FIXED INCOME MARKET
FIX ORDER ENTRY CERTIFICATION PROGRAM
ORDER ENTRY STAGE

April 2025, Version 1.7

PREPARATION BEFORE PARTICIPATION IN THE TEST

Institutions that want to receive FIX API Certification must test their software in BISTECH test environments before coming to the certification tests. They must follow the scenario steps in the certification documents according to the market they want to receive certification in and make sure that they can successfully complete all the steps.

In addition to the tests conducted in the BISTECH test environment, the institution can also use the FIX simulator application developed by BISTECH and offered to members so that institutions can test the scenario steps on their own software and successfully complete the process in a short time. Access to the FIX Simulator application and user manual files can be provided via the BIST Connect platform of the relevant test environment.

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BISTECH FIX ORDER ENTRY STAGE CONNECTION TEST of
…………………………………………………………..

Attention to our Members:

The purpose of this test is to enable our members to test their systems in the current BISTECH FIX environment.

Certification process;

1. System Connection Tests

2. Order Transmission and Function Tests

  a. Basic level

  b. Advanced

  c. Market Making

3. System Shutdown Tests

It consists of sections.oluşmaktadır.

Institutions that have previously received BISTECH FIX certification for the Equity Market and/or Futures and Options Market (VIOP) will be assumed to have passed the Basic Level. These institutions can skip the System Connection Tests, Basic Level and System Closing Tests sections and only perform the Advanced Level and Market Making tests. Similarly, institutions that have previously received a Market Making certificate for the Equity Market and/or VIOP will be assumed to have passed the scenarios in the Market Making section.

Institutions that have received a certificate for the Equity Market or VİOP and want to have a Basic Level certificate for BAP do not need to obtain a certificate again. Institutions that want to have an Advanced Level certificate for BAP must complete the Advanced Level sections.

Institutions that have not previously received BISTECH FIX certification are required to perform the steps in the System Connection Tests, Basic Level and System Closing Tests sections. Advanced Level and Market Making departments are optional.

Please follow the steps below one by one and be sure to check the messages you receive at each step.

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

After the order or any request is sent to the system, both the completeness of the sent message and whether the response is processed correctly in the member system will be checked. After the checks, the appropriate option under each step will be marked to indicate whether the expected effect has occurred (Expected messages received / There is a problem with the messages).

In case of an unexpected situation, report the problem to the authorities immediately.

After filling out the section allocated to you in the last part of the test, submit it to Borsa Istanbul officials.

In case of disputes that may arise between members and their customers who do not use the optional order and transaction functions included in the BAP current trading rules and allowed to be used by the Stock Exchange with BISTECH FIX in their own FIX programs, the legal liability will entirely belong to the member.

For this reason, it is recommended that our members inform their customers about this issue and establish the appropriate legal basis between them and their customers.

It is entirely the responsibility of our members to ensure that the member system operates flawlessly.

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SECTION 1: SYSTEM CONNECTIVITY TESTS

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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 must be entered as Limit and Daily. Account type must be customer, AFK information must be FI-M, account code must be 1.):

o TRT311225T12_KESN_T0 BUY Price: 101,123 Quantity(Nominal): 500000 **[ClOrdID=1]**
o TRT311225T12_KESN_T0 BUY Price: 101,425 Quantity(Nominal): 1000000 **[ClOrdID=2]**
o TRT311225T12_KESN_T0 BUY Price: 101,550 Quantity(Nominal): 1500000 **[ClOrdID=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.

<u>Logon and Resend Request</u>
➢   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:

- o   TRT020425K12_KESN_T0 BUY Price: 101,123 Quantity(Nominal): 500000 fully Traded
- o   TRT020425K12_KESN_T0 BUY Price: 101,425 Quantity(Nominal): 1000000 fully Traded
- o   TRT020425K12_KESN_T0 BUY Price: 101,550 Quantity(Nominal): 1500000 fully Traded

( ) Expected messages are received.   ( ) Problem with messages

1. **Logout**
➢   Send Logout message and receive Logout message.

( ) Expected messages are received.   ( ) Problem with messages

2. **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.

<u>Logon</u>
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.
- o   Sequence Reset message with GapFillFlag=Y and NewSeqNum field should be sent instead of session messages that will be resent.
- o   Application messages should be resent with PossDupFlag=Y and OrigSendingTime fields.

