

Participant Specifications

Shortcode Procedure for the Munich Stock Exchange

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Convenience Translation

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Munich Stock Exchange

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1 Scope

The following chapters outline the shortcode procedure in accordance with section 45 (2) of the German Stock Exchange Rules (BörsO), § 5 of the Trading Conditions together with § 7 of the Implementation Regulations for trading participants directly connected to the Munich Stock Exchange's MAX-ONE and gettex trading platforms.

The description provided for delivering shortcode files corresponds to the position discussed within the working groups of stock exchanges for the use, format, delivery and review of shortcode files transmitted by trading participants on trading platforms and for the provision of the corresponding audit files. The shortcode procedure of the Munich Stock Exchange, i.e. use, format, delivery as well as verification of shortcode data, fits into the shortcode procedure of the exchange community of Germany.

The use, format, delivery and review of shortcode data is explained in the following chapters and affects trading participants directly connected to the Munich Stock Exchange's MAX-ONE and gettex trading platforms.

The shortcode procedure for trading participants connected to MAX-ONE via XONTRO is outlined in Update 1 to XONTRO MiFID II Newsletter No. 3 issued by Braintrade Gesellschaft für Börsensysteme mbH on 22 September 2017 and is aligned with the shortcode procedure for the Munich Stock Exchange. Update 1 to XONTRO MiFID II Newsletter No. 3 is available via www.xontro.de (MiFID II).

2 Shortcode Use

- Shortcode files help to encapsulate the identification of the following parties that must be transferred to the MAX-ONE and gettex trading platforms in accordance with MiFID II:
 - **Execution within Firm (*Executing Trader*):**
The trader or algorithm responsible for execution.
 - **Investment Decision within Firm (*Investment Decision Taker*):**
The trader or algorithm responsible for investment decisions.
 - **Client Identification Code (*Client*):**
Direct client of the party placing the order.

The contents of FIX data fields for parties including the Executing Trader, Investment Decision Taker and Client that are transmitted during the trading day as order transactions (order entry, order change, order deletion) via the FIX protocol on the MAX-ONE and gettex trading platforms are considered relevant for shortcode delivery:

FIX day	FIX field name	Req.?	Allocation	Significance of FIX for MAX-ONE/gettex
Party: Executing Trader				
447	PartyID Source	Mand.	P	ID for transmission as shortcode or AlgoID
448	PartyID	Mand.		The trader or algo responsible for execution:
			<Shortcode>	Shortcode identification
			<AlgoID>	AlgoID
			3	'Order with specific instructions'
452	PartyRole	Mand.	12	Execution within firm
2376	PartyRole Qual.	Opt.	22	Algo
			24	Natural person
Party: Investment Decision Taker				
447	PartyID Source	Mand.	P	ID for transmission as shortcode or AlgoID
448	PartyID	Mand.		The trader or algo responsible for investment decision:
			<Shortcode>	Shortcode identification
			<AlgoID>	AlgoID
452	PartyRole	Mand.	122	Investment decision within firm
2376	PartyRole Qual.	Opt.	22	Algo
			24	Natural person
Party: Client				
447	PartyID Source	Mand.	P	ID for transmission as shortcode
448	PartyID	Mand.		Identification of client:
			1	AGGR (order aggregation)
			2	PNAL (pending allocation)
			<Shortcode>	Shortcode identification
452	PartyRole	Mand.	3	Client
2376	PartyRole Qual.	Opt.	23	LEI (company)
			24	Natural person

- The shortcode shows the NATIONAL_ID and LEI as well as the AlgoID, where applicable, in a 20-digit numeric field within the range of values [100, 2⁶³-1].

3 Shortcode Procedure

The delivery and review of shortcode files and the provision of audit and log files is carried out in the same way for all participants directly connected to the Munich Stock Exchange's MAX-ONE and gettex trading platforms via FIX 4.4.

