



**BORSA
İSTANBUL**

**PHASE 2+ (FIXED INCOME MARKET)
BISTECH FIX CERTIFICATION PROGRAM –
ORDER ENTRY**

2020, Version 1.4

**FIXED INCOME MARKET
BISTECH FIX CERTIFICATION PROGRAM –
ORDER ENTRY**

..... BISTECH FIX ORDER ENTRY STAGE CONNECTIVITY TEST

To The Attention of Our Members:

The purpose of this test is to enable our members to test their own systems as they are in BISTECH FIX environment.

Certification process consists of the sections below:

1. Connectivity Test
2. Order Entry and Functionality
 - a. Base Level
 - b. Advanced Level
 - c. Market Making
3. Closing the System

Equity/Derivatives Market BISTECH FIX certification (base or advanced levels) will be valid for Fixed Income Market BISTECH FIX certification (base level only) as well. Those members who have been certified for Equity/Derivatives Market can skip Connectivity Test Section, Base Level steps in Order Entry and Functionality Section and Closing the System Section. Likewise, the members who have been certified for Market Making in Equity/Derivatives Market can skip the Market Making steps in Order Entry and Functionality Section.

For the members who have been certified for Equity/Derivatives Market;

- ***If they want to have Base Level certificate for Fixed Income Market, no additional certification process is required.***
- ***If they want to have Advanced Level certificate for Fixed Income Market, Advanced Level steps in Order Entry and Functionality Section are required.***

For the members who do not have any BISTECH FIX certificate, Connectivity Test Section, Base Level steps in Order Entry and Functionality Section and Closing the System Section are required. But Advanced Level and Market Making steps are optional.

Certification Steps	Steps That Members Are Responsible For									
	Does Not Have Equity/Derivatives Market Certification				Has Equity/Derivatives Market Base/Advanced Certification				Has Equity/Derivatives Market Market Making Certification	
	Fixed Income Base	Fixed Income Advanced	Fixed Income Base + MM	Fixed Income Advanced + MM	Fixed Income Base	Fixed Income Advanced	Fixed Income Base + MM	Fixed Income Advanced + MM	Fixed Income Base + MM	Fixed Income Advanced + MM
1. Connectivity Test										
2. Order Entry and Functionality										
a. Base Level Steps										
b. Advanced Level Steps										
c. Market Making Steps										
3. Closing the System										

Please perform the transactions below in order and make sure to check the messages incoming at every step when you carry out these transactions.

First, determine the impact expected to occur when order is sent to the system.

When a transaction is sent to the system, the integrity of the message and whether it is accurately processed in the system of the member or not is controlled. After that control, the proper checkbox under each step will be ticked regarding whether expected impact occurred or not (Expected messages are received / Problem with messages).

Inform the officers immediately if an unexpected situation occurs.

Please send the document to Borsa Istanbul officers after filling the part at the end of it.

Legal Liability fully pertains to the member in disputes which may arise between the customers and members who do not use optional order and transaction functions, in their FIX programs, which are taking part in existing transaction rules of Fixed Income Market and allowed by Fixed Income Market to be used with BISTECH FIX.

For this reason, we recommend our members to inform their customers on this subject and form the proper legal basis with their customers.

Our members are fully responsible for faultless operation of their own member systems.

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SECTION 1: CONNECTIVITY TEST

1. Logon with Password Change

- Send the first Logon message of the day with sequence number 1. (Password=LLL)
- Receive Logout message from the system with "Password Expired" message. (SessionStatus=8 – Password Expired)

Expected messages are received. Problem with messages

- Send Logon message with Password Change. (554=LLL 925=MMM). Receive Logon message from the system with "Password Changed" status.

Expected messages are received. Problem with messages

2. Logout Message

- Send Logout message and receive Logout message from the system with "Logout Complete".

