

Short code submission, format and short code – long code mapping process

(based on Wiener Borse's description with minor BSE amendments)

Submission method

Members will be able to upload 2 different data-files containing the mapping between short codes and the belonging National IDs or LEIs via their MiFID SFTP access. (For further information please check "BSE FTP Upload Server Guide". Both files need to be uploaded in the MIFID2-codes/Incoming folder.

The two files are:

- **Client Info Reporting File** (containing short codes belonging to clients in order to fill audit trail "Client identification code" field)
- Inhouse Info Reporting File (containing short codes belonging to persons within the investment firm in order to fill "Investment decision within firm" (Investment Decision Maker) and "Execution within firm" (Executing Trader) fields)

Please note that value between 0 and 9 as a short code will be reserved by BSE (please check "New fields for audit trail BSE spot market Xetra" documentation on BSE website)

Submission deadline

Members have to provide data with the short codes and corresponding long codes and the relevant identifier (National ID or LEI) in a "Client Info Reporting" and "Inhouse Info Reporting File" before 22:00 CET of the respective trading day (Day T).

BSE initiates two "Confirmation" runs at 16:00 CET and 22:00 CET where provided data will be checked on formal correctness and completeness, and "Confirmation Files" and "Feedback Files" will be sent to Members for Client file and Inhouse file separately.

The files produced in the evening confirmation run always overwrite the afternoon files.

Please note: modifications for data of day T can only be done on day T (see the FAQ section on handling possible mistakes).

Deletions are Valid from day T, for instance with the following record:

 XBUD D
 2018-05-05
 123456789
 N
 HU
 1
 1912121230HNWICK

 the last day John Wick belongs to the Short Code 123456789 is 2018.05.04.
 Image: 100 minipage
 Ima



Client Info Reporting File

Format Specification "Client Info Reporting File":

- <u>Header part:</u> ###<Member-ID> Example: ###ABCHU
- <u>Footer part:</u> ###<Date and time of creation>;<Num_data_records> Date and time of creation: Format "YYYY-MM-DD hh:mm:ss" (in CET) Num_data_records: Number of data lines (not including header and footer lines)
- <u>Common properties:</u> Field separator: Tab (ASCII 09)
- <u>Filename-convention</u>: CLIENT_INFO_<Member-ID>_<yyyymmdd>.DAT (please note that only the properly named files will be processed, the date should always be the current date)

Data record format "Client Info Reporting File":

(Members shall provide the following data)

Req	Field Name	Field Lenght	Field Type	Valid Values	Example
YES	MIC	Char(4)	Alphanumeric	MIC acc. to ISO 10383	XBUD
YES	StatusIndicator	Char(1)	Uppercase Letter	N (new) M (modify) D (delete)	N
YES	ValidFrom	Char(10)	Date	Date Format "yyyy-mm-dd"	2018-01-03
YES	ShortCodeID	8 bytes	Numeric	10-18446744073709551614	123456
YES	Classification	Char(1)	Uppercase Letter	L (for LEI) N (for National ID)	Ν
No	NatIDCtryCode	Char(2)	Capital Alpha Values	Country Code according to ISO 3166-1 alpha 2	HU
No	NatIDPrio	Char(1)	Numeric	1 2 3	1
YES	ClientLongValue	Char(35)	Alphanumeric		19950320JOZSEF MINTA

As the description implies, a full file or a delta file can be sent.



Inhouse Info Reporting File

Format Specification "Inhouse Info Reporting File":

- <u>Header part:</u> ###<Member-ID> Example: ###ABCHU
- <u>Footer part:</u> ###<Date and time of creation>;<Num_data_records> Date and time of creation: Format "YYYY-MM-DD hh:mm:ss" (in CET) Num_data_records: Number of data lines (not including header and footer lines)
- <u>Common properties:</u> Field separator: Tab (ASCII 09)
- Filename-convention: INHOUSE_INFO_<Member-ID>_<yyyymmdd>.DAT

Data record format "Inhouse Info Reporting File":

(Members shall provide the following data)

		Field			
Req.	Field Name	Lenght	Field Type	Valid Values	Example
YES	MIC	Char(4)	Alphanumeric	MIC acc. to ISO 10383	XBUD
YES	StatusIndicator	Char(1)	Uppercase Letter	N (new) M (modify) D (delete)	N
YES	ValidFrom	Char(10)	Date	Date Format "yyyy-mm-dd"	2018-01-03
YES	ShortCodeID	8 bytes	Numeric	10-18446744073709551614	123456
YES	Classification	Char(1)	Uppercase Letter	N (for National ID)	Ν
No	NatIDCtryCode	Char(2)	Capital Alpha Values	Country Code according to ISO 3166-1 alpha 2	HU
No	NatIDPrio	Char(1)	Numeric	1 2 3	1
YES	InhouseLongValue	Char(35)	Alphanumeric		19950320JOZSEFMINTA

As the description implies, a full file or a delta file can be sent.



Confirmation files

Immediately after 16:00 CET and 22:00 CET BSE will process a formal check of the provided data (Client Info and Inhouse Info) and will generate a confirmation files in the same location as the file processed including the result of the formal verification. Please note, if the file was not moved from the Incoming folder to the Archive/Incoming folder, then the procession was not successful. The most common reason for it is the improper naming of files (wrong date, or .dat extension instead of .DAT).

