X-pand into the Future

e u r e x *circular 219/07*

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Authorized by: Thomas Lenz

High priority

1. Eurex Technology Roadmap - Enhanced Transaction Solution
2. Extension of the Eurex® Network Connection Portfolio

Related Eurex Circulars: 075/07, 115/07

Contact: Member Services & Admission, tel. +49-69-211-1 17 00

Content may be most important for:	**Attachment:**
Ü All departments	Eurex Enhanced Transaction Solution - Access Order Form

Summary:

1. Eurex Technology Roadmap – Enhanced Transaction Solution

As announced in Eurex circular 075/07, Eurex will implement the next phase of the Eurex Technology Roadmap on **April 14, 2008**. The Enhanced Transaction Solution (ETS) is a new optional, message-based interface which will provide fast access to the Eurex® trading system. The new ETS interface will offer core trading activities and focus on order and quote maintenance functionality. The simulation of ETS is scheduled to take place between **February 25, 2008** and **April 11, 2008**.

2. Extension of the Eurex® Network Connection Portfolio

The overall Eurex® Network Connection Portfolio will be extended during the introduction of ETS.

- In addition to the existing 1 Mbit/s standard connection via the MISS architecture, an optional 10 Mbit/s connection will also be offered from April 14, 2008 onwards.
- The connection portfolio for the Enhanced Broadcast Solution (EBS) will be extended..
- In future, members will be able to consolidate the different services (standard connections, EBS and ETS) on one high bandwidth connection.

However, support for the Eurex New Socket Data Feed will be withdrawn on **June 30, 2008**. From this point onwards dissemination of un-netted public market data will be provided exclusively by EBS which will be introduced in production on **December 3, 2007**.

eurex

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1. Eurex Technology Roadmap: Enhanced Transaction Solution
2. Consolidation of Eurex® Network Connections

1. Eurex Technology Roadmap – Enhanced Transaction Solution

As announced in Eurex circular 075/07, Eurex will implement the next phase of the Eurex Technology Roadmap on **April 14, 2008**. The Enhanced Transaction Solution (ETS) is a new optional, message-based interface which will provide fast access to the Eurex® trading system. The new ETS interface will offer core trading activities and focus on order and quote maintenance functionality. The simulation of ETS is scheduled to take place between **February 25, 2008** and **April 11, 2008**.

ETS will be offered as an optional service in parallel to the existing MISS-based connection via the VALUES API interface.

A. Key Features of the Enhanced Transaction Solution

a. Message-based

ETS is an asynchronous message-based interface. The ETS connection between members and the Eurex® system is realized with a TCP connection. Unlike VALUES API, no software will be required by Eurex for installation at the member site. The ETS interface specification will be delivered to members in an XML form.

b. Session-oriented

ETS is a session-oriented interface whereby the session is the basic context of the interaction with the Eurex® system. ETS-based applications will receive information for orders and quotes entered within their own session. Several trader subgroups may share a single session, but any session may only be instantiated once.

c. Open Interface

ETS allows customers to use any combination of operating system and compiler version of any programming language in order to connect to the Eurex® system.

d. Low Foot Print Solution

ETS is designed as a lean interface with low foot print and therefore provides a small number of data fields and application messages. The syntax and semantics of the interface should be as easy as possible.

e. Simplicity through Layering

Within ETS there is a strong separation between the different parts (e.g. message flow, application messages and encoding) of the interface in terms of their degree of abstraction. Layering allows the complexity and size of the application message and transport message layouts to be kept small and comprehensible. As a result, the overall complexity of the interface is expected to be small.

f. Full Control on Failover

ETS will not provide any form of transparent failover. However mechanisms, for example Heartbeats, will be made available to support detection of malfunctions between the client application (trading session) and the new Application Gateway. Client applications will be required to implement the appropriate failover mechanism required to satisfy individual needs.

To provide members with more information concerning ETS, Eurex will publish a detailed interface specification document. This document will contain the main design and functional concepts of the interface, an in-depth description of the functionality to be provided, a full specification of the message and data layouts as well as the definition of the encoding scheme.

In addition to the specification document, Eurex will also provide an updated version of the Network Access to Exchange Applications documentation, currently published on the Eurex website under the following path:

www.eurexchange.com > Member Section > Releases > Eurex 10.0 > Manuals > Technical Manuals

Eurex plans to publish both the interface specification and the updated Network Access to Exchange Applications documentation on the Eurex website on October 29, 2007.