Expected messages are received. Problem with messages

3. Logon Message with Reset Sequence Number Flag

- Send Logon message with reset sequence number. (ResetSeqNumFlag=Y, SeqNum=1). Receive Logon message from the system with "Active" status. (SessionStatus=0 SeqNum=1)

Expected messages are received. Problem with messages

4. Sending Resend Request Message

Enter Order

- Send below orders to the system and receive Execution reports (Orders should be Limit, Day order, Account type should be "Client", AFK Info should be "FI-M", Account should be "1"):
 - TRT020322T17_KESN_TO BUY Price: 101.123 TRY Quantity: 500000 [CIOrdID=1]
 - TRT020322T17_KESN_TO BUY Price: 101.425 TRY Quantity: 1000000 [CIOrdID=2]
 - TRT020322T17_KESN_TO BUY Price: 101.550 TRY Quantity: 1500000 [CIOrdID=3]

Expected messages are received. Problem with messages

Logout

- Send Logout message and receive Logout message.

Expected messages are received. Problem with messages

Executions

While user is logged out, orders that will match with user's orders will be entered to the system. Orders of the user will be executed and execution messages (Execution Report - Trade) will be written to the message queue of the user.

Logon and Resend Request

- Send Logon message to the system without resetting the sequence number and receive Logon message from the system.

Expected messages are received. Problem with messages

- Send Resend Request message to the system due the fact that higher sequence number than expected is received. Following Execution Report messages will be received from the system as response to the Resend Request:
 - TRT020322T17_KESN_TO BUY Price: 101.123 TRY Quantity: 500000 order fully traded
 - TRT020322T17_KESN_TO BUY Price: 101.425 TRY Quantity: 1000000 order fully traded
 - TRT020322T17_KESN_TO BUY Price: 101.550 TRY Quantity: 1500000 order fully traded

Expected messages are received. Problem with messages

5. Logout

- Send Logout message and receive Logout message.

Expected messages are received. Problem with messages

6. Replying Resend Request Message

Before user logs in to the system, expected sequence number on the server side will be decreased to a lower number manually. When user logs in to the system without resetting the sequence number, Resend Request message will be sent from the system.

Logon

- Send Logon message without resetting Sequence number and receive Logon message from system.

Expected messages are received. Problem with messages

- Resend request message will be received from the system right after the Logon message. Resend Request message must be replied according to below principals. System will not respond with any message if there is not a problem with resent messages.
 - Sequence Reset message with GapFillFlag=Y and NewSeqNum field should be sent instead of session messages that will be resent.
 - Application messages should be resent with PossDupFlag=Y and OrigSendingTime fields.

Expected messages are sent. Problem with messages

7. Logout

- Send Logout message and receive Logout message.

Expected messages are received. Problem with messages

SECTION 2: ORDER ENTRY AND FUNCTIONALITY

Information about the instruments that will be used during test are listed below:

Connectivity Test and Base Level Steps	Partition	Price Type	Repo Price
TRT120325T20_KESN_T1	2	Clean Price	
TRT150120A17_KESN_T1	2	Yield	
S-KUCUK_REPS_T0-1HAFTA	2	Rate	
TRT020322T17_MKTR_T1-ON	2	Rate	Clean Price
S-NORMAL_REPN_T1-ON	2	Rate	
TRT120325T12_MKTR_T0-ON	2	Rate	Clean Price
ISCTR.E_PREP_T1-ON	1	Rate	Price
S-KUCUK_REPS_T0-1AY	2	Rate	

Advanced Level Steps	Partition	Price Type	Repo Price
US900123CA66_EUTP_T1	2	Clean Price	
S-NORMAL_REPN_T0-1AY	2	Rate	
S-NORMAL_REPN_T0-ON	2	Rate	

Market Making Steps	Partition	Price Type	Repo Price
TRT150120T16_KESN_T1	2	Clean Price	
TRT110320T18_KESN_T0	2	Clean Price	

Reference Data (Security Definition, Security Status, Price Limits vs.) regarding the instruments that are listed will be available through FIX Reference Data connection.

