sample Request:

#### To request all classifications:

Trade: https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/nomenclature/

Tariff: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/nomenclature/">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/nomenclature/</a>

#### To request a specific classification:

Trade: https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/nomenclature/h0

Tariff: https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/nomenclature/s2

#### Sample Response Format:

```
▼<wits:datasource xmlns:wits="http://wits.worldbank.org" datasourcecode="tradestats-tariff" datasourcename="WITS TradeStats - Tariff" language="en" total="2">
▼<wits:nomenclatures>

<mits:nomenclature nomenclaturecode="H0" description="Harmonized System 1988/92">HS 1988/92</mits:nomenclature>

<mits:nomenclature nomenclaturecode="S2" description="Standard International Trade Classification, Revision 2">SITC Revision 2</mits:nomenclature>

</mits:nomenclatures>

</mits:datasource>
```

#### **Product**

This API helps to obtain information on the products that are available in the Trade-stats—Trade and Trade-stats-Tariff dataset.

Note: The products are grouping of multiple HS and SITC code, respectively.

*URL:* https://wits.worldbank.org/API/V1/wits /datasource/tradestats-trade|tradestats-tariff/product/ALL|:productCode|:productCodeList

#### Method:

**GET** 

#### **URL Parameter:**

ALL: To access all the products metadata available in this dataset

: productCode = Product group code

: productCodeList = List of product group codes separated by delimiter(;)

#### Response Format:

XML

# Success Response:

#### **HTTP Response Status Code: 200**

**Content:** The response has the following information about the product codes.

- Product code
- Product description
- Is a product code group? Yes/No
- Product Group Type
- Notes

# Sample Request:

# To request all products:

Trade: https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/product/all

Tariff: https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/product/all

# To request a specific product:

Tariff: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/product/4449\_Wood;fuels">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/product/4449\_Wood;fuels</a>

Trade: https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/product/4449\_Wood;fuels

Sample Response Format:

```
▼⟨wits:product productcode="999999" isgroup="N/A" nomenclaturecode="N/A" grouptype="N/A">
    ⟨wits:productdescription>Not Applicable⟨/wits:productdescription>
    ⟨wits:product>
    ⟨wits:product productcode="01-05_Animal" isgroup="Yes" nomenclaturecode="H0" grouptype="Sector">
    ⟨wits:productdescription>Animal⟨/wits:productdescription>
    ⟨wits:notes/>
    ⟨/wits:product
    ⟨wits:product productcode="06-15_Vegetable" isgroup="Yes" nomenclaturecode="H0" grouptype="Sector">
    ⟨wits:product productcode="06-15_Vegetable" isgroup="Yes" nomenclaturecode="H0" grouptype="Sector">
    ⟨wits:productdescription>Vegetable
    ⟨wits:productdescription>Vegetable
    ⟨wits:productdescription>Vegetable
```

#### Indicator

The API helps to obtain indicator code, name, source, topic, periodicity, and other Meta data about the indicators that are available in Trade Stats- trade, tariff, and development datasets.

#### URL:

https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade|tradestatstariff|tradestats-development/indicator/ALL|:IndicatorCode|: IndicatorCodeList

#### Method:

GET

#### **URL Parameter:**

ALL: To retrieve all indicators.

:IndicatorCode= indicator code

:IndicatorCodeList= List of indicator codes separated by delimiter(;)

#### Response Format:

XML

#### Success Response:

#### HTTP Response Status Code: 200

Content: The response has the following information about the requested indicator the datasets

- Indicator Code
- Is Partner Required (for indicators that have a valid partner dimension other than 999 N/A)
- SDMX Partner Value (if the Partner required is "no" the value to provide for SDMX data request query)
- Is Product Required (for indicators that have a valid product dimension other than 999999 N/A)
- SDMX Product Value (if the Product required is "no" the value to provide for SDMX data request query)
- Indicator Name
- Indicator Definition
- Source
- Topic
- Periodicity
- Valuation
- Currency
- Notes

#### Sample Request:

# To request all Indicators:

Trade: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/indicator/ALL">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/indicator/ALL</a>
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Tariff: https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/indicator/ALL

**Development:** <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/indicator/ALL">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/indicator/ALL</a>

#### To request a specific Indicator:

Trade: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/indicator/HH-MKT-CNCNTRTN-NDX">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/indicator/HH-MKT-CNCNTRTN-NDX</a>

Tariff: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/indicator/AHS-DTY-FR-MPRTs">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/indicator/AHS-DTY-FR-MPRTs</a>

**Development:** <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/indicator/TM-VAL-SERV-CD-WT">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/indicator/TM-VAL-SERV-CD-WT</a>

# To request list of Indicators:

<u>Trade</u>: <u>https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/indicator/HH-MKT-CNCNTRTN-NDX;NMBR-XPRT-HS6-PRDCT</u>

Tariff: https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/indicator/AHS-DTYFR-MPRTs;MFN-DTBL-MPRT

**Development:** <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/indicator/IQ-CPA-TRAD-XQ;TX-VAL-MRCH-XD-WD">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/indicator/IQ-CPA-TRAD-XQ;TX-VAL-MRCH-XD-WD</a>

# Sample Response Format:

# **Data Availability**

The API helps to obtain data availability in the Trade Stats-Trade/Tariff/Development dataset. It provides the data availability for entire Trade/Tariff/Development datasets or data availability for one or more reporters, one more indicator or in given year(s) indicator data in Trade/Tariff/Development dataset.