B. Enhanced Transaction Solution: Session IDs

Client applications will be connected to the trading host by means of Application Gateways which will host the individual client sessions. Each individual session will receive a unique session ID.

Each member will be able to request up to ten individual session IDs for itself. Eurex will provide two session IDs free of charge. However, members requiring more than two sessions will be charged per additional session ID according to the price list provided with this circular (paragraph 2.E).

In order to ensure that individual client sessions are not capable of generating extremely high transmission rates which may endanger the operation of the Exchange and also to contribute to fairness between client sessions, each session will enable a specific number of transaction requests to be submitted within one second. The so called “throttle” setting will initially be equal to the current architecture throttle setting of the existing MISS architecture (currently 80 transactions per second).

C. Network Bandwidth Portfolio for ETS Connections

In order to provide members with the opportunity to select the appropriate bandwidth which is best suited to meet their requirements, Eurex will offer members a choice of either 1 Mbit/s or 10 Mbit/s for use with ETS. The connection charges can also be taken from paragraph 2.E of this circular.

Internet-based connections will not be offered for the ETS service.

D. Simulation

Acces to the simulation via ETS is scheduled to take place between **February 25, 2008** and **April 11, 2008**.

2. Extension of the Eurex® Network Connection Portfolio

A. Extension of the Network Portfolio for Standard Connections

From April 14, 2008 onwards, an optional 10 Mbit/s for standard connections via the MISS architecture, in addition to the existing 1 Mbit/s connection, will be made available. The 10 Mbit/s connection will only be available as a leased-line connection.

B. Extension of the Bandwidth Portfolio for Connections to the Enhanced Broadcast Solution

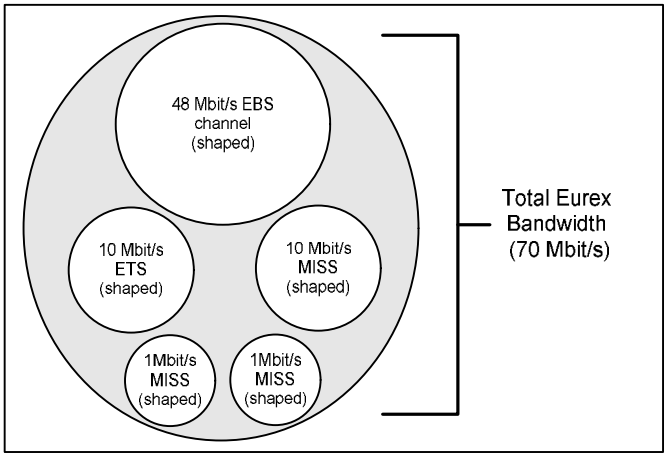
For the production launch of the Enhanced Broadcast Solution (EBS) on December 3, 2007, a bandwidth connection portfolio of 10, 20, 30 and 50 Mbit/s is available for members. Due to the consolidation possibilities described below, the bandwidth portfolio for EBS will be extended [1].

[1] The provision of high bandwidth connections is subject to technical availability in the selected location.

C. Consolidation of Eurex Network Connections

In addition to the existing VALUES and Enhanced Broadcast Solution (EBS) connections, the introduction of ETS will provide members with a third connection alternative. In response to market demand and in order to provide members with the maximum flexibility and efficiency with the implementation of different connections to the Eurex Exchanges, Eurex will offer its members an extended connection portfolio from April 14, 2008 onwards enabling them to consolidate the VALUES, EBS and ETS services on one physical connection.

Members will be able to divide the bandwidth selected for EBS into several logical “channels” and in addition to the EBS connection will be able to create MISS and ETS connections on it too. The following illustration provides an example of such a configuration.



When selecting the bandwidth necessary to suit individual requirements, members are requested to observe the following restrictions:

- A physical line can contain only one logical ETS channel.
- A physical line can contain only one EBS channel.
- An EBS channel must have a bandwidth of at least 10 Mbit/s (maximum 70 Mbit/s).
- MISS and ETS channels can have a bandwidth of 1 Mbit/s or 10 Mbit/s.
- For failover purposes two high bandwidth connections with an identical configuration must be ordered.

An order form for the new consolidated connection portfolio is provided with this circular.