Notes

- ✓ Orders should be **Limit** priced **Day** and **Client** orders unless it is noted otherwise. "AFK" field must be filled for all order types. For Interbank Repo-Reverse Repo Market, orders should be sent **Limit** priced, **Day** and **House**.
- ✓ Values of Account and Reference fields will be checked for only steps that indicate these values in the scenario. These fields should be sent in compliance with FIX Specification document.
- ✓ For the members who do not support order amendment (OrderCancelReplace) message, order cancelation + new order submission can be used instead of order amendment. In that case, order priority is lost even if order amendment may keep the order priority.
- ✓ For Client Orders, AFK field value is "FI-M".

DropCopy Connection

Connect to the DropCopy Port (will be given before test) with FIX DropCopy user. User should be stay connected during the test. After test is completed, message log file of DropCopy connection will be requested in addition to the message log files of FIX Order Entry connection.

- Send Logon message with resetting sequence number and receive Logon message from the system.

Expected messages are received. Problem with messages

BASE LEVEL

CONTINUOUS AUCTION

1. Enter orders listed below and receive Execution Reports (Accepted).

- i. TRT120325T20_KESN_T1 – BUY – 1000000 Quantity – 108.204 TRY – Day [COrdID=10]
- ii. TRT120325T20_KESN_T1 – BUY – 2000000 Quantity – 108.204 TRY – Day [COrdID=20]
- iii. TRT120325T20_KESN_T1 – BUY – 5000000 Quantity – 108.104 TRY – Day [COrdID=30]
- iv. TRT120325T20_KESN_T1 – BUY – 7000000 Quantity – 107.904 TRY – Day [COrdID=40]
- v. TRT120325T20_KESN_T1 – BUY – 6000000 Quantity – 107.804 TRY – FAK (IOC) [COrdID=50]
- vi. TRT120325T20_KESN_T1 – BUY – 4000000 Quantity – 108.104 TRY – FOK [COrdID=60]
- vii. TRT150120A17_KESN_T1 – SELL – 1000000 Quantity – 12.81 % yield – Day [COrdID=70]
- viii. TRT120325T20_KESN_T1 – SELL – 2000000 Quantity – 108.804 TRY – FAK (IOC) [COrdID=80]
- ix. TRT120325T20_KESN_T1 – SELL – 9000000 Quantity – 108.904 TRY – Day [COrdID=90]

Expected messages are received. Problem with messages

2. Cancel below orders and receive Execution Report messages (cancelled).

- i. (COrdID=40) TRT120325T20_KESN_T1 – BUY – 7000000 Quantity – 107.904 TRY – Day [COrdID=100]
- ii. (COrdID=70) TRT150120A17_KESN_T1 – SELL – 1000000 Quantity – 12.81 % yield – Day [COrdID=110]

Expected messages are received. Problem with messages

3. For instrument **TRT120325T20_KESN_T1**, modify quantity / price of below orders and receive Execution Report messages (modified).

- i. (COrdID=30) TRT120325T20_KESN_T1 – BUY – 6000000 Quantity – 108.104 TRY – Day [COrdID=120]
- ii. (COrdID=90) TRT120325T20_KESN_T1 – SELL – 9000000 Quantity – 108.804 TRY – Day [COrdID=130]

Expected messages are received. Problem with messages

4. For instrument **TRT120325T20_KESN_T1**, enter order below and receive Execution Report message.

- i. TRT120325T20_KESN_T1 – BUY – 2000000 Quantity – 108.304 TRY – Day
[CIOrdID=140]

Borsa İstanbul enters an order to match the order above. Check Execution Report and Trade Capture Report messages regarding the trade below.

- i. Trade 1: 500000 Quantity 108.304 TRY

Expected messages are received. Problem with messages

5. For instrument **TRT120325T20_KESN_T1**, modify the order below which is partially matched and receive Execution Report message.