#### **URL**:

https://wits.worldbank.org/API/V1/wits/datasource/ tradestats-trade|tradestatstariff|tradestats-development / dataavailability

https://wits.worldbank.org/API/V1/wits/datasource/ tradestats-trade|tradestats-tariff|tradestats-development /

dataavailability/country/ALL|:countryCode|:countryCodeList/year/ALL:year|:yearList/indicator/ALL|:IndicatorCode|: IndicatorCodeList

#### Method:

#### **URL Parameter:**

ALL: To access all available entries in this dataset.

:CountryCode= Three letter alpha numeric country code

:CountryCodeList= List of three letter alpha numeric country codes separated by delimiter(;)

: year = {integer}

:yearList= List of years separated by delimiter(;)

:IndicatorCode= indicator code

:IndicatorCodeList= List of indicator codes separated by delimiter(;)

# Response Format:

XML

# Success Response:

**HTTP Response Status Code: 200** 

Content: The response has the following information on data availability

- Country Information (Country name, code, iso3, Is group, group type)
- Year
- Reported Nomenclature
- Is the estimated tariff rate available for specific duty expression (applicable only to Trade Stats Tariff dataset)
- notes
- Last updated date

#### Sample Request:

To request entire (all country periods) data availability:

Trade: https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/dataavailability/

Tariff: https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/dataavailability/

Development: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/dataavailability/">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/dataavailability/</a>

To request a specific country and all years and all indicators:

Trade: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/dataavailability/country/usa/indicator/all">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/dataavailability/country/usa/indicator/all</a>

Tariff: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/dataavailability/country/usa/indicator/all">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/dataavailability/country/usa/indicator/all</a>

Development: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/dataavailability/country/usa/indicator/all">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/dataavailability/country/usa/indicator/all</a>

# To request all indicators and a specific year:

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<u>Trade:</u> https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/dataavailability/year/2007/indicator/all

Tariff: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/dataavailability/year/2007/indicator/all">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/dataavailability/year/2007/indicator/all</a>

**Development:** <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/dataavailability/year/2007/indicator/all">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/dataavailability/year/2007/indicator/all</a>

# To request list of countries, all years, and all indicators:

Trade: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/dataavailability/country/usa;ipn/indicator/all">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/dataavailability/country/usa;ipn/indicator/all</a>

**Tariff:** https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/dataavailability/country/usa;ipn/indicator/all

Development: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/dataavailability/country/usa;">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/dataavailability/country/usa;</a>;<a href="mailto:jpn/indicator/all">jpn/indicator/all</a>

# To request all countries, all Indicators and list of years:

<u>Trade</u>: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/dataavailability/year/2007;2008/indicator/all">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/dataavailability/year/2007;2008/indicator/all</a>

Tariff: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/dataavailability/year/2007;2008/indicator/all">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/dataavailability/year/2007;2008/indicator/all</a>

Development: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/dataavailability/year/2007;2008/indicator/all">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/dataavailability/year/2007;2008/indicator/all</a>

To request a specific indicator for all countries and all years:

<u>Trade:</u> <u>https://wits.worldbank.org/API/V1/wits/datasource/tradestats-trade/dataavailability/country/all/year/all/indicator/MPRT-TRD-VL</u>

Tariff: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/dataavailability/country/all/year/all/indicator/AHS-WGHTD-AVRG">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-tariff/dataavailability/country/all/year/all/indicator/AHS-WGHTD-AVRG</a>

Development: <a href="https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/dataavailability/country/all/year/all/indicator/NE-TRD-GNFS-ZS">https://wits.worldbank.org/API/V1/wits/datasource/tradestats-development/dataavailability/country/all/year/all/indicator/NE-TRD-GNFS-ZS</a>

