X-pand into the Future

eurex circular 110/13

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

Eurex Exchange's new trading architecture and next phase of Eurex Technology Roadmap

Related Eurex Circulars: 068/13, 070/13, 097/13

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

Summary:

On 3 December 2012, Eurex Group reached a significant milestone of its Technology Roadmap with the successful launch of Eurex Exchange's new trading architecture. Since then, the products available for trading on Eurex Exchange have been migrated to the new trading architecture in a stepwise approach.

The final phase of the product migration is now approaching and, as previously announced in circular 097/13, the product migration will be completed with the migration of all remaining Fixed Income derivatives on **10 June 2013**.

Together with the circulars 068/13 and 070/13, Eurex Exchange also announced Eurex Exchange's new trading architecture Releases 1.1 and 2.0, which will further contribute to the improvement and extension of Eurex Exchange's infrastructure for derivatives trading.

In addition to the two releases, Eurex Group is also planning the next phase of the Eurex Technology Roadmap consisting of a number of components which not only include technical and functional changes to the new trading architecture and its interfaces but also encompasses infrastructure changes. In this circular Eurex Exchange provides participants with more detailed information on the following roadmap components:

- Enhancements and changes in network connectivity
- Enhancements and changes related to the Eurex ETI and Eurex FIX Gateway
- Decommissioning of Eurex Exchange's legacy interfaces

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Eurex Exchange's new trading architecture and next phase of Eurex Technology Roadmap

1 Introduction

On 3 December 2012, Eurex Group reached a significant milestone of its Technology Roadmap with the successful launch of Eurex Exchange's new trading architecture. Since then, the products available for trading on Eurex Exchange have been migrated to the new trading architecture in a stepwise approach.

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2 Enhancements and changes in network connectivity

2.1 Enhanced network connectivity – introduction of Last Mile Redundancy

To further enhance connectivity to the new trading architecture, Eurex Exchange will provide redundant access to both sides of the Eurex ETI Trading Gateway, Eurex FIX Gateway and Common Report Engine infrastructure via a Eurex MIC and to both sides of the GUI Proxy Server infrastructure via a Eurex GUI Channel. Excluded from this enhancement are combined access, iAccess, E1/T1, 10Gbit/s co-location and single line connections.

The enhancement facilitates a network routing failover when a single circuit fails, instead of the application having to failover to the other infrastructure side and will be provided at no additional cost.

The appropriate changes to the existing infrastructure will be made in a "big bang" approach on **Saturday, 21 September 2013** and a connection test will be provided to accompany the change. More details regarding the change and the connection test will be provided at the appropriate time.

The enhanced configuration will also be provided as the standard for new installations connected via dual Ethernet WAN circuits in the future.

As a result of the changes, the following IP Prefixes will be propagated via both the Eurex Exchange new trading architecture Ethernet WAN MIC / and GUI connections in a dual connection setup.

	Simulation	Production
GUI Proxy Servers prefixes	193.29.89.224/28 193.29.95.224/28	193.29.91.224/28 193.29.93.224/28
Eurex ETI Trading Gateways	193.29.89.64/27 193.29.89.128/27 193.29.89.96/27 193.29.89.160/27	193.29.91.64/27 193.29.91.128/27 193.29.91.96/27 193.29.91.160/27
Common Report Engine	193.29.90.64/27 193.29.90.96/27	
FIX Gateway prefixes	90.150.253.0/24 90.151.253.0/24	

In addition, the enhancement also enables Trading Participants to increase their redundancy by using two instances of a redundant gateway protocol such as HSRP or VRRP in the new trading architecture member LAN, thus avoiding impact of a router failure on the participant side.

Please refer to the “Network Access to the New Trading Architecture” documentation for further information. The document is available for download from the Eurex website www.eurexchange.com under the following path:

Technology > New trading architecture > System documentation > Release 1.0 > Network access

3 Cancellation of redundant network infrastructure

As announced in Circular 097/13, connection fees with regard to the new trading architecture will come into effect as of 1 July 2013. Please note that existing customer connections to the old trading architecture will not be cancelled by Eurex automatically. Participants are requested not only to cancel any connections to the old trading architecture but also sessions for the Enhanced Transaction Solution, Enhanced Confirmation Solution and FIX Gateway which are no longer required. Please Note: Physical lines or iAccess connections which provide access to both the existing Eurex® system and the new trading architecture will only be charged according to the new connection fees. Cancellation of network infrastructure and sessions can be performed in the ‘Technical Connection’ section of the Member Section. Participants are reminded that cancellations must be performed by **30 June 2013,** otherwise “old” lines and sessions will continue to be charged as before.

4 Enhancements and Changes for the Eurex ETI interface

4.1 Redistribution of existing ETI sessions

Following the migration of all products to Eurex Exchange’s new trading architecture, Eurex will review the load pattern of the high frequency trading gateways to perform an optimization in the current load balancing. If necessary, the reassignment of the sessions to the high frequency trading gateways will take place on two consecutive weekends, **21 September** and **28 September, 2013** and the appropriate connection tests will be provided.