- i. (CIOrdID=140) TRT120325T20_KESN_T1 – BUY – **1500000 Quantity*** – 108.304 TRY – Day
[CIOrdID=150]

* Order with original quantity of 2000000 is partially executed and remains 1500000 in the orderbook before modification. When order is modified as quantity 1500000, partially executed quantity will be extracted and passive order in the orderbook will be updated as quantity 1000000. Check and confirm that 1000000 is received in the LeavesQty field (151=1000000). *(This warning messages is for users who send Order Cancel Replace Request for order modification.)*

Expected messages are received. Problem with messages

- **Steps 6 and 7 are for Independent Software Vendors(ISVs) and members who are authorized in Repo Market For Specified Securities. When unauthorized members send orders to these series, they will receive the message "The customer is not allowed to act in this instrument type".**

6. For instrument **TRT120325T12_MKTR_T0-ON**, enter orders below and receive Execution Report messages.

- i. TRT120325T12_MKTR_T0-ON – BUY – 50000 Quantity – 9 Rate – 102.555 Clean Price – Day
[CIOrdID=160]
- ii. TRT120325T12_MKTR_T0-ON – SELL – 90000 Quantity – 9 Rate – 102.555 Clean Price – Day
[CIOrdID=170]

Check Execution Report and Trade Capture Report messages regarding the trade below.

- i. Trade 1: 50000 Quantity 9 Rate

Cancel order below and receive Order Cancel Reject message regarding that the order is fully matched.

- i. (COrdID=160) TRT120325T12_MKTR_T0-ON – BUY – 50000 Quantity – 9 Rate – 102.555
Clean Price - Day **[COrdID=180]**

Expected messages are received. Problem with messages

- 7. For instrument **TRT020322T17_MKTR_T1-ON**, enter order below and receive Execution Report message.

- i. TRT020322T17_MKTR_T1-ON – BUY – 10000 Quantity – 5.50 Rate – 107.004 TRY – Day
[COrdID=190]

Modify quantity of the order above and receive Order Cancel Reject message regarding that the minimum quantity limit is exceeded.

- i. (COrdID=190) TRT020322T17_MKTR_T1-ON – BUY – **9000 Quantity** – 5.50 Rate –
107.004 TRY – Day **[COrdID=200]**

Modify repo price of the order above and receive Order Cancel Reject message regarding that the price is out of price limits.

- i. (COrdID=190) TRT020322T17_MKTR_T1-ON – BUY – 10000 Quantity – 5.50 Rate –
1020,000 TRY Repo Price – Day **[COrdID=210]**

Expected messages are received. Problem with messages

- **Steps 8 is for Independent Software Vendors(ISVs) and members who are authorized in Equity Repo Market. When unauthorized members send orders to these series, they will receive the message "The customer is not allowed to act in this instrument type".**

- 8. For instrument **ISCTR.E_PREP_T1-ON**, enter order below and receive Execution Report message regarding that the price is out of the limits.

- i. ISCTR.E_PREP_T1-ON – SELL – 20000 Quantity – 6 Rate – Day
[COrdID=220]

Expected messages are received. Problem with messages

- **Steps 9 and 10 are for Independent Software Vendors(ISVs) and members who are authorized in Repo Markets. When unauthorized members send orders to these series, they will receive the message "The customer is not allowed to act in this instrument type".**

9. For instrument **S-NORMAL_REPN_T1-ON**, enter orders below and receive Execution Report messages.

- i. BUY – 2000000 TRY Quantity – 9.50 Rate – Day [CfOrdID=230]
- ii. SELL – 1500000 TRY Quantity – 9.50 Rate – House – AFK : FI-P – Day [CfOrdID=240]

Check Execution Report and Trade Capture Report messages regarding the trade below.

- i. Trade 1: 1500000 TRY Quantity 9.50 Rate

Expected messages are received. Problem with messages

10. For instrument **S-NORMAL_REPN_T1-ON**, modify the partially matched order below and receive Execution Report message.

- i. (CfOrdID=230) BUY – **1500000 TRY Quantity***** – 9.50 Rate – **Day** [CfOrdID=250]

*** Order with original quantity of 2000000 is partially executed and remains 500000 in the orderbook before modification. When order is modified as quantity 1500000, since 1500000 quantity of the order is executed before and there is no remaining quantity to be executed order will be removed (as fully matched). Check and confirm that 0 is received in the LeavesQty field (151=0). *(This warning messages is for users who send Order Cancel Replace Request for order modification. The ones who do not modify the order should cancel the order.)*

Expected messages are received. Problem with messages

FORWARD VALUE DATE CONTINUOUS AUCTION

11. For instrument **S-KUCUK_REPS_T0-1HAFTA**, enter order below and receive Execution Report – Order Reject message regarding that the order is same value date in future value date continuous auction session.

