

# Moscow Exchange Fix protocol specifications for OTC trades report system (OTC-monitor)

version 1.16.0

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# **History of changes**

| Date       | Version | Changes   |
|------------|---------|---|
| 19.01.2023 | 1.16.0  | 1. Adding a trade report, in the <b>Trade Capture Report</b> (MsgType = AE) message - see section 4.1:  |
|            |         | <ul> <li>and in the reply message Trade Capture Report Ack (MsgType = AR) TradeReportID attribute became<br/>optional (N);</li> </ul>   |
|            |         | SettlCurrency attribute became mandatory (Y);   |
|            |         | SettIDate attribute became mandatory (Y);   |
|            |         | TrdType attribute was deleted - Flag of large trade;  |
|            |         | SettlType attribute was deleted - Period of time to fulfill party's obligations for trade;  |
|            |         | CurrencyRatio attribute was deleted - Russian Ruble exchange rate;  |
|            |         | value «T» - Funds under accounted management, was deleted for PartyID attribute.  |
|            |         | 2. Changing the trade, in the <b>Trade Capture Report</b> (MsgType = AE) message - see section 4.2:   |
|            |         | <ul> <li>and in the reply message Trade Capture Report Ack (MsgType = AR) TradeReportID attribute became optional (N);</li> </ul>   |
|            |         | SettlCurrency attribute became mandatory (Y);   |
|            |         | SettlDate attribute became mandatory (Y);   |
|            |         | CurrencyRatio attribute was deleted - Russian Ruble exchange rate;  |
|            |         | value «T» - Funds under accounted management, was deleted for PartyID attribute.  |
|            |         | 3. Canceling trade report, in the <b>Trade Capture Report</b> (MsgType = AE) message and in the reply message <b>Trade Capture Report Ack</b> (MsgType = AR) <b>TradeReportID</b> attribute became optional ( <b>N</b> ) - see section 4.3: |
|            |         | 4. <b>Drop Copy Service</b> , changes in <b>Trade Capture Report</b> (MsgType = AE) message - see section 5:  |
|            |         | SettlCurrency attribute became mandatory (Y);   |
|            |         | SettlDate attribute became mandatory (Y);   |
|            |         | TrdType attribute was deleted - Flag of large trade;  |
|            |         | the trade execution period in calendar days is broadcasted into an attribute SettlType.   |
| 19.10.2022 | 1.14.8  | 1. <b>Drop Copy Service</b> , changes in <b>Trade Capture Report</b> (MsgType = AE) message - see section 5:  |
|            |         | <ul> <li>new field SettlCurrency - Settlement currency code. Strict control of the SettlCurrency field is disabled<br/>until the implementation of the second stage of improvements.</li> </ul>   |
|            |         | new field <b>CFICode</b> - CFI code of the instrument with which the trade  |
|            |         | new value for <b>TradeReportType</b> field: '5' - change trade.   |
|            |         | 2. In the trade report - see section 4.1:   |
|            |         | new parameter CFICode - CFI code of the instrument with which the trade   |
|            |         | 3. New message for change of the trade - see section 4.2.   |
| 03.04.2019 | 1.8.0   | Optional field <b>OnBehalfOfCompID</b> (participant code in the OTC-monitor system) added to message header - see section 2.1.  |
| 03.04.2017 | 1.5.3   | Section '4.1. Adding a trade report': the MarketID field' description has been changed.   |
| 28.11.2016 | 1.5.3   | Section '5.2. Trades broadcast': flag Mandatory now changed to N in field SettlDate of message Trade Capture Report (MsgType = AE).   |
| 23.03.2016 | 1.5.2   | Changes applied:  |
|            |         | Section '4.1. Adding a trade report': the following fields' descriptions have been changed: TradeReportID, SecondaryTradeID, Symbol.  |
|            |         | • Section '4.1. Adding a trade report': message Trade Capture Report Ack (MsgType = AR), description of field TradeReportID has been changed.   |

