



FIX Rules of Engagement

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1. Introduction

This document contains the FIX interface specification for OSL | Exchange trading platform (henceforth referred to as "the Exchange"). The document serves as a technical reference for the Exchange participant when building applications that interact with the Exchange through FIX.

1.1 FIX Onboarding Process

All clients will have to go through conformance tests to ensure that the client's implementation conforms to the specification outlined in this document. The certification process will test the message flow that clients need.

This table below shows the activities involved.

Activity	Owner	Completed
Obtain source IP from FIX client for UAT and PROD	FIX Client	
Provide reason/purpose to connect to the Exchange	FIX Client	
Register order management and settlement accounts for FIX user creation via trading platform	FIX Client	
Provide FIX Rules of Engagement to client	Exchange	
Provide FIX conformance test plan to client	Exchange	
Generate CSR key for stunnel certificate	FIX Client	
Sign the CSR key from client and send back to client	Exchange	
Create FIX session(s) and open stunnel port to FIX engine	Exchange	
Whitelist source IP and port from firewall	Exchange	
Provide stunnel connection detail/FIX credentials to client	Exchange	
Engage client to test with Exchange	FIX Client	
Certify FIX client with the conformance test results	Exchange	

1.2 Connectivity Details

Access to the platform has to go through TLS/SSL encrypted TCP connection over the Internet.

FIX clients have to set up a tunnel to route FIX traffic.

The OSL FIX API supports three FIX session types:

Order Management Session for managing orders (place, amend, cancel)

Market Data Session for subscribing to streaming prices

Drop Copy Session for passively receiving trade executions

1.3 Message Flow

OSL FIX API implemented FIX version 4.4 protocol.

1.3.1 Supported Message Types

Administrative messages:

- Logon
- Heartbeat
- Test Request
- Session-level Reject
- Logout
- Resend Request
- Sequence Reset

Application messages supported in the order management session:

- New Order Single
- Order Cancel / Replace Request
- Order Cancel Request
- Execution Report
- Order Cancel Reject

Application messages supported in the drop copy session:

- Execution Report

Application messages supported in the market data session:

- Market Data Request
- Market Data Request Reject
- Market Data – Snapshot / Full Refresh

1.4 Session Management

FIX sessions are uniquely defined by SenderCompID and TargetCompID. Any attempt to establish an additional FIX session using the same SenderCompID and TargetCompID will be rejected.

When either side of a FIX session has not sent any message for HeartBtInt<108> seconds, the FIX client/Exchange will transmit a Heartbeat<0> message. If one side of the connection does not receive any message for (HeartBtInt<108> + (HeartBtInt<108> / 5)) seconds, the other side will transmit a TestRequest<1> message. If there is still no Heartbeat<0> message received afterward, a force logout should be initiated from either end to disconnect the session.

In case of connectivity loss with the Exchange, the Exchange expects the FIX client to re-login with the next expected sequence numbers and to handle the sequence synchronization if there's any sequence gap detected.

For Market Data (MD) Session, the Exchange doesn't support session management. Every MD session needs to re-login with force reset sequence number (ResetSeqNumFlag<141>=Y).

Note that the Exchange has a daily maintenance period from 6:30 am HKT to 7:00 am HKT (5:30am HKT to 6:00 am if DST). After the maintenance, it is expected that Order Management (OM) and Drop Copy (DC) session logon with MsgSeqNum <34> =1 and ResetSeqNumFlag<141>=Y.

2. Session Messages

2.1 Header and Trailer

All FIX messages must begin with header fields and end with a trailer field.

Header

Tag	Field Name	Data Type	Req'd	Comments
8	BeginString	string	Y	Identifies beginning of new message and protocol version. Always the first field in a message. Value is FIX.4.4.
9	BodyLength	int	Y	Message length, in bytes, forward to the CheckSum<10> field. Always second field in message and unencrypted
35	MsgType	string	Y	Defines message type. Always third field in message.
34	MsgSeqNum	int	Y	Integer message sequence number.
49	SenderCompID	int	Y	Uses to identify a firm which sends the message.
52	SendingTime	string	Y	Time of message transmission (in UTC).
56	TargetCompID	string	Y	Uses to identify a receiving firm.

Trailer

Tag	Field Name	Data Type	Req'd	Comments
10	Checksum	int	Y	Simple checksum. Always defined as three characters in the last field in the message.