( ) Expected messages are received.	( ) Problem with messages

3. **Logout**
   ➢ Send Logout message and receive Logout message.

( ) Expected messages are received.	( ) Problem with messages

SECTION 2: ORDER ENTRY AND FUNCTIONALITY TESTS

Information about the series to be used during the test is as follows:

System Connection Tests and Base Level Steps	Partition	Price Type	RepoMK Price Type
TRT120325T12_KESN_T1	6	Clean Price	
TRT011025A17_KESN_T1	6	Yield	
S-KUCUK_REPS_T0-1HAFTA	6	Rate	
TRT020425K12_MKTR_T1-ON	6	Rate	Clean Price
S-NORMAL_REPN_T1-ON	6	Rate	
TRT020425K12_MKTR_T0-ON	6	Rate	Clean Price
AEFES.E_PREP_T1-ON	1	Rate	
ISCTR.E_PREP_T1-ON	2	Rate	
KOZAL.E_PREP_T1-ON	3	Rate	
TCELL.E_PREP_T1-ON	4	Rate	
S-KUCUK_REPS_T0-1AY	6	Rate	
TRT311225T12_KESN_T0	6	Rate	

Advanced Level Steps	Partition	Price Type	RepoMK Price Type
US900123CB40_EUTP_T1	6	Clean Price	
S-NORMAL_REPN_T0-1AY	6	Rate	
S-NORMAL_REPN_T0-ON	6	Rate	

Market Making Steps	Partition	Price Type	RepoMK Price Tpye
TRT120325T12_KESN_T1	6	Clean Price	
TRT311225T12_KESN_T0	6	Clean Price	

Information about the series defined in the test environment (Security Definition, Security Status, Price Limits, etc.) can be obtained via the FIX Reference Data channel.

Notes

✓ Unless stated otherwise in order entries, orders must be sent with Limit Price and as Daily and Client. It is mandatory to fill in the AFK field for all order types. In the Interbank Repo Reverse Repo Market, orders must be sent with Limit Price and as Daily and Portfolio (House).

✓ Except for the steps where Account number and Reference field values are tested, the values in these fields will not be checked. For messages where the account number is mandatory, the account number must be included in the message in accordance with the rules in the FIX rules document.

✓ Software that does not use the OrderCancelReplace message can perform the order change function by canceling the existing order and entering a new order. In cases where time priority cannot be lost with an order change message, using Order Cancellation and New Order entry will cause the order to lose time priority.

✓ The AFK code defined to members for customer account type orders to be entered within the scope of the scenarios will be 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

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BASE LEVEL

CONTINIOUS AUCTION

1. Enter the orders below and check that Execution Report messages are received.

 i. TRT120325T12_KESN_T1 – BUY – 1000000 nominal – 108,204 Price – Day   **[ClOrdID=10]**
 ii. TRT120325T12_KESN_T1 – BUY – 2000000 nominal – 108,204 Price – Day   **[ClOrdID=20]**
 iii. TRT120325T12_KESN_T1 – BUY – 5000000 nominal – 108,104 Price – Day   **[ClOrdID=30]**
 iv. TRT120325T12_KESN_T1 – BUY – 7000000 nominal – 107,904 Price – Day   **[ClOrdID=40]**
    – TRT120325T12_KESN_T1 – BUY – 6000000 nominal – 107,804 Price – FAK (IOC) **[ClOrdID=50]**
 v. TRT120325T12_KESN_T1 – BUY – 4000000 nominal – 108,104 Price – FOK   **[ClOrdID=60]**
 vi. TRT011025A17_KESN_T1 – SELL – 1000000 nominal – 12,81 % Yield – Day   **[ClOrdID=70]**
 vii. TRT120325T12_KESN_T1 – SELL – 2000000 nominal – 108,804 Price – FAK (IOC)
                                  [ClOrdID=80]
 viii. TRT120325T12_KESN_T1 – SELL – 9000000 nominal – 108,904 Price – Day   **[ClOrdID=90]**

(   ) Expected messages are received. (   ) Problem with messages

2. Cancel the orders below and check that Execution Report messages are received.

 i. (ClOrdID=40) TRT120325T12_KESN_T1 – BUY – 7000000 nominal – 107,904 Price – Day   **[ClOrdID=100]**
 ii. (ClOrdID=70) TRT011025A17_KESN_T1 – SELL – 1000000 nominal – 12,81 % Yield – Day   **[ClOrdID=110]**