| Date       | Version | Changes   |
|------------|---------|---|
|            |         | Section '4.2. Canceling trade report': descriptions of fields TradeReportID and SecondaryTradeID have been changed.   |
|            |         | <ul> <li>Section '5.2. Trades broadcast' the following fields' descriptions have been changed: TradeReportID, Sec-<br/>ondaryTradeID, Symbol.</li> </ul>  |
| 10.03.2016 | 1.5.1   | Changes applied:  |
|            |         | • Section '4.1. Adding a trade report': description of fields Currency and SettlCurrency now contains RUB instead of RUR.   |
|            |         | Section '5.2. Trades broadcast': description of field Currency now contains RUB instead of RUR.   |
| 3.02.2016  | 1.5.0   | Changes applied:  |
|            |         | Section '4.1. Adding a trade report': the following fields' descriptions have been changed: TradeReportID, SecondaryTradeID, TrdType, SettlDate, SettlCurrency, CurrencyRatio, SecurityID, SecurityAltID. |
|            |         | Section '4.2. Canceling trade report': field TradeReportID's description have been changed.   |
|            |         | • Section '5.2. Trades broadcast' now contains description of field LastPxRub. Description of field SettlCurrency has been removed from the section.  |

## 1. Introduction

## 1.1. Document purpose

The document below describes the protocol for interaction between the FIX Gate application and client's trading systems. The description is based on the standard FIX protocol (Financial Information Exchange, http://www.fixtradingcommunity.org, version 4.4) specification. The specification does not contain neither technical nor administrative details on network connection or security protection methods.

## 1.2. General description

FIX Gate is a server application which provides availability for user applications such as robots, terminals, technical analysis systems, etc. to connect to the Exchange trading sessions using the FIX 4.4 protocol. The protocol consists of transport, session and application layers.

The transport layer defines rules of: a) transferring data as set of messages, b) composing message as set of fields, c) composing fields using field ID and field value. The transport layer description is a part of FIX 4.4 specification, therefore, it is not listed in this specification.

The session layer provides identification of each participant as well as guaranteed delivery and message consistent processing, connection status control and session recovery in case of a failure. This specification contains a brief description of the session layer protocol in order to cover certain parameters needed for establishing connection to FIX Gate.

This document is based on description of the application layer protocol designed for interaction with OTC trades report system.

The FIX Gate for OTC-monitor allows to perform the following operations:

- · add a trade report;
- · make changes to the information about an already registered trade;
- · delete information about a previously registered trade.

Please note, that the directory of OTC-monitor instruments is not distributed via FIX Gate.

# 2. Description of fields and their values

There are many messages containing the same field sets, for example, the 'Standard Header' and 'Standard Trailer' fields which contain some service information. Some of such field sets are described below:

- Tag the unique field ID, used for generating a FIX message.
- Field the field name, not used for generating FIX messages and described for your reference only.
- Presence a field attribute: specifies whether the field in message is mandatory or optional.
  - · Y mandatory field;
  - · N optional field;
  - C mandatory, if meets the condition (see 'Description').
- Description detailed description of the field.
- Allowable values additional limitations.

The "\*" symbol - flag of difference from the standard FIX protocol.

## 2.1. Standard Header group

The standard header contained in every message contains.

| Tag | Field name       | Mandatory | Details  |
|-----|------------------|-----------|--|
| 8   | BeginString      | Y         | Specifies message start and protocol version.  |
| 9   | BodyLength       | Υ         | Message body length. Calculated in accordance with the standards.  |
| 35  | MsgType          | Υ         | The MsgType ID which is unique for every message.  |
| 49  | SenderCompID     | Y         | Sender ID. The allowable values are specified by the Exchange individually for every trading firm (broker firm). |
| 115 | OnBehalfOfCompID | N         | Participant's ID added by the OTC-monitor system.  |
| 56  | TargetCompID     | Υ         | Recipient ID. (FIX-gate ID).   |
| 34  | MsgSeqNum        | Υ         | Message sequential number.   |
| 52  | SendingTime      | Υ         | Message sending time.  |
| 97  | PossResend       | N         | Indicates the message containing some data which had been already sent with another sequential number.           |
| 43  | PossDupFlag      | N         | Indicates the allowance for resending message using the same sequential number.                                  |

## 2.2. Standard Trailer group

The standard trailer (end) which every message contains.

| Tag | Field name | Mandatory | Details   |
|-----|------------|-----------|---|
| 10  | CheckSum   | Y         | Message checksum. For calculation method description see FIX, Volume 2: 'Checksum Calculation'. |

# 3. Session layer protocol

Session layer protocol which provides parties authentication, guaranteed messages delivery and sequential message processing, connection status and session recovery in case of any failure.