3.1 Shortcode File Format

Field name	CBF-NO*	VALID-FROM (trading day)	SHORTCODE	LONGCODE-ID	LONGCODE
Required?	Mand.	Mand.	Mand.	Mand.	Mand.
Field format	num[4]	date[yyyymmdd]	num[20]	char[2]	char[50]
Field content	CBF No.	Reportable trading day	Shortcode	22=AlgoID 23=LEI 24=nat. person	AlgoID LEI Nat. ID
Example with CONCAT	2890	20180104	1234567890	24	DE19961111 MAX##MUSTE

*CBF-NO denotes the CBF NO. of the party placing the order (**Executing Firm**).

- The shortcode file is a comma-separated CSV file.
- Every shortcode file must include at least the header. If there is no shortcode data for the trading participant to transmit, the shortcode file is transmitted with the header only.
- The shortcode file being transmitted includes the relevant trading participant's CBF No., the trading day (start of validity), the shortcode, the longcode ID (AlgoID, LEI, natural person) and the longcode (AlgoID, LEI, Nat. ID).
- The transmitted shortcode data relates to the order messages transmitted by the trading participant on the relevant trading day, i.e. order entries, changes and deletions.
- The shortcode is a numeric field with a maximum of 20 digits in the range of values [100, 2⁶³-1]. The range of values from 0-99 is reserved and must not be used by trading participants.
- With effect from **02.01.2024**, a mandatory static shortcode procedure will apply at the Munich Stock Exchange. Dynamic shortcode assignments are no longer possible for newly entered orders as of this date. It must be ensured that per KVNR the shortcode assignment used is unique (static) at the latest as of 02.01.2024 and will no longer be changed. A changeover from dynamic to static shortcode assignments is possible at any time. The changeover has to be notified to Börse München. Existing orders are not affected by the introduction of the static shortcode procedure and may also be changed beyond 02.01.2024 without complying with this regulation. As far as dynamic shortcode assignments are still permitted, the following applies: If there are several deliveries for the same shortcode within one exchange/reporting day, the shortcode data of the last delivery shall apply.
- Trading participants must only deliver shortcode data for the relevant trading day that relates to the order messages submitted by the trading participant on that trading day. Missing and corrected shortcode data can also be delivered on the following trading days.

Notes on the transmission of shortcode data in order messages:

- It is not possible to change shortcode data in transmitted order messages.
- A party identified as an algorithm can be transmitted in order messages using either an AlgoID or shortcode. Notwithstanding the above, the use of an

algorithm must always be clearly indicated in the order message.

3.2 Delivering Shortcode Files

Basics:

- As a rule, every trading participant delivers all of the relevant shortcode data for the trading day in question in a single shortcode file once a day.
- Shortcode files can be delivered via a technical centre for several trading participants where applicable, provided that the trading participants' technical centre is trading participant at the Munich Stock Exchange.
- The trading participants are required to refrain from transmitting a daily inventory of all existing longcodes.
- The trading participants are not obliged to retransmit unchanged existing shortcode data each day. For example, it may be appropriate for a trading participant with a lower, fixed number of identifications for traders, portfolio managers or algorithms and without retail clients (specialists, market makers or similar) to retransmit the shortcode file only in the event of changes rather than every day.
- A shortcode file including shortcode data for future trading days is **only** permitted in exceptional cases, e.g. for trading participants that exclusively manage a low, fixed number of identifications for traders, portfolio managers or algorithms entering a new responsible trader from a specified point in time in the future.
- Missing and corrected shortcode data can also be delivered on the following trading days.
- The transmitted shortcode data is secured via batch processing and stored separately from the order portfolio and only transmitted to the relevant supervisory authority upon request.

Detailed transmission process:

- Trading participants transmit shortcode files to the Munich Stock Exchange via secure ftp (**sftp**) from an IP address disclosed to the Munich Stock Exchange in advance. Trading participants can collect audit and log files via the same sftp access. The following times and directory and naming conventions are provided for delivering shortcode files:
- **Transmission time: 07:00-23:00 CET on trading days on which trading activities are taking place. Shortcode files are not processed on settlement days.**
- **Cut-off time: 10:00 CET on the next trading day.**
Shortcode files can be delivered until this time and several deliveries of the same shortcode are permitted each trading day. The last delivery of shortcode data made before the cut-off time applies to the trading day and shortcode in each case.
- **Provision of log file: from 12:30 CET.**

