



# New requirements for the application of trading algorithms

## - on markets operated by BSE -

### Testing

According to Article 10 of RTS 7 (Article 48(6) of Directive 2014/65/EU):

*“Trading venues shall require their Members to certify that the algorithms they deploy have been tested to avoid contributing to or creating disorderly trading conditions prior to the deployment or substantial update of a trading algorithm or trading strategy and explain the means used for that testing.”*

In order to avoid disorderly trading conditions, BSE requires Exchange Members to undertake basic testing for each of their trading algorithms prior to the

- deployment of a new trading algorithm, or
- any material change made to an existing trading algorithm.

Exchange Members have to certify (during the Algo ID registration), that they have tested the algorithms before deployment to avoid contributing to or creating disorderly trading conditions.

The test (undertaken by the Member) must cover the following functionalities/order types:

- send buy/sell limit/market price order/quote entry/modify/cancel requests
- process execution and partial execution
- populate Investment Decision Maker and Executing Trader (Execution ID in MMTS2) fields with Algo ID
- interaction with volatility safeguards, limits and price collars used by BSE
- triggering limits and safeguards used in the member' own IT system.
- ability to shut down the algorithm by the Member if any disorderly condition occurs.

Please note: BSE will not issue certificate for the result of the test. It is the Member's responsibility to make sure if the algorithm has successfully passed the test.

But if you need any support for the Algo testing, please contact: [trading@bse.hu](mailto:trading@bse.hu)

### Algo ID format and flagging in the trading systems

Any trading algorithm involved in BSE trading must be uniquely identified with an Algo ID registered at the National Competent Authority (NCA) and declared (registered) to BSE before deployment.

The application of not registered/declared Algo IDs are not permitted in BSE trading.

The Algo ID must be a numerical value between 10 and 18446744073709551615 (8 byte integer) generated by the Member.

In order to populate investment decision or execution within the firm fields in the order audit trail report (BSE's MiFID2 obligation) Members have to fill the relevant fields of

- Xetra Trading System (new order and quote fields) - Cash market
- MMTS II. Trading System (K2 interface Execution ID) – Derivative market
- KELER KID system (PVE) – Derivative market

with the Algo ID (no short code solution is used!)

For further information please check:

[https://www.bse.hu/pfile/file?path=/site/Magyar/Dokumentumok/Tozsdetagoknak/MIFID-II/New\\_fields\\_for\\_audit\\_trail\\_BSE\\_spot\\_market\\_Xetra\\_20171016.pdf1](https://www.bse.hu/pfile/file?path=/site/Magyar/Dokumentumok/Tozsdetagoknak/MIFID-II/New_fields_for_audit_trail_BSE_spot_market_Xetra_20171016.pdf1)  
(Cash market)

AND

[https://www.bse.hu/pfile/file?path=/site/Magyar/Dokumentumok/Tozsdetagoknak/MIFID-II/BSE\\_audit\\_trail\\_MMTSII\\_EN\\_.zip1](https://www.bse.hu/pfile/file?path=/site/Magyar/Dokumentumok/Tozsdetagoknak/MIFID-II/BSE_audit_trail_MMTSII_EN_.zip1)  
(Derivative market)



## **Algo ID registration/declaration process**

Members have to fill and sign the form in the Annex and send it to BSE (to the postal address and [trading@bse.hu](mailto:trading@bse.hu) as well) not later than one trading day before the deployment of a new algorithm.

For existing algorithms, the registration form must be sent to BSE by 2 January 2018.



## ANNEX

# Member Algo ID registration - Budapest Stock Exchange Ltd

Please note that only duly completed, well readable and correctly signed forms with original signatures can be accepted. In any case the original signed form has to be sent with postal mail although you have sent it ahead per fax or electronic mail.

### Declaration

To:

Exchange Member:

Budapest Stock Exchange Ltd.  
Trading and Business  
Development Division

Full name:

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Location:

Budapest  
Szabadság tér 7.  
H-1054

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We, the undersigned authorized representatives of above named exchange member instruct the BSE to register or amend our algorithmic identifiers as following:

Algo ID	Valid from (YYYY-MM-DD)	Valid to (YYYY-MM-DD or "Until recall")	BSE Trading System (Xetra and/or MMTS2)	New/ Modify/ Delete	Short description (optional)
10	2018.01.03	2018.12.31	Xetra	New	
...	...	...	...		
...	...	...	...		
...	...	...	...		
13	2018.01.03	N/A	Xetra; MMTS2	New	BUX market making

We take notice that the setting up will be done in accordance with our declaration.

Date: \_\_\_\_\_

\_\_\_\_\_

(Authorized signatures)



We, the undersigned authorized representatives of above named exchange member hereby certify that the algorithms above have been tested prior to the deployment or any substantial update, to avoid contributing to or creating disorderly trading conditions with the following methodology:

Name of the Member's software components or environment(s) used (mandatory):

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Name of BSE Trading System's components or interfaces used (mandatory):

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Any other tool used by the Member (optional):

.....

Test cases (Mandatory. BSE's minimum requirements, please amend if necessary):

- send buy/sell limit/market price order/quote entry/modify/cancel requests
- process execution and partial execution
- populate Investment Decision Maker and Executing Trader (Execution ID in MMTS2) fields with Algo ID
- interaction with volatility safeguards, limits and price collars used by BSE
- triggering limits and safeguards used in the member' own IT system.
- ability to shut down the algorithm by the Member if any disorderly condition occurs.

Date: \_\_\_\_\_

\_\_\_\_\_

(Authorized signatures)

<b>FOR BSE INTERNAL USE!</b>					
<b>Setting</b>			<b>Checking</b>		
Date	Time	Set by	Date	Time	Checked by