

Aquis Stock Exchange (AQSE) NETWORK CONNECTIVITY

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OVERVIEW

This document describes the network connectivity specifications for connecting to the AQSE trading and information platform.

The level of detail provided may not be required for implementation of a network connection via a third party provider, but will be applicable for any parties wishing to connect directly to the AQSE infrastructure via leased lines or cross connects if already in the required data centres.

Document audience

Networking and technical personnel in the following organisations (“Participants”) should read this document:

- Market Data Vendor (MDVs) – organisations that receive AQSE data and publish it on their market data solution;
- Independent Software Vendors (ISVs) – organisations that provide a trading interface to AQSE. Some ISVs also provide a MDV solution; and
- Market Makers (MM) – Market Makers who have implemented an in-house trading interface to AQSE and Market Makers who manage the physical connections in their trading solution.

Readers of this document should be familiar with the IP protocol suite as well as understand the new connectivity options, including failover procedures. Please refer to the documentation section for more information on these topics.

Background

The trading platform includes:

- MiFID compliant Price Quoting and Trade Reporting
- Integrated surveillance systems
- Resilient, scalable, future proof technology
- Sustained performance
- Connectivity options detailed in this document

THE AQSE CONNECTIVITY OPTION

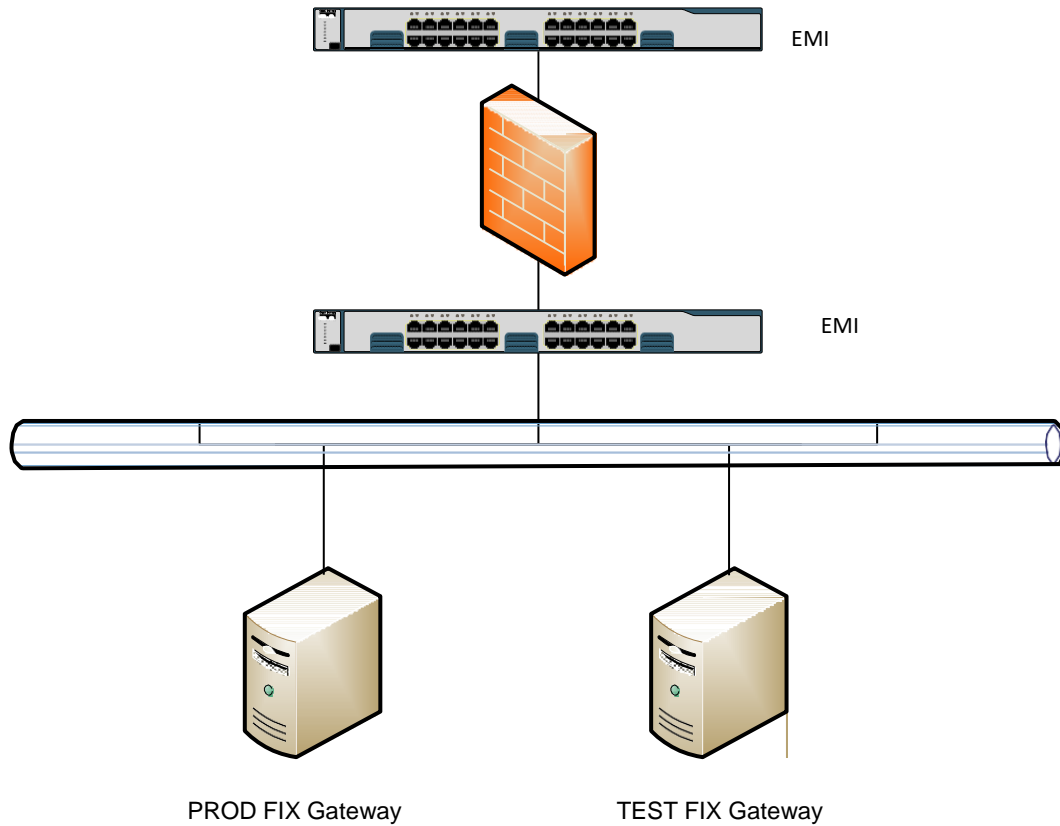
All AQSE Participants will be responsible for configuring, implementing where appropriate, and managing their respective access network to the AQSE trading and information services.

AQSE allow one method for connecting to the trading and information services. This is via Leased Line connections into the two data centres with appropriate cross connects from the Telco rooms to the AQSE cabinets. If Participants require AQSE to arrange Cross Connect(s), a Port Access Fee will be payable. This Fee will equate to the AQSE cost of providing the service from the data centre and will be simply re-charged to the Participant.

THE AQSE NETWORK

Network overview

Access to the AQSE trading and information services will be via network connections based on the TCP/IP protocol. Each site will contain two FIX gateways (one for Production and one for Test use) that will have unique IP/Port combinations.



The following sections provide further details and configuration settings where appropriate on each protocol layer.

PHYSICAL LOCATIONS AND BANDWIDTH RECOMMENDATIONS

AQSE Participants who decide on leased line connections to AQSE will need to order the lines including cabling to the RJ45 ports in the switches located at the sites set out in Table 1 Primary and secondary hosting sites below.

Table 1 Primary and secondary hosting sites

Location	Addresses
Primary Site A	Equinix eFX2/LD4 2 Buckingham Avenue Slough Trading Estate Slough SL1 4NB AQSE Cabinet location: 050GeFX2 B13

DR Site B	Interxion 5th Floor 91-95 Brick Lane London E1 6QL AQSE Cabinet location: room 305B Full Cabinet ref: LON1. 305B.R52B1
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The recommended minimum bandwidth for connections is as follows:

Table 2 Recommended bandwidth allocation

Connection type	Minimumrecommended bandwidth
Connection for a Market Maker	1 Mbps
Connection for a Market Data Vendor	1 Mbps

IP addresses for connection to the AQSE Trading System

Once a physical connection is available to the **AQSE Cabinet location** trading and information services the following IP addresses will be required to connect to the services. These IP addresses will be NAT'd.

This section, setting out the IP addresses, is divided into 2 sections.

1. Production IP Addresses/Ports
2. Pre-Production (Test) IP Addresses/Ports

Table 3 IP addresses and port numbers

Production environment	Site A FIX Gateway	IP Address 10.0.100.100 Port: In 13000 Range
	Site B FIX Gateway	IP Address 10.0.100.200 Port: In 13000 Range

Test environment	Site A FIX Gateway	IP Address 10.0.200.100 Port: In 14000 Range
	Site B FIX Gateway	IP Address 10.0.200.200 Port: In 14000 Range

AQSE will use NAT'ted IP addresses for the physical connectivity, and the above IP addresses will be mapped via a firewall solution to the incoming customer IP address.

For all connectivity questions Market Participants are requested to contact operationssupport@nexexchange.com