## 3.1. Supported messages

- · Logon Initiates session.
- Logout Initiates or confirms session termination.
- · Heartbeat Ensures that session is up and running.
- Test Request Used as part of session establishment procedure, must be replied with specific Heartbeat message.
- Reject Informs party about incorrect or unknown message.
- · Resend Request Informs party that messages in particular range must be resent.
- Sequence Reset Used to skip administrative messages on resend 'Gap Fill mode'. Also used to reset messages sequence 'Reset mode'.

All the messages can be sent in both directions.

#### 3.1.1. Logon

Initiates or confirms session start. This message must be the first in every session.

| Tag               | Field name      | Mandatory | Details  |
|-------------------|-----------------|-----------|--|
| <'Header' group>  |                 | Y         | Message type 'A'.  |
| 98                | EncryptMethod   | Y         | Encryption method. Must be set to '0' – NONE_OTHER – no message encryption |
| 108               | HeartBtInt      | Υ         | Heartbeat messages sending interval.                                       |
| 141               | ResetSeqNumFlag | N         | Reset messages sequence for both parties.                                  |
| <'Trailer' group> |                 | Y         |  |

#### 3.1.2. Logout

Initiates or confirms session termination.

| Tag               | Field name | Mandatory | Details                        |
|-------------------|------------|-----------|--------------------------------|
| <'Header' group>  |            | Υ         | Message type '5'.              |
| 58 Text           |            | N         | Reason for session termination |
| <'Trailer' group> |            | Υ         |                                |

#### 3.1.3. Heartbeat

Ensures that session is up and running. If the 'Heartbeat' message is sent in response to the 'Test Request' message, the 'TestReqID' field must contain the 'Test Request' message ID.

| Tag               | Field name | Mandatory | Details  |
|-------------------|------------|-----------|--|
| <'Header' group>  |            | Y         | Message type '0'.  |
| 112               | TestReqID  | N         | Mandatory if sent in response to the 'Test Request' message. |
| <'Trailer' group> |            | Y         |  |

#### 3.1.4. Test Request

The message calls/initiates/requests the 'Heartbeat' message from the opposite party...

| Tag               | Field name | Mandatory | Details  |
|-------------------|------------|-----------|--|
| <'Header' group>  |            | Υ         | Message type '1'.  |
| 112               | TestReqID  | Y         | Request message ID, returned in the 'Heartbeat' message. |
| <'Trailer' group> |            | Υ         |  |

#### 3.1.5. Reject

The reject message should be issued when a message is received but cannot be properly processed due to a session-level rule violation. An example of when a reject may be appropriate would be the receipt of a message with invalid basic data (e.g. MsgType=&) which successfully passes CheckSum and BodyLength checks.

| Tag          | Field name          | Manda-<br>tory | Details                   |
|--------------|---------------------|----------------|---------------------------|
| <'Header'    | group>              | Y              | Message type '3'.         |
| 45           | RefSeqNum           | Υ              | Rejected message number.  |
| 371          | RefTagID            | N              | Invalid field number.     |
| 372          | RefMsgType          | N              | Rejected message type.    |
| 373          | SessionRejectReason | N              | Rejection reason ID.      |
| 58           | Text                | N              | Rejection reason details. |
| <'Trailer' g | roup>               | Υ              |                           |

#### 3.1.6. Resend Request

The message initiates resending of a particular message range. Use 'BeginSeqNo=EndSeqNo' for a single message resending and 'End-SeqNo=0' for a range of messages starting from the particular one (where '0' indicates infinity).

| Tag               | Field name | Mandatory | Details                                |
|-------------------|------------|-----------|--|
| <'Header' group>  |            | Υ         | Message type '2'.                      |
| 7                 | BeginSeqNo | Υ         | Number of the first message to resend. |
| 16                | EndSeqNo   | Y         | Number of the last message to resend.  |
| <'Trailer' group> |            | Υ         |  |