#### Sample Response Format:

```
▼<wits:reporter countrycode="533" iso3Code="ABW" isgroup="No" grouptype="N/A">
       <wits:name>Aruba</wits:name>
        <wits:year>2000</wits:year>
        <a href="wits:reporternernomenclature">wits:reporternernomenclature</a> (wits:reporternernomenclature)
<a href="wits:reporternernomenclature">wits:reporternernomenclature</a> (wits:reporternernomenclature)
        <wits:numberofpreferentialagreement>N/A</wits:numberofpreferentialagreement>
       <wits:partnerlist>All Partners
        <wits:isspecificdutyexpressionestimatedavailable>N/A</wits:isspecificdutyexpressionestimatedavailable>
       <wits:notes/>
        <wits:lastupdateddate>Aug-24-2015</wits:lastupdateddate>
   </wits:reporter>
 v<wits:reporter countrycode="533" iso3Code="ABW" isgroup="No" grouptype="N/A">
        <wits:name>Aruba</wits:name>
        <wits:vear>2001</wits:vear>
        <wits:reporternernomenclature reporternernomenclaturecode="H0;S2">Harmonized System 1988/92;SITC Revision 2</wits:reporternernomenclature>
       <wits:numberofpreferentialagreement>N/A</wits:numberofpreferentialagreement>
       <wits:partnerlist>All Partners
        <\verb|wits:isspecific duty expression estimated available > N/A < / wits:isspecific duty expression estimated available > N/A < / wits:isspecific duty expression estimated available > N/A < / wits:isspecific duty expression estimated available > N/A < / wits:isspecific duty expression estimated available > N/A < / wits:isspecific duty expression estimated available > N/A < / wits:isspecific duty expression estimated available > N/A < / wits:isspecific duty expression estimated available > N/A < / wits:isspecific duty expression estimated available > N/A < / wits:isspecific duty expression estimated available > N/A < / wits:isspecific duty expression estimated available > N/A < / wits:isspecific duty expression estimated available > N/A < / wits:isspecific duty expression extra = N/A < / w
       <wits:notes/>
        <wits:lastupdateddate>Aug-24-2015</wits:lastupdateddate>
  </wits:reporter>
```

# Error Response:

The following error response is obtained for invalid parameter values.

WITS Message Code: 160

Content: Data not found

```
▼<wits:error xmlns:wits="http://wits.worldbank.org">

▼<wits:message id="160" key="Data not found.">

The provided parameter value is not valid or data not found.

</wits:message>

</wits:error>
```

### Trade Stats Data Request

This API offer variety of options to retrieve the data. User can request for a country--partner product-indicator over period.

#### URL:

Country-Year-Partner-Product Indicators (Trade Stats – Trade and Trade Stats – Tariff dataset only):

https://wits.worldbank.org/API/V1/SDMX/V21/datasource/ tradestats-trade|tradestats-tariff|tradestatsdevelopment /reporter/{ALL|Reporter Code list }/ year/{ ALL|Year List}/ partner/{ALL|Partner Code list }/product/{ALL|Product Code list} /indicator/{ALL| Indicator code list}|?format=JSON|

<u>Country-Year-Partner Indicators (Trade Stats – Trade and Trade Stats – Tariff dataset only):</u>
https://wits.worldbank.org/API/V1/SDMX/V21/datasource/ tradestats-trade|tradestatstariff|tradestatsdevelopment /reporter/{ALL|Reporter Code list }/ year/{ ALL|Year List}/ partner/
{ALL|Partner Code list }/indicator/{ALL| Indicator code list}

<u>Country-Year Indicators (Trade stats- Trade and Trade Stats – Development dataset only):</u>

https://wits.worldbank.org/API/V1/SDMX/V21/datasource/ tradestats-trade|tradestats-tariff|tradestatsdevelopment/reporter/{ALL|Reporter Code list}/ year/{ ALL|Year List}/ indicator/{ALL|Indicator code list}

Method:

**GET** 

#### **URL Parameter:**

**Data Source:** The value to access trade indicators is tradestats-trade. The value to access tariff is tradestats-tariff and development indicator is tradestats-development.

**Reporter**: The reporter parameter can have the value of "All" or list of country ISO3 codes from Reporter and Partner metadata request.

**Product**: The product parameter can the value of "All" or list of product group codes, which can be obtained from Product Metadata request.

**Partner**: The partner parameter can have the value of "All", or list of partner codes obtained from data availability metadata request call.

**Year**: The year parameter can have the value of "All", or list of values obtained from data availability metadata request call.

**Indicator:** The indicator parameter can the value of "All" or list of indicator codes, which can be obtained from Indicator Metadata request.

**Format:** The format parameter can have the value of "JSON". When a valid format parameter is specified, the data is returned in JSON format.

