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	Subject	Borsa Istanbul A.S. Technological Transition Program PHASE 2 BISTECH Trading System Testing Environment
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	Prepared by	Debt Securities and Derivatives Markets Application Development Department, Financial Derivatives Market Department
	Distribution	Members

Dear Member

- Relation a) 23/05/2016 dated and 2016/50 numbered Announcement
b) 03/06/2016 dated and 2016/52 numbered Announcement

As noted in letters in relation, it was announced that a new Phase 2 BISTECH Trading System testing environment running both Equity and Derivatives Markets would be launched in June for our members to test their systems.

Phase 2 BISTECH Trading System test environment can be used for testing FIX, ITCH protocols and Trader Workstation (TW) application starting from June 15, 2016. Phase 2 test version of TW can be downloaded from <http://www.borsaistanbul.com/en/bistechsupport/client-applications> web address.

Members that are connected via Wide Area Network (WAN) and software firms that are connected via Internet shall continue using existing VPN users in order to connect to BISTECH Trading System testing environment. Username, password, and IP/port information required to connect to the testing environment can be requested by applying through e-mail at bistechsupport_autoticket@borsaistanbul.com. Detailed information related to the testing environment are written on the appendix document of "Technical Information and Testing Program".

Kindly submitted for your information.

With regards,

Ufuk ÖZDEMİR

Chief Information Officer (V.)

Çetin Ali DÖNMEZ

Chief Operations Officer Derivatives &
Private Market

APPENDIX: Phase 2 BISTECH Trading System Testing Environment Technical Information and Test Program

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ANNEX:

PHASE 2 BISTECH TRADING SYSTEM TESTING ENVIRONMENT

TECHNICAL INFORMATION AND TEST PROGRAM DOCUMENT

Please forward this announcement to corporate administration and to IT in charge.

(This announcement can be downloaded from “Borsa Istanbul Markets Announcements” on page “<http://www.borsaistanbul.com/en/bistechsupport/general-letter>”.)

Dear Participant,

Phase 2 BISTECH Trading System testing environment running both Equity and Derivatives Markets is available starting from June 15, 2016 for free testing of members and software firms. Technical details required to connect to the testing environment are available on this document.

A - Essential Information Before Testing

Connection to the testing environment will be provided over current production networks. Our participants can avoid data traffic which can be a concern by planning their tests during hours with relatively less traffic instead of rush hours.

Although BISTECH production environment has an active-passive failover architecture for BISTECH FIX GWs, only an active FIX GW will be available in the testing environment.

Participants can request their user information for Phase 2 BISTECH Trading System testing environment from Help Desk on (+90 212) 298 24 27 or at bistechsupport_autoticket@borsaistanbul.com as of June 15, 2016. In order to avoid any confusion, it is important for our participants to specify for which testing environment (Phase 1/ Phase 2) they request their user information.

Connection with TW:

- Trader Workstation will be available for Phase 2 BISTECH test environment and can be downloaded from <http://www.borsaistanbul.com/en/bistechsupport/client-applications> web address. TW IP/port information which is valid for all our members is listed below. User information will be shared on request.

	IP Address	Port Number
TW Connection	10.57.3.22	8024 8025 8026 8027

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Connection with FIX:

- Port information as well as username and password will be given for FIX connections. Connection port info will be separate for each participant.
- There are two trading partitions on the testing environment. Trading partition separation is shown in the table below. Clients to run tests are required to connect to the both partitions with different users. IP's of the both partitions will be identical but port information is different. For this sake, two users and two port numbers will be given to clients related to FIX order transmission.

Instruments	Partition 1	Partition 2
Equities, Warrants, Certificates	Instruments which belong to an underlying with initial letter between A - I	Instruments which belong to an underlying with initial letter between J - Z
Futures, Options	Instruments which belong to underlyings AKBNK, ARCLK, EKGYO, EREGL, FBIST, GARAN, HALKB and ISCTR	All other instruments

	IP Address	Port Number	
FIX Order Entry	10.57.3.22	Partition 1	Partition 2
		<i>Specific to User 1</i>	<i>Specific to user 2</i>

- A FIX user can be logged in to only one partition at a time. For other partition's connection, second FIX user is required.
- For the tests on Market Maker Activities, additional port/user information shall be provided to clients upon request.
- Trading hours of markets, status information, instruments' partitions, base and limit price information shall be provided via FIX Reference Data (RD) connection.
- Regardless of the partitions, all information will be provided via only one FIX RD connection. For this connection, separate FIX user and port information will be shared with our associates.

	IP Address	Port Number
FIX Reference Data	10.57.3.22	<i>Specific to user</i>

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- Drop Copy (DC) messages can be retrieved via FIX Drop Copy channel. Clients are required to connect to two partitions separately with different users for FIX DC. For those connections, separate FIX DC users and port information will be shared with our associates.

	IP Address	Port Number	
FIX Drop Copy	10.57.3.22	Partition 1	Partition 2
		<i>Specific to User 1</i>	<i>Specific to User 2</i>

Connection with OUCH:

- OUCH will be available for Equity Market on the testing environment. For the OUCH connection, clients are required to connect to two partitions separately with different users as in the FIX connection. Trading partition separation shown above for the FIX connection is valid for the OUCH connection as well. Partition information can also be retrieved via FIX RD. Due to two partition structure, port information related to both partitions and two user details shall be shared upon request.
- Members will be informed about OUCH availability for Derivatives Market in the testing environment later on.

Connection with ITCH:

- For the ITCH and Glimpse connection in test environment, again there are two trading partitions. Distribution of instruments to the partitions is the same. Port information related to both partitions and two user details for ITCH/Glimpse shall be shared upon request.

PTRM:

- Pre Trade Risk Management (PTRM) system will not be available in the testing environment for the first stage. It is planned to integrate PTRM system to the testing environment in the following weeks. Members will be informed about the inclusion of PTRM system later on.

End of Day Reports:

- End of day reports will not be available in the testing environment for the first stage. It is planned to publish end of day reports for the testing environment in the following weeks. Members will be informed about the inclusion of end of day reports later on.

B - Test Data and Trading Hours

End of day data of June 10, 2016 shall be used in the testing environment. After the first data uploaded, price information is going to be shaped as a result of trades made in testing

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environment and those prices shall be transferred to following trade days. For instrument which is going to be used for testing, it is required to get updated partition and price information via FIX RD test connection.

Members and software firms willing to run tests for Market Maker activities are required to apply via bistechsupport_autoticket@borsaistanbul.com e-mail address for their market marker definitions to be made.

Trading hours of Phase 2 BISTECH testing environment can be reached from <http://www.borsaistanbul.com/en/bistechsupport/technical-documents> web address, “BISTECH UAT Environment Trading Hours” section. On the other hand, trading sessions for all instruments can be received through FIX Reference Data connection.

Members and software firms can address their questions regarding to BISTECH testing environment at following address via e-mail: bistechsupport_autoticket@borsaistanbul.com.