- i. S-KUCUK_REPS_T0-1HAFTA – BUY – 30000 Quantity – 8 Rate– Day [CfOrdID=260]

Expected messages are received. Problem with messages

12. For instrument **S-KUCUK_REPS_T0-1HAFTA**, enter order below and receive Execution Report message regarding that the order is same value date in future value date continuous auction session.

- i. S-KUCUK_REPS_T0-1HAFTA – BUY – 30000 Quantity – 8 Rate – FUND – AFK : FI-ABC – Day
[COrdID=270]

Expected messages are received. Problem with messages

13. For instrument **S-KUCUK_REPS_T0-1AY**, exchange will enter order below.

- S-KUCUK_REPS_T0-1AY – SELL – 50000 Quantity – 7.5 Rate – Fund – AFK : FI-CRT – Day

Enter order below to match the order above for instrument **S-KUCUK_REPS_T0-1AY** and receive Execution Report message regarding that the order has invalid TimeInForce value.

- i. S-KUCUK_REPS_T0-1AY – BUY – 50000 Quantity – 7.5 Rate – House – AFK : FI-P – Day
[COrdID=280]

Enter order below to match the order above for instrument **S-KUCUK_REPS_T0-1AY** and receive Execution Report message.

- i. S-KUCUK_REPS_T0-1AY – BUY – 50000 Quantity – 7.5 Rate – House – AFK : FI-P –
FOK(IOC) [COrdID=290]

Check Execution Report and Trade Capture Report messages regarding the trade below.

- i. Trade 1: 50000 Quantity 7.50 Rate

Expected messages are received. Problem with messages

ADVANCED LEVEL

TRADE REPORT

NOTE: TradeReportID given by user is recommended to be produced from the same numbering series as the ClOrdID. We applied this principle for test steps below and continued numbering from the last used ClOrdID value. TradeReportID must be entered as indicated below each step.

NOTE II: For general collateral repo market(REPN) TrdType (828) = 812, for Eurobond negotiated deals market(EPIP) TrdType (828) = 812 or TrdType (828) = 818.

- 14.** For instrument **S-NORMAL_REPN_T0-1AY**, enter BUY side of TradeReport with following details:
10000000 TRY quantity at rate level 15 with counterparty code BICRT and check Trade Capture Report Ack message is received. **[TradeReportID:1010]**

Expected messages are received. Problem with messages

- 15.** For instrument **S-NORMAL_REPN_T0-1AY**, Exchange operator will enter the Sell side of the Trade Report of which you entered Buy side with TradeReportID=1010. Check the Trade Capture Report – Confirmation message indicating your TradeReport is matched by the system.

i. (TradeReportRefID=1010) **S-NORMAL_REPN_T0-1AY** 10000000 TRY Quantity 15 Rate

Expected messages are received. Problem with messages

- 16.** For instrument **S-NORMAL_REPN_T0-1AY**, enter SELL side of TradeReport with following details:
2500000 TRY quantity at rate level 9.75 with counterparty code BICRT and check Trade Capture Report Ack message is received. **[TradeReportID:1020]**

Expected messages are received. Problem with messages

- 17.** For instrument **S-NORMAL_REPN_T0-1AY**, cancel SELL side of Trade Report (TradeReportRefID: 1020) and check Trade Capture Report Ack message is received. **[TradeReportID:1030]**

Expected messages are received. Problem with messages

18. For instrument **S-NORMAL_REPN_T0-1AY**, Exchange operator will enter the BUY side of a Trade Report on behalf of BICRT participant with counterparty is set to your participant code.
Details: 500000 TRY quantity at price level 0.6 TRY
Check Trade Capture Report – Notification message is received.