Exact details of the reorganization process, including the mapping between the old and new gateway assignments and the connection test will be provided with sufficient lead time.

In preparation for the session reassignment, participants must ensure their applications support the automatic gateway reassignment. Hardcoding of gateway assignments may lead to the inability to connect to the trading gateways.

In future, focus days will be provided in the simulation environment where all the trading gateway assignments will be changed at random. The simulation calendar will provide the exact date when the gateway reassignment will be performed.

All possible trading gateways are listed in the “Eurex Network Access to the New Trading Architecture” document which is available on the Eurex website.

4.2 Introduction of two new session types

In response to participant requests, two additional session types will be provided for the Eurex Enhanced Trading Interface (Eurex ETI):

- **Low-Frequency (LF) full session:** similar to High-Frequency (HF) sessions, participants will be able to order an LF session with the capacity type attribute “full”. The number of transaction requests which can be transmitted by each LF full session will also be set to150 txn/s. The functionality associated with LF sessions will remain unchanged.
- **ETI Back-Office session:** A new session type "ETI Back Office" will be introduced which offers a subset of the low frequency session functionality, namely the ability to receive listener data and trade confirmations only.

Ordering Eurex ETI LF full and Eurex ETI Back-Office sessions via the “Requests & Configuration” option in the “Technical Connections” section of the Eurex Member Section will be possible for the simulation environment from **12 June 2013** and for the production environment from **28 June 2013** onwards. Existing ETI LF light sessions can be converted either to LF full sessions or ETI Back-Office sessions.

As previously announced in Eurex circular 097/13, the session pricing for the new sessions will be aligned with the existing HF full and FIX Back-Office sessions:

- Eurex ETI low-frequency session (150 transactions/second): EUR 500/month
- Eurex ETI back-office session: EUR 100/month

4.3 Specification of additional subnet address for FIX session IDs

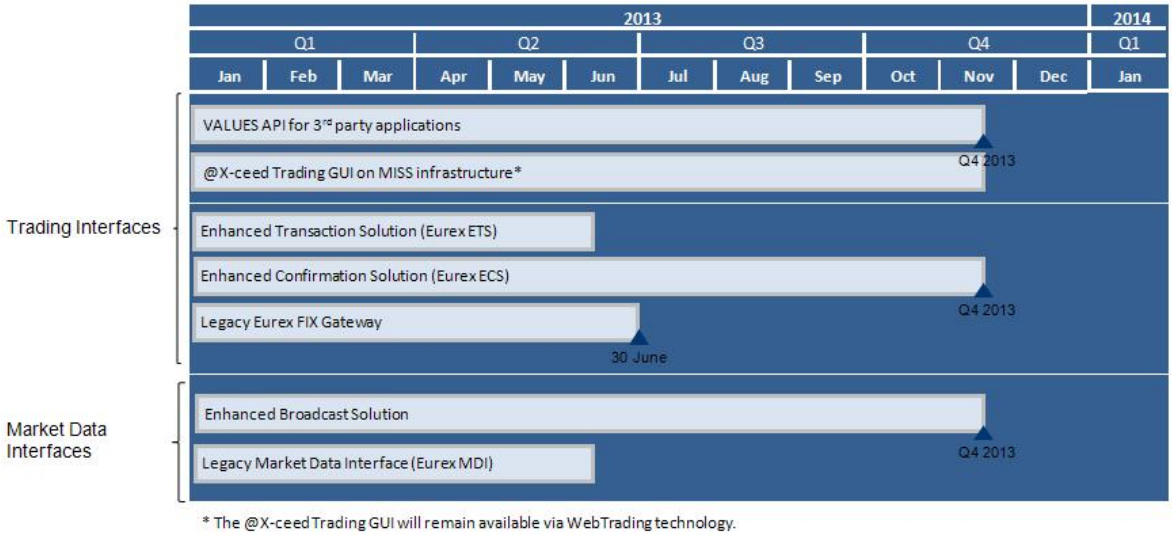
To allow participants the possibility to initiate/resume their FIX sessions from alternate locations, e.g., a backup site or disaster recovery location, Eurex Exchange will permit setup of up to four IP subnet addresses for FIX session IDs via the Member Section from **13 July 2013** onwards.

4.4 Simplified modification of the ETI session alias in the Member Section

To provide more flexibility in changing ETI session names, users who are able to add orders via the Member Section will now be able to change session alias attributes without the necessity to have the approval right. Please note that this feature only applies to the change of session alias. Ordering new sessions as well as any other changes will require the approval right as before.

5 Decommissioning of Eurex Exchange's legacy interfaces

The following table provides an updated overview of the current decommissioning plan for Eurex Exchange's legacy interfaces. More detailed information will be provided at the appropriate time.



6 Contacts

If you have any questions or require further information regarding the technical information contained within this circular, please contact your Technical Account Manager using your VIP number or via e-mail to: cts@eurexchange.com.

For all other queries, please contact the Markets Services team at tel. +49-69-211-1 31 18 or e-mail: technology.roadmap@eurexchange.com.

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