(   ) Expected messages are received. (   ) Problem with messages

3. **TRT120325T12_KESN_T1** Make Quantity and Price changes in the following orders in the series and check that Execution Report messages are received.

 i. (ClOrdID=30) TRT120325T12_KESN_T1 – BUY – **6000000** nominal – 108,104 TL – Day   **[ClOrdID=120]**
 ii. (ClOrdID=90) TRT120325T12_KESN_T1 – SELL – 9000000 nominal – **108,804** TL – Day   **[ClOrdID=130]**

(   ) Expected messages are received. (   ) Problem with messages

4. **TRT120325T12_KESN_T1** Enter the following order into the series and check that the Execution Report message is received.

    i.   TRT120325T12_KESN_T1 – BUY – 2000000 nominal – 108,304 Price – Day

        [ClOrdID=140]

(   ) Expected messages are received. (   ) Problem with messages

Check the received Execution Report and Transaction Capture Report messages regarding the order that matches the order entered by Borsa Istanbul.

  i. Trade 1: 500000 nominal **108,304** Price

5. **TRT120325T12_KESN_T1** Enter the following order change into your partially traded order in the series and check that Execution Report messages are received.

    i.   (ClOrdID=140) TRT120325T12_KESN_T1 – BUY – **1500000** nominal***** – 108,304 Price – Day
        [ClOrdID=150]

* Your order, whose original quantity was 2000000 nominal, was partially traded and was included in the order book as 1500000 nominal. When you change the Order Quantity to 1500000 nominal, the partial trader will be calculated and the Quantity in the order book will be updated to 1000000 nominal. In the Execution Report message, check that the LeavesQty field is 1000000 nominal (151=1000000) and that this Quantity is processed correctly in your system. (This warning is valid for members who use the order change message - Order Cancel Replace.)

(   ) Expected messages are received. (   ) Problem with messages

- *Steps 6 and 7 are for software developer organizations and members authorized in preferential repo markets. When non-authorized members send orders to these series, they will receive a message saying "The customer is not allowed to act in this instrument type".*

6. **TRT020425K12_MKTR_T0-ON** Enter the following orders into the series and check that Execution Report messages are received.

    i.   TRT020425K12_MKTR_T0-ON – BUY – 50000 Quantity – 9 Rate – 102,555 Security Price
         – Day   **[ClOrdID=160]**
    ii.   TRT020425K12_MKTR_T0-ON – SELL – 90000 Quantity – 9 Rate – 102,555 Security Price
         – Day   **[ClOrdID=170]**

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

  i. Trade 1: 50000 nominal 9 Rate

Cancel the order below and check that you receive the Order Cancel Reject message stating that the entire order has been cancelled.

  i. (ClOrdID=160) TRT020425K12_MKTR_T0-ON – BUY – 50000 Quantity – 9 Rate – 102,555 Clean Price – Day   **[ClOrdID=180]**

( ) Expected messages are received. (   ) Problem with messages

7. **TRT020425K12_MKTR_T1-ON** Enter the following order into the series and check that the Execution Report message is received.

  i. TRT020425K12_MKTR_T1-ON – BUY – 10000 Quantity – 5,50 Rate – 107,004 Security Price – Day   **[ClOrdID=190]**

Make a Quantity change on the entered order and check that you receive the next Order Cancel Reject message stating that the minimum order Quantity has been exceeded.

  ii. (ClOrdID=190) TRT020425K12_MKTR_T1-ON – BUY – **9000** Quantity – 5,50 Rate – 107,004 Security Price – Day   **[ClOrdID=200]**

Change the Security Price on the entered order and check that you receive the Order Cancel Reject message that will appear when the Security Price is outside the Price limits.

  iii. (ClOrdID=190) TRT020425K12_MKTR_T1-ON – BUY – 10000 Quantity – 5,50 Rate – **1020,000 TL Security Price** – Day   **[ClOrdID=210]**

( ) Expected messages are received. (   ) Problem with messages

➢ *Step 8 is for software developers and members authorized in the Stock Repo markets. When non-authorized members send orders to these series, they will receive a message saying "The customer is not allowed to act in this instrument type".*

8. Make the order entries below and check that you receive the Execution Report message stating that the orders are outside the Security Price limits.

