	Type	Announcement			
ıt	No	2017/82			
Document	Issue	About The Planned Release on BISTECH Trading Platform			
cui	Date of Approval	17/11/2017			
D_0	Prepared by	Equity Market Directorate, Derivatives Market Directorate,			
		Trading System Development Directorate			
	Distribution	Members of Equity and Derivatives Market			

Dear Member,

Equity and Derives Markets are actively serve on Borsa Istanbul A.Ş. BISTECH Trading Platform (System).

At the same time, the efforts to improve and develop the system are in progress in accordance with the needs that arise from our members as well as the needs that arise over time. Within the scope of these improvements, it is expected from our members to have knowledge about technical issues and changes involving the planned FIX and OUCH issues in the coming days and complete their preparations by carrying out the tests in concern with their operations. The mentioned changes are planned to release on 11 December 2017 however the exact date of the release is going to be announced via https://connect.borsaistanbul.com.

Improvements in FIX Protocol:

- The opening and closing messages sent from the FIX Reference Data (FIXRD) for instruments during session state transitions are synchronized with the matching engine. Very rarely encountered, after receiving the session opening message from FIXRD, the situation which caused the reject message to be received with the error message "illegal transaction at this time" has been completely eliminated.
- Some improvements have been made in order amendment function, and new error codes are added to the "FIX Error Messages with code" document at http://www.borsaistanbul.com/en/bistechsupport/technical-documents

Improvements in OUCH Protocol:

- In the case of an order coming from the OUCH channel matching with the both open and hidden part of the same iceberg order in the same transaction; more than one trades can receive same Match ID. With the change made, these trades will be combined with a single "MatchID" to be a single trade message.
- In line with this change, the "BISTECH OUCH Protocol Specification" document on the http://www.borsaistanbul.com/en/bistechsupport/technical-documents page has been updated. All technical information about the change to be made can be found in the

"Technical Information" document attached to this announcement.

The new version containing the changes and improvements mentioned above has been uploaded to the Phase-2 member free test environment with IP address 10.57.3.22/1940.142.189 on 14 November 2017 and opened for member tests. It is very important for our members to update their own software in this framework by carrying out the necessary tests before the implementation of the developments in the production environment.

For your information and necessary actions.

Regards,

Korkmaz ERGUN

Executive Vice President (A.)

M. Ufuk ÖZDEMİR
Executive Vice President

Annex: BISTECH Trading Platform Technical Information Document on Change that will be implemented to Reserve Orders.

ANNEX: BISTECH TRADING PLATFORM TECHNICAL INFORMATION DOCUMENT ON CHANGE THAT WILL BE IMPLEMENTED TO RESERVE ORDERS

Please forward this announcement to your company managers and relevant IT personnel.

Dear Member,

Limit orders can be submitted as reserve orders with partial display condition on BISTECH Trading Platform. Once the displayed portion of the main order is fulfilled, a specified amount of the hidden part becomes visible. This newly displayed part of the main order is subject to price and time priority rules as if it is a new order submitted at that time. This process continues until; the order is fully met, the validity period of the order expires or until the order is canceled. In BISTECH, "Reserve / Iceberg Orders" are available through Trader Workstation (TW) and FIX API (FIX) channels.

In the event of a full or partial match of a reserve order entered through TW or FIX channels with an order entered via OUCH, more than one transaction message with the same "MatchID" are sent to OUCH channel. First one of these messages is sent for displayed part and the other is sent for hidden part of the main order that is fulfilled. Apart from OUCH channel, in the other order transmission and data broadcasting channels, such as TW, FIX, ITCH, TIP, this transaction information is contained as a single transaction message with a single "MatchID" containing the total volume of the trade, displayed and hidden parts together.

In this context, OUCH is modified to send transaction information in a single transaction message to include the total amount of displayed and hidden part. This ensures that the "MatchID" in the transaction messages on the OUCH channel is unique and that the OUCH channel has similar functionality to other transmission and broadcasting channels.

This change does not cause any changes in TW, FIX, ITCH, TIP and evening reports.

Two examples related to the change made are detailed below.

Example-1:

The old and new behavior of the OUCH channel is shown below. Messages from the ITCH channel have also been added to the example. The flow of OUCH and ITCH channels is beginning with the seventh step in the example.

Order book:

OrderId	Volume	Total V.	Side
1	1500		Buy (Limit)
2	1650		Buy (Limit)
3	696		Buy (Limit)
4	5000	18000	Buy (Iceberg)
5	968		Buy (Limit)
6	468		Buy (Limit)
7	12000		Sell (Limit) (OUCH)

ITCH channel:

Message Type	Volume	OrderId	MatchId
Е	1500	1	1
Е	1650	2	2
Е	696	3	3
D		4	
P	6718		4
Е	968	5	5
Е	468	6	6
A	3282	4	

Present OUCH version:

Message	Volume	OrderId	MatchId
A	12000	7	
Е	1500	7	1
Е	1650	7	2
Е	696	7	3
E	5000	7	4
Е	968	7	5
Е	468	7	6
E	1718	7	4

New OUCH version:

Volume	OrderId	MatchId
12000	7	
1500	7	1
1650	7	2
696	7	3
6718	7	4
968	7	5
468	7	6
	12000 1500 1650 696 6718 968	12000 7 1500 7 1650 7 696 7 6718 7 968 7

Example-2:

The old and new behavior of the OUCH channel is shown below. Messages from the ITCH channel have also been added to the example. The flow of OUCH and ITCH channels is

beginning with the seventh step in the example.

Order book:

OrderId	Volume	Total V.	Side
1	1500		Buy (Limit)
2	1650		Buy (Limit)
3	696		Buy (Limit)
4	5000	6718	Buy (Iceberg)
5	968		Buy (Limit)
6	468		Buy (Limit)
7	12000		Sell (Limit) (OUCH)

ITCH channel:

Message Type	Volume	OrderId	MatchId
Е	1500	1	1
Е	1650	2	2
Е	696	3	3
Е	5000	4	4
P	1718		4
Е	968	5	5
Е	468	6	6

Present OUCH version:

Message	Volume	OrderId	MatchId
A	12000	7	
Е	1500	7	1
Е	1650	7	2
Е	696	7	3
E	5000	7	4
Е	968	7	5
Е	468	7	6
E	1718	7	4

New OUCH version:

Message	Volume	OrderId	MatchId
A	12000	7	
Е	1500	7	1
Е	1650	7	2
Е	696	7	3
E	6718	7	4
Е	968	7	5
Е	468	7	6