Samples of the error messages can be found under the link in the 'Received' folder:

https://bet.hu/pfile/file?path=/site/Magyar/Dokumentumok/sample-dat-files

Format Specification

- <u>Header part:</u> ###<Member-ID>;<Status>
 Example: ###ABCHU;OK or ###ABCHU;ERROR
- <u>Footer part and common properties</u>: Same as for "Client and Inhouse Info Reporting Files"
- <u>Filename-convention:</u> CLIENT_INFO_CONFIRMATION<Member-ID>_<yyyymmdd>.DAT INHOUSE_INFO_CONFIRMATION<Member-ID>_<yyyymmdd>.DAT

Data record format

(same as for "Client Info Reporting File/Inhouse Info Reporting file" + 2 additional fields)

Req.	Field Name	Field Lenght	Field Type	Valid Values	Example
Yes	Confirmed	Char(1)	Boolean	Y (yes); N (No)	Y
No	Error	Char(50)	Alphanumeric	Error in Field <field name=""> Missing Field <field name=""> Error in Header or Footer</field></field>	Error in Field "Valid From"

The field "Error" is only sent back, if field "Confirmed" is set to "N".



Feedback files

BSE will check the completeness of client/inhouse data provided on a daily basis short after 16:00 CET for the last trading day before the current trading day and short after 22:00 for the current trading day.

Although completeness process will be run daily all missing data will be stored by BSE and the feedback file (provided by BSE) will include all short codes found in the trading system data, for which no client or inhouse information had been provided at all.

Feedback file contains all missing items since 3 January, 2018.

If Members fail to provide the decrypted ID for a short code submitted by the end of Day T, BSE will inform Members about incomplete data by means of a "Feedback File". Similarly, to the confirmation files, feedback files will be populated differently for Client as well as for Inhouse.

Members have to ensure completing missing data the next trading day (T+1) before 16:00 CET at the latest.

In case there are no missing items, an empty Feedback File will be provided.

Format Specification

- <u>Header and Footer Part</u>: Same as for "Client and Inhouse Info Reporting File"
- Filename-conv.:

CLIENT_INFO_FEEDBACK_<MEMBER_ID>_<DATE_OF_CREATION>.DAT INHOUSE_INFO_FEEDBACK_<MEMBER_ID>_< DATE_OF_CREATION >.DAT

Data record format

Field	Spec	Field type	Description/Example
MIC	Char(4)	Alphanumeric	MIC code of the place of trade (XBUD)
TraderID	Char(11)	Alphanumeric	Xetra Trader ID in trading system (e.g. "ABCHUTRDABC")
Trade date	Char(10)	Date	The date of missing value
ShortCodeID	8 byte	Numeric	Short code in the trading system



Handling Missing Items

If the Feedback File contains any missing Short Code, then please pay extra attention to the date of the 'ValidFrom' field, when uploading the missing items, in order to match with the date indicated in the Feedback file. If the uploaded item is dated later than indicated in the Feedback file, the program will continue to include the Short Code in the Feedback file.

Example:

- XY Brokerage firm uses the 132456 Short Code on 1st of June but forgets to upload it. She notices the missing item in the Feedback File on 5th of June.
- WRONG solution: include the missing items in the 5th Info file with '<u>ValidFrom': 2018.06.05</u>. The missing items will persist to arrive in the Feed File, as there is no mapping for these items between 1st and 5th of June.

RIGHT solution: include the missing items in the 5th Info file with 'ValidFrom': 2018.06.01.

Frequently Asked Questions

• <u>I already submitted a Short Code which was processed (as I got 'Y' in the</u> <u>'Confirmed' field), but the Short Code still appears in the Feedback File as</u> <u>missing item.</u>

The most common mistake in this case is the improper population of the 'ValidFrom' field (as indicated above), so probably a later date was provided than the first usage of the Short Code. The issue here is that the program does not allow to modify any values in the past. In order to clear the affected Short Code from the Feedback file, BSE can delete these Short codes from its database, and then the member shall upload the mapping with the right starting date. In case of an error like this, please send an email to trading@bse.hu in which the exchange member specifies the Short codes and asks for the deletion of those. Please note that these emails will be forwarded to MNB.

Long code has changed (or any mistake occurred), but it was not administered in the system?

As previously stated modification for the past is not possible. Modifications for day T can only be done in day T, therefore to fix this type of errors, members should update the long code from that day when they notice the mistake and send an email to <u>trading@bse.hu</u> to notify the exchange about the error, then upload a txt file on the SFTP server in the MIFID2-codes folder. The txt file must contain accurately who was assigned to the given Short Code during the time period of the mistake. Please note that these files will be sent to MNB along with the daily files.



• How to handle Algo IDs?

Since algo ID shall be provided directly in the short code field, there is no need to upload registered Algo IDs in any of the Info files. However, according to current functionality of the program, Algo IDs can appear in the Feedback file, in case it was entered in the trading system incorrectly, so the related field (if the Algo ID was entered in the 'Executing Trader' field then the 'Executing Trader Indicator') was not populated with the value '1' (Algorithm is responsible for execution).

The correct population of the connected fields.

Executing Trader Indicator: 1 Investment Decision Indicator:1 Executing Trader Algo ID Investment Decision Maker: Algo ID

In case of these fields are correctly populated fields, Algo IDs will not appear in the Feedback file.

Further information can be found under the following link:

https://bse.hu/pfile/file?path=/site/Magyar/Dokumentumok/Tozsdetagoknak/MIFID-II/New_fields_for_audit_trail_BSE_spot_market_Xetra_20171016.pdf1

• What to do if I forgot to upload a file for a given day?

In this case item for the given day can be added to the current day's Info file. Please pay attention to the correct population of the 'ValidFrom' field at these items.