- i. **S-NORMAL_REPN_T0-1AY** 500000 TRY Quantity 7.05 Rate BUY Counterparty: BICRT

Expected messages are received. Problem with messages

Enter the SELL side of the TradeReport sent by BICRT participant in order to confirm the trade report and check Trade Capture Report Ack message is received. (500000 TRY quantity – 7.05 Rate, Counterparty: BICRT).
[TradeReportID: 1040]

Expected messages are received. Problem with messages

Check the Trade Capture Report – Confirmation message is received indicating that your Trade Report is matched by the system.

- i. (TradeReportRefID=1040) **S-NORMAL_REPN_T0-1AY** 500000 TRY Quantity 7.05 Rate Counterparty: BICRT

Expected messages are received. Problem with messages

Check Trade Report – Delete Notification message is received indicating that Trade Capture Report - Notification message sent previously is not valid anymore. You have fulfilled the TradeReport waiting for your confirmation and you will receive this message to delete the notification on your side.

- i. **S-NORMAL_REPN_T0-1AY** 500000 TRY Quantity 7.05 Rate Counterparty: BICRT

Expected messages are received. Problem with messages

19. For instrument **S-NORMAL_REPN_T0-1AY**, Exchange operator will enter the SELL side of a Trade Report on behalf of BICRT participant with counterparty is set to your participant code.
Details: 1500000 TRY quantity at rate level 8.65
Check Trade Capture Report – Notification message is received.

- i. **S-NORMAL_REPN_T0-1AY** 1500000 TRY Quantity 8.65 Rate SELL Counterparty: BICRT

Expected messages are received. Problem with messages

This Trade Report will be cancelled by Exchange operator on behalf of BICRT before you confirm it. Check Trade Capture Report – Delete Notification message is received indicating that the notification previously sent is not valid anymore.

- i. **S-NORMAL_REPN_T0-1AY** 1500000 TRY Quantity 8.65 Rate SELL Counterparty: BIX

Expected messages are received. Problem with messages

20. For instrument **S-NORMAL_REPN_T0-1AY**, enter two sided TradeReport with following details:
2000000 TRY quantity at rate level 7.55 with both side partyid code is your participant code and
check Trade Capture Report Ack messages are received. **[TradeReportID:1050]**

- i. (TradeReportRefID=1050) **S-NORMAL_REPN_T0-1AY** 2000000 TRY Quantity 7.55 Rate
Two Party Trade Report Accepted
- ii. (TradeReportRefID=1050) **S-NORMAL_REPN_T0-1AY** 2000000 TRY Quantity 7.55 Rate
Two Party Trade Report Confirmation

Expected messages are received. Problem with messages

21. For instrument **US900123CA66_EUTP_T1**, Exchange operator will enter two Trade Reports on
behalf of BICRT participant with counterparty is set to your participant code.
Details: 50000 USD quantity at price level 109.0945 USD SELL side and 1000000 USD quantity at
price level 110.0245 USD BUY side
Check Trade Capture Report – Notification message is received.

- i. **US900123CA66_EUTP_T1** 50000 quantity 109.0945 USD SELL Counterparty: BICRT
- ii. **US900123CA66_EUTP_T1** 100000 quantity 110.0245 USD BUY Counterparty: BICRT

Expected messages are received. Problem with messages

Enter the counter side of the TradeReports above in order to confirm them and check Trade
Capture Report Ack messages are received.

- i. **US900123CA66_EUTP_T1** 50000 quantity 109.0945 USD BUY Counterparty: BICRT
TradeReportClass : **812** **[TradeReportID:1060]**
- ii. **US900123CA66_EUTP_T1** 100000 quantity 110.0245 USD SELL Counterparty: BICRT
TradeReportClass : **818** **[TradeReportID:1070]**

Expected messages are received. Problem with messages

Check Trade Capture Report – Matched messages are received indicating that the TradeReports
are matched.

- i. (TradeReportRefID=1060) **US900123CA66_EUTP_T1** 50000 quantity 109.0945 USD
- ii. (TradeReportRefID=1070) **US900123CA66_EUTP_T1** 100000 quantity 110.0245 USD

Expected messages are received. Problem with messages

TAILOR MADE INSTRUMENTS

The preferred method for creating a Tailor Made Series is to send a Security Definition message over the Standard Series. The standard series is named as _T0, T1 or T2.