# Response Format:

XML for JSON (when "?format=JSON" present on the URL parameter)

# Success Response:

HTTP Response Status Code: 200

**Content:** The response has the indicator data for the requested dimensions.

#### Sample Request:

Country-Year-Partner-Product Indicator request:

To request one reporter-one partner-one product- one year-one indicator:

Trade: <a href="https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-trade/reporter/usa/year/2000/partner/wld/product/fuels/indicator/XPRT-TRD-VL">https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-trade/reporter/usa/year/2000/partner/wld/product/fuels/indicator/XPRT-TRD-VL</a>

Tariff: <a href="https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-tariff/reporter/usa/year/2000/partner/jpn/product/fuels/indicator/AHS-SMPL-AVRG">https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-tariff/reporter/usa/year/2000/partner/jpn/product/fuels/indicator/AHS-SMPL-AVRG</a>

To request one reporter-one partner-one product- one year-All indicator in JSON format:

Trade: <a href="https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-trade/reporter/usa/year/2000/partner/all/product/fuels/indicator/all?format=JSON">https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-trade/reporter/usa/year/2000/partner/all/product/fuels/indicator/all?format=JSON</a>

Tariff: <a href="https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-tariff/reporter/usa/year/2000/partner/all/product/fuels/indicator/all?format=JSON">https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-tariff/reporter/usa/year/2000/partner/all/product/fuels/indicator/all?format=JSON</a>

#### Country-Year-Partner Indicator request:

To request one reporter-ALL partner- one year-one indicator:

Trade: <a href="https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-trade/reporter/usa/year/2000/partner/all/indicator/MPRT-PRTNR-SHR">https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-trade/reporter/usa/year/2000/partner/all/indicator/MPRT-PRTNR-SHR</a>

Tariff: https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-tariff/reporter/usa/year/2000/partner/all/indicator/TRF-NMBR-AGGRMNT

# To request one reporter-ALL partner- one year-all indicator:

Trade: <a href="https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-trade/reporter/usa/year/2000/partner/all/indicator/all/">https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-trade/reporter/usa/year/2000/partner/all/indicator/all/</a>

Tariff: <a href="https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-tariff/reporter/usa/year/2000/partner/all/product/fuels/indicator/all">https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-tariff/reporter/usa/year/2000/partner/all/product/fuels/indicator/all</a>

#### Country-Year Indicator request:

To request ALL reporter- one year-ALL indicator:

Trade: <a href="https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-trade/reporter/all/year/2000/indicator/all">https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-trade/reporter/all/year/2000/indicator/all</a>

#### Development:

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https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-development/reporter/usa/year/2000/indicator/all

To request ALL reporter- All year-one indicator in JSON Format:

Trade: <a href="https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-trade/reporter/all/year/all/indicator/NDX-XPRT-MKT-PNRTTN?format=JSON">https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-trade/reporter/all/year/all/indicator/NDX-XPRT-MKT-PNRTTN?format=JSON</a>

Development: <a href="https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-development/reporter/all/year/all/indicator/NE-TRD-GNFS-ZS?format=JSON">https://wits.worldbank.org/API/V1/SDMX/V21/datasource/tradestats-development/reporter/all/year/all/indicator/NE-TRD-GNFS-ZS?format=JSON</a>

#### Sample Response Format:

#### JSON Response

```
{ ♥ 3 properties, 114 KB | "header": { ▼ 4 properties, 139 bytes
    "id": "DF WITS TradeStats Trade",
"prepared": "2017-02-21T12:53:17",
    "test": false,
    "sender": { ♥ 2 properties, 50 bytes
      "id": "WBG WITS",
      "name": "World Bank Group - WITS"
  "dataSets": [ W 1 item, 104 KB
      "action": "Information",
     "series": { > 204 properties, 104 KB }
  "structure": { V 5 properties,
     "name": "WITS TradeStats Trade",
    "description": "Trade data such as total exports, number or products exported, exporting and importing
    "dimensions": { ▼ 3 properties, 9 KB
      "dataset": [],
      "series": [ > 5 items, 6 KB ],
      "observation": [ > 1 item, 2 KB ]
    "attributes": { ▼ 3 properties, 153 bytes
      "dataset": [],
      "series": [],
      "observation": [ > 1 item, 112 bytes ]
    "annotations": []
```

#### **Error Response:**

The following error response are returned for invalid parameter values or when the data is too large to return.

# HTTP Response Status Code: 400

WITS Message Code: 150

Content: Invalid reporter code

```
▼<wits:error xmlns:wits="http://wits.worldbank.org">
    ▼<wits:message id="150" key="Invalid Reporter Code.">
        The provided reporter parameter value is not valid.
        </wits:message>
        </wits:error>
```

HTTP Response Status Code: 400

WITS Message Code: 150

Content: Invalid partner code

**HTTP Response Status Code: 400** 

WITS Message Code: 150

Content: Invalid product code

▼<wits:error xmlns:wits="http://wits.worldbank.org">
 <wits:message id="150" key="Invalid Product Code.">The provided product parameter value is not valid.</wits:message>
 </wits:error>

**HTTP Response Status Code: 400** 

WITS Message Code: 150

Content: Invalid year

HTTP Response Status Code: 400

WITS Message Code: 150

**Content:** The request yield large data to return.

# **SDMX Query Request**

There are two types of requests: One request type is to retrieve the Meta data and other request type is to retrieve trade stats data. The following two SDMX response format are supported.