Due to the number of different locations and the resultant dependency on different telecommunication providers, the delivery of new network connections for ETS and the new consolidated connection portfolio can take in excess of sixteen weeks. Members are requested to bear in mind the appropriate lead-time when placing their orders.

The consolidation of Eurex MISS connections (VALUES-based) will be possible only after the introduction of ETS on April 14, 2008.

D. Discontinuation of the support for the New Socket Data Feed

As announced in Eurex circular 115/07, the New Socket Data Feed will be replaced by EBS. In order to provide members with sufficient time for the migration, the New Socket Data Feed will be supported until June 30, 2008.

E. Price Overview

Together with the introduction of ETS and the simultaneous extension of the connection portfolio, an extension to the existing price model for the technical connection to the Eurex Exchanges is required. The prices for existing connections remain unchanged.

a. Connection to the Eurex Exchange via ETS

For the connection to the Eurex Exchanges via ETS, members can choose between a bandwidth of either 1 Mbit/s or 10 Mbit/s. The connection can either be made via dedicated leased-line connections or via the definition of the appropriate logical channels on an EBS connection. For the different connection alternatives the following monthly charges apply:

Each 10 Mbit/s leased-line	see prices for 10 Mbit/s EBS connections
Each 1 Mbit/s channel	EUR 700
Each 10 Mbit/s channel	EUR 1,400
Each Session (from third session)	EUR 700

b. Access to EBS

The following table contains the charges for the access to the EBS service depending on the bandwidth selected and the location of the member's individual installation.

	Bandwidth						
Tier	**10 MB**	**20 MB**	**30 MB**	**50 MB**	**60 MB**	**70 MB**	**Locations***
1	3.500 €	4.250 €	4.750 €	5.500 €	6.000 €	6.500 €	Amsterdam, Chicago, Dublin, Frankfurt, London, Milano, New York City, Paris, Zurich
2	3.500 €	on request	on request	on request	on request	on request	Helsinki, Madrid, Vienna
3	6.000 €	7.500 €	8.500 €	9.500 €	on request	on request	Belgium, Denmark, France, Germany, Italy, Luxembuorg, Netherlands, Switzerland, United Kingdom, USA
4	6.000 €	on request	on request	on request	on request	on request	Austria, Finland, Portugal, Singapore, Spain, Sweden
5	10.000 €	13.200 €	16.300 €	21.600 €	on request	on request	Australia
6	20.000 €	27.600 €	27.600 €	55.800 €	on request	on request	Greece
7	30.000 €	on request	on request	on request	on request	on request	Gibraltar
8	not available	not available	not available	not available	not available	not available	Dubai

* Pricing for Tiers 3 to 8 only valid for currently existing Eurex member locations (as of October 1, 2007)

The charges refer to the bandwidth of a connection supplied to the member for access to EBS and are independent of any additional channels configured for the consolidation of further connections.

c. Access via VALUES/MISS

In future, members will also be able to choose between a bandwidth of either 1 Mbit/s or 10 Mbit/s for standard connections via the VALUES/MISS architecture. Furthermore, standard connections can be established either via leased-line, via Internet or via the definition of the appropriate logical channels on an EBS connection. For the different connection alternatives the following monthly charges apply:

Each 1 Mbit/s leased-line (unchanged)	EUR 750 for the first two connections for each additional connection EUR 2,000
Each 10 Mbit/s leased-line	see prices for 10 Mbit/s EBS connections
Each 1 Mbits/s Internet Connection	EUR 500
Each 1 Mbit/s channel	EUR 700
Each 10 Mbit/s channel	EUR 1,400

In the event that a member establishes a VALUES/MISS connection with the definition of the appropriate logical channels on an EBS connection, any further additional 1 Mbit/s leased-line connections which may be present will in general be charged at EUR 2,000.

If you have any questions or request further information, please contact Member Services & Admission, tel. +49-69-211-1 17 00.

Frankfurt, October 26, 2007

Eurex

- Zugangsformular: Bestellung / Kündigung
- *Access Form: Order / Cancellation*

Eurex Frankfurt AG
Markets Services
D-60485 Frankfurt am Main

Fax: +49-69-211-61 05 02

Auftraggeber / *Applicant*

Name des Unternehmens / *Company name*

Straße oder Postfach / *Street or post-office box*

Land, PLZ und Ort / *Country, zip code and town*

Telefon / *Phone* Fax

E-Mail / *E-mail*

Eurex Member ID / Provider ID

Hiermit erteilen wir den Auftrag zur Anbindung an einen Access Point der Gruppe Deutsche Börse.
We hereby apply for connection via an access point of Deutsche Börse Group.