- **Directory structure for shortcode files:**

Directory	Meaning
	Home directory of trading participant
./in/maxone	Directory for delivering MAX-ONE shortcode files
./in/gettex	Directory for delivering gettex shortcode files
./out/maxone	Directory for collecting MAX-ONE audit and log files after shortcode checks
./out/gettex	Directory for collecting gettex audit and log files after shortcode checks

- **Naming convention for shortcode files:**

Shortcode file:

[MO|GX]-IN001-<Trading participant main CBF No.>-<Trading day>-<Seq. no.>

Audit file:

[MO|GX]-OUT002-<Trading participant main CBF No.>-<Trading day>-<Seq. no.>

Log file:

[MO|GX]-OUT003-<Trading participant main CBF No.>-<Trading day>-<Seq. no.>

Key: < ... > Variable [A|B] A or B

Examples:

Shortcode file: GX-IN001-2892-20170609-001

Audit file: GX-OUT002-2892-20170609-001

Log file: GX-OUT003-2892-20170609-001.

- The sequence number is in ascending order starting from 001 and is unique for each file type. **The seq. no. of the log file corresponds to the seq. no. of the last shortcode file delivered before the cut-off time.**
- The trading day is the day, in the format date [yyyymmdd], when the order transactions were carried out to which the shortcode data refers. Missing or incorrectly delivered shortcode data from previous days can be attached to the shortcode file by stating a different trading day.

3.3 Checking the Shortcode File

The shortcode file check is broken down into two steps.

1. **Syntactic and semantic check:** Carried out after the shortcode file is submitted and completed with an **audit file**. The syntactic and semantic correctness of the entries is checked after the shortcode file is submitted.
2. **Completeness check:** Carried out after the cut-off time and checks the order portfolio against the transmitted shortcode and longcode data. The results are provided in the form of a **log file**.

The completeness check also includes checking the LEIs transmitted as the longcode against the GLEIF database.

3.4 Providing the Audit and Log File

- Both the audit and log files are provided in the aforementioned directories and can be collected by the trading participants via sftp after the check.
- The log file includes all abnormal data sets, i.e. data sets for which the check logged a hint or error.
- Audit and log files contain a maximum of one hint or error for each transmitted data set (shortcode file line entry) and, in the case of an error, the error identified first during the checking process. Each data set within the audit or log file contains all the transmitted data in the shortcode file as well as the relevant information or error code for the abnormal data set (for formats, see 3.4.1 and 3.4.2).
- Missing shortcode or longcode data is marked as incorrect. A hint is attached to any shortcode or longcode data missing on the day the check is carried out but already transmitted on previous days.
- For missing shortcode or longcode data, only the CBF No., shortcode and OrderID for the order transaction and the relevant error code are shown in the log file (see below).
- If there are no abnormalities, i.e. no hints or errors, an empty audit or log file with a header is provided.
- In the event of an error, trading participants and technical centres must retransmit the corrected data sets.
- Late notifications for missing shortcode data or correction notification for incorrectly logged shortcode data are possible on subsequent trading days.

3.4.1 Format and Content of Audit File

- **Name of audit file:** [MO|GX]-OUT002-<Trading participant main CBF No.>-<Trading day>-<Seq. no.>
- **Directory:** ./out/[maxone|gettex]
- **Format:** CSV file with header and comma separation
- **Content:** Each data set contains:
- CBF No. for party placing the order, trading day (start of validity), shortcode, longcode ID (AlgoID, LEI, natural person), longcode (AlgoID, LEI, Nat. ID), error code, OrderID (not documented)

Key: < ...> Variable [A|B] A or B

Field name	CBF-NO*	VALID-FROM (trading day)	SHORT CODE	LONG CODE-ID	LONGCODE	ERROR CODE	ORDER NO.
Required?	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	<empty>
Field format	num[4]	date[yyyy mmdd]	num[20]	char[2]	char[50]	char[7]	
Field content	CBF No.	Reportable trading day	Shortcode	22=AlgoID 23=LEI 24=nat. person	AlgoID LEI Nat. ID	[MO GX] <xxxx> [E H]	
Example with CONCAT	2890	20180104	MM00120	24	GE19961111 MAX##MUSTE	MO4000E	

