

## Connecting to ISE Xetra

The Irish Stock Exchange (ISE) offers its trading members and service providers a broad range of options for connecting to ISE Xetra, the electronic trading platform of the ISE. Members already connected to another Xetra market benefit from being able to use their existing Xetra lines to connect to ISE Xetra, with no additional line charges. Alternatively they may choose to establish separate lines for their ISE Xetra connection.

Trading members can choose which of the following connectivity options most suit their trading strategy:

- VALUES API is the traditional interface of ISE Xetra. As it is due to be phased out at some, as yet undefined, date in the future it is no longer possible to order a dedicated VALUES API line. Existing connections may continue to be used until further notice is given.
- The Xetra Multi-Interface Channel, not available for consolidated connections, enables access to the following interfaces - Enhanced Transaction Solution (ETS), Xetra FIX Gateway, Xetra Market Data and VALUES API interface – via a single connection, thereby providing users with a wide range of services in one cost-effective channel. Furthermore all Xetra markets may be accessed via the same Multi-Interface Channel. Firms may convert their existing 512 Kbit/s and/or 2 Mbit/s VALUES API connections to a Multi-Interface Channel.
- The ETS interface, available on both dedicated and consolidated connections, allows for high-speed access to the trading system. Separate sessions must be ordered for each Xetra market. The Enhanced Broadcast Solution (EnBS) interface is a high-speed market data service that also allows users to have access to the broadcast streams of the Xetra Market Data Interface. EnBS consolidated connections enable firms to also access FIX and ETS via their EnBS line.
- The FIX Channel gives access to both VALUES API and the FIX Gateway, a point-to-point service based on the technology and the industry standards TCP/IP, FIX and FIX Session Protocol, supporting FIX versions 4.2 and 4.4. Members may use one FIX session to access all Xetra markets but separate sessions must be ordered for trading and back-office services.
- GUI Connection (previously WebTrading): Connecting to ISE Xetra can also be achieved via a GUI Connection, which can be accessed via an internet connection or leased lines. The GUI Connection provides access to the Xetra J-Trader Trading GUI supporting administrative functions without the need for a MISS server. This is particularly suited to firms which trade via ETS only but need to access the J-Trader to set-up and maintain traders' access levels. To access the GUI Connection, at least one certificate for ISE Xetra must be ordered.

Once a trading member has decided which connection(s) would best meet its needs it must decide upon the bandwidth that it requires and the infrastructure on which the connection will be maintained, be it a data centre, location with access point, location without access point or the internet. The cost of the various options is shown in section 1.1 on the following page.

Trading members with existing connectivity, either direct or via a service provider, are entitled to 4 free tokens/certificates for ISE Xetra.

Please also note that for dedicated ISE Xetra line connections, ETS sessions and FIX Trading session-based connections for the equivalent monthly value of up to €1,000 per trading member are free of charge. For firms accessing ISE Xetra on shared lines, ISE ETS sessions and FIX Trading session-based connections for the equivalent monthly value of up to €250 per trading member are free of charge. Sessions and session-based connections above these values are charged as per section 1.2.

## Monthly Connection Fees for accessing the ISE Xetra Trading Platform

### 1.1 Line Connections to the ISE

The following table outlines the prices for the various bandwidth and infrastructure options that are available for the ETS, the Multi-Interface Channel, the FIX Channel and the VALUES API interface. If bandwidth has been purchased for a Xetra Frankfurt connection, ISE Xetra trading members may use these lines to access ISE Xetra with no additional line charges.

Bandwidth	Bandwidth on line connections			Bandwidth on EnBS Connection <sup>4</sup>	Bandwidth via Internet
	Data-Centres <sup>1</sup>	Locations with Access Point <sup>2</sup>	Locations without Access Point <sup>3</sup>		
512 kbit/s	€1,500			€600	€750
2 Mbit/s	€2,000	€2,400	€3,800	€800	€900
10 Mbit/s	€2,500	€2,900	€5,300	€1,400	
1 Gbit/s <sup>5</sup>	€3,000				
10 Gbit/s	€4,500				

### 1.2 Sessions and Session-based Connections to the ISE

For trading sessions on ISE Xetra via ETS or for trading session-based connections via the FIX Gateway the following monthly fees are charged:

Access Type	Monthly Charge
ISE Xetra Enhanced Transaction Solution trading session (150 txn/s)	€500 each
ISE Xetra Enhanced Transaction Solution Light trading session (50 txn/s)	€250 each
ISE Xetra FIX Trading session-based connection	€250 each

Up to two ISE Xetra FIX Back-Office session-based connections are free of charge per trading member per month. Additional connections are charged at the following monthly fees:

Access Type	Monthly Charge
ISE Xetra FIX Back-Office session-based connection	€100 each

### 1.3 Fees for GUI Connections

#### 1.3.1 Bandwidths

For GUI Connections via leased lines for trading members and service providers, which already have bandwidths between 512 kbit/s and 50 Mbit/s on leased lines or Enhanced Broadcast Solution connections according to section 1.1 so that this GUI Connection is not setup on a dedicated leased line, the following fees are charged:

Bandwidth	Data-Centres <sup>1</sup>	Locations with Access Point <sup>2</sup>	Locations without Access Point <sup>3</sup>
512 kbit/s	€40	€60	€100

#### 1.3.2 Tokens and Certificates for GUI Connections

For trading members connecting to ISE Xetra via a GUI Connection, the following monthly fees are charged:

Access Type	Monthly Charge
Certificate for GUI Connection via internet or not via a dedicated leased line	€300 each
Certificate for GUI Connection via dedicated leased line	€100 each

<sup>1</sup> In Co-Location and Proximity data centres in Frankfurt/Main, Germany

<sup>2</sup> Access Points: Amsterdam, Frankfurt/Main, London (including Proximity data centre in London), Madrid, Milan, Paris, Vienna, Zurich.

<sup>3</sup> The specified prices apply to all connections within Europe. Connections from outside Europe are charged with individual connection prices.

<sup>4</sup> As "FIX Channel" (512 kbit/s and 2 Mbit/s) and as "Enhanced Transaction Solution Channel" (2 Mbit/s and 10 Mbit/s). For provision of an Enhanced Broadcast Solution connection, separate fees are charged in accordance with the Enhanced Broadcast Solution Connection Agreement.

<sup>5</sup> Only existing connection (no new installations offered).