X-pand into the Future

e u r e x *circular 216/13*

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Recipients: All Trading Participants of Eurex Deutschland and Eurex Zürich and Vendors
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⚠ **High priority**

Information on algorithm flags and identification ("algo-flagging")

Related Eurex Circulars: 052/13, 070/13, 073/13, 077/13, 099/13, 106/13, 164/13

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Content may be most important for:	**Attachment:**
Ü All departments	Updated sections of the Exchange Rules for Eurex Deutschland and Eurex Zürich

Summary:

This circular provides an update on the algo-flagging element in the German HFT Act. The Management Board of Eurex Deutschland announces its decisions on the algorithm flags and identifications as approved by the Exchange Council on 27 September 2013.

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Information on algorithm flags and identification ("algo-flagging")

On 27 September 2013 the Exchange Council of Eurex Deutschland approved the new § 17 a of the Exchange Rules for Eurex Deutschland and Eurex Zürich on identification of algorithmic orders and of trading algorithms. Direct Trading Participants are obliged to apply the rules regarding algo-flagging as of 1 April 2014. This means that the Trading Participants must flag orders and binding quotes generated by them through algorithmic trading and identify the trading algorithms used. This obligation includes orders by Trading Participants on the basis of client orders only in cases where orders received by clients are modified by own trading algorithms and then entered into the electronic data processing (EDP) system of the Eurex Exchanges. In § 17 a para. 2 it is specified how to identify orders and firm quotes generated through algorithmic trading and of trading algorithms.

1. Flagging of orders or quotes generated through algorithmic trading within the meaning of section 33 para. 1a sentence 1 of the German Securities Trading Act and the identification of the algorithms must be comprehensible, definite and consistent. The identification of an algorithm must be clear without ambiguity and the identification key must remain unchanged during the lifetime of a respective algorithm until at least one of its characteristics was changed in a way that it constitutes a new trading behaviour. All algorithms must be identified with a single unambiguous key.
2. Para. 2 further requires that orders or quotes generated, modified or deleted via algorithms and the identification of the trading algorithms must be flagged. This flagging must be made utilizing the appropriate input options of the EDP system of the Eurex Exchanges. In order to adhere to this requirement, the flagging of the orders or quotes generated and the identification of the trading algorithms used in each case is to be made using the 4-byte field that will be provided with Eurex Exchange's T7 Release 2.0 on 25 November 2013, and has been already available in simulation since 23 September 2013. The unsigned 4-byte numeric field allows for approx. 4.3 bn (= 256^4) different flagging possibilities.

The Exchange Supervisory Authority of the State of Hesse indicated that it will provide participants by mid-October 2013 with guidance to interpretation of the requirements of the German Stock Exchange Act and the Exchange Rules for Eurex Deutschland and Eurex Zürich regarding flagging of algorithms. This information will be published on its website under the link:

https://wirtschaft.hessen.de/wirtschaft/boerse/boersenrecht

Based on this definition, the Management Board of Eurex Deutschland determines that these trading algorithms must be identified by setting out the complete automated decision-making process by which the entry of orders or quotes into the EDP system of the Eurex Exchanges or the modification or deletion of such orders or quotes was effected. It is the responsibility of the direct Trading Participant when entering, modifying or deleting orders or quotes into the EDP system of the Eurex Exchanges to mark the orders and quotes accordingly. By mid-October 2013, examples will be provided on the Eurex website www.eurexchange.com of how such codification of the entire automated decision-making process can be performed by the direct exchange participant. The examples will be made available under the following link:

Technology > High-frequency trading

Trading Participants are reminded that in case of violation of § 17 a of the Exchange Rules for Eurex Deutschland and Eurex Zürich, the Disciplinary Committee of Eurex Deutschland will be called to decide if measures according to § 22 of the German Stock Exchange Act should be taken.