  i. AEFES.E_PREP_T1-ON – SELL – 20000 Quantity – 6 Rate – Day
  ii. ISCTR.E_PREP_T1-ON – SELL – 20000 Quantity – 6 Rate – Day
  iii. KOZAL.E_PREP_T1-ON – SELL – 20000 Quantity – 6 Rate – Day

iv.   TCELL.E_PREP_T1-ON – SELL – 20000 Quantity – 6 Rate – Day

( ) Expected messages are received. (   ) Problem with messages

> *Steps 9 and 10 are mandatory for software developers and authorized institutions in repo reverse repo markets. When non-authorized members send orders to these series, they will receive a message saying "The customer is not allowed to act in this instrument type".*

9. **S-NORMAL_REPN_T1-ON** Enter the following orders in the 1st series and check that Execution Report messages are received.

   i.   BUY – 1500000 TL Quantity – 9,50 Rate – Day   **[ClOrdID=230]**
   ii.   SELL – 3000000 TL Quantity – 9,50 Rate – PORTFOY – AFK: FI-P – Day   **[ClOrdID=240]**

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

   i.   Trade 1: 1500000 TL Quantity 9,50 Rate

   ( ) Expected messages are received. (   ) Problem with messages

10. **S-NORMAL_REPN_T1-ON** - Enter the following order change into your partially traded order in the series and check that Execution Report messages are received.

    i.   (ClOrdID=230) BUY – **2000000 TL Quantity***** – 9,50 Rate – Day   **[ClOrdID=250]**

*** Your order, whose original Quantity was 2000000 Quantity, was partially Traded and was listed as 500000 Quantity in the order book. When you change the Order Quantity to 1500000 Quantity, your order will be completely eliminated because your order has previously seen 1500000 Quantity Trade and the Quantity to be Traded will be filled (or even more). In the Execution Report message, check that there is 0 Quantity in the LeavesQty field (151=0) and that this Quantity is processed correctly in your system. (Members who cannot make this order change must cancel the order.)

( ) Expected messages are received. (   ) Problem with messages

FORWARD VALUE SESSION

11. S-KUCUK_REPS_T0-1HAFTA Enter the following order into the series and check that you receive the Execution Report – Order Reject message stating that the order is a same-day value order in the forward value session.

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

12. S-KUCUK_REPS_T0-1HAFTA Enter the following order into the series and check that you receive the Execution Report message stating that the order is a same-day value order in the forward value session.

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

> (   ) Expected messages are received. (   ) Problem with messages

13. S-KUCUK_REPS_T0-1AY The following order will be entered into the series by the Stock Exchange.

- S-KUCUK_REPS_T0-1AY – SELL – 50000 Quantity – 7,5 Rate – FON – AFK: FI-CRT – Day

Enter the following order into the S-KUCUK_REPS_T0-1AY series that will meet this order and check that you receive the Execution Report message stating that an invalid TimeInForce value was sent for the acceptance of the order.

     i.   S-KUCUK_REPS_T0-1AY – BUY – 50000 Quantity – 7,5 Rate – PORTFOY – AFK: FI-P – Day
                                                            [ClOrdID=280]

Enter the following order into the S-KUCUK_REPS_T0-1AY series that will meet this order and check that the ExecutionReport message regarding the acceptance of the order has been received.

     i.   S-KUCUK_REPS_T0-1AY – BUY – 50000 Quantity – 7,5 Rate – PORTFOY – AFK: FI-P – FOK(IOC)   **[ClOrdID=290]**

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

     i.   Trade 1: 50000 TL Quantity 7,50 Rate

> (   ) Expected messages are received. (   ) Problem with messages

ADVANCED LEVEL STEPS

TRADE REPORT

NOTE: It is recommended that the TradeReportID value to be given by the member be produced from the same series as the ClOrdID numbering order. This approach has been adopted in the testing steps and TradeReportID values are expected to be given as specified in the steps.

NOTE II: TrdType value (828) = 812 will be used in Trade Report to be sent to the GCRepo market, and TrdType value (828) = 812 (cleared by Takasbank) or 818 (cleared by Takasbank) will be used in Trade Report to be sent to the EPIP market.

