Eurex Circular 047/18

Provision of market data for all products via EOBI in the T7 production environment and changes to Eurex Exchange's connectivity price list

Summary

In the T7 production environment, the Eurex Enhanced Order Book Interface (Eurex EOBI) currently provides market data for a selected group of Eurex benchmark futures and the KOSPI product traded on Eurex. In **February 2019**, Eurex Exchange is planning to start the dissemination of market data via EOBI for all products. The additional market data will be made available in a stepwise approach. In the T7 simulation environment, market data via EOBI is already available for all products which are set up in the simulation.

To coincide with the additional market data offering, Eurex Exchange will consolidate market data into five services, enabling Participants to choose the market data best suited to their requirements:

- (Existing) Co-Location 2.0 Mkt. Data Eurex EMDI
- (Existing) Co-Location 2.0 Mkt. Data Eurex EOBI (Futures)
- (Existing) Co-Location 2.0 Mkt. Data Eurex EMDI & EOBI (Futures)
- **(New)** Co-Location 2.0 Mkt. Data Eurex EOBI (Futures + Options)
- **(New)** Co-Location 2.0 Mkt. Data Eurex EMDI & EOBI (Futures + Options)

The date from which the respective market data services can be ordered via the Member Portal will be communicated separately.

Furthermore, Eurex Frankfurt AG will simplify the Price Lists by reducing the tiers and deleting the old Co-Location 1.0 services and will introduce a minimum billing period of one month.

Attachments

- 1a./2a./3a.: Updated Price Lists to the Agreement on the technical connection and the utilization of the Trading System of Eurex Deutschland (Connection Agreement)
- 1b./2b./3b.: Updated Price Lists to the Agreement on the technical connection to the Electronic Trading EDP Eurex for a Provider of the Multi-Member-Frontend System (Provider Connection Agreement)

Date: 15 June 2018

Recipients:
All Trading Participants of Eurex Deutschland and Vendors

Authorized by:
Randolf Roth

Target groups:
- All departments

Related Eurex Circular:
013/18

Contact:
Your Group Client Key Account Manager Trading or your Technical Key Account Manager using your VIP number or via e-mail to: cts@deutsche-boerse.com

Provision of market data for all products via EOBI in the T7 production environment and changes to Eurex Exchange's connectivity price list

Introduction

The Eurex Enhanced Order Book Interface (Eurex EOBI) provides the entire visible order book by publishing information on each individual order and quote side together with executions and status information in real-time. In the T7 production environment, Eurex EOBI currently provides market data for a selected group of Eurex benchmark futures and the KOSPI product traded on Eurex. In the T7 simulation environment, market data via EOBI is already available for all products which are set up in simulation.

For more information regarding the latency characteristics of EMDI and EOBI, please refer to page 33 of the "Insights into Trading System Dynamics" presentation.

For production, access to EOBI is available exclusively via 10 Gbit/s Co-location connections only. Simulation access to Eurex EOBI is available via 10 Gbit/s Co-location connections and also via Multi-Interface Channels with a bandwidth of at least 80 MB.

Timeline

In **February 2019**, Eurex Exchange is planning to start the dissemination of market data via EOBI for all products. The provision of the additional market data will be performed in a stepwise approach on three separate dates as follows:

Date	Partition(s)	Affected products
04.02.2019	5 + 7	ODAX (+ weekly options), OESX (+ weekly options)
11.02.2019	8	All products on partition 8
18.02.2019	9 + 10	All products on partition 9 + 10 together with all remaining products

To coincide with the additional market data offering, Eurex Exchange will consolidate the dissemination of market data into five market data services enabling Participants to choose the market data best suited to their requirements.