2.2 Heartbeat <0>

The client and the Exchange transmit the Heartbeat <0> message to verify connectivity during periods of inactivity. The Exchange will send a Heartbeat anytime it has not transmitted a message for the heartbeat interval. The client is expected to employ the same logic.

Heartbeat

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = 0

112	TestReqID	string	Y	Identifier to be returned in resulting Heartbeat
Standard trailer				

2.3 Logon <A>

The Logon <A> message authenticates a user and starts a session. It must be the first message sent by any application requesting to initiate a FIX session. A message of the same type will be sent to acknowledge the logon.

Logon

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = A
98	EncryptMethod	int	Y	Method of encryption. Valid values: 0 = None / other
108	HeartBtInt	int	Y	Heartbeat interval (seconds)
141	ResetSeqNumFlag	boolean	Y	Indicates that both sides of the FIX session should reset sequence numbers. Values: Y = Yes, reset sequence numbers N = No
553	Username	string	Y	UserId
554	Password	string	Y	Password
Standard trailer				

2.4 Test Request <1>

The TestRequest <1> message forces a heartbeat from the opposing application in order to verify the FIX session status, upon receiving receipt of a TestRequest the recipient should reply with a Heartbeat message stating the corresponding TestReqID.

Test Request

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = 1
112	TestReqID	string	Y	Identifier to be returned in resulting Heartbeat
Standard trailer				

2.5 Reject <3>

The Reject <3> message is issued by the server when a message is received but cannot be properly processed due to deviation from the FIX specification or system error. The reason for the rejection may be given in the Text <58> field.

Reject

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = 3
45	RefSeqNum	int	Y	MsgSeqNum <34> of the rejected message
58	Text	int	N	Message that explains reject reason
Standard trailer				

2.6 Logout <5>

The Logout <5> message is sent by either side to initiate a session termination. A message of the same type will be sent to acknowledge the logout.

Logout

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = 5
58	Text	String	N	Message that explains logout reason. Normal client logout "remote initiated logout" Force logout due to inactivity "Remote has ignored my test request. Aborting session..."
Standard trailer				

2.7 Resend Request <2>

The Resend Request <2> message can be sent by either side to initiate the retransmission of messages. It can be used if a sequence number gap is detected, or if either side lost a message, or as a function of the initialization process.

Resend Request

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = 2
7	BeginSeqNo	int	Y	Sequence number of first message in range to be resent.
16	EndSeqNo	int	Y	Sequence number of last message in range to be resent.
Standard trailer				

2.8 Sequence Reset <4>

The Sequence Reset <4> message is used by the sending application to reset the incoming sequence number on the opposing side.

Sequence Reset

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = 4
123	GapFillFlag	boolean	Y	Indicates replacing administrative or application messages which will not be resent. Valid values: <ul style="list-style-type: none"> Y = Gap Fill mode N = Sequence Reset mode
36	NewSeqNo	int	Y	New sequence number
Standard trailer				

3. **Cancel On Disconnect**

FIX client can request to enable Cancel on Disconnect function so that all open orders submitted through a FIX session will be automatically cancelled when the server identifies a disconnection of the client session in the following scenarios:

- graceful logout by FIX client
- ungraceful logout from either FIX server/client due to Test Request with no acknowledgement
- ungraceful FIX socket disconnection
- exchange downstream error/timeout

4. Order Execution

4.1 General Information

4.1.1 Instrument

FIX client retrieves the list of supported currency pairs from the Exchange. (The Exchange does not support Security Definition Request <c> message). Every order request message has to specify the instrument in Symbol <55>.

e.g. 55=BTCUSD, the Exchange instrument shortname

4.1.2 OrdType <40>

The Exchange supports the following order types specify in OrdType<40> field:

- 1 - Market Order
- 2 - Limit Order

4.1.3 TimelnForce <59>

The Exchange supports the following types TimelnForce<59> field:

- 1 - Good Till Cancel (GTC)
- 3 - Immediate or Cancel (IOC)

4.1.4 OrdStatus <39>

The Exchange supports the following order status for OrdStatus<39> field:

- 0 - New
- 1 - Partially filled
- 2 - Filled
- 4 - Cancelled
- 5 - Replaced
- 8 - Rejected
- C - Expired

Note that the Exchange does not support Pending OrdStatus (Pending Cancel<6>, Pending New<A> and Pending Replace<E>), the order status will be responded with the final result immediately. For example, in the event of receiving Order Cancel Request, the system will respond with Cancelled<4> immediately.