14. **S-NORMAL_REPN_T0-1AY** Enter the BUY side (Trade Report) of a Special Trade Report with 10000000 TL Quantity 15 Rate counterparty member code BICRT in the series. Check that the Trade Capture Report Ack message is received.   **[TradeReportID:1010]**

( ) Expected messages are received. (   ) Problem with messages

15. **S-NORMAL_REPN_T0-1AY** The other party (Exchange Operator) will enter the SELL side of the Trade Report to which you send the BUY side to the series (as TradeReportID=1010). Check that you have received the confirmation message (Trade Capture Report - Confirmation) regarding the matching of your Trade Report in the Trade system.
    i.   (TradeReportRefID=1010) **S-NORMAL_REPN_T0-1AY** 10000000 TL Quantity 15 Rate

( ) Expected messages are received. (   ) Problem with messages

16. **S-NORMAL_REPN_T0-1AY** Enter the SELL side (Trade Report) of a Trade Report with 2500000 TL Quantity 9.75 Rate counterparty member code BICRT in the series and check that the Trade Capture Report Ack is received.   **[TradeReportID:1020]**

( ) Expected messages are received. (   ) Problem with messages

17. **S-NORMAL_REPN_T0-1AY** Cancel the SELL side (Trade Report) of the Trade Report series you have entered and check that the Trade Capture Report Ack has been received. (TradeReportRefID: 1020 should be sent)   [**TradeReportID:1030**]

( ) Expected messages are received. (   ) Problem with messages

18. **S-NORMAL_REPN_T0-1AY** The BUY side of the 500000 TL Quantity 7.05 Rate Trade Report will be entered by the Stock Exchange Operator as a BICRT member, with the counterparty member information being your member code. Check that you have received a notification message (Trade Capture Report - Notification) stating that there is a Trade Report awaiting your approval. Cancel the SELL side (Trade Report) of the Trade Report and check that the Trade Capture Report Ack has been received. (TradeReportRefID: 1020 should be sent)

   i.   **S-NORMAL_REPN_T0-1AY** 500000 TL Quantity 7,05 Rate BUY Counterparty: BICRT

( ) Expected messages are received. ( ) Problem with messages

To confirm the 500000 TL Quantity 7.05 Rate Trade Report for the S-NORMAL_REPN_T0-1AY series sent by BICRT, enter the SELL side (Trade Report) and check that the Trade Capture Report Ack is received.   **[TradeReportID:1040]**

( ) Expected messages are received. ( ) Problem with messages

Check that you have received the confirmation message (Trade Capture Report - Confirmation) regarding the matching of your Trade Report in the Trade system.

   i.   (TradeReportRefID=1040) **S-NORMAL_REPN_T0-1AY** 500000 TL Quantity 7,05 Rate Counterparty: BICRT)

( ) Expected messages are received. ( ) Problem with messages

Check that you receive a second notification message stating that the notification message stating that there is a Trade Report awaiting your approval is no longer valid. (Trade Capture Report – Delete Notification)

   i.   **S-NORMAL_REPN_T0-1AY** 500000 TL Quantity 7,05 Rate Counterparty: BICRT

( ) Expected messages are received. ( ) Problem with messages

19. **S-NORMAL_REPN_T0-1AY** The SELL side of the 1500000 Quantity 8.65 Rate Trade Report will be entered into the series by the Stock Exchange Operator as a BICRT member, with the counterparty member information as your member code. Check that you have received a notification message (Trade Capture Report - Notification) regarding the relevant Trade notification.

   i.   **S-NORMAL_REPN_T0-1AY** 1500000 TL Quantity 8,65 Rate SELL Counterparty: BICRT

( ) Expected messages are received. ( ) Problem with messages

This Trade Report will be canceled by BICRT without confirmation by you. Check that you have received the message that the Trade Notification has been cancelled. (Trade Capture Report – Delete Notification)

   i.   **S-NORMAL_REPN_T0-1AY** 1500000 Quantity 8,65 Rate SELL Counterparty: BICRT

( ) Beklenen mesajlar alındı	( ) Mesajlarda sorun var

20. **S-NORMAL_REPN_T0-1AY** Enter a Trade Report with 2000000 TL Quantity and 7.55 Rate double-sided swap in the series (Trade Report – Two Party: In-house, BUY and SELL side with your own member code) and check that the confirmation messages are received.   [**TradeReportID:1050**]

   i. (TradeReportRefID=1050) **S-NORMAL_REPN_T0-1AY** 2000000 TL Quantity 7,55 Rate Two Party Trade Report Accepted
   ii. (TradeReportRefID=1050) **S-NORMAL_REPN_T0-1AY** 2000000 TL Quantity 7,55 Rate Two Party Trade Report Confirmation