- (Existing) Co-Location 2.0 Mkt. Data Eurex EMDI
- (Existing) Co-Location 2.0 Mkt. Data Eurex EOBI (Futures)
- (Existing) Co-Location 2.0 Mkt. Data Eurex EMDI & EOBI (Futures)
- **(New)** Co-Location 2.0 Mkt. Data Eurex EOBI (Futures + Options)
- **(New)** Co-Location 2.0 Mkt. Data Eurex EMDI & EOBI (Futures + Options)

The date from which the respective market data services can be ordered via the Member Portal will be communicated separately. Eurex EOBI for options can be added to an existing 10 Gbit/s Eurex market data connection. A separate cross connect is not required. No action is required for Participants who do not wish to receive any additional market data.

Due to the decommissioning of the old 10 Gbit/s Eurex Co-location 1.0 infrastructure (see Eurex circular 013/18) by 30 September 2018, the extended market data services will only be made available for the Co-Location 2.0 service.

Simulation

The Eurex T7 Release 6.1 environment currently disseminates market data via EOBI for all products which are set up in the simulation environment. The T7 Release 6.1 permanent simulation environment will be available until mid-September 2018 at which point the simulation will close for the conversion to Release 7.0. During this time, the T7 Cloud Simulation will be available, allowing Trading Participants and Independent Software Vendors to test against the current T7 production and simulation environments. For more information on the T7 Cloud Simulation, please refer to the Eurex website www.eurexchange.com under this link:

Technology > Eurex T7 Cloud Simulation

From 24 September 2018 onwards, the permanent simulation will be made available again with T7 Release 7.0.

Multicast addresses and reference data

For the dissemination of the extended market data, Eurex plans to reuse some of the multicast address ranges previously used by the old Enhanced Broadcast Solution interface, which was decommissioned at the end of 2013. The respective multicast ranges are as follows:

Service A: 224.0.29.128 to 224.0.29.191

Service B: 224.0.30.128 to 224.0.30.191

The "N7 Network Access Guide – Network Configuration Guide" has been updated to reflect the additional address ranges. The document can be found on the Eurex website under the link:

Technology > T7 Trading architecture > System documentation > Release 6.1 > Network Access

The reference data containing the respective multicast addresses will be provided following the start of the T7 trading system for the respective activation day. To enable Participants to prepare for the receipt of the options market data in advance, the multicast addresses are defined as follows:

ParentMktSegmID	Snapshot (A)	Incremental (A)	Snapshot (B)	Incremental (B)
FSTK	224.0.114.60 224.0.114.152	224.0.114.61 224.0.114.153	224.0.114.92 224.0.114.168	224.0.114.93 224.0.114.169
OFBD	224.0.29.128	224.0.29.129	224.0.30.128	224.0.30.129
OFIT	224.0.29.130 224.0.114.40	224.0.29.131 224.0.114.41	224.0.30.130 224.0.114.72	224.0.30.131 224.0.114.73
OFIX	224.0.29.132	224.0.29.133	224.0.30.132	224.0.30.133
OINX (Others)*	224.0.29.134	224.0.29.135	224.0.30.134	224.0.30.135
OINX (ODAX)	224.0.29.136	224.0.29.137	224.0.30.136	224.0.30.137
OINX (OESX)	224.0.29.138	224.0.29.139	224.0.30.138	224.0.30.139

ParentMktSegmID	Snapshot (A)	Incremental (A)	Snapshot (B)	Incremental (B)
OINX (OKS2) **(unchanged)**	224.0.114.58	224.0.114.59	224.0.114.90	224.0.114.91
OSTK (Partition 8)	224.0.29.140 224.0.29.146 224.0.29.154 224.0.114.152	224.0.29.141 224.0.29.147 224.0.29.155 224.0.114.153	224.0.30.140 224.0.30.146 224.0.30.154 224.0.114.168	224.0.30.141 224.0.30.147 224.0.30.155 224.0.114.169
OSTK (Partition 9)	224.0.29.144 224.0.29.148 224.0.29.156	224.0.29.145 224.0.29.149 224.0.29.157	224.0.30.144 224.0.30.148 224.0.30.156	224.0.30.145 224.0.30.149 224.0.30.157
OSTK (Partition 10)	224.0.29.142 224.0.29.150 224.0.29.152	224.0.29.143 224.0.29.151 224.0.29.153	224.0.30.142 224.0.30.150 224.0.30.152	224.0.30.143 224.0.30.151 224.0.30.153

* Please note that the KOSPI product (OKS2) traded on Eurex Exchange will continue to be part of the Co-Location 2.0 Mkt. Data Eurex EOBI (Futures) service and the existing multicast addresses will therefore remain unchanged.

