



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

**version 1.16.0**

**Moscow 2023**

# Table of Contents

1. Introduction .....	5
1.1. Document purpose .....	5
1.2. General description .....	5
2. Description of fields and their values .....	6
2.1. Data types .....	6
2.2. Standard Header group .....	6
2.3. Standard Trailer group .....	7
3. Session layer protocol .....	8
3.1. Supported messages .....	8
3.1.1. Logon .....	8
3.1.2. Logout .....	8
3.1.3. Heartbeat .....	8
3.1.4. Test Request .....	8
3.1.5. Reject .....	9
3.1.6. Resend Request .....	9
3.1.7. Sequence Reset .....	9
3.2. Session establishing and termination scenarios .....	9
3.2.1. Session establishing and termination .....	9
3.2.2. Message resending request .....	9
3.2.3. Session status monitoring .....	10
3.2.4. Resetting message sequence .....	10
3.2.5. Session recovery after failure .....	10
4. Trading interaction .....	11
4.1. Adding a trade report .....	11
4.2. Changing the trade .....	12
4.3. Canceling trade report .....	13
5. Drop Copy service .....	15
5.1. Session layer .....	15
5.2. Trades broadcast .....	15

## History of changes

Date	Version	Changes
19.01.2023	1.16.0	<ol style="list-style-type: none"> <li>Adding a trade report, in the <b>Trade Capture Report</b> (MsgType = AE) message - see section 4.1: <ul style="list-style-type: none"> <li>and in the reply message <b>Trade Capture Report Ack</b> (MsgType = AR) <b>TradeReportID</b> attribute became optional (<b>N</b>);</li> <li><b>SettlCurrency</b> attribute became mandatory (<b>Y</b>);</li> <li><b>SettlDate</b> attribute became mandatory (<b>Y</b>);</li> <li><b>TrdType</b> attribute was deleted - Flag of large trade;</li> <li><b>SettlType</b> attribute was deleted - Period of time to fulfill party's obligations for trade;</li> <li><b>CurrencyRatio</b> attribute was deleted - Russian Ruble exchange rate;</li> <li>value «T» - Funds under accounted management, was deleted for <b>PartyID</b> attribute.</li> </ul> </li> <li>Changing the trade, in the <b>Trade Capture Report</b> (MsgType = AE) message - see section 4.2: <ul style="list-style-type: none"> <li>and in the reply message <b>Trade Capture Report Ack</b> (MsgType = AR) <b>TradeReportID</b> attribute became optional (<b>N</b>);</li> <li><b>SettlCurrency</b> attribute became mandatory (<b>Y</b>);</li> <li><b>SettlDate</b> attribute became mandatory (<b>Y</b>);</li> <li><b>CurrencyRatio</b> attribute was deleted - Russian Ruble exchange rate;</li> <li>value «T» - Funds under accounted management, was deleted for <b>PartyID</b> attribute.</li> </ul> </li> <li>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:</li> <li><b>Drop Copy Service</b>, changes in <b>Trade Capture Report</b> (MsgType = AE) message - see section 5: <ul style="list-style-type: none"> <li><b>SettlCurrency</b> attribute became mandatory (<b>Y</b>);</li> <li><b>SettlDate</b> attribute became mandatory (<b>Y</b>);</li> <li><b>TrdType</b> attribute was deleted - Flag of large trade;</li> <li>the trade execution period in calendar days is broadcasted into an attribute <b>SettlType</b>.</li> </ul> </li> </ol>
19.10.2022	1.14.8	<ol style="list-style-type: none"> <li><b>Drop Copy Service</b>, changes in <b>Trade Capture Report</b> (MsgType = AE) message - see section 5: <ul style="list-style-type: none"> <li>new field <b>SettlCurrency</b> - Settlement currency code. Strict control of the <b>SettlCurrency</b> field is disabled until the implementation of the second stage of improvements.</li> <li>new field <b>CFICode</b> - CFI code of the instrument with which the trade</li> <li>new value for <b>TradeReportType</b> field: '5' - change trade.</li> </ul> </li> <li>In the trade report - see section 4.1: <ul style="list-style-type: none"> <li>new parameter <b>CFICode</b> - CFI code of the instrument with which the trade</li> </ul> </li> <li>New message for change of the trade - see section 4.2.</li> </ol>
03.04.2019	1.8.0	Optional field <b>OnBehalfOfCompID</b> (participant code in the OTC-monitor system) added to message header - see section 2.2.
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	<p>Changes applied:</p> <ul style="list-style-type: none"> <li>Section '4.1. Adding a trade report': the following fields' descriptions have been changed: TradeReportID, SecondaryTradeID, Symbol.</li> <li>Section '4.1. Adding a trade report': message Trade Capture Report Ack (MsgType = AR), description of field TradeReportID has been changed.</li> </ul>