30 September 2013

Fifth Amendment Ordinance to the Exchange Rules for Eurex Deutschland and Eurex Zürich

Article 1 Amendment to the Exchange Rules for Eurex Deutschland and Eurex Zürich in the version dated 1 August 2011, as amended by the Fourth Amendment Ordinance dated 11 June 2013

The Exchange Rules for Eurex Deutschland and Eurex Zürich will be amended as follows:

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AMENDMENTS ARE MARKED AS FOLLOWS:

INSERTIONS ARE UNDERLINED

DELETIONS ARE CROSSED OUT

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Exchange Rules for Eurex Deutschland and Eurex Zürich

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III. Section General Conditions

1. Sub-Section Exchange Trading

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§ 17 Market Integrity

Exchange Participants are obligated to use the installations of the Eurex Exchanges in accordance with the Exchange-related legal provisions in order to guarantee an orderly implementation of the trading and the Exchange transaction settlement (hereinafter “orderly futures and options trading”).

In order to guarantee an orderly futures and options trading, the Exchange Participant or several Exchange Participants acting upon mutual consultation may not – when concluding transactions at the Eurex Exchanges or entering orders respectively quotes in the system of the Eurex Exchanges – influence in an erroneous or misleading way bid, ask or price of products traded at the Eurex Exchanges or effect a price not in line with the market or an artificial price level without being in compliance with a common market practice in accord with the orderly implementation of trading pursuant to the Exchange-related legal provisions.

§ 17 a Identification of algorithmic orders and of trading algorithms

(1) Exchange Participants are obligated to mark the orders and firm quotes generated through algorithmic trading within the meaning of § 33 para. 1a sentence 1 of the Securities Trading Act and to identify the trading algorithms used in each case. This shall also apply in the event that orders are being transmitted via an Order Routing System.

(2) The orders or quotes must be marked when they are entered into the EDP-System of the Eurex Exchanges. The trading algorithms used in each case must be identified when orders or quotes resulting from the trading algorithms are entered into the EDP-System of the Eurex Exchanges and when such orders or quotes are modified or deleted. The marking of the orders or quotes generated and the identification of the trading algorithms used in each case must be made using the appropriate input options of the EDP-System of the Eurex Exchanges. The marking of

the orders or quotes generated and the identification of the algorithms used in each case must be comprehensible, definite and consistent. Trading algorithms must be identified by setting out the complete automated decision-making process by which the entry of orders or quotes into the EDP-System of the Eurex Exchanges or the modification or deletion of such orders or quotes was effected.

(3) The Management Boards of the Eurex Exchanges may issue further provisions on the structure and format of the marks and identifications.

§ 17 b Order to Trade Ratio

(1) Exchange Participants are obligated to ensure an adequate ratio between order- and quote-entries, -modifications and -deletions (order-entries) and contracts traded.

(2) The Order to Trade Ratio is determined by dividing the numerical volume of the order-entries of an admitted enterprise per product within one calendar month by a limit as defined in paragraph 4. The Order to Trade Ratio is adequate if it is less than or equal to 1 at the end of the last trading day of a calendar month.

(3) The numerical volume of an order-entry is the number of contracts to which the order-entry relates. A modification of an order is counted as a deletion of the previous order and an entry of a new order.

(4) The limit is the sum of a volume component and a floor.

1. The volume component is the number of contracts traded by the admitted enterprise in a product in the order book within one calendar month multiplied by the Volume Factor. The Volume Factor is a number specified per product pursuant to the Appendix to § 17 b.

2. The floor depends on the function of the admitted enterprise. It is either a Market-Maker-Floor (MM Floor), which corresponds to the function as a market maker or a Non-Market Maker Floor (Non-MM Floor) for any other exchange participant. The floor is available to an admitted enterprise independent of the number of traded contracts.

   a) The Non-MM Floor is a number specified per product pursuant to the Appendix to § 17 b.

   b) The MM Floor is applicable if the Quote Performance of the exchange participant in a product is greater than the multiplication of the Grace Factor and the minimum quoting requirement of the Market Maker

Obligations as determined by the Management Boards of the Eurex Exchanges (Market Maker Obligations).

The MM Floor results per product from the multiplication of the Market-Maker-Base (MM Base), the Quote Performance and the Average Quote Size.