Pricing

For Trading Participants and Multi-Member System Providers, the new market data services will be added as new service categories to the Price List to the Connection Agreement and to the Price List to the Provider Connection Agreement, effective as of 1 February 2019. The fees for the new service categories will be as follows:

Service	Fee in EUR/month
Co-Location 2.0 Mkt. Data Eurex EOBI (Futures & Options)	7,500
Co-Location 2.0 Mkt. Data Eurex EMDI & Eurex EOBI (Futures & Options)	8,000

Eurex Frankfurt AG will apply a fee waiver to the additional costs caused by the new EOBI options service until 30 April 2019.

The updated Price List to the Connection Agreement and the updated Price List to the Provider Connection Agreement are attached to this circular. As of the effective date 1 February 2019, the documents in their final versions will be published on the Eurex website under the following link:

Technology > Connection fees

Simplification of Price Lists

Effective 1 October 2018, Eurex Frankfurt AG will simplify the Price List to the Connection Agreement and the Price List to the Provider Connection Agreement by reducing the tiers as follows:

Legend	
Tier A	Metro areas of Amsterdam, Frankfurt, London, Milan, Paris, ~~and~~ Zurich, Chicago and New York
~~Tier A2~~	~~Metro areas of Chicago, New York, Hong Kong and Singapore~~
Tier B	Germany, France, UK, The Netherlands, Austria and, Switzerland and U.S.
~~Tier B2~~	~~U.S.~~
Tier C	~~Hong Kong, Singapore, Belgium, Ireland, Italy, Luxembourg, Sweden, Spain, Portugal, Denmark and Finland~~
~~Tier D~~	~~Australia, Gibraltar and Greece~~
R and other locations	~~Availability of high - bandwidth MIC (80 Mbit/s, 260 Mbit/s and 760 Mbit/s) and Eurex Trader GUI in other locations on request.~~

The locations from Tier D will be covered by „R and other locations".

The old Co-location 1.0 infrastructure will be discontinued, as announced in Eurex circular 013/18, and removed from both Price Lists.

As of the effective date 1 October 2018, the updated Price List to the Connection Agreement and the updated Price List to the Provider Connection Agreement in their final versions will be published on the Eurex website under the following link:

Technology > Connection fees

Minimum billing period

In the event that one or more of the following connection components are terminated at the end of the month in which the technical implementation was done, the monthly fee for the respective connection component will be charged for the calendar month in which the technical implementation was done:

- Co-Location 2.0 Mkt. Data Eurex EMDI
- Co-Location 2.0 Mkt. Data Eurex EOBI
- Co-Location 2.0 Mkt. Data Eurex EMDI & Eurex EOBI
- Co-Location 2.0 Transaction Eurex ETI

This applies regardless of whether the Trading Participant has already used the connection or has made a functional test.

As of the effective date 1 August 2018, the updated Price List to the Connection Agreement and the updated Price List to the Provider Connection Agreement in their final versions will be published on the Eurex website under the following link:

Technology > Connection fees

Eurex Frankfurt AG (EFAG) is entitled pursuant to Sec. 9 of the General Terms and Conditions (GTC) to the Connection Agreement of EFAG to amend the GTC at any time having due regard to the interests of the Trading Participant. Amendments to the GTC will be notified to Trading Participants at least six weeks prior to their effective date. They are deemed to have been approved if the Trading Participant does not lodge objections with EFAG within six (6) weeks of notification of the amendment.

Contacts

If you have any questions or require further information, please contact your Group Client Key Account Manager Trading. Alternatively, please contact your Technical Key Account Manager using your VIP number or via e-mail to: cts@deutsche-boerse.com.

15 June 2018