( ) Expected messages are received. (   ) Problem with messages

21. **US900123CB40_EUTP_T1** As a BICRT member, two Trade Report will be entered into the series by the Exchange Operator, namely SELL with 50000 Quantity (nominal), 109,0945 USD Price and BUY with 100000 Quantity (nominal), 110,0245 USD Price, with the counterparty member information being your member code. . Check that you have received a notification message (Trade Capture Report - Notification) regarding the relevant Trade notifications.

   i. **US900123CB40_EUTP_T1** 50000 nominal 109,0945 USD SELL Counterparty: BICRT
   ii. **US900123CB40_EUTP_T1** 100000 nominal 110,0245 USD BUY Counterparty: BICRT

( ) Expected messages are received. (   ) Problem with messages

Enter the opposite side of the two Trade Reports entered by the Exchange Operator and check that the Trade Capture Report Ack is received.

   i. **US900123CB40_EUTP_T1** 50000 nominal 109,0945 USD BUY Counterparty: BICRT
   TradeReportClass: **812**   [**TradeReportID:1060**]
   ii. **US900123CB40_EUTP_T1** 100000 nominal 110,0245 USD SELL Counterparty: BICRT
   TradeReportClass: **818**   [**TradeReportID:1070**]

( ) Expected messages are received. (   ) Problem with messages

Check that you have received the confirmation message (Trade Capture Report - Matched) regarding the matching of your Trade Report in the Trade system.

   i. (TradeReportRefID=1060) **US900123CB40_EUTP_T1** 50000 Quantity (nominal) 109,0945 USD
   ii. (TradeReportRefID=1070) **US900123CB40_EUTP_T1** 100000 Quantity (nominal) 110,0245 USD

( ) Expected messages are received. (   ) Problem with messages

TAILOR-MADE SERIES

The preferred method for creating a Tailor - made Series is to send the Security Definition message via Standard Series. In the name of standard series; These are series containing T0, T1 or T2.

22. **S-NORMAL_REPN_T0-ON** Using the standard series, create a Tailor Made series with Value1 = T+2 (in YYYYMMDD format) and Value2 = T+5 (in YYYYMMDD format) and check that the Security Definition and Security Definition Update Report messages are received. Tailor Made series; It will be created in the format S- NORMAL_REPN_DDMMYY-DDMMYY.

> (   ) Expected messages are received. (   ) Problem with messages

Enter the following orders into the NORMAL_REPN_DDMMYY-DDMMYY series and check that Execution Report messages are received.
  i.   BUY – 500000 TL Quantity – 7,60 Rate – Day   **[ClOrdID=300]**
  ii.   SELL – 1000000 TL Quantity – 7,60 Rate – PORTFOY – AFK: FI-P – FAK **[ClOrdID=310]**

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

  i.   Trade 1: 500000 TL Quantity 7,60 Rate

Check that you have received the Execution Report message stating that the order below has been cancelled.
  i.   (ClOrdID=310) SELL – 1000000 TL Quantity – 7,60 Rate – FAK

> (   ) Expected messages are received. (   ) Problem with messages

23. **TRT120325T12_KESN_T1** Create a Tailor Made series with Value1 = T+5 (in YYYYMMDD format) using the standard series and check that the Security Definition and Security Definition Update Report messages are received. Tailor Made series; It will be created in the format TRT120325T20_KESN_DDMMYY.

> (   ) Expected messages are received. (   ) Problem with messages

Enter the following orders into the TRT120325T20_KESN_DDMMYY series and check that Execution Report messages are received.
  i.   BUY – 500000 Quantity(nominal) – 97,600 Price – Day   **[ClOrdID=320]**
  ii.   SELL – 1000000 Quantity(nominal) – 97,600 Price – FAK   **[ClOrdID=330]**

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

  i.   Trade 1: 500000 Quantity(nominal) 97,600 Price

Check that you have received the Execution Report message stating that the order below has been cancelled.

    i.   (ClOrdID=330) SELL – 1000000 Quantity (nominal) – 97,600 Price – FAK

(   ) Expected messages are received. (   ) Problem with messages

MARKET MAKING TESTS

Notes

- ✓ Unless stated otherwise in order entries, orders must be sent as a Limit Price, Day (Day) DIBS Market Maker (Primary Dealer). AFK code will be FI-GOV-MM.

- ✓ No confirmation message will be returned for MassQuote messages successfully entered into the system. The MassQuote Acknowledgment message will be sent if the entered message contains an error. Whether the message has been received successfully will be checked by the system.

