X-pand into the Future

eurex circular 026/17

Date: 20 March 2017
Recipients: All Trading Participants of Eurex Deutschland and Eurex Zürich and Vendors and Multi-Member Service Providers
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Introduction of the Co-location 2.0 service and optimisation of back-end network infrastructure to improve market data distribution and access to the high frequency gateways

Related Eurex circular: 010/17

Contact: Your dedicated Technical Key Account Manager (TKAM) via your VIP number, or via: cts@deutsche-boerse.com

Content may be most important for:	**Attachments:**
➲ All departments	none

Summary:

As previously announced in Eurex circular 010/17, Eurex Deutschland and Eurex Zürich AG (collectively: the Eurex Exchanges) are planning to implement the Co-location 2.0 service which will ensure a state-of-the-art and more predictable technical infrastructure set-up within the Eurex Exchanges' Co-location facility. The launch of the Co-location 2.0 service is currently planned to take place on **29 May 2017** prior to the launch of the T7® Release 5.0 which is scheduled for **19 June 2017**.

In preparation for the launch of the Co-location 2.0 service and optimisation of the back-end network infrastructure, extensive infrastructure changes will be made by replacing the distribution layer of the overall network. A large number of Participants and a broad range of services, in particular market data distribution and the access to the high frequency gateways, are affected. To minimise operational risk, these infrastructure changes are scheduled to take place on two consecutive weekends, **29 April 2017** and **6 May 2017**.

Following the changes, a connection test with technical support will be provided between 16:00 CET and 18:00 CET giving Participants the opportunity to verify their connectivity. Participation in the connection tests is highly recommended for all affected Participants and Multi-Member Service Providers.

This circular provides information on the Participants and services affected by the infrastructure changes and the respective connection tests. If you have any questions regarding the infrastructure changes, please contact your Technical Key Account Manager via your VIP number or send an e-mail to: cts@deutsche-boerse.com.

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Introduction of the Co-location 2.0 service and optimisation of back-end network infrastructure to improve market data distribution and access to the high frequency gateways

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1. Affected services

The Participants and services affected by the infrastructure changes depend on a Participant's connectivity option. The following table provides an overview of which services are affected:

Service	Co-location (10 Gbit/s)	Co-location (1 Gbit/s)[1]	All other access points
Eurex T7 & T7/FX ETI (Prod / Simu)	✓	✓ (Prod only)	✓ (Prod only)
EurexT7 Fix GW (Prod / Simu)	✓	✓ (Prod only)	✓ (Prod only)
EurexT7 & T7/FX RDI (Prod / Simu)	✓	✓ (Prod only)	✓ (Prod only)
EurexT7 & T7/FX EOBI (Prod / Simu)	✓	✓ (Prod only)	✓ (Prod only)
EurexT7 & T7/FX EMDI (Prod / Simu)	✓	✓ (Prod only)	✓ (Prod only)
EurexT7 & T7/FX MDI (Prod / Simu)	✓	✓ (Prod only)	✓ (Prod only)
Eurex T7 EMDS (Prod / Simu)	✓	✓ (Prod only)	✓ (Prod only)
Eurex T7 Market Signals (Prod / Simu)	✓	✓ (Prod only)	✓ (Prod only)
Eurex T7 Admin GUI	✓	✓ (Prod only)	✓ (Prod only)
Eurex C7 FixML (Prod / Simu)	✓	×	×
Eurex C7 FPML/Margin Calculator (Prod / Simu)	✓	×	×
Common Report Engine	✓	×	×

✓= affected / × = not affected by the infrastructure changes

[1] Co-location Customer with 1 Gbit/s, located in datacentre Equinix or Colt

2. Implementation steps

The infrastructure changes will be performed in two individual steps on consecutive weekends. During each step only one side of the exchange infrastructure will be changed:

- 29 April 2017: Side B
- 6 May 2017: Side A

Please refer to the document "Access to Eurex Exchange's T7, Eurex Clearing, Eurex Repo's F7, EEX and Eurex T7/FX – Network configuration Guide" to ascertain which network addresses are associated with which side of the infrastructure. The document is available on the Eurex website www.eurexchange.com under the link:

Technology > Eurex Exchange's T7 > System documentation > Release 4.0 > Network Access

The respective IP addresses for HF production gateways and production Multicast groups ranges are listed in chapter 5 of this document.

Please note: Following the implementation of the infrastructure changes, a base latency increase of < 2 µs (one way) for the existing Co-location facility is to be expected. An updated version of the "Insights into trading system dynamics" presentation provides more detailed information of the system enhancements. The presentation is available on the Eurex website under the link:

Technology > High-frequency trading

Participants who have already ordered, received and completed the network connection test for Co-location 2.0 connectivity will be able to use the connectivity to access the simulation environment once all the infrastructure changes have been completed.

3. Connection tests

Following the infrastructure changes, a connection test with technical support will be provided on 29 April 2017 and 6 May 2017 between 16:00 CET and 18:00 CET giving Participants the opportunity to verify their connectivity prior to the start of trading on 2 May 2017 and 8 May 2017. Participation in the connection tests is highly recommended for all affected Participants and Multi-Member Service Providers.

Please make sure that a staff member of your company will be available to perform the login to the T7® production system (e.g. Eurex T7 Trader and/or Admin GUI and third-party applications). During the connection test, the T7® production system will be available for connectivity testing on the RDI, ETI, MDI, EMDI, EOBI and EMDS interfaces and via T7 Admin GUI and T7 Trader GUI. The FIX gateways will be available for session login only (no other requests will be possible). No order and quote entries will be possible. Technical and functional heartbeats via the market data interfaces will be disseminated. Reference data for the start of production on 2 May 2017 and 8 May 2017 will be available both via RDI and the RDF on the Common Report Engine.

The Eurex Exchanges recommend that all affected services listed in the table are tested. The connection test can be regarded as successful when

- a successful login via the Eurex Trader GUI and/or Eurex Admin GUI has been performed;
- a successful session and trader login via ETI on the High-Frequency gateways **on both sides** has been performed;
- MDI/EMDI/EOBI and EMDS heartbeats have been received via the multicast addresses of **both** network halves.

The Eurex Exchanges will inform Participants about the general progress of the infrastructure changes connection test via Implementation News on the Eurex website available under the link:

Technology > Eurex Exchange's T7 > Implementation news

Following the end of the connection test, the Eurex Exchanges' T7 production back-end with the exception of the FIX gateways will remain available throughout the weekend. It will however be unattended.

4. Launch of the Co-location 2.0 service

The launch of the Co-location 2.0 service is currently planned to take place on 29 May 2017. An additional connection test will be provided on 27 May 2017 and will only be relevant for Participants with Co-location (10 Gbit/s) connectivity. More information regarding the connection test will be provided at a later date.

If you have any questions regarding the infrastructure changes, please contact your Technical Key Account Manager via your VIP number or send an e-mail to: cts@deutsche-boerse.com.

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