4.1.5 ExecType <150>

The Exchange supports the following execution type for ExecType <150> field:

- 0 - New
- 4 - Cancelled
- 5 - Replaced
- 8 - Rejected
- C - Expired
- F - Trade (partial fill or fill)

4.2 New Order Single <D>

The New Order Single message is used to submit order to the Exchange for execution.

New Order Single

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = D
1	Account	string	Y	The Exchange user uuid which is the same as the one specify in Logon<A> message Username<553> field
21	HandlInst	int	N	Instructions for order handling on the Exchange Valid value: 1 = Automated execution order, private, no intervention
11	ClOrdID	string	Y	Unique identifier of the order as assigned by client.
38	OrderQty	float	Y	Quantity to trade
44	Price	float	Y	Price per unit of quantity (e.g. per 1 BTC coin)
40	OrdType	int	Y	Order type. Valid values: <ul style="list-style-type: none"> • 1 = Market • 2 = Limit
54	Side	int	Y	Side of order. Valid values: <ul style="list-style-type: none"> • 1 = Buy • 2 = Sell
55	Symbol	string	Y	Ticker symbol for instrument to trade
59	TimeInForce	int	Y	Specifies how long the order remains in effect. Valid values: <ul style="list-style-type: none"> • 1 - Good Till Cancel (GTC) • 3 - Immediate or Cancel (IOC) <p>NOTE: Exchange will convert to GTC automatically if invalid value detected</p>
60	TransactTime	string	Y	Time of execution/order creation in UTC i.e. yyyyMMdd-hh:mm:ss:xxx
453	NoPartyIDs	int	Y	A repeating group which should contain unique combinations of below tags

				<ul style="list-style-type: none"> • PartyID <448> • PartyIDSource <447> • PartyRole <452>
>>448	PartyID	string	Y	Party identifier/code. It can be an Exchange firm name or user unique identifier that is the same as tag 1. e.g. XXXX_GROUP
>>447	PartyIDSource	string	Y	Identifies class or source of PartyID <448> Valid value: <ul style="list-style-type: none"> • D = Proprietary/Custom code
>>452	PartyRole	int	Y	Identifies the type of PartyID <448> Valid values: <ul style="list-style-type: none"> • 1 = Executing Firm • 12 = Executing Trader • 5 = Investor ID (subaccount identifier)

4.3 Order Cancel / Replace Request <G>

The Order Cancel/Replace Request <G> message is used to amend an existing order.

Order Cancel / Replace Request

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = G
11	ClOrdID	string	Y	Unique identifier of the order as assigned by client.
41	OrigClOrdID	string	Y	ClOrdID <11> of the existing order that the amend request want to execute
37	OrderID	string	N	Unique identifier for Order as assigned by the Exchange.
44	Price	float	Y	Price per unit of quantity (e.g. per 1 BTC coin)
38	OrderQty	float	Y	Quantity to trade
40	OrdType	int	Y	Order type. Valid values: <ul style="list-style-type: none"> • 1 = Market • 2 = Limit
54	Side	int	Y	Side of order. Valid values: <ul style="list-style-type: none"> • 1 = Buy • 2 = Sell
55	Symbol	string	Y	Ticker symbol for Instrument to trade
59	TimeInForce	int	Y	Specifies how long the order remains in effect. Valid values: <ul style="list-style-type: none"> • 1 - Good Till Cancel (GTC) • 3 - Immediate or Cancel (IOC) <p>NOTE: Exchange will convert to GTC automatically if invalid value detected</p>
60	TransactTime	string	Y	Time of execution/order creation in UTC i.e. yyyyMMdd-hh:mm:ss:xxx
453	NoPartyIDs	int	Y	A repeating group which should contain unique combinations of below tags <ul style="list-style-type: none"> • PartyID <448>

				<ul style="list-style-type: none"> • PartyIDSource <447> • PartyRole <452>
>>448	PartyID	string	Y	Party identifier/code. It can be an Exchange firm name or user unique identifier that is the same as tag 1. e.g. XXXX_GROUP
>>447	PartyIDSource	string	Y	Identifies class or source of PartyID <448> Valid value: <ul style="list-style-type: none"> • D = Proprietary/Custom code
>>452	PartyRole	int	Y	Identifies the type of PartyID <448> Valid values: <ul style="list-style-type: none"> • 1 = Executing Firm • 12 = Executing Trader
Standard trailer				

4.4 Order Cancel Request <F>

The Order Cancel Request <F> message is used to cancel an existing order with remaining quantity.