- ✓ It is recommended that the IDs to be used in the QuoteID field in the MassQuote message and the QuoteRequestID fields in the DirectQuoteRequest message be produced from the same numbering series as the ClOrdID series. Therefore, this approach was adopted in the test scenario.

- ✓ The "QuoteEntryID" value, which is included in the MassQuote message and represents the quotation entered in each series, is given sequentially, starting from 1. These values are expected to be sent for messages containing more than one quote.

- ✓ There is no response to successful Quotation messages entered into the system. Checking that the quotation message has been entered into the system will be done from the Representative Screen (Trading Workstation). The Exchange Operator will carry out this control during the certification tests.

CONTINIOUS AUCTION

1. **TRT120325T12_KESN_T1** Enter 5000000 quote orders for prices 101,301 – 101,501 in the series.   **[QuoteID=5000]**

   ( ) Expected messages are received. (   ) Problem with messages

2. **TRT120325T12_KESN_T1** Enter 5000000 quote orders for prices 101,302 – 101,502 in the series. The current quotation in this series will be updated
   [QuoteID=5010]

   ( ) Expected messages are received. (   ) Problem with messages

3. **TRT120325T12_KESN_T1** Enter the following orders into the series and check that confirmation messages are received.
   i. BUY – 3000000 TL nominal – 101,502 TL – Day   **[QuoteID=5020]**

   Check the following Execution Report and Trade Capture Report messages regarding the Trade below.
   i. Trade 1: 3000000 nominal 101,502 TL

   ( ) Expected messages are received. (   ) Problem with messages

4. **TRT120325T12_KESN_T1** Update The SELL side of the quotation in the series is 101,500 TL Price and 5000000 nominal.

                    [QuoteID=5030]

   ( ) Expected messages are received. (   ) Problem with messages

5. **TRT120325T12_KESN_T1** Update the Quantity of the SELL side of the quote in the series to 10000000.

                    [QuoteID=5040]

   ( ) Expected messages are received. (   ) Problem with messages

6. **TRT120325T12_KESN_T1** Cancel only the BUY side of the quote in the series.
                    [QuoteID=5050]

   ( ) Expected messages are received. (   ) Problem with messages

7. **TRT120325T12_KESN_T1** Also cancel the SELL side of the quote in the series
                    [QuoteID=5060]

> (   ) Expected messages are received. (   ) Problem with messages

8. **TRT120325T12_KESN_T1** Enter a BUY only quote in the series with 7000000 Quantity (nominal) 101,303 Price.   **[QuoteID=5070]**

> (   ) Expected messages are received. (   ) Problem with messages

9. **TRT120325T12_KESN_T1** Enter only SELL quotation in the series with 7000000 Quantity (nominal) 101,503 Price.   **[QuoteID=5080]**

> (   ) Expected messages are received. (   ) Problem with messages

10. **TRT120325T12_KESN_T1** Cancel your quotes in the series   **[QuoteID=5090]**

> (   ) Expected messages are received. (   ) Problem with messages

11. Enter quotes for the Prices and Quantities specified in the series below with a single quote message (MassQuote).   **[QuoteID=5100]**

     TRT120325T12_KESN_T1 : BUY: 101,099 TL 900000 Quantity(Nominal) – SELL: 101,299 900000 Quantity(Nominal)   *(QuoteEntryID=1)*

     TRT110827T16_KESN_T1: BUY: 100,701 TL 500000 Quantity(Nominal) – SELL: 101,001 600000 Quantity(Nominal)   *(QuoteEntryID=2)*

> (   ) Expected messages are received. (   ) Problem with messages

12. Enter quotes for the Prices and Quantities specified in the series below with a single quote message (MassQuote).   **[QuoteID=5110]**

     TRT120325T12_KESN_T1: BUY: 101,098 TL 900000 Quantity(Nominal) – SELL: 101,298 900000 Quantity(Nominal)   *(QuoteEntryID=1)*

     TRT110827T16_KESN_T1: BUY: 100,689 TL 500000 Quantity(Nominal) – SELL: 101,001 600000 Quantity(Nominal)   *(QuoteEntryID=2)*

Check that you have received the confirmation message (Mass Quote Acknowledgment - Some Quotes Rejected) stating that the 2nd rank quote has been rejected.

