Technical Interfaces for Aggregated and Disaggregated Data Provided by BSSE

(updated: 22 May 2025, valid from: 1 September 2025)

This document describes the technical interfaces for data provided by the Bratislava Stock Exchange (BSSE) to interested parties seeking real-time access to pre-trade and post-trade aggregated or disaggregated data.

BSSE will provide access to the data and interfaces for pre-trade and post-trade information upon request, in accordance with EU Regulation No. 600/2014, as stated in Article 1 of RTS 14 under MiFID II.

To enable data distribution to the recipient, a TCP/IP connection with an endpoint on the BSSE router is required, either via VPN or leased line. BSSE does not provide such connection services directly; therefore, it is necessary to engage third-party network service providers.

The aggregated and disaggregated data themselves are distributed in a format described in the document titled ***"Types and Formats of Aggregated and Disaggregated Data Provided by BSSE"*** (hereinafter referred to as Doc_1). Data distribution is facilitated through FTP and REST-type technical interfaces.

FTP Interface Type.

This represents the original BSSE interface for the distribution of real-time pre-trade and post-trade aggregated data. Each generated message (record) is stored as a separate file named DDMMYYYY_< Message Identification Number> (a file without extension), where *<Message Identification Number>* (see Doc_1) is a 7-digit number representing the message generated during the day. It corresponds to the first field in the respective record and is incremented starting from 1. Files are copied using the standard GET command. The authentication is handled using an assigned User/Password combination.

The FTP interface does not support selective retrieval of specific message types when subscribing to pre-trade and post-trade disaggregated data. Therefore, it may only be used for retrieving the entire set of all types of pre-trade and post-trade aggregated data.

REST Interface Type

This represents the new interface developed by BSSE for the real-time distribution of pre-trade and post-trade disaggregated data. Unlike the FTP interface, this interface allows the selection of a specific pre-trade or post-trade data package, which includes selected types of messages (see Doc_1) based on the standard package offering or an agreement between the data subscriber and BSSE. It is also possible to subscribe to more than one type of data package.

The interface uses the HTTPS protocol with mutual TLS (mTLS) for security. For subscriber authentication, a certificate issued by a trusted certification authority must be used. The interface is accessed via HTTP GET requests.

REST API Interface Endpoints of BSSE

1. /BIS/AgencyInterface/Data/helloWorld
2. /BIS/AgencyInterface /Data /GetPackages
3. /BIS/AgencyInterface /Data /GetData4BusinessDay

1. /BIS/AgencyInterface/Data/helloWorld

Description : Client authentication test.
Input parameter : None.
Output : JSON -

*{
"Message": "Hello World - Authenticated",
"UserName": "User Name",
"Role": "Optional",
"Time": "2025-04-29T10:00:00Z"
}*

2. /BIS/AgencyInterface/Data/GetPackages

Description : List of available data packages for the authenticated subscriber.
Input parameter : None.
Output : XML – type AgencyPackagesList/ResponseData [element Response]
XML schema : AgencyPackagesList.xsd

Description of output data of type *AgencyPackagesList/Response:*

PackageTypeID	string (GUID)	GUID code of the package type
PackageTypeName	string	Package name
PackageTypeDesc	string	Package description
PackageSecuritiesType	cmn:SecurityTypeEnum	Security type

3. /BIS/AgencyInterface/Data/GetData4BusinessDay

Description : List of generated messages for pre-trade and post-trade data.
Input parameters : URL query parameters
Output : XML – type BusinessDayData
XML schema : AgencyDataResponse.xsd

Description of input parameters of type *URL query parameters*:

PackageDate (required)	YYYY-MM-DD	Date for which data of the specified package type is requested
PackageTypeID (required)	GUID	Guid code of the requested package type

LastPackageIcReceived (optional)	integer	Sequence number of the last received message for the requested package and day

Description of output data of type *BusinessDayData:*

ReqParm/PackageDate	cmn:ISODate	Date for which data of the specified package type is requested
ReqParm/PackageTypeID	string (GUID)	GUID code of the specified package type
ReqParm/LastPackageIcReceived	int	Last ID of the received message of the specified package type for the requested date
Response[]/MessageIc	int	Sequence number of the message for the given package and day
Response[]/CreDt	cmn:ISODateTime	Date and time of generation of the message
Response[]/Data	String	Message of the specified sentence type in the format according to Doc_1
MorePackageDataAvailable	cmn:YesNoIndicator	Indicator whether additional messages can currently be downloaded for the specified package type

Notes:

1. The values of the input parameters for the *GetData4BusinessDay* call are provided in the response under *BusinessDayData/ReqParm.*
2. Since the given package may not contain all types of messages (see Doc_1), the numbering of messages for the given package and day (*Response/MessageIc*) does not correspond to the *message identification number* indicated in the first field of the message. *Response/MessageIc* is incremented from 1 for each package type and day.
3. The number of messages returned in the *GetData4BusinessDay* response is limited to 100 messages. If the response contains this number of messages and the *MorePackageDataAvailable* indicator is set to *true*, additional messages for the given package type and day are available. The call should be repeated with the corresponding value of the *LastPackageIcReceived* parameter.
4. The value of *AgencyPackagesList/Response/PackageSecuritiesType* can contain the following values:
   - ‘A‘ - if the package type contains data only for equity instruments
   - ‘D‘ - if the package type contains data only for debt instruments
   - ‘X‘ - if the package type contains data for all types of securities instruments

List of used XSD schemas:

BIS_CommonTypes.xsd (cmn:namespace)
AgencyPackagesList.xsd
AgencyDataResponse.xsd

Examples of calling *GetData4BusinessDay*:

GET request with input parameters:

https://.../BIS/AgencyInterface/Data/GetData4BusinessDay?PackageDate=2025-05-12&PackageTypeID=123e4567-e89b-12d3-a456-426614174000&LastPackageIcReceived=1789

Response

<BusinessDayData>
<ReqParm>
<PackageDate>2025-05-12</PackageDate>
<PackageTypeID>123e4567-e89b-12d3-a456-426614174000</PackageTypeID>
<LastPackageIcReceived>1789</LastPackageIcReceived>
</ReqParm>
<Response>
<MessageIc>1790</MessageIc>
<Data> 2268EM0001A#Chemovlak a.s. CHLTobrucká 7 90904Smolník 1992 16733.6487 0.00000000000031221851 </Data>
</Response>
<MorePackageDataAvailable>false</MorePackageDataAvailable>
</BusinessDayData>