#### 3.1.7. Sequence Reset

Used to skip administrative messages on resend - 'Gap Fill mode'. Also used to reset messages sequence - 'Reset mode'.

| Tag               | Field name  | Mandatory | Details   |
|-------------------|-------------|-----------|---|
| <'Header' group>  |             | Y         | Message type '4'.   |
| 123               | GapFillFlag | N         | Mode:     'Y' - the 'Gap Fill' mode – the 'MsgSeqNum' field is used. If there are some administrative messages to be skipped, then the 'Sequence Reset' message is used for responding to the 'Resend Request' message.      'N' - the 'Reset' mode - Messages sequence reset mode. |
| 16                | NewSeqNo    | Y         | New sequence number.  |
| <'Trailer' group> |             | Y         |   |

## 3.2. Session establishing and termination scenarios

#### 3.2.1. Session establishing and termination

For establishing connection to FIX Client a client must send the 'Logon' message including its 'SenderCompID'. If the 'Logon' message is valid and the sender was successfully authorized then FIX Gate sends the 'Logon' message in return, confirming that the connection has been successfully established.

For correct session termination, client must send the 'Logout' message to FIX Gate and receive one in return. Any other ways of session closing/termination are incorrect and may lead to an error.

Also, before sending the 'Logout' message it is recommended to send the 'Test Request' message to FIX Gate and receive the 'Heartbeat' message in return. This may help to avoid missing and/or lost messages.

#### 3.2.2. Message resending request

During the initialization process or due to unexpected connection break there may be numeration error when the incoming message sequence number is greater than expected (while the common message number is always greater by 1 than that of the last message in log). In this case, a client must request the retransmission via sending the 'Resend Request' message including sequence number range for the missing messages (the 'BeginSeqNo', 'EndSeqNo' fields values).

#### 3.2.3. Session status monitoring

The 'Heartbeat' message is used to monitor the FIX session status as well as gaps in messages sequence numbers in case of missing some incoming messages. In order to do this, the client application generates the 'Heartbeat' messages and sends it to FIX Gate in accordance with time interval specified by the 'HeartBtInt' field value in the 'Logon' Message.

If there is no reply from FIX Gate within the specified time interval (the 'HeartBtInt' field value + transmission time), the client should generate and send the 'Test Request' message to Fix Gate. In case of no reply within the specified time interval the client should reestablish connection to the FIX Gate.

#### 3.2.4. Resetting message sequence

The following methods are used to reset message sequence:

- · Sending the 'Logon' message with the 'ResetSeqNumFlag' flag.
- · Sending the 'Sequence Reset' in the 'Reset mode' mode.
- By schedule. For example, message sequence can be automatically reset by the Exchange before starting a trading session.

After message sequence was reset, there is no more option to resend any message via the 'Resend Request' procedure.

#### 3.2.5. Session recovery after failure

In order to recover session after failure, the client should send the 'Logon' message which includes the sequence number 1 more than that of the last message in log (the 'MsgSeqNum' field). If the incoming 'Logon' message sequence number is greater than expected, then the client must request the retransmission via sending the 'Resend Request' message including sequence number range for the missing messages.

If the primary FIX gate server is unreachable, the client is recommended to establish connection to the secondary server to continue working according to the rules stated above.

The message numbers are synchronised between the primary and secondary FIX Gate servers, therefore, the message sequence will not be broken. However, there is a possibility of a severe failure which may lead message sequence to become out of sync. In this case, the client will receive a message with the sequence number less than expected. Due to this, it is recommended to the client either to wait the primary server to be recovered or use the message sequence resetting method.

# 4. Trading interaction

The message **Trade Capture Report** (**MsgType = AE**) is used both to add a trade report and to withdraw a trade report.

The TradeReportID field can be used by the client to link a message sent to the FIX gate with a response from the FIX gate.

Now the Participant can specify the Participant code from the OTC-monitor system in the transaction report. To do this, a special optional field may be added to the message header **OnBehalfOfCompID**, containing this Participant code (for details see section 2.1).