> (   ) Expected messages are received. (   ) Problem with messages

13. Enter quotes in the Prices and Quantities specified for the series below with a single quote message.
[QuoteID=5120]

TRT120325T12_KESN_T1: BUY: 101,152 TL 900000 Quantity(Nominal) – SELL: 101,122 TL 900000 Quantity(Nominal)   *(QuoteEntryID=1)*

TRT110827T16_KESN_T1: BUY: 100,808 TL 500000 Quantity(Nominal) – SELL: 100,807 TL 600000 Quantity(Nominal)   *(QuoteEntryID=2)*

Check that you have received the confirmation message (Mass Quote Acknowledgment – All Quotes Rejected) stating that all Quotes have been rejected.

(   ) Expected messages are received. (   ) Problem with messages

SECTION 3: CLOSING THE SYSTEM

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FAILOVER TO SECONDARY GATEWAY (ORDER ENTRY)

The connection is terminated from the Primary Gateway IP and Ports and a connection is established to the given Secondary Gateway IP and Ports.

➢ The Logon message is sent and the Logon message is received from the system without resetting the sequence number.

( ) Expected messages are received. ( ) Problem with messages

➢ The following orders are entered in the Secondary Gateway and Execution Report messages are received:

- AEFES.E_PREP_T1-ON – SELL – 20000 Quantity – 6 Rate – Day *(Partition1)* **[ClOrdID=340]**
- ISCTR.E_PREP_T1-ON – SELL – 20000 Quantity – 6 Rate – Day *(Partition2)* **[ClOrdID=350]**
- KOZAL.E_PREP_T1-ON – SELL – 20000 Quantity – 6 Rate – Day *(Partition3)* **[ClOrdID=360]**
- TCELL.E_PREP_T1-ON – SELL – 20000 Quantity – 6 Rate – Day *(Partition4)* **[ClOrdID=370]**
- TRT311225T12_KESN_T0 BUY Price: 101,123 Quantity (Nominal): 500000 *(Partition6)* **[ClOrdID=380]**

FAILOVER TO SECONDARY GATEWAY (DROP COPY)

The connection from the primary DC Gateway IPs is terminated. While the user is in the Logout state, orders that match the user orders are entered into the system. User orders are executed and execution reports (Execution Report - Trade) are written to the user's message queue.

Drop copy connections are established in all partitions with the given Secondary Gateway IPs. The ports used in the primary gateway connection will be used.

➢ The Logon message is sent and the Logon message is received from the system without resetting the sequence number.

( ) Expected messages are received. (   ) Problem with messages

➢ Since the Sequence number of the message coming from the server is higher than expected, a Resend Request message is sent to the system. It is seen that the missed messages are received from the system in response to the Resend Request message:

- AEFES.E_PREP_T1-ON – 20000 Quantity – 6 Rate fully traded.
- ISCTR.E_PREP_T1-ON – 20000 Quantity – 6 Rate fully traded.
- KOZAL.E_PREP_T1-ON – 20000 Quantity – 6 Rate fully traded.
- TCELL.E_PREP_T1-ON – 20000 Quantity – 6 Rate fully traded.
- TRT311225T12_KESN_T0 Price: 101,123 Quantity (Nominal): 500000 fully traded.

( ) Expected messages are received. (   ) Problem with messages

➢ The following order entries are made through the OE channel and it is checked that Execution Report messages are received in the secondary Drop Copy connections.

- AEFES.E_PREP_T1-ON – SELL – 20000 Quantity – 6 Rate – Day *(Partition1)*
- ISCTR.E_PREP_T1-ON – SELL – 20000 Quantity – 6 Rate – Day *(Partition2)*
- KOZAL.E_PREP_T1-ON – SELL – 20000 Quantity – 6 Rate – Day *(Partition3)*
- TCELL.E_PREP_T1-ON – SELL – 20000 Quantity – 6 Rate – Day *(Partition4)*
- TRT311225T12_KESN_T0 BUY Price: 101,123 Quantity (Nominal): 500000 *(Partition6)*

( ) Expected messages are received. (   ) Problem with messages

END OF DAY BATCH

Check that Order Cancellation messages for Day and Good Till Cancel orders have been received.

( ) Expected messages are received. ( ) Problem with messages

Logout from the system at the end of the day after receiving the expected messages. The system will be closed after end of day trades.

( ) Expected messages are received. ( ) Problem with messages

TEST EVALUATION

Title of 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.