- Pursuant to the Appendix to § 17 b, the MM Base depends on the Spread Quality. The Spread Quality results from the average quoted Spread Quality compared to the maximum spread as set out in the Market Maker Obligations.
- The Quote Performance is the quoted proportion of the maximum possible quote time as defined in the Market Maker Obligations.
- The Average Quote Size is the time-weighted average volume of quotes.

The Quote Performance, Spread Quality and Average Quote Size are measured based on the values captured by the Eurex Exchanges at the end of the respective calendar month. Limit-orders are treated as quotes in case this is provided in the Market Maker Obligations. Only those quotes and limit-orders which meet the minimum requirements of the Market Maker Obligations are considered in the calculation of the MM Floor.

If the MM Floor is lower than the Non-MM Floor, then the Non-MM Floor is applied.

(5) The parameters for the calculation of the Order to Trade Ratio can be changed by the Management Boards of the Eurex Exchanges under exceptional market conditions in order to adequately adjust the Order to Trade Ratio to the respective exceptional market conditions. Exceptional market conditions can be characterized by rapid and significant changes in market activity, extraordinary volatility or rapid and significant interest rate fluctuations.

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V. Section Access to the Exchange-EDP

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2. Sub-Section Access to the Exchange-EDP by Individuals

§ 55 Application for Access Codes

(1) In order to access the Electronic Trading System, each company admitted as Exchange Participant shall be assigned at least one user ID by the Board of Management; such ID may only be used by the respective company. The Board of Management may in particular, without limitation, assign several user IDs if an exchange participant settles different futures and options transactions through different Clearing Members in accordance with § 27 Paragraph 1 No 1. In such case, the Board of Management shall assign one user ID with respect to each instructed Clearing Member. Based on this user ID, the Exchange Participant shall, upon application, be assigned personal user IDs and codes for all persons supposed to get access to the system of the Eurex Exchanges. The Board of Management shall be notified of the names of the persons as well as user IDs.

(2) Exchange traders as well as other persons using the electronic trading system (e.g. back-office personnel, safety officers) may be allowed access to the Electronic Trading System. Personal user IDs and codes may only be used for entries into to the Exchange-EDP by the persons they have been assigned to. Codes may not be disclosed to third persons. The person to whom the personal user ID and code has been assigned to must ensure that no third person uses them in order to make entries into the Exchange-EDP.

(3) Only admitted Exchange traders of the Exchange Participant utilizing the personal user ID and code which has been assigned to them shall be permitted to use the system of the Eurex Exchanges to transfer orders for conclusion of futures and options transactions.

[...]

VII. Section Final Provisions

[...]

§ 69 Transitional rules

(1) The obligations of the Exchange Participants regarding the marking of orders and quotes generated through algorithmic trading and the identification of the trading algorithms used in each case under § 17 b apply as of 1 April 2014.

(2) The obligations of the Exchange Participants regarding the Order to Trade Ratio under § 17 b apply as of 1 December 2013.

Appendix to § 17 b Order to Trade Ratio

Product Type	Grace Factor	Volume Factor	Non-MM Floor (in mil)	Spread Quality	MM Base (in mil)
FSTK	0.25	500	50	0.0	3
				0.2	4
				0.3	5
				0.4	10
FINX FVOL FCRD	0.25	500	50	0.0	3
				0.2	6
				0.3	7
				0.4	8
OINX OFIX	0.25	500	1,000	0.0	500
				0.2	600
				0.3	800
				0.4	1,000
OSTK	0.25	500	200	0.0	100
				0.2	150
				0.3	200
				0.4	300
FBND FINT	0.25	500	50	0.0	2
				0.2	5
				0.3	10
				0.4	15
OFBD OFIT	0.25	500	50	0.0	40
				0.2	60
				0.3	80
				0.4	100
New Asset Classes	0.25	500	1,000	0.0	500
				0.2	600
				0.3	800
				0.4	1,000

Article 2 Effectiveness

Article 1 will be effective as of 1 October 2013.