## 4.1. Adding a trade report

A client sends the 'Trade Capture Report (MsgType = AE)' message to FIX Gate. The message contains 1 trade.

| Tag  | Field                       | Mandatory | Details  |
|--|-----------------------------|-----------|--|
| <heac< td=""><td>ler group&gt;</td><td>Υ</td><td>Message type 'AE'.</td></heac<> | ler group>                  | Υ         | Message type 'AE'.   |
| 856  | TradeReportType             | Y*        | ='0' (Submit)  |
| 571  | TradeReportID               | N*        | Trade number within the Participant's internal accounting system.  |
| 1040   | SecondaryTradeID            | N         | Purchase agreement number. Default value is ' '.   |
| 1125   | OrigTradeDate               | Y*        | Date of trade in YYYY-MM-DD format.  |
| 552  | NoSides = 1                 | Y         | Trade leg:   |
| =>54   | Side                        | Y         | • '1' - buy (B)  |
|  |                             |           | • '2' - sell (S)   |
|  |                             |           | All other values of the 'Side' tag are invalid and will be rejected.   |
| =>453  | NoPartyIDs = 2              | Y*        |  |
|  | =>448 PartyID               | Y*        | Participant's name on trade.   |
|  | =>447 PartyIDSource = D     | Y*        | Allowable values in <b>PartyID</b> :   |
|  | =>452 PartyRole = 3 (Clien- | Y*        | 'P' - Participant themselves   |
|  | tID)                        |           | • 'A' - Client   |
|  | =>448 PartyID               | Y*        | Account on trade   |
|  | =>447 PartyIDSource = D     | Y*        | Allowable values in PartyID:   |
|  | =>452 PartyRole = 1 (Exe-   | Y*        | 'P' - Participant's account  |
|  | cuting Firm)                |           | 'A' - Client's account   |
| 55   | Symbol                      | Υ         | Security code assigned by the Exchange   |
| 32   | LastQty                     | Υ         | Number of securities in trade. A fractional number is possible for all types of securities.  |
| 31   | LastPx                      | Y         | Price of single security in trade.   |
|  |                             |           | When report is received, the price value is truncated to 5 digits after decimal point. The initial price value will be stored in the Exchange database in a special field. |
| 15   | Currency                    | Y*        | Price currency code:   |
|  |                             |           | currency code (RUB - rubles, USD - U.S. dollars, EUR - Euro; as well as other currencies for which the Central Bank sets the exchange rate);                               |
|  |                             |           | PCT - percentage of the face value (for trades in bonds).  |
| 64   | SettlDate                   | Y         | The last date for parties to fulfill their payment and settlement obligations according to the specified period of time in YYYY-MM-DD format.                              |
|  |                             |           | If date of payment and date of settlement differ, the latest date is used as the value for this field.   |
| 120  | SettlCurrency               | Y         | Settlement currency code (RUB - rubles, USD - U.S. dollars, EUR - Euro; as well as other currencies for which the Central Bank sets the exchange rate).                    |
| 1301   | MarketID                    | N         | Stock exchange code to perform report for.   |
|  |                             |           | Allowable code:  |
|  |                             |           | 'M' - Moscow Exchange (default value)  |
| 22   | SecurityIDSource = 4        | N         | ISIN code of the instrument for trade. Default value is ' '.   |

| Tag   | Field                   | Mandatory | Details  |
|-------|-------------------------|-----------|--|
| 48    | SecurityID              | N         |  |
| 454   | NoSecurityAltID = 1     | N         | State registration code of the instrument for trade.   |
| =>455 | SecurityAltID           | N         | If there are several issues with different registration codes in one trade, than it is recommended to leave this field blank. Default value is ''. |
| =>456 | SecurityAltIDSource = 8 | N         | Social Control and the note statut 2 statut value to   |
| 461   | CFICode                 | N         | CFI code of the instrument with which the trade was made. Default value is ' '.  |

FIX Gate sends the Trade Capture Report Ack (MsgType = AR) message to client in reply.