Order Cancel Request

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = F
11	ClOrdID	string	Y	Unique identifier of the order as assigned by client.
41	OrigClOrdID	string	Y	ClOrdID <11> of the existing order that the cancel request want to execute
37	OrderID	string	N	Unique identifier for Order as assigned by the Exchange
38	OrderQty	float	Y	Quantity to trade
54	Side	int	Y	Side of order. Valid values: <ul style="list-style-type: none"> • 1 = Buy • 2 = Sell
55	Symbol	string	Y	Ticker symbol for Instrument to trade
60	TransactTime	string	Y	Time of execution/order creation in UTC i.e. yyyyMMdd-hh:mm:ss:xxx
Standard trailer				

4.5 Execution Report <8>

The Execution Report <8> message is used to

- acknowledge the receipt of an order
- confirm changes to an existing order (i.e. cancelled or replaced)
- reject orders

Execution Report

Tag	Field Name	Data Type	Req'd	Comments
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Standard header - Outgoing				MsgType (35) = 8
37	OrderID	string	Y	Unique identifier for Order as assigned by the Exchange
198	SecondaryOrderID	string	N	Unique identifier for Order as assigned by the Exchange(in a different format)
11	ClOrdID	string	Y	Unique identifier of the order as assigned by client.
41	OrigClOrdID	string	Y	ClOrdID <11> of the existing order that the amend/cancel request want to execute
453	NoPartyIDs	int	Y	A repeating group which should contain unique combinations of below tags <ul style="list-style-type: none"> • PartyID <448> • PartyIDSource <447> • PartyRole <452>
>>448	PartyID	string	Y	Party identifier/code. It can be an Exchange firm name or user unique identifier that is the same as tag 1. e.g. XXXX_GROUP
>>447	PartyIDSource	string	Y	Identifies class or source of PartyID <448> Valid value: <ul style="list-style-type: none"> • D = Proprietary/Custom code
>>452	PartyRole	int	Y	Identifies the type of PartyID <448> Valid values: <ul style="list-style-type: none"> • 1 = Executing Firm • 12 = Executing Trader • 5 = Investor ID (subaccount identifier)
17	ExecID	string	Y	Unique identifier of execution message as assigned by the Exchange
527	SecondaryExecID	string	N	Unique identifier for executed fill as assigned by the Exchange(in a different format), an alphanumeric string of no more than 20 characters
150	ExecType	string	Y	Describes the specific Execution Report while OrdStatus <39> will always identify the current order status Valid values:

				<ul style="list-style-type: none"> • 0 - New • 4 - Canceled • 5 - Replaced • 8 - Rejected • C - Expired • F - Trade (partial fill or fill)
39	OrdStatus	string	Y	<p>Identifies current status of order. Valid values:</p> <ul style="list-style-type: none"> • 0 - New • 1 - Partially filled • 2 - Filled • 4 - Cancelled • 5 - Replaced • 8 - Rejected • C - Expired
1	Account	string	Y	The Exchange user uuid which is the same as the one specify in Logon <A> message Username <553> field
660	AcctIDSource	int	Y	<p>Uses to identify the source of the Account <1> code. Valid value:</p> <ul style="list-style-type: none"> • 99 - Other (custom or proprietary)
63	SettleType	int	Y	<p>Indicates order settlement period. Valid value:</p> <ul style="list-style-type: none"> • 0 - Regular
55	Symbol	string	Y	Ticker symbol for Instrument to trade
54	Side	int	Y	<p>Side of order. Valid values:</p> <ul style="list-style-type: none"> • 1 = Buy • 2 = Sell
854	QtyType	int	Y	<p>Type of quantity Valid values:</p> <ul style="list-style-type: none"> • 0 = Units (currency)
38	OrderQty	float	Y	Quantity to trade
40	OrdType	int	Y	<p>Order type. Valid values:</p> <ul style="list-style-type: none"> • 1 = Market • 2 = Limit