☐ Anbindungsbestellung
Connection order

☐ Anbindungskündigung zum (TT.MM.JJJJ)
Connection cancellation effective (DD.MM.YYYY)

Bei Kündigung bestehender Anbindung(en) Angabe der Installations-ID(s) /
For cancellation of existing connection(s) please list installation ID(s)

1.:

2.:

☐ **EUREX Einzelanbindungen**
EUREX Single services

Siehe Abschnitt 1 / *See chapter 1*

☐ **Konsolidierte Anbindungen**
Consolidated connections

Siehe Abschnitt 2 / *See chapter 2*

1. EUREX Einzelanbindungen / *EUREX Single connections*

1.1 VALUES (MISS) - Anbindung(en) / *VALUES (MISS) connection(s)*

Anzahl *No.* ____ ☐ 1 Mbit/s und /oder *and / or* Anzahl *No.* ____ ☐ 10 Mbit/s

Anmerkungen: 1 Mbit/s und 10 Mbit/s VALUES (MISS) - Anbindungen werden auf Standleitungen realisiert und müssen redundant, entweder durch mindestens eine zusätzliche Bandbreite gleicher Kapazität auf einer separaten Standleitung oder eine Internet-Anbindung gleicher Kapazität ausgelegt sein. Bitte beachten Sie, dass 10 Mbit/s VALUES (MISS) - Anbindungen voraussichtlich ab dem 14. April 2008 zur Verfühung stehen werden. / *1 Mbit/s and 10 Mbit/s VALUES (MISS) connections are realized on leased lines. They must be construed redundant, either by at least one additional bandwidth with the same capacity on a separate leased line or by an internet connection with the same capacity. Please note that 10Mbit/s VALUES (MISS) connections are expected to be available from April, 14th 2008 onward.*

Internetanbindung(en) *Internet connetion(s)* Anzahl *No.* ____ ☐ 1 Mbit/s

Die Festverbindung zum Internet Service Provider (ISP) wird vom Auftraggeber selbst beauftragt. Die vom ISP bereitgestellte IP-Adresse ist Eurex mitzuteilen. / *Dedicated connections between customers and Internet Service Providers (ISP) must be ordered by the applicant. Applicants are requested to inform Eurex of the IP-address provided by the ISP.*

1.2 Enhanced Transaction Solution (ETS)

Anzahl / *No.* _____ ☐ 10 Mbit/s

Anzahl / *No.* _____ Sessions / *Sessions*

Anmerkung: Maximal zehn Sessions pro Member-ID. Die ersten beiden Sessions pro Member-ID sind kostenfrei.
Note: At a maximum ten sessions per Member ID. The first two session per member ID are for free.

Installations-ID / *Installation ID:* _____

☐ bestellte Anbindungen sollen innerhalb eines LANs konfiguriert werden /
connections ordered should be configurated within the same LAN

1.3 Enhanced Broadcast Solution (EBS)

☐ 10 Mbit/s ☐ 20 Mbit/s ☐ 30 Mbit/s ☐ 50 Mbit/s ☐ 60 Mbit/s ☐ 70 Mbit/s

Anzahl / *No.* _____ Anbindung(en) / *connection(s)*

☐ bestellte Anbindungen sollen innerhalb eines LANs konfiguriert werden /
connections ordered should be configurated within the same LAN

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2. Konsolidierte Anbindungen / *Consolidated connections*

☐ Bestellung von zwei identisch konfigurierten Anbindungen
Order of two identically configured connections

☐ Änderung einer bestehenden Anbindung/
Modification of an existing connection

Installations-ID / *Installation ID:* _____

☐ 10 Mbit/s ☐ 20 Mbit/s ☐ 30 Mbit/s ☐ 50 Mbit/s ☐ 60 Mbit/s ☐ 70 Mbit/s

Jede dieser Anbindungen wird redundant mit einer Anbindung gleicher Konfiguration aufgebaut. Daher bitte Anzahl entsprechend als Summe der Services beider konsolidierter Anbindungen angeben.
Each of these connections will be construed redundant with a connection of the same configuration. Therefore, please fill the number as sum of services of both consolidated connections.