3.4.2 Format and Content of Log File

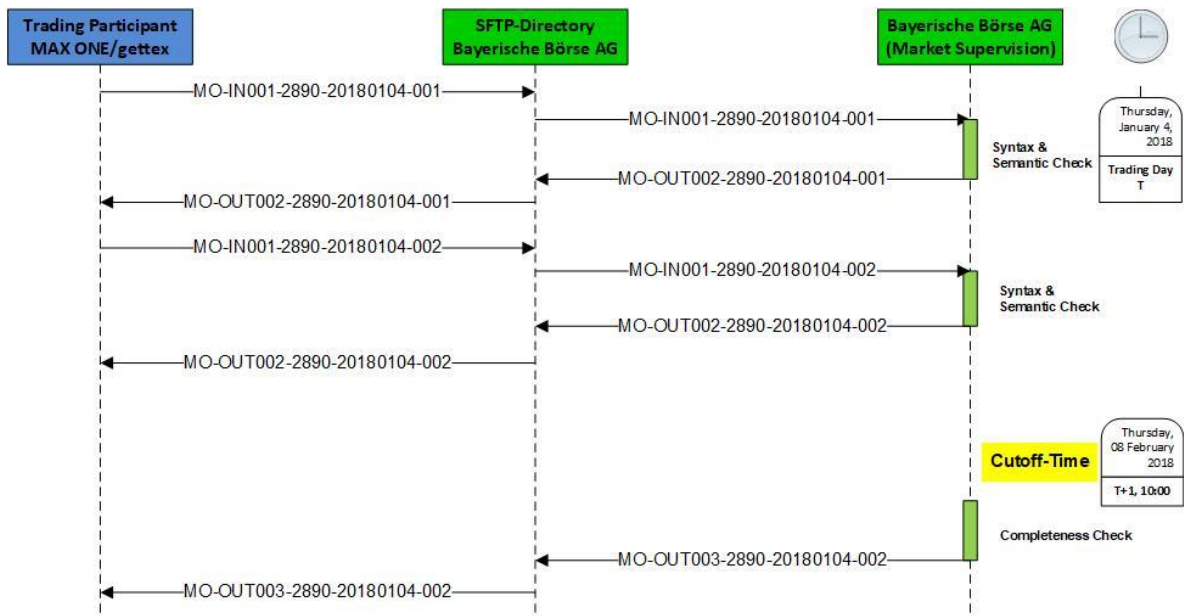
- **Name of log file:** [MO|GX]-OUT003-<Trading participant main CBF No.>-<Trading day>-<Seq. no.>. The sequence number of the log file is the sequence number of the last shortcode file submitted by the trading participant on the relevant trading day. If the trading participant does not deliver a shortcode file on the relevant trading day, the sequence number is set to 999.
- **Directory:** ./out/[maxone|gettex]
- **Format:** CSV file with header and comma separation
- **Content:** Each data set contains:
 CBF NO. for party placing the order, trading day (start of validity), shortcode, longcode ID (AlgoID, LEI, natural person), longcode (AlgoID, LEI, Nat. ID), error code, OrderID (documented in the event of error code [MO|GX]8000E or [MO|GX]8001H), whereby the contents of the trading day, longcode ID and longcode fields are dependent upon the delivery of a longcode for the shortcode transmitted in order transactions.