| Tag  | Field name              | Mandatory | Details  |
|--|-------------------------|-----------|--|
| <head< td=""><td>ler group&gt;</td><td>Y</td><td>Message type 'AR'.</td></head<> | ler group>              | Y         | Message type 'AR'.   |
| 571  | TradeReportID           | N*        | Trade number within the Participant's internal accounting system.                                  |
| 751  | TradeReportRejectReason | Y*        | Cancellation code.   |
|  |                         |           | If '0' - the trade is accepted successfully.  If not '0' - the trade is not accepted successfully. |
| 1003   | TradeID                 | N         | OTC trade registration number assigned by the Exchange.  |
| 58   | Text                    | N         | The field contains:  • if rejected - text description of errors occurred                           |
|  |                         |           | if accepted - text description of some notes about procession of trade                             |

# 4.2. Changing the trade

A client sends the 'Trade Capture Report (MsgType = AE)' message to FIX Gate. The message contains one change trade.

| Tag   | Field                                | Mandatory | Details  |
|---|--------------------------------------|-----------|--|
| <head< td=""><td colspan="2"><header group=""></header></td><td>Message type 'AE'.</td></head<> | <header group=""></header>           |           | Message type 'AE'.   |
| 856   | TradeReportType                      | Y*        | = '5' (No/Was)   |
| 1003  | TradeID                              | Y         | OTC trade registration number assigned by the Exchange.  |
| 49  | SenderCompID                         | Y         | Sender ID. The allowable values are specified by the Exchange individually for every trading firm (broker firm). |
| 115   | OnBehalfOfCompID                     | N         | Participant's ID added by the OTC-monitor system.  |
| 571   | TradeReportID                        | N*        | Trade number within the Participant's internal accounting system.  |
| 1040  | SecondaryTradeID                     | N         | Purchase agreement number. Default value is ' '.   |
| 1125  | OrigTradeDate                        | Y*        | Date of trade in YYYY-MM-DD format.  |
| 552   | NoSides = 1                          | Y         | Trade leg:   |
| =>54  | Side                                 | Y         | • '1' - buy (B) • '2' - sell (S)   |
|   |                                      |           | All other values of the 'Side' tag are invalid and will be rejected.   |
| =>453   | NoPartyIDs = 2                       | Y*        |  |
|   | =>448 PartyID                        | Y*        | Participant's name on trade.   |
|   | =>447 PartyIDSource = D              | Y*        | Allowable values in <b>PartyID</b> :   |
|   | =>452 PartyRole = 3 (Clien-tlD)      | Y*        | 'P' - Participant themselves     'A' - Client  |
|   | =>448 PartyID                        | Y*        | Account on trade   |
|   | =>447 PartyIDSource = D              | Y*        | Allowable values in <b>PartyID</b> :   |
|   | =>452 PartyRole = 1 (Executing Firm) | Y*        | 'P' - Participant's account  |
|   | ,                                    |           | 'A' - Client's account   |
| 55  | Symbol                               | Y         | Security code assigned by the Exchange.  |
| 32  | LastQty                              | Y         | Number of securities in trade. A fractional quantity is possible for all securities types.                       |

| Tag   | Field                   | Mandatory | Details  |
|-------|-------------------------|-----------|--|
| 31    | LastPx                  | Y         | Price of single security in trade.   |
|       |                         |           | When report is received, the price value is truncated to 5 digits after decimal point. The initial price value will be stored in the Exchange database in a special field. |
| 15    | Currency                | Y*        | Price currency code:   |
|       |                         |           | currency code (RUB - Rouble, USD - US dollar, EUR - Euro; and other currencies for which the Central Bank sets the exchange rate);   |
|       |                         |           | PCT - percentage of the face value (for trades in bonds).  |
| 64    | SettlDate               | Y         | The last date for parties to fulfill their payment and settlement obligations according to the specified period of time in YYYY-MM-DD format.                              |
|       |                         |           | If date of payment and date of settlement differ, the latest date is used.   |
| 120   | SettlCurrency           | Y         | Settlement currency code (RUB - Rouble, USD - US dollar, EUR - Euro; and other currencies for which the Central Bank sets the exchange rate).                              |
| 1301  | MarketID                | N         | Stock exchange code to perform report for.   |
|       |                         |           | Allowable code:  |
|       |                         |           | 'M' - Moscow Exchange (default value)  |
| 22    | SecurityIDSource = 4    | N         | ISIN code of the instrument for trade. Default value is ' '.   |
| 48    | SecurityID              | N         |  |
| 454   | NoSecurityAltID = 1     | N         | State registration code of the instrument for trade.   |
| =>455 | SecurityAltID           | N         | If there are several issues with different registration codes in one trade, than it is recommended to leave this field blank. Default value is ''.                         |
| =>456 | SecurityAltIDSource = 8 | N         | Teconimenaea to leave this neia blank. Delault value is .  |
| 461   | CFICode                 | N         | CFI code of the instrument with which the trade was made. Default value is ''.   |