Date	Version	Changes
		<ul style="list-style-type: none"> <li>• Section '4.2. Canceling trade report': descriptions of fields TradeReportID and SecondaryTradeID have been changed.</li> <li>• Section '5.2. Trades broadcast' the following fields' descriptions have been changed: TradeReportID, SecondaryTradeID, Symbol.</li> </ul>
10.03.2016	1.5.1	<p>Changes applied:</p> <ul style="list-style-type: none"> <li>• Section '4.1. Adding a trade report': description of fields Currency and SettlCurrency now contains RUB instead of RUR.</li> <li>• Section '5.2. Trades broadcast': description of field Currency now contains RUB instead of RUR.</li> </ul>
3.02.2016	1.5.0	<p>Changes applied:</p> <ul style="list-style-type: none"> <li>• Section '4.1. Adding a trade report': the following fields' descriptions have been changed: TradeReportID, SecondaryTradeID, TrdType, SettlDate, SettlCurrency, CurrencyRatio, SecurityID, SecurityAltID.</li> <li>• Section '4.2. Canceling trade report': field TradeReportID's description have been changed.</li> <li>• Section '5.2. Trades broadcast' now contains description of field LastPxRub. Description of field SettlCurrency has been removed from the section.</li> </ul>

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# 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. Data types

Within the protocol, the following data types are used:

Type	Details
char	Single character value, can include any alphanumeric character or punctuation except the delimiter. All char fields are case sensitive (i.e. m != M).
String	Alpha-numeric free format strings, can include any character or punctuation except the delimiter. All char fields are case sensitive (i.e. morstatt != Morstatt).
float	Sequence of digits with optional decimal point and sign character (ASCII characters "-", "0" - "9" and "."); the absence of the decimal point within the string will be interpreted as the float representation of an integer value. The number of decimal places used should be a factor of business/market needs and mutual agreement between counterparties. Note that float values may contain leading zeros (e.g. "00023.23" = "23.23") and may contain or omit trailing zeros after the decimal point (e.g. "23.0" = "23.0000" = "23" = "23.").
Price16.5	Float field representing a price. The number of significant digits is sixteen. The number of decimal places is five.
Int	Sequence of digits without commas or decimals and optional sign character (ASCII characters "-" and "0" - "9" ). The sign character utilizes one byte (i.e. positive int is "99999" while negative int is "-99999"). Note that int values may contain leading zeros (e.g. "00023" = "23"). Examples: 723 in field 21 would be mapped int as [21=723], -723 in field 12 would be mapped int as [12=-723].
NumInGroup	Int field representing the number of entries in a repeating group. Value must be positive.
Int32	Integer signed, 4 bytes.
Int64	Integer signed, 8 bytes.
StringN	String of symbols with fixed length.
UTCTimestamp	Time/date combination represented in UTC (Universal Time Coordinated) in YYYYMMDD-HH:MM:SS.sss (milliseconds) or YYYYMMDD-HH:MM:SS.ssssssss (nanoseconds) format.
SeqNum	Int32 field representing a message sequence number. Value must be positive.
Boolean	Char field containing one of two values: 'Y' = True/Yes, 'N' = False/No.
LocalMktDate	Date of Local Market (vs. UTC) in YYYYMMDD format. Valid values: YYYY = 0000-9999, MM = 01-12, DD = 01-31.
Exchange	String field representing a market or exchange using ISO 10383 Market Identifier Code (MIC) values.
Length	Int field representing the length in bytes. Value must be positive.
Qty	Float field capable of storing either a whole number (no decimal places) of shares (securities denominated in whole units) or a decimal value containing decimal places for non-share quantity asset classes (securities denominated in fractional units).
Currency	String field representing a currency type using ISO 4217 Currency code (3 character) values.

### 2.2. Standard Header group

The standard header contained in every message contains.

Tag	Field name	Mandatory	Type	Details
8	BeginString	Y	String7	Specifies message start and protocol version.