Key: .> Variable [A|B] A or B

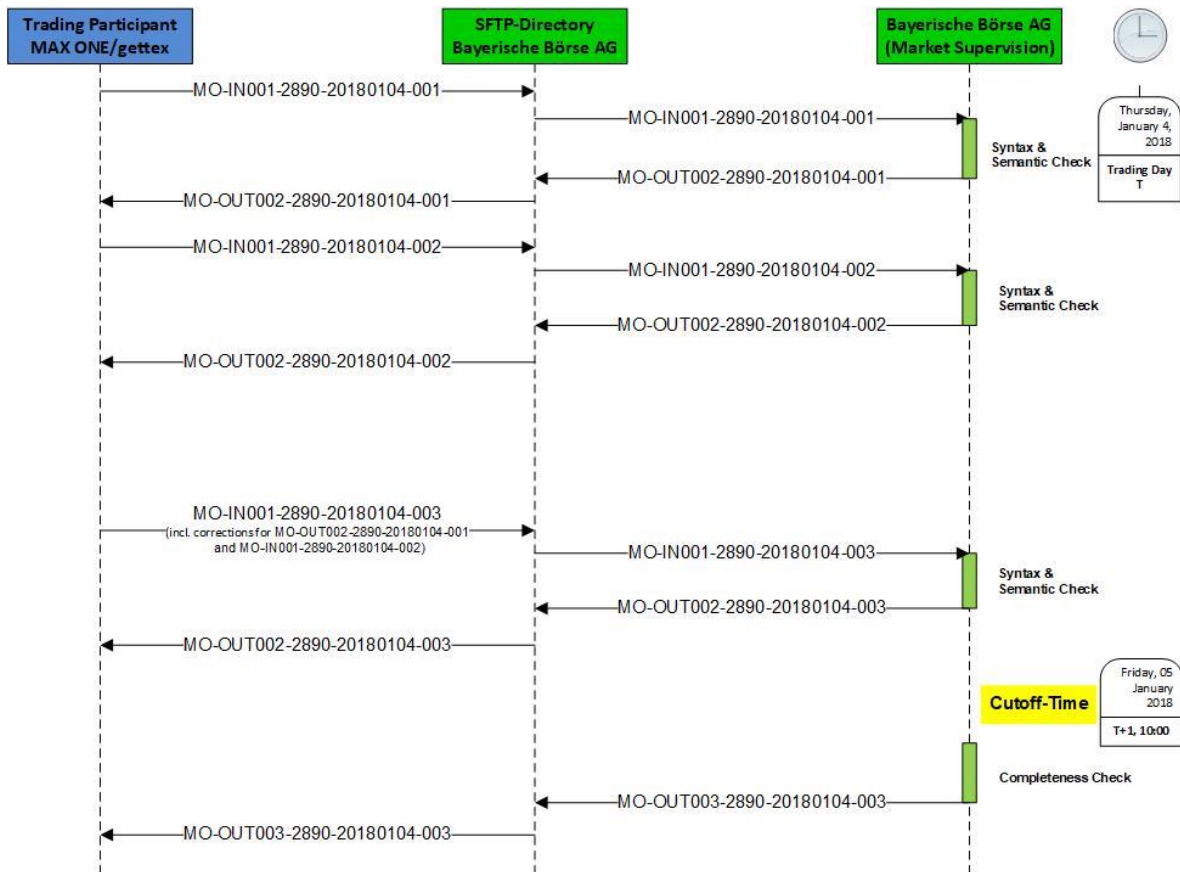
Field name	CBF-NO*	VALID-FROM (trading day)	SHORT CODE	LONG CODE-ID	LONGCODE	ERROR CODE	ORDER NO.
Required?	Mand.	Conditional	Mand.	Conditional	Conditional	Mand.	Conditiona
Field format	num[4]	date[yyyy mmdd]	num[20]	char[2]	char[50]	char[7]	char[13]
Field content	CBF NO.	Reportable trading day	Shortcode	22=AlgoID 23=LEI 24=nat. person	AlgoID LEI Nat. ID	[MO GX] <xxxx> [E H]	<Order ID>
Example	2890		12345 67890			MO8000E	987654 3210

3.4.3 File and Correction Deliveries

The following diagram outlines an example of the sequence for transmitting two shortcode files for trading participant with KVN 2890, the syntactic and semantic check with audit file and the completeness check with log file.



Corrections to shortcode data identified as incorrect by the syntactic and semantic check can be sent via a new shortcode file delivery - here denoted as Index 003 - before the cut-off time. The trading participants' shortcode file labelled as Index 003 contains corrections to previously submitted shortcode files identified as Indices 001 and 002.



Corrections to shortcode data identified as incorrect by the syntactic and semantic check can be carried out after the cut-off time by delivering the shortcode file on the following trading day (T+1). Corrections to shortcode data identified as incorrect or missing by the completeness check can also be carried out by delivering the shortcode file on the following trading day (T+1).