59	TimeInForce	int	Y	Specifies how long the order remains in effect. Valid values: <ul style="list-style-type: none"> • 1 - Good Till Cancel (GTC) • 3 - Immediate or Cancel (IOC) NOTE: Exchange will convert Day Order to GTC automatically to GTC
423	PriceType	int	Y	Code to represent the price type. Valid values: <ul style="list-style-type: none"> • 2 = Per unit
44	Price	float	Y	Price per unit of quantity (e.g. per 1 BTC coin)
1057	AggressorIndicator	boolean	N	Used to identify whether the order initiator is an aggressor or not in the trade. <ul style="list-style-type: none"> • Y - Order initiator is aggressor • N - Order initiator is passive
151	LeavesQty	float	Y	Outstanding quantity for further execution.
14	CumQty	float	Y	Total quantity filled
6	AvgPx	float	Y	Calculated average price of all fills on this order.
75	TradeDate	string	Y	Indicates date of trade(UTC) referenced in YYYYMMDD format
60	TransactTime	string	Y	Time of execution/order creation in UTC i.e. yyyyMMdd-hh:mm:ss:xxx
381	GrossTradeAmt	float	N	Total amount traded (e.g. CumQty <14> * AvgPx <6>) expressed in units of currency.
119	SettlCurrAmt	float	Y	Total amount due expressed in settlement currency
120	SettlCurrency	string	Y	Currency code of settlement denomination. Valid values e.g.: <ul style="list-style-type: none"> • USD • USDT

136	NoMiscFee	int	Y	Number of repeating groups of miscellaneous fees
>>137	MiscFeeAmt	float	Y	Miscellaneous fee value
>>138	MiscFeeCurr	string	Y	Currency of miscellaneous Valid values e.g.: <ul style="list-style-type: none">• USD• USDT
>>139	MiscFeeType	int	Y	Indicates type of miscellaneous fee Valid value: <ul style="list-style-type: none">• 7=Other
58	Text	string	Y	providing supplemental information on the order
Standard trailer				

4.6 Order Cancel Reject <9>

When an order cancellation or order replacement fails, the system will send this message.

Order Cancel Reject

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = 9
11	ClOrdID	string	Y	Unique identifier of the order as assigned by client.
41	OrigClOrdID	string	Y	ClOrdID <11> of the existing order that the replace/cancel request want to execute
37	OrderID	string	N	Unique identifier for Order as assigned by the Exchange
39	OrdStatus	string	Y	Identifies current status of order. Valid values: <ul style="list-style-type: none"> • 0 - New • 1 - Partially filled • 2 - Filled • 4 - Cancelled • 5 - Replaced • 8 - Rejected • C - Expired
434	CxlRejResponseTo	int	Y	Identifies the type of request that the Cancel Reject <9> is in response to. Valid values: <ul style="list-style-type: none"> • 1 = Order Cancel Request <F> • 2 = Order Cancel/Replace Request <G>
102	CxlRejReason	int	Y	Code to identify reason for canceling rejection. Valid values: <ul style="list-style-type: none"> • 0 = Too late to cancel
58	Text	string	Y	providing supplemental information on reject reason
Standard trailer				

5. Market Data

This section describes the message flow for the Exchange market data distribution functionality.

5.1 Market Data Request <V>

Market Data Request

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = V
146	NoRelatedSym	int	Y	Specifies the number of repeating Symbol <55> tags
55	Symbol	string	Y	e.g. BTCUSD
262	MDReqID	string	Y	Unique identifier for Market Data Request
263	SubscriptionRequestType	int	Y	Indicates to the other party what type of response is expected. Valid values: <ul style="list-style-type: none"> 0 = Snapshot 1 = Snapshot + Updates (Subscribe) 2 = Disable previous Snapshot + Update Request (Unsubscribe)
264	MarketDepth	int	Y	Depth of market for Book Snapshot Valid values: <ul style="list-style-type: none"> 0 - full market depth 1 - top of book > 1 - full market depth
265	MDUpdateType	int	Y	Specifies the type of Market Data update Valid values: <ul style="list-style-type: none"> 1 = Incremental Refresh
267	NoMDEntryTypes	int	Y	Specifies the number of repeating MDEntryType <269> entries.
>>269	MDEntryType	char	Y	Entries that the firm requesting the Market Data is interested in receiving. There can be multiple fields, as defined by field 267 Valid values: <ul style="list-style-type: none"> 0 = Bid 1 = Offer
Standard trailer				