Tag	Field name	Mandatory	Type	Details
9	BodyLength	Y	Length	Message body length. Calculated in accordance with the standards.
35	MsgType	Y	String10	The MsgType ID which is unique for every message.
49	SenderCompID	Y	String64	Sender ID. The allowable values are specified by the Exchange individually for every trading firm (broker firm).
115	OnBehalfOfCompID	N	String7	Participant's ID added by the OTC-monitor system.
56	TargetCompID	Y	String	Recipient ID. (FIX-gate ID).
34	MsgSeqNum	Y	SeqNum	Message sequential number.
52	SendingTime	Y	UTCTimestamp	Message sending time.
122	OrigSendingTime	N*	UTCTimestamp	Original message transmission time when resending messages in reply to resend request (message Resend Request (2)), in UTC. Mandatory if a message is sent in reply to resend request (message Resend Request (2)).
97	PossResend	N	Boolean	Indicates the message containing some data which had been already sent with another sequential number.
43	PossDupFlag	N	Boolean	Indicates the allowance for resending message using the same sequential number.

## 2.3. Standard Trailer group

The standard trailer (end) which every message contains.

Tag	Field name	Mandatory	Type	Details
10	Checksum	Y	String3	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	Type	Details
<'Header' group>		Y		Message type 'A'.
98	EncryptMethod	Y	Int	Encryption method. Must be set to '0' – NONE_OTHER – no message encryption..
108	HeartBtInt	Y	Int	Heartbeat messages sending interval.
141	ResetSeqNumFlag	N	Boolean	Reset messages sequence for both parties.
<'Trailer' group>		Y		

#### 3.1.2. Logout

Initiates or confirms session termination.

Tag	Field name	Mandatory	Type	Details
<'Header' group>		Y		Message type '5'.
58	Text	N	String	Reason for session termination
<'Trailer' group>		Y		

#### 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	Type	Details
<'Header' group>		Y		Message type '0'.
112	TestReqID	N	String	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	Type	Details
<'Header' group>		Y		Message type '1'.
112	TestReqID	Y	String	Request message ID, returned in the 'Heartbeat' message.



Tag	Field name	Mandatory	Type	Details
<Trailer group>		Y		

### 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	Mandatory	Type	Details
<Header group>		Y		Message type '3'.
45	RefSeqNum	Y	SeqNum	Rejected message number.
371	RefTagID	N	Int	Invalid field number.
372	RefMsgType	N	String	Rejected message type.
373	SessionRejectReason	N	Int	Rejection reason ID.
58	Text	N	String	Rejection reason details.
<Trailer group>		Y		

### 3.1.6. Resend Request

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

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

### 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	Type	Details
<Header group>		Y		Message type '4'.
123	GapFillFlag	N	Boolean	Mode: <ul style="list-style-type: none"> <li>'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.</li> <li>'N' - the 'Reset' mode - Messages sequence reset mode.</li> </ul>
16	NewSeqNo	Y	SeqNum	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 2.2).

### 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	Type	Details
<Header group>		Y		Message type 'AE'.
856	TradeReportType	Y*	int	= '0' (Submit)
571	TradeReportID	N*	String80	Trade number within the Participant's internal accounting system.
1040	SecondaryTradeID	N	String32	Purchase agreement number. Default value is ' '.
1125	OrigTradeDate	Y*	LocalMktDate	Date of trade in YYYYMMDD format.
552	NoSides = 1	Y	NumInGroup	Trade leg:
=>54	Side	Y	char	<ul style="list-style-type: none"> <li>'1' - buy (B)</li> <li>'2' - sell (S)</li> </ul> All other values of the 'Side' tag are invalid and will be rejected.
=>453	NoPartyIDs = 2	Y*	NumInGroup	
	=>448 PartyID	Y*	String	Participant's name on trade.
	=>447 PartyIDSource = D	Y*	char	Allowable values in <b>PartyID</b> :
	=>452 PartyRole = 3 (ClientID)	Y*	int	<ul style="list-style-type: none"> <li>'P' - Participant themselves</li> <li>'A' - Client</li> </ul>
	=>448 PartyID	Y*	String	Account on trade
	=>447 PartyIDSource = D	Y*	char	Allowable values in <b>PartyID</b> :
	=>452 PartyRole = 1 (Executing Firm)	Y*	int	<ul style="list-style-type: none"> <li>'P' - Participant's account</li> <li>'A' - Client's account</li> </ul>
55	Symbol	Y	String18	Security code assigned by the Exchange
32	LastQty	Y	Qty	Number of securities in trade. A fractional number is possible for all types of securities.
31	LastPx	Y	Price16.5	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*	Currency	Price currency code: <ul style="list-style-type: none"> <li>currency code (RUB - rubles, USD - U.S. dollars, EUR - Euro; as well as other currencies for which the Central Bank sets the exchange rate);</li> <li>PCT - percentage of the face value (for trades in bonds).</li> </ul>
64	SettlDate	Y	LocalMktDate	The last date for parties to fulfill their payment and settlement obligations according to the specified period of time in YYYYMMDD format.  If date of payment and date of settlement differ, the latest date is used as the value for this field.
120	SettlCurrency	Y	Currency	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	Exchange	Stock exchange code to perform report for.  Allowable code:

Tag	Field	Mandatory	Type	Details
				• 'M' - Moscow Exchange (default value)
22	SecurityIDSource = 4	N	String	ISIN code of the instrument for trade. Default value is ''.
48	SecurityID	N	String	
454	NoSecurityAltID = 1	N	NumInGroup	State registration code of the instrument for trade.
=>455	SecurityAltID	N	String32	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	String	
461	CFIcode	N	String6	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	Type	Details
<Header group>		Y		Message type 'AR'.
571	TradeReportID	N*	String80	Trade number within the Participant's internal accounting system.
751	TradeReportRejectReason	Y*	int	Cancellation code.  If '0' - the trade is accepted successfully.  If not '0' - the trade is not accepted successfully.
1003	TradeID	N	String	OTC trade registration number assigned by the Exchange.
58	Text	N	String	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	Type	Details
<Header group>		Y		Message type 'AE'.
856	TradeReportType	Y*	int	= '5' (No/Was)
1003	TradeID	Y	String	OTC trade registration number assigned by the Exchange.
571	TradeReportID	N*	String80	Trade number within the Participant's internal accounting system.
1040	SecondaryTradeID	N	String32	Purchase agreement number. Default value is ''.
1125	OrigTradeDate	Y*	LocalMktDate	Date of trade in YYYYMMDD format.
552	NoSides = 1	Y	NumInGroup	Trade leg:
=>54	Side	Y	char	• '1' - buy (B)  • '2' - sell (S)  All other values of the 'Side' tag are invalid and will be rejected.
=>453	NoPartyIDs = 2	Y*	NumInGroup	
	=>448 PartyID	Y*	String	Participant's name on trade.
	=>447 PartyIDSource = D	Y*	char	Allowable values in <b>PartyID</b> :  • 'P' - Participant themselves  • 'A' - Client
	=>452 PartyRole = 3 (ClientID)	Y*	int	
	=>448 PartyID	Y*	String	Account on trade
	=>447 PartyIDSource = D	Y*	char	Allowable values in <b>PartyID</b> :  • 'P' - Participant's account  • 'A' - Client's account
	=>452 PartyRole = 1 (Executing Firm)	Y*	int	
55	Symbol	Y	String18	Security code assigned by the Exchange.

Tag	Field	Mandatory	Type	Details
32	LastQty	Y	Qty	Number of securities in trade. A fractional quantity is possible for all securities types.
31	LastPx	Y	Price16.5	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*	Currency	Price currency code:  <ul style="list-style-type: none"> <li>• currency code (RUB - Rouble, USD - US dollar, EUR - Euro; and other currencies for which the Central Bank sets the exchange rate);</li> <li>• PCT - percentage of the face value (for trades in bonds).</li> </ul>
64	SettlDate	Y	LocalMktDate	The last date for parties to fulfill their payment and settlement obligations according to the specified period of time in YYYYMMDD format.  If date of payment and date of settlement differ, the latest date is used.
120	SettlCurrency	Y	Currency	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	Exchange	Stock exchange code to perform report for.  Allowable code:  <ul style="list-style-type: none"> <li>• 'M' - Moscow Exchange (default value)</li> </ul>
22	SecurityIDSource = 4	N	String	ISIN code of the instrument for trade. Default value is ' '.
48	SecurityID	N	String32	
454	NoSecurityAltID = 1	N	NumInGroup	State registration code of the instrument for trade.
=>455	SecurityAltID	N	String32	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	String	
461	CFICode	N	String6	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	Тип	Описание
	<Группа Header>	Y		Тип сообщения "AR".
571	TradeReportID	N*	String80	Trade number within the Participant's internal accounting system.
751	TradeReportRejectReason	Y*	int	Cancellation code.  If '0' - the trade is updated successfully.  If not '0' - the trade is not updated successfully.
1003	TradeID	Y	String	OTC trade registration number assigned by the Exchange.
58	Text	N	String	The field contains:  <ul style="list-style-type: none"> <li>• if rejected - text description of errors, due to which it is impossible to update the trade</li> <li>• if accepted - text description of some notes about updating of trade</li> </ul>

### 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	Type	Details
	<Header group>	Y		Message type 'AE'.
856	TradeReportType	Y*	int	= '6' (Trade Report Cancel)
1003	TradeID	Y*	String	OTC trade registration number assigned by the Exchange.
571	TradeReportID	N*	String80	Trade number within the Participant's internal accounting system.
1040	SecondaryTradeID	N	String32	Purchase agreement number.