SDMX-ML 2.1 generic schema: The response is provided by default.

**SDMX-ML 2.1 structure specific schema:** The structure specific schema is more suited for processing of large data amounts. To get the response in this format, modify the HTTP request header field "Accept: application/vnd.sdmx.structurespecificdata+xml" on the SDMX query request. More information about SDMX-ML formats is available in document <u>SDMX guidelines for the use of web services</u>

**JSON Format:**\_To get the data in JSON format, modify the HTTP request header field "Accept: application/vnd.sdmx.data+json;version=1.0.0-wd" on the SDMX data query request

# Meta Data Request

This section explains the call to get dataflow, code list and Data Structure Definition (DSD).

#### Data Flow

This API retrieves the unique dataset code for UNCTAD TRAINS dataset.

URL: https://wits.worldbank.org/API/V1/SDMX/V21/rest/dataflow/wbg\_wits/

Method:

**GET** 

**URL Parameter:** 

None

Response Format:

**XML** 

Success Response:

HTTP Response Status Code: 200

**Content:** The response has the data flow code to access the Trade Stats – Traded, Trade Stats – Tariff and Trade Stats – Development datasets

Sample Request:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/dataflow/wbg\_wits/

#### Sample Response Format:

```
▼(Dataflow id="DF_WITS_TradeStats_Development" urn="urn:sdmx:org.sdmx.infomodel.datastructure.Dataflow=WBG_WITS:DF_WITS_TradeStats_Developm
 Development indicators such as GDP, GNI per capita, Trade Balance, Trade and Services trade as percentage of GPD is available from WDI
   </Description>
 ▼ <Structure>
     <Ref xmlns="" id="TRADESTATS" version="1.0" agencyID="WBG_WITS" package="datastructure" class="DataStructure"/>
   </Structure>
 </Dataflow>
v(Dataflow id="DF_WITS_TradeStats_Tariff" urn="urn:sdmx:org.sdmx.infomodel.datastructure.Dataflow=WBG_WITS:DF_WITS_TradeStats_Tariff(1.0)"
 <\Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">WITS TradeStats Tariff</Name>

**CDescription xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">
     Tariff information like number of trade agreements, simple and weighted average tariff, duty free imports value and duty free goods sh
   </Description>
 ▼ <Structure>
     <Ref xmlns="" id="TRADESTATS" version="1.0" agencyID="WBG_WITS" package="datastructure" class="DataStructure"/>
   </Structure>
 </Dataflow>
▼〈Dataflow id="DF_WITS_TradeStats_Trade" urn="urn:sdmx:org.sdmx.infomodel.datastructure.Dataflow=WBG_WITS:DF_WITS_TradeStats_Trade(1.0)" ag
 <\Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">WITS TradeStats Trade</Name>

**CDescription xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">
     Trade data such as total exports, number or products exported, top exporting and importing partner countries and top exported and impo
   </Description>
 ▼ <Structure>
     <Ref xmlns="" id="TRADESTATS" version="1.0" agencyID="WBG_WITS" package="datastructure" class="DataStructure"/>
   </Structure>
 </Dataflow>
```

#### Code List

This API retrieves the code list for the entire datasets in the WITS API.

URL: https://wits.worldbank.org/API/V1/SDMX/V21/rest/codelist/all

Method:

**GET** 

**URL Parameter:** 

None

Response Format:

XML

#### Success Response:

HTTP Response Status Code: 200

**Content:** The response has the code list available for various dimension in UNCTAD TRAINS traded and non-traded tariff lines tariff schedule

#### Sample Request:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/codelist/all/

# Sample Response Format:

```
▼<Structure xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/message">
 ▼ <Header>
    <ID>World Bank Group - WITS</ID>
     <Test>true</Test>
    <Prepared>2016-03-28T10:30:47-04:00</Prepared>
   ▼ <Sender id="WBG WITS">
      <Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">World Integrated Trade
      Solution</Name>
     ▶ <Contact>...</Contact>
     </Sender>
   ▼ <Receiver id="Unknown">
      <Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">Unknown</Name>
     ▶ <Contact>...</Contact>
    <Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2 1/common" xml:lang="en">Unknown</Name>
    <Source xml:lang="en">WITS</Source>
  </Header>
 ▼ <Structures>
   ▶ <Codelists xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/structure">...</Codelists>
   </Structures>
 </structure>
```

# Data Structure Definition (DSD)

This API retrieves the Data Structure Definition (DSD) for the Trade Stats dataset.

URL:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/datastructure/WBG WITS/TRADESTATS/

Method:

**GET** 

**URL Parameter:** 

None

Response Format:

XML

### Success Response:

#### **HTTP Response Status Code: 200**

Content: The response has the Data Structure Definition (DSD) for Trade Stats dataset.