FIX Gate sends the Trade Capture Report Ack (MsgType = AR) message to client in reply.

| Tag    | Поле                    | Наличие | Описание  |
|--------|-------------------------|---------|---|
| <Групг | na Header>              | Υ       | Тип сообщения "AR".   |
| 571    | TradeReportID           | N*      | Trade number within the Participant's internal accounting system.                           |
| 751    | TradeReportRejectReason | Y*      | Cancellation code.  |
|        |                         |         | If '0' - the trade is updated successfully.   |
|        |                         |         | If not '0' - the trade is not updated successfully.   |
| 1003   | TradeID                 | Υ       | OTC trade registration number assigned by the Exchange.                                     |
| 58     | Text                    | N       | The field contains:   |
|        |                         |         | if rejected - text description of errors, due to which it is impossible to update the trade |
|        |                         |         | if accepted - text description of some notes about updating of trade                        |

# 4.3. Canceling trade report

A client sends the **Trade Capture Report (MsgType = AE)** message to FIX gate. The message contains order to cancel 1 trade.

| Tag   | Field name       | Mandatory | Details   |
|---|------------------|-----------|---|
| <head< td=""><td>er group&gt;</td><td>Υ</td><td>Message type 'AE'.</td></head<> | er group>        | Υ         | Message type 'AE'.  |
| 856   | TradeReportType  | Y*        | ='6' (Trade Report Cancel)  |
| 1003  | TradeID          | Y*        | OTC trade registration number assigned by the Exchange.           |
| 571   | TradeReportID    | N*        | Trade number within the Participant's internal accounting system. |
| 1040  | SecondaryTradeID | N         | Purchase agreement number.  |
| 1328  | RejectText       | N         | Trade cancellation reason.  |

FIX Gate sends the Trade Capture Report Ack (MsgType = AR) message to client in reply.

| Tag                        | Field name | Mandatory | Details            |
|----------------------------|------------|-----------|--------------------|
| <header group=""></header> |            | Υ         | Message type 'AR'. |

| Tag  | Field name              | Mandatory | Details   |
|------|-------------------------|-----------|---|
| 571  | TradeReportID           | N*        | Trade number within the Participant's internal accounting system. |
| 751  | TradeReportRejectReason | Y*        | Cancellation code.  |
|      |                         |           | If '0' - the trade is deleted.                                    |
|      |                         |           | If not '0' - the trade is not deleted.                            |
| 1003 | TradeID                 | Y         | OTC trade registration number assigned by the Exchange.           |
| 58   | Text                    | N         | Text description of trade cancellation errors occurred.           |
|      |                         |           | The field is transmitted only in case of cancellation error.      |

# 5. Drop Copy service

**Drop Copy** is a service, which allows clients to receive information on trades according to the Participants code list using dedicated FIX session.

Each client is provided with the separate FIX login, which is not valid for making trading operations.

Once the system receives the 'Trade Capture Report (MsgType = AE)' message from this login, the FIX Gate will send the 'Reject' message in reply.

## 5.1. Session layer

The Drop Copy Service session layer is equal to that of the standard FIX session, i. e. clients are connected to and authenticated by the Drop Copy server using the standard methods, with possibility to exchange the 'Heartbeat' messages and make the 'Resend Request' requests.