2.1 VALUES (MISS) - Anbindung(en) / *VALUES (MISS) connection(s)*

Anzahl / *No.* _____ ☐ 1 Mbit/s

Anzahl / *No.* _____ ☐ 10 Mbit/s

2.2 Enhanced Transaction Solution (ETS)

☐ 1 Mbit/s oder/ or ☐ 10 Mbit/s

Anzahl *No.* _____ Sessions *Sessions*

Anmerkung: Maximal zehn Sessions pro Member-ID. Die ersten beiden Sessions pro Member-ID sind kostenfrei.
Note: At a maximum ten sessions per Member ID. The first two session per member ID are for free.

Installations-ID / *Installation ID:* _____

2.3 Enhanced Broadcast Solution (EBS)

☐ Ja / *Yes*

☐ Nein / *No*

Anmerkung: Bei verschiedenen Services auf der Grundleitung müssen mindestens 10 Mbit/s für EBS nutzbar sein. Falls mehr als 10 Mbit/s Kapazität frei ist, wird die restliche Bandbreite für EBS eingerichtet. /
Note: If several services are used, please make sure that a capacity of at least 10 Mbit/s for EBS is available. If there is more capacity available, this bandwith will be set up for the EBS.

3. Angaben zu Lokation und Installation / *Location and installation information*

Lokation *Location*

Neu *New*: ☐ Trading Location ☐ Back Office Location

Bisher *Existing*: ☐ Trading Location ☐ Back Office Location

☐ Disaster recovery

☐ Proximity Service (nur möglich für die Lokationen / *only for locations*: Hanauer Landstr. 324-326, Friesstr. 26 und Kruppstr. 121-127)

☐ Leitungsinstallation außerhalb der Geschäftszeiten
Connection installation outside of business hours

Bitte mit Hardware-Voraussetzungen abgleichen! / *Please double-check with hardware prerequisites!*
Standort des Leitungsabschlusses / *Point of line termination*

Name des Unternehmens / *Company name*

Straße / *Street*

Land, Postleitzahl und Ort / *Country, zip code and town*

Gebäudeteil *Part of building*	Etage *floor*	Raum-Nr. *room no.*	Rack-Nr. *rack no.*	Provider oder Kundenkabinett *carrier or customer cabinet*

NPA/NXX Nummer (nur für Lokationen in den USA) / *NPA/NXX Number (only applicable for locations in the USA)*

Eurex

- Zugangsformular: Bestellung / Kündigung
- *Access Form: Order / Cancellation*

☐ Router und Leitungsabschluss befinden sich im selben Raum
Router and point of line termination are located in the same room

☐ Router und Leitungsabschluss befinden sich in unterschiedlichen Räumen
Router and point of line termination are located in different rooms

Für 1 Mbit/s Anbindungen: / *For 1 Mbit/s connections:*

☐ Tischgerät
Desktop device

☐ Einschubtechnik
Rack-mountable

Lokation der Hauseinführung (Bezeichnung durch den lokalen Netzwerk-Provider)
Location of building entry (description by local network provider)

Beschreibung der Hauseinführung / *Description of building entry*

Technischer Ansprechpartner vor Ort / *Technical contact person at location*

Vorname und Name / *First name and family name*	Vertreter: Vorname und Name / *Deputy: first name and family name*
Telefon / *Phone* Fax	Telefon / *Phone* Fax
E-Mail / *E-mail*	E-Mail / *E-mail*

Zur näheren Beschreibung der Hardware-Konfiguration, Internet Router etc. verwenden Sie bitte den Systems Configuration Questionnaire.
For description of hardware configuration, internet router, etc. please use the Systems Configuration Questionnaire.

Falls nicht identisch mit der ersten Anbindung / *If not identical with first connection*
Standort des Leitungsabschlusses / *Point of line termination*

Name des Unternehmens / *Company Name*

Straße / *Street*

Land, Postleitzahl und Ort */ Country, zip code and town*

Gebäudeteil *Part of building*	Etage *floor*	Raum-Nr. *room no.*	Rack-Nr. *rack no.*	Provider oder Kundenkabinett *carrier or customer cabinet*

NPA/NXX Nummer (nur für Lokationen in den USA) / *NPA/NXX Number (only applicable for locations in the USA)*

☐ Router und Leitungsabschluss befinden sich im selben Raum
Router and point of line termination are located in the same room