#### Sample Request:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/datastructure/WBG\_WITS/TRADESTATS/

#### Sample Response Format:

```
\{\text{Nontants}\{\sqrt{sender}\}
\{\sqrt{Sender}\}
\{\sqrt{Sender}\}
\{\sqrt{Receiver id="Unknown"}\}
\{\text{Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">\text{Unknown</Name}\}
\{\text{Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">\text{Unknown</Name}\}
\{\text{Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">\text{Unknown</Name}\}
\{\text{Receiver}\}
\{\text{Receiver}\}
\{\text{Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">\text{Trans46302</Name}\}
\{\text{Source xml:lang="en">\text{Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common" xml:lang="en">\text{Trans46302</Name}\}
\{\text{Source xml:lang="en">\text{Name xmlns="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/structure"}\}
\{\text{Structures}\}
\{\text{NataStructure id="TRADESTATS" urn="urn:sdmx:org.sdmx.infomodel.datastructure.lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataStructure-lataSt
```

#### **Error Response:**

The following error response is returned for invalid parameter value.

HTTP Response Status Code: 404

Content: Invalid structure code

<string xmlns="http://schemas.microsoft.com/2003/10/Serialization/">No structures found for the specific query</string>

# Trade Stats Data Request

This API offer variety of options to retrieve the Trade Stats – Trade data, Trade Stats – Tariff data and Trade Stats – Development data.

### URL:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats
\_trade|df\_wits\_tradestats\_tariff|df\_wits\_tradestats\_development/<Freq>.<Repo
rter>.<Partner>.<productCode>.<indicator>/?startperiod=<year>&endperiod=<ye ar>&detail=Full | DataOnly |
SeriesKeysOnly | NoData

#### Method:

GET

#### **URL Parameter:**

**Freq:** The possible value for frequency is "A" If no value is specified, it is considered as all frequencies.

**Reporter**: The reporter parameter can have the value of "All" or list of country ISO3 codes from Reporter and Partner metadata request.

**Product**: The product parameter can the value of "All" or list of product group codes, which can be obtained from Product Metadata request.

**Partner**: The partner parameter can have the value of "All", or list of partner codes obtained from data availability metadata request call.

**Year**: The year parameter can have the value of "All", or list of values obtained from data availability metadata request call.

**Indicator:** The indicator parameter can the value of "All" or list of indicator codes, which can be obtained from Indicator Metadata request.

**StartPeriod**: This is a year parameter and can have the value from 1988 onwards. If ignored, trade stats data for available years will be returned.

**EndPeriod**: This is a year parameter and can have the value from 1988 onwards. If ignored, the trade stats data available from the start period to the latest available years will be returned.

**Detail**: This is an optional parameter and specifies the desired amount of information to be returned. It can take one of the below values.

- Full: all data and documentation, including annotations (default)
- DataOnly: attributes and therefore groups will be excluded.
- SeriesKeysOnly: only the series elements and the dimensions that make up the series keys.
- **NoData**: returns the groups and series, including attributes and annotations, without observations.

#### Response Format:

XML- SDMX-ML 2.1 generic schema, XML- SDMX-ML 2.1 structure specific schema or JSON format.

# Success Response:

HTTP Response Status Code: 200

**Content:** The response has the indicator data for the requested dimensions.

# Sample Request:

# Country-Year-Partner-Product Indicator request:

To request one reporter-one partner-one product- one year-one indicator:

#### Trade:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_trade/A.usa.wld.fuels.XPRT-TRD-VL?startPeriod=2000&endPeriod=2002

#### Tariff:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_tariff/A.usa.wld.fuels.AHS-SMPL-AVRG?startPeriod=2000&endPeriod=2002

# To request one reporter-one partner-one product- one year-All indicator:

# Trade:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_trade/A.usa.wld.fuels./?startPeriod=2000&endPeriod=2002

#### Tariff:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_tariff/A.usa.wld.fuels./?star tPeriod=2000&endPeriod=2002

# Country-Year-Partner Indicator request:

# To request one reporter-ALL partner- one year-one indicator:

#### Trade:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_trade/A.usa..999999.MPRT-PRTNR-SHR/?startPeriod=2000&endPeriod=2002

#### Tariff:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_tariff/A.usa..999999.TRF-NMBR-AGGRMNT/?startPeriod=2000&endPeriod=2002

#### To request one reporter-ALL partner- one year-all indicator:

#### Trade:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_trade/A.usa..999999.?start Period=2000&endPeriod=2000

#### Tariff:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_tariff/A.usa..999999.?startPeriod=2000&endPeriod=2000

# Country-Year Indicator request:

#### To request ALL reporter- one year-ALL indicator:

#### Trade:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_trade/A..999.999999.?start Period=2000&endPeriod=2000

#### **Development:**

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_development/A..999.99999 9.?startPeriod=2000&endPeriod=2000

# To request ALL reporter- All year-one indicator:

#### Trade:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_trade/A..999.999999.NDX-XPRT-MKT-PNRTTN/

#### Development:

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_development/A..999.99999 9.NE-TRD-GNFS-ZS