22. Create a Tailor Made instrument with ValueDate1 = T+2 (YYYYMMDD) and ValueDate2=T+5(YYYYMMDD) by using **S-NORMAL_REPN_T0-ON** and receive Security Definition and Security Definition Update Report messages.

Expected messages are received. Problem with messages

For Instrument S-NORMAL_REPN_DDMMYY-DDMMYY, enter the orders below and receive Execution Report messages.

- i. BUY – 500000 TRY Quantity – 7.60 Rate – Day **[CLOrdID=540]**
- ii. SELL – 1000000 TRY Quantity – 7.60 Rate – House – AFK : FI-P – FAK **[CLOrdID=550]**

Check Execution Report and Trade Capture Report messages regarding the trade below.

- i. Trade 1: 500000 TRY Quantity 7.60 Rate

Check Execution Report message indicating the cancelation of the order below.

- i. (CLOrdID=550) SELL – 1000000 TRY Quantity – 7.60 Rate – FAK

Expected messages are received. Problem with messages

23. Create a Tailor Made instrument with ValueDate1=T+5(YYYYMMDD) by using **TRT120325T20_KESN_T1** and receive Security Definition and Security Definition Update Report messages.

Expected messages are received. Problem with messages

For Instrument TRT120325T20_KESN_DDMMYY, enter the orders below and receive Execution Report messages.

- iii. BUY – 500000 Quantity – 97.600 Price – Day **[CLOrdID=560]**
- iv. SELL – 1000000 Quantity – 97.600 Price – FAK **[CLOrdID=570]**

Check Execution Report and Trade Capture Report messages regarding the trade below.

- ii. Trade 1: 500000 Quantity 7.60 Rate

Check Execution Report message indicating the cancelation of the order below.

- ii. (CLOrdID=570) SELL – 1000000 Quantity – 97.600 Price – FAK

Expected messages are received. Problem with messages

MARKET MAKING

Notes

- ✓ Quotes should be **Limit** priced **Day** and **Primary Dealer Government** orders unless it is noted otherwise
- ✓ There will be no response from the system for successful MassQuote entries. MassQuote Acknowledgement message will be sent if one or more Quote entry has incorrect value. MassQuote message will be validated by Exchange operator and user will be informed.
- ✓ It is strongly recommended that the QuoteIDs are taken from the same numbering series as the ClOrdID in cases where Orders and Quotes are submitted through the same FIX session. This principle is applied for test steps below and previously used ClOrdIDs/TradeReportIDs are not used.
- ✓ “QuoteEntryID” value that will be given to each quote entry is started from 1 and incremented by one for each quote entry. Given QuoteEntryIDs are expected for MassQuote messages that include more than one quotes.
- ✓ Entered successful MassQuotes will be checked from Trader Workstation by Exchange Operator.

CONTINUOUS AUCTION

1. For instrument **TRT150120T16_KESN_T1**, enter MassQuote at price levels 101.301 TRY – 101.501 TRY and 5000000 quantity each side. **[QuoteID=5000]**

Expected messages are received. Problem with messages

2. For instrument **TRT150120T16_KESN_T1**, enter MassQuote at price levels 101.302 TRY – 101.502 TRY and 5000000 quantity each side. Quote entry on this instrument will be updated. **[QuoteID=5010]**

Expected messages are received. Problem with messages

3. For instrument **TRT150120T16_KESN_T1**, enter below order and receive Execution Report message.
i. BUY – 3000000 Quantity – 101.502 TRY – Day **[CIOrdID=5020]**

Check Execution Report and Trade Report messages are received for below trades.