3.4.4 Information and error codes

The error codes have been agreed by Germany's stock exchange community and take the following form for the MAX-ONE and gettex trading platforms:

- 2 digits for identifying the trading platforms of the Munich Stock Exchange:
 - MO: MAX-ONE
 - GX: gettex
- 4 numeric digits for identifying the error
- 1 digit for identifying the error type:
 - H: Hint
 - E: Error

Max-ONE*	gettex*	Error code	Error type	Audit type	Error text	Error description
X	X	1000E	Error	Syntax	Invalid File Name	File Name should be valid
X	X	1001E	Error	Syntax	File has already been submitted	File has already been submitted
X	X	1002E	Error	Syntax	Invalid Sequence Number	Sequence Numbers are not continuous
X	X	2000E	Error	Syntax	Invalid CBF-NR Syntax	CBF-NR should be 4 digit numeric value.
X	X	2001E	Error	Semantic	Invalid CBF-NR	CBF-NR value is not valid.
X	X	3000E	Error	Syntax	Invalid Report Date Syntax	Report Date should be a valid date
X	X	3001E	Error	Semantic	Invalid Report Date	Report Date is not a valid trade day
X	X	4000E	Error	Syntax	Invalid Shortcode Syntax	Shortcode should be numeric
X	X	4001E	Error	Semantic	Invalid Shortcode	Shortcode is not in the valid range
X	X	4002H	Hint	Semantic	Invalid Shortcode multiple	Shortcode is not unique
X	X	5000E	Error	Syntax	Invalid Longcode-ID Syntax	Longcode-ID should be 2 digit
X	X	5001E	Error	Semantic	Invalid Longcode-ID	Longcode-ID value should be in the valid range
X	X	5002H	Hint	Semantic	Invalid Longcode multiple	Longcode is not unique
X	X	6000E	Error	Syntax	Invalid Longcode Syntax	Longcode should be max 50 digit
X	X	6001E	Error	Semantic	Invalid National-ID	National-ID is not valid
X	X	6002E	Error	Semantic	Invalid LEI-Code	LEI-Code is not valid
X	X	8000E	Error	Semantic & Completeness	No Shortcode sent	No mapping sent for Shortcode used on trading day
X	X	8001H	Hint	Semantic & Completeness	Previous sent Shortcode will be used	Existing mapping of Shortcode is used for trading day
X	X	8004E	Error	Syntax	Invalid Data Content	The Data Content is not in the right csv-format
X	X	8005H	Hint	Semantic & Completeness	Valid from Date contains future date	Valid from Date contains future date

3.4.5 Example of Shortcode Audit and Log Files

Example of shortcode file with MAX-ONE header: MO-IN001-2890-20180104-001

CBF-NO,VALID-FROM,SHORTCODE,LONGCODE-ID,LONGCODE
2890,20180104,10001815,24,DE19840909MAX###MUSTE
2890,20180104,20004578,23,549300BVJ82D3ANYK999
2890,20180104,30001008,22,30001008
2890,20180104,10041345,24,FR19820604JEAN#GRENO
2890,20180104,10050238,24,11223344556
2890,20180101,10061459,24,EF44452R
2890,20180104,PSTEIN,24,DE19701202PETERSTEIN
2890,20180104,20006628,23,DUMMYLEI
8002,20180104,10001634,24,DE19680505UWE###MUELL

Example of audit file with MAX-ONE header: MO-OUT002-2890-20180104-001

CBF-NO,VALID-FROM,SHORTCODE,LONGCODE-
ID,LONGCODE,ERRORCODE,ORDER-NR
2890,20180101,10061459,24,EF44452R,MO3001 E
2890,20180104,PSTEIN,24,DE19701202PETERSTEIN,MO4000E
8002,20180104,10001634,24,DE19680505UWE###MUELL,MO2001 E

Example of log file with MAX-ONE header: MO-OUT003-2890-20180104-001.

CBF-NO,VALID-FROM,SHORTCODE,LONGCODE-
ID,LONGCODE,ERRORCODE,ORDER-NR
2890,,10004578,,MO8000E,1245984589
2890,20180104,20006628,23,DUMMYLEI,MO6002E,

3.4.6 Contact for Setting Up Transmission of Shortcode Files

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[Annex: Form: Registration for Shortcode Procedure for the Munich Stock Exchange](#)