To request series elements and the dimension the makeup the series key for one reporter-one partner one product- one year-one indicator

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_trade/A.usa.wld.fuels.XPRT-TRD-VL/?startPeriod=2000&endPeriod=2002&detail=serieskeysonly

To request groups and series, including attributes and annotations without observations for one reporterone partner-one product- one year-reported tariff rate

https://wits.worldbank.org/API/V1/SDMX/V21/rest/data/df\_wits\_tradestats\_trade/A.usa.wld.fuels.XPRT-TRD-VL/?startPeriod=2000&endPeriod=2002&detail=nodata

#### Sample Response Format:

#### SDMX-ML 2.1 generic schema

```
▼<message:GenericData xmlns:message="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/message" xmlns:generic="http://www.:
 xsi:schemaLocation="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/message SDMXMessage.xsd">
 ▼<message:Header>
    <message:ID>DF_WITS_TradeStats_Trade</message:ID>
    <message:Test>false</message:Test
    <message:Prepared>2016-05-09T13:21:52</message:Prepared>
  <message:DataSetAction>Information</message:DataSetAction>
  ▶ <message:DataSetID>...</message:DataSetID>
    <message:Extracted>2016-05-09T13:21:52</message:Extracted>
  </message:Header>
 ▼<message:DataSet structureRef="WBG_WITS_TRADESTATS_1_0">
  ▼ <generic:Series>
     ▼ <generic:SeriesKey>
        <generic:Value id="FREQ" value="A"/>
       <generic:Value id="REPORTER" value="USA"/>
       <generic:Value id="PARTNER" value="WLD"/>
       <generic:Value id="PRODUCTCODE" value="01-05_Animal"/>
       <generic:Value id="INDICATOR" value="CNTRY-GRWTH"/>
     </generic:SeriesKey>
     ▼ <generic:Obs>
        <generic:ObsDimension id="TIME_PERIOD" value="2000"/>
        <generic:ObsValue value="5.79998403521664"/>
      ▼ <generic:Attributes>
         <generic:Value id="DATASOURCE" value="WITS-CMT"/>
       </generic:Attributes>
      </generic:Obs>
    </generic:Series>
   ▼ <generic:Series>
     ▼<generic:SeriesKey>
       <generic:Value id="FREQ" value="A"/>
       <generic:Value id="REPORTER" value="USA"/>
       <generic:Value id="PARTNER" value="WLD"/>
       <generic:Value id="PRODUCTCODE" value="01-05 Animal"/>
       <generic:Value id="INDICATOR" value="MPRT-PRDCT-SHR"/>
     </generic:SeriesKey>
     ▼ <generic:Obs>
       <generic:ObsDimension id="TIME PERIOD" value="2000"/>
        <generic:ObsValue value="1.257"/>
      ▼ <generic:Attributes>
         <generic:Value id="DATASOURCE" value="WITS-CMT"/>
       </generic:Attributes>
      </generic:Obs>
    </generic:Series>
```