- i. Trade 1: 3000000 Quantity 101.502 TRY

Expected messages are received. Problem with messages

4. For instrument **TRT150120T16_KESN_T1**, update SELL side of the quote with price 101.500 TRY and quantity 5000000. **[QuoteID=5030]**

Expected messages are received. Problem with messages

5. For instrument **TRT150120T16_KESN_T1**, update SELL side of the quote with quantity 10000000. **[QuoteID=5040]**

Expected messages are received. Problem with messages

6. For instrument **TRT150120T16_KESN_T1**, cancel only the BUY side of the quote entered above. **[QuoteID=5050]**

Expected messages are received. Problem with messages

7. For instrument **TRT150120T16_KESN_T1**, cancel the SELL side of the quote entered above. **[QuoteID=5060]**

Expected messages are received. Problem with messages

8. For instrument **TRT150120T16_KESN_T1**, enter MassQuote only on BUY side at price level 101.303 TRY and quantity 7000000. **[QuoteID=5070]**

Expected messages are received. Problem with messages

9. For instrument **TRT150120T16_KESN_T1**, enter MassQuote only on SELL side at price level 101.503 TRY and quantity 7000000. **[QuoteID=5080]**

Expected messages are received. Problem with messages

10. Cancel the quote on instrument **TRT150120T16_KESN_T1**. **[QuoteID=5090]**

Expected messages are received. Problem with messages

11. Enter a single MassQuote message on below instruments with given price levels, size and QuoteEntryID. **[QuoteID=5100]**

TRT150120T16_KESN_T1: BUY: 101.099 TRY 900000 Quantity – SELL: 101.299 TRY
900000 Quantity **(QuoteEntryID=1)**

TRT110320T18_KESN_T0: BUY: 100.701 TRY 500000 Quantity – SELL: 101.001 TRY
600000 Quantity **(QuoteEntryID=2)**

Expected messages are received. Problem with messages

12. Enter a single MassQuote message on below instruments with given price levels, size and QuoteEntryID. **[QuoteID=5110]**

TRT150120T16_KESN_T1: BUY: 101.098 TRY 900000 Quantity – SELL: 101.298 TRY
900000 Quantity **(QuoteEntryID=1)**

TRT110320T18_KESN_T0: BUY: 100.689 TRY 500000 Quantity – SELL: 101.001 TRY
600000 Quantity **(QuoteEntryID=2)**

Check that “Mass Quote Acknowledgement - Some Quotes Rejected” message is received due to rejection of 2nd quote entry in the MassQuote message.

Expected messages are received. Problem with messages

13. Enter a single MassQuote message on below instruments with given price levels, size and QuoteEntryID. **[QuoteID=5120]**

TRT150120T16_KESN_T1: BUY: 101.152 TRY 900000 Quantity – SELL: 101.122 TRY
900000 Quantity **(QuoteEntryID=1)**

TRT110320T18_KESN_T0: BUY: 100.808 TRY 500000 Quantity – SELL: 100.807 TRY
600000 Quantity **(QuoteEntryID=2)**

Check that “Mass Quote Acknowledgement – All Quotes Rejected” message is received due to rejection of all quote entries in the MassQuote message.

Expected messages are received. Problem with messages

SECTION 3: CLOSING THE SYSTEM

END OF DAY BATCH

Check cancel messages (Execution Report - cancelled) for Expired day orders and Good Till Date orders.

Expected messages are received. Problem with messages

Logout from the system after expected cancel messages are received. System will be restarted after End of Day Batch.

Expected messages are received. Problem with messages

FAILOVER TO SECONDARY GATEWAY

Terminate connection with Primary FIX Gateway IP and Ports and connect to secondary FIX Gateway IP and Port provided.

- Send Logon message without resetting Sequence number and receive Logon message.

Expected messages are received. Problem with messages

- Enter below orders to the secondary system and receive Execution Report (accepted) messages:

- **S-NORMAL_REPN_T1-ON** BUY Rate(Price): 7.30 Quantity: 500000 (*Partition2*)
[CfOrdID=4]
- **ISCTR.E_PREP_T1-ON** BUY Rate(Price): 6.80 Quantity:10000 (*Partition1*)
[CfOrdID=5]

Expected messages are received. Problem with messages

TEST EVALUATION

Title of the Brokerage House	
Technical Staff Participated in the Test	
Exchange Official Participated in the Test	
General Evaluation (to be filled by BIST officials)	

Please contact with bistechsupport_autoticket@borsaistanbul.com for your questions.