☐ Router und Leitungsabschluss befinden sich in unterschiedlichen Räumen
Router and point of line termination are located in different rooms

Für 1 Mbit/s Anbindungen: / *For 1 Mbit/s connections:*

☐ Tischgerät
Desktop device

☐ Einschubtechnik
Rack-mountable

Lokation der Hauseinführung (Bezeichnung durch den lokalen Netzwerk-Provider)
Location of building entry (Description by local network provider)

Beschreibung der Hauseinführung / *Description of building entry*

Eurex

- Zugangsformular: Bestellung / Kündigung
- *Access Form: Order / Cancellation*

Falls nicht identisch: Technischer Ansprechpartner vor Ort / *If not identical: Technical contact person at location*

Vorname und Name / *First name and family name*	Vertreter: Vorname und Name / *Deputy: first name and family name*
Telefon / *Phone* Fax	Telefon / *Phone* Fax
E-Mail / *E-mail*	E-Mail / *E-mail*

Zur näheren Beschreibung der Hardware-Konfiguration, Internet Router etc. verwenden Sie bitte den Systems Configuration Questionnaire.
For description of hardware configuration, internet router, etc. please use the Systems Configuration Questionnaire.

Mit Unterzeichnung dieses Zugangsformulars verpflichtet sich der Auftraggeber, sämtliche Kosten für die Installation und Bereitstellung der Anbindung zu tragen. Dies gilt auch für den Fall, dass
• die Bestellung vom Antragsteller zurückgezogen wird
• die Anbindung trotz Bereitstellung nicht vom Auftraggeber in Betrieb genommen wird.

Anbindungskosten werden für Handelsteilnehmer bzw. für Kunden im Zulassungsprozess ab Bereitstellung der Anbindung durch Eurex fällig. Die Kosten sind der jeweils gültigen Preisliste der Eurex Frankfurt AG zu entnehmen. Preise verstehen sich zzgl. gesetzlicher Mehrwertsteuer.
Für Multi-Member Frontend Service Provider, die keine Handelszulassung besitzen, werden die Anbindungskosten gemäß den Bedingungen für den Betrieb eines Multi-Member Frontend-Systems ab Bereitstellung der Anbindung durch Eurex fällig.

Bei Kündigung der Zulassung bzw. Anbindung werden die Kosten bis einschließlich des Kündigungsmonats erhoben.

Hinweise:
Die Aktivierung der bestellten Anbindung(en) erfolgt nur, wenn die entsprechenden unterzeichneten Verträge der Eurex Frankfurt AG vorliegen.
Die Eurex Frankfurt AG stellt die optionalen Anbindungen für Enhanced Transaction Solution und Enhanced Broadcast Solution allen Handelsteilnehmern und Multi-Member Frontend Service Providern der Eurex zur Verfügung. Zu beachten ist, dass die Nutzung der optionalen Anbindungsangebote keine Auswirkungen auf den Umfang der Eurex-Produkte hat, die von in den USA ansässigen Eurex-Handelsteilnehmern gehandelt werden können.

By signing this access order form the applicant commits itself to bear all costs for installation and provision of the connection. This also applies if
• the order is withdrawn by the applicant
• the connection provided is not put into operation by the applicant.

Connection fees for trading members or customers in the admission process are due as soon as the connection has been provided by Eurex. The costs can be deducted from the Eurex Frankfurt AG price list valid at this time. Fees are exclusive of VAT.
For Multi-Member Front-End Service Providers not admitted for trading, according to the Conditions for the Operation of a Multi-Member Front-End System, connection fees plus VAT are due as soon as the connection has been provided by Eurex.

Upon cancellation of a connection or admission, fees will be charged until the end of the month when the cancellation was made .

Notes:
The activation of the ordered connection(s) will be processed only if Eurex Frankfurt AG received the respective signed agreements.
Eurex makes the optional connections for Enhanced Transaction Solution and Enhanced Broadcast Solution available to all of its trading members, including those Eurex Member that trade from Eurex trading terminals located in the U.S., subject to U.S. regulatory approval, and to Multi-Member Frontend Service Provider. Members should keep in mind that this optional connections do not alter the products that can be traded from Eurex terminals located in the U.S.

Ort, Datum / *Place, date*

Firmenstempel, Unterschrift des Auftraggebers, Name in Druckbuchstaben
Company stamp, signature of applicant, name in capitals