### SDMX-ML 2.1 structure specific schema

```
k?xml version="1.0" encoding="utf-8"?>
🗏 <message:StructureSpecificData xmlns:message="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/message" xmlns:n:
<message:Header>
     <message:ID>DF_WITS_TradeStats_Trade</message:ID>
     <message:Test>false</message:Test>
     <message:Prepared>2016-05-09T13:23:01</message:Prepared>
     <message:Sender id="WBG_WITS">...</message:Sender>
+
+
     kmessage:Structure structureID="WBG_WITS_TRADES" namespace="urn:sdmx:org.sd" dimensionAtObservation="TIME_PEI
     <message:DataSetAction>Information</message:DataSetAction>
     <message:DataSetID>DF_WITS_TradeStats_Trade_WBG_WITS_2016-05-09T132301/message:DataSetID>
     <message:Extracted>2016-05-09T13:23:01</message:Extracted>
   </message:Header>
  <message:DataSet ss:dataScope="DataStructure" xsi:type="ns1:DataSetType" ss:structureRef="WBG_WITS_TRADESTATS_"</pre>
    <Series FREQ="A" REPORTER="USA" PARTNER="WLD" PRODUCTCODE="01-05_Animal" INDICATOR="CNTRY-GRWTH">
       <Obs TIME_PERIOD="2000" OBS_VALUE="5.79998403521664" DATASOURCE="WITS-CMT" />
     <Series FREQ="A" REPORTER="USA" PARTNER="WLD" PRODUCTCODE="01-05 Animal" INDICATOR="MPRT-PRDCT-SHR">
       <Obs TIME_PERIOD="2000" OBS_VALUE="1.257" DATASOURCE="WITS-CMT" />
    <Series FREQ="A" REPORTER="USA" PARTNER="WLD" PRODUCTCODE="01-05_Animal" INDICATOR="MPRT-TRD-VL">
       <Obs TIME_PERIOD="2000" OBS_VALUE="15814321.331" DATASOURCE="WITS-CMT" />
    <Series FREQ="A" REPORTER="USA" PARTNER="WLD" PRODUCTCODE="01-05 Animal" INDICATOR="RCA">
       <Obs TIME PERIOD="2000" OBS VALUE="0.8" DATASOURCE="WITS-CMT" />
     </Series>
     <Series FREQ="A" REPORTER="USA" PARTNER="WLD" PRODUCTCODE="01-05_Animal" INDICATOR="WRLD-GRWTH">
       <Obs TIME PERIOD="2000" OBS VALUE="1.42362212045672" DATASOURCE="WITS-CMT" />
    <Series FREQ="A" REPORTER="USA" PARTNER="WLD" PRODUCTCODE="01-05_Animal" INDICATOR="XPRT-PRDCT-SHR">
       <Obs TIME PERIOD="2000" OBS VALUE="1.5169" DATASOURCE="WITS-CMT" />
    <Series FREQ="A" REPORTER="USA" PARTNER="WLD" PRODUCTCODE="01-05 Animal" INDICATOR="XPRT-TRD-VL">
       <Obs TIME_PERIOD="2000" OBS_VALUE="11836865.403" DATASOURCE="WITS-CMT" />
     </Series>
     <Series FREQ="A" REPORTER="USA" PARTNER="WLD" PRODUCTCODE="06-15_Vegetable" INDICATOR="CNTRY-GRWTH">
       <Obs TIME PERIOD="2000" OBS VALUE="-1.67613015012208" DATASOURCE="WITS-CMT" />
    <Series FREQ="A" REPORTER="USA" PARTNER="WLD" PRODUCTCODE="06-15_Vegetable" INDICATOR="MPRT-PRDCT-SHR">
       <Obs TIME_PERIOD="2000" OBS_VALUE="1.3391" DATASOURCE="WITS-CMT" />
    <Series FREQ="A" REPORTER="USA" PARTNER="WLD" PRODUCTCODE="06-15 Vegetable" INDICATOR="MPRT-TRD-VL">
       <Obs TIME_PERIOD="2000" OBS_VALUE="16847225.13" DATASOURCE="WITS-CMT" />
     </Series>
Ė
     <Series FREQ="A" REPORTER="USA" PARTNER="WLD" PRODUCTCODE="06-15 Vegetable" INDICATOR="RCA">
      <Obs TIME_PERIOD="2000" OBS_VALUE="1.32" DATASOURCE="WITS-CMT" />
```

#### JSON Format

```
{ ♥ 3 properties, 114 KB
"header": { ♥ 4 properties, 139 bytes
    "id": "DF WITS TradeStats Trade",
"prepared": "2017-02-21T12:53:17",
    "test": false,
    "sender": { ▼ 2 properties, 50 bytes
      "id": "WBG WITS",
      "name": "World Bank Group - WITS"
  "dataSets": [ W 1 item, 104 KB
    { ▼ 2 properties, 104 KB
      "action": "Information",
     "series": { > 204 properties, 104 KB }
  "structure": { V 5 properties, 9 KB
    "name": "WITS TradeStats Trade",
    "description": "Trade data such as total exports, number or products exported, exporting and importing
     "dimensions": { ▼ 3 properties, 9 KB
      "dataset": [],
      "series": [ > 5 items, 6 KB ],
      "observation": [ > 1 item, 2 KB ]
    "attributes": { ▼ 3 properties, 153 bytes
      "series": [],
     "observation": [ > 1 item, 112 bytes ]
    "annotations": []
```

#### **Error Response:**

The following error response are returned for invalid parameter values or when the data is too large to return.

HTTP Response Status Code: 400

WITS Message Code: 150

Content: Invalid reporter code

```
▼<wits:error xmlns:wits="http://wits.worldbank.org">
    ▼<wits:message id="150" key="Invalid Reporter Code.">
        The provided reporter parameter value is not valid.
      </wits:message>
      </wits:error>
```

HTTP Response Status Code: 400

WITS Message Code: 150

Content: Invalid partner code

```
▼<wits:error xmlns:wits="http://wits.worldbank.org">
    <wits:message id="150" key="Invalid Partner Code.">The provided partner parameter value is not valid.</wits:message>
    </wits:error>
```

HTTP Response Status Code: 400

WITS Message Code: 150

Content: Invalid product code

**HTTP Response Status Code: 400** 

WITS Message Code: 150

Content: Invalid year

▼<wits:error xmlns:wits="http://wits.worldbank.org">
 <wits:message id="150" key="Invalid Year.">The provided year parameter value is not valid.</wits:message>
 </wits:error>

HTTP Response Status Code: 413

WITS Message Code: 150

Content: The request yield large data to return.