Tag	Field name	Mandatory	Type	Details
1328	RejectText	N	String256	Trade cancellation reason.

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

Tag	Field name	Mandatory	Type	Details
<Header group>		Y		Message type 'AR'.
571	TradeReportID	N*	String80	Trade number within the Participant's internal accounting system.
751	TradeReportRejectReason	Y*	int	Cancellation code. If '0' - the trade is deleted. If not '0' - the trade is not deleted.
1003	TradeID	Y	String	OTC trade registration number assigned by the Exchange.
58	Text	N	String	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	Type	Details
<Header group>		Y		Message type 'AE'.
1003	TradeID	Y*	String	OTC trade registration number assigned by the Exchange.
856	TradeReportType	Y*	int	Message type. <ul style="list-style-type: none"> <li>= '0' (Submit) - adding trade</li> <li>= '5' (No/Was) - changing trade</li> <li>= '6' (Trade Report Cancel) - cancelling trade</li> </ul>
1041	FirmTradeID	Y*	String7	Participant's ID added by the OTC-monitor system.
=>453	NoPartyIDs = 2	Y*	NumInGroup	
	=>448 PartyID	Y*	String	Participant's name on trade.
	=>447 PartyIDSource = D	Y*	char	Allowable values:
	=>452 PartyRole = 3 (ClientID)	Y*	int	<ul style="list-style-type: none"> <li>'P' - Participant themselves</li> <li>'A' - Client</li> </ul>
	=>448 PartyID	Y*	String	Account on trade
	=>447 PartyIDSource = D	Y*	char	Allowable values in :
	=>452 PartyRole = 1 (Executing Firm)	Y*	int	<ul style="list-style-type: none"> <li>'P' - Participant's account</li> <li>'A' - Client's account</li> </ul>
552	NoSides = 1	Y	NumInGroup	Trade leg:
=>54	Side	Y	char	<ul style="list-style-type: none"> <li>'1' - buy</li> <li>'2' - sell</li> </ul>
55	Symbol	Y	String18	Security code assigned by the Exchange.
32	LastQty	Y	Qty	Number of securities in trade. A fractional quantity is possible for all securities types.
15	Currency	Y*	Currency	Price currency code: <ul style="list-style-type: none"> <li>currency code (RUB - Rouble, USD - US dollar, EUR - Euro; and other currencies for which the Central Bank sets the exchange rate);</li> <li>PCT - percentage of the face value (for trades in bonds).</li> </ul>
75	TradeDate	Y*	LocalMktDate	Date of trade
63	SettlType	Y*	String	Trade execution period, calendar days.
64	SettlDate	Y	LocalMktDate	The last date for parties to fulfill their payment and settlement obligations according to the specified period of time in YYYYMMDD format. If date of payment and date of settlement differ, the latest date is used.
60	TransactTime	Y*	UTCTimestamp	Date of trade registration

Tag	Field	Mandatory	Type	Details
571	TradeReportID	N	String80	Trade number within the Participant's internal accounting system.
1040	SecondaryTradeID	N	String32	Purchase agreement number.
31	LastPx	Y	Price16.5	Price of single security in trade.
1301	MarketID	N	Exchange	Stock exchange code to perform report for.  Allowable codes: • 'M' - Moscow Exchange (default value)
120	SettlCurrency	Y	Currency	Settlement currency code (RUB - Rouble, USD - US dollar, EUR - Euro; and other currencies for which the Central Bank sets the exchange rate).
58	Text	N	String	Text description of some notes about procession of trade
22	SecurityIDSource = 4	N	String	ISIN code of the instrument for trade
48	SecurityID	N	String32	
454	NoSecurityAltID = 1	N	NumInGroup	State registration code of the instrument for trade.
=>455	SecurityAltID	N	String32	Empty, if the instrument issue was not specified by Participant.
=>456	SecurityAltIDSource = 8	N	String	
20020	LastPxRub	Y	String	Price of a single security in Russian Ruble.
461	CFICode	N	String6	CFI code of the instrument with which the trade was made. Default value is ''.