## 5.2. Trades broadcast

Trades are broadcasted using the **Trade Capture Report (MsgType = AE)** messages.

| Tag  | Field                       | Mandatory  | Details   |
|--|-----------------------------|------------|---|
| <heade< td=""><td>r group&gt;</td><td>Υ</td><td>Message type 'AE'.</td></heade<> | r group>                    | Υ          | Message type 'AE'.  |
| 1003   | TradeID                     | Y*         | OTC trade registration number assigned by the Exchange.   |
| 856  | TradeReportType             | Y*         | Message type.   |
|  |                             |            | • = '0' (Submit) - adding trade   |
|  |                             |            | • = '5' (No/Was) - changing trade   |
|  |                             |            | • = '6' (Trade Report Cancel) - cancelling trade  |
| 1041   | FirmTradeID                 | Y*         | Participant's ID added by the OTC-monitor system.   |
| =>453  | NoPartyIDs = 2              | Y*         |   |
|  | =>448 PartyID               | Y*         | Participant's name on trade.  |
|  | =>447 PartyIDSource = D     | Y*         | Allowable values:   |
|  | =>452 PartyRole = 3 (Clien- | Y*         | • 'P' - Participant themselves  |
|  | tID)                        |            | • 'A' - Client  |
|  | =>448 PartyID               | Y*         | Account on trade  |
|  | =>447 PartyIDSource = D     | Y*         | Allowable values in :   |
|  | =>452 PartyRole = 1 (Exe-   | <b>Y</b> * | • 'P' - Participant's account   |
|  | cuting Firm)                |            | 'A' - Client's account  |
| 552  | NoSides = 1                 | Υ          | Trade leg:  |
| =>54   | Side                        | Υ          | • '1' - buy   |
|  |                             |            | • '2' - sell  |
| 55   | Symbol                      | Υ          | Security code assigned by the Exchange.   |
| 32   | LastQty                     | Y          | Number of securities in trade. A fractional quantity is possible for all securities types.  |
| 15   | Currency                    | Υ*         | Price currency code:  |
|  |                             |            | currency code (RUB - Rouble, USD - US dollar, EUR - Euro; and other currencies for which the Central Bank sets the exchange rate);            |
|  |                             |            | PCT - percentage of the face value (for trades in bonds).   |
| 75   | TradeDate                   | Y*         | Date of trade   |
| 63   | SettlType                   | Y*         | Trade execution period, calendar days.  |
| 64   | SettlDate                   | Y          | The last date for parties to fulfill their payment and settlement obligations according to the specified period of time in YYYY-MM-DD format. |
|  |                             |            | If date of payment and date of settlement differ, the latest date is used.  |
| 60   | TransactTime                | Y*         | Date of trade registration  |

| Tag   | Field                   | Mandatory | Details   |
|-------|-------------------------|-----------|---|
| 571   | TradeReportID           | N         | Trade number within the Participant's internal accounting system.   |
| 1040  | SecondaryTradeID        | N         | Purchase agreement number.  |
| 31    | LastPx                  | Υ         | Price of single security in trade.  |
| 1301  | MarketID                | N         | Stock exchange code to perform report for.  |
|       |                         |           | Allowable codes:  |
|       |                         |           | 'M' - Moscow Exchange (default value)   |
| 120   | SettlCurrency           | Y         | Settlement currency code (RUB - Rouble, USD - US dollar, EUR - Euro; and other currencies for which the Central Bank sets the exchange rate). |
| 1382  | CurrencyRatio           | N         | Rouble exchange rate to use for the control computation of trade price in roubles.  |
| 58    | Text                    | N         | Text description of some notes about procession of trade  |
| 22    | SecurityIDSource = 4    | N         | ISIN code of the instrument for trade   |
| 48    | SecurityID              | N         |   |
| 454   | NoSecurityAltID = 1     | N         | State registration code of the instrument for trade.  |
| =>455 | SecurityAltID           | N         | Empty, if the instrument issue was not specified by Participant.  |
| =>456 | SecurityAltIDSource = 8 | N         |   |
| 20020 | LastPxRub               | Y         | Price of a single security in Russian Ruble.  |
| 461   | CFICode                 | N         | CFI code of the instrument with which the trade was made. Default value is ' '.   |