5.2 Market Data - Snapshot/Full Refresh <W>

Market Data - Snapshot/Full Refresh

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = W
262	MDReqID	string	Y	Unique identifier for Market Data Request
55	Symbol	string	Y	e.g. BTCUSD
451	NetChgPrevDay	float	Y	Net change from previous day's closing price vs. last traded price
268	NoMDEntries	int	Y	Number of repeating groups following
>>54	Side	Int	N	When MDEntryType(269) = 2(trade), this tag will appear.
>>269	MDEntryType	char	Y	<p>Entries that the firm requesting the Market Data is interested in receiving. There can be multiple fields, as defined by field 267.</p> <p>Valid values:</p> <ul style="list-style-type: none"> ● 0 = Bid ● 1 = Offer ● 2 = Trade ● 4 = Opening Price ● 5 = Closing Price ● 7 = Trading Session High Price ● 8 = Trading Session Low Price ● B = Trade Volume
>>270	MDEntryPx	price	Y	Price of the Market Data Entry
>>271	MDEntrySize	int	Y	Number of units available (or the maximum trade size) at the time the market data snapshot was generated
>>272	MDEntryDate	string	Y	UTC date of rate data i.e. yyyyMMdd
>>336	TradingSessionID	string	Y	<p>Identifier for Trading Session</p> <p>Valid values:</p> <ul style="list-style-type: none"> ● CONTINUOUS
>>346	NumberOfOrders	int	Y	Number of orders in the market.
>>290	MDEntryPositionNo	int	Y	Display position of a bid or offer, numbered from most competitive to least competitive
Standard trailer				

5.3 Market Data – Incremental Refresh <X>

Market Data – Incremental Refresh

Tag	Field Name	Data Type	Req'd	Comments
Standard header				MsgType (35) = X
262	MDReqID	string	Y	Unique identifier for Market Data Request
268	NoMDEntries	int	Y	Number of repeating groups following
>>54	Side	Int	N	When MDEntryType(269) = 2(trade), this tag is appeared to indicate if the trade aggressor Valid values: <ul style="list-style-type: none"> • 1 = Buy • 2 = Sell
>>279	MDUpdateAction	int	Y	Type of Market Data update action Valid values: <ul style="list-style-type: none"> • 1 = Change • 2 = Delete
>>269	MDEntryType	char	Y	Entries that the firm requesting the Market Data is interested in receiving. There can be multiple fields, as defined by field 267 Valid values: <ul style="list-style-type: none"> • 0 = Bid • 1 = Offer • 2 = Trade • 7 = Trading Session High Price • 8 = Trading Session Low Price • B = Trade Volume
>>278	MDEntryID	string	Y	Unique Market Data Entry identifier.
>>55	Symbol	string	Y	e.g. BTCUSD
>>270	MDEntryPx	price	Y	Price of the Market Data Entry
>>271	MDEntrySize	int	Y	Number of units available (or the maximum trade size) at the time the market data snapshot was generated
>>346	NumberOfOrders	int	Y	Number of orders in the market.
Standard trailer				

5.4 Market Data – Market Data Request Reject <Y>

Market Data Request Reject

Tag	Field Name	Data Type	Req'd	Comments
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Standard header				MsgType (35) = Y
262	MDReqID	string	Y	Unique identifier for Market Data Request
281	MDReqRejReason	char	Y	Reason for a Market Data request rejection. Valid values: <ul style="list-style-type: none">• 0 = Unknown symbol• 1 = Duplicate MDReqID <262>• 4 = Unsupported Subscription Request Type
Standard trailer				

6. Drop Copy

This section describes the message flow for the Exchange drop copy functionality. FIX drop copy is designed to deliver real-time information about trading activity taking place at the Exchange and about order activity when orders are entered, modified, canceled or executed.

Two subscription types are available:

- Session Reconciliation - consists of only trade-related transactions of a particular order management session.
- Market Level Reconciliation - consists of order and trade-related transactions for the market order book, only available for OSL market surveillance partners.

7. Document Revision History

Document Version	Change Date	Author	Changes
V1.1.5	Jun 8th, 2020	Eric Siu	Update on 35=D, 35=8, for tag<452> PartyRole 5 = Investor ID (subaccount identifier)
V1.1.4	May 13th, 2020	Eric Siu	Update on 35=V, tag<264> description
V1.1.3	April 16, 2020	Henry Chan	Update on 35=X and 35=W. tag<54> is added Update on 35=8, tag<1057> is added Update on 35=V, tag<265> and tag<264> are clarified
V1.1.2	April 15, 2020	Henry Chan	Update 35=V for the tag<265>
V1.1.1	April 14, 2020	Henry Chan	Update 35=D, 35=G for tag<448>. Update definition of tag<264>
V1.1.0	April 2, 2020	Eric Siu	Update section of Session management and ER
V1.1.0	Feb 17, 2020	Henry Chan	Add section of FIX Drop Copy and Session management
V1.0.0	Feb 6th, 2020	Eric Siu	Initial revision