



UBS MTF Market Notice

Large in Scale and Order book Sweep

18 November 2016

Dear Member,

As announced in our Market Notice N13, UBS MTF has received regulatory approval to use a Large in Scale Waiver (LIS) in addition to our current Reference Price Waiver (RPW) for executions in the Mid, Bid and Offer order books. Both waivers will be available in each of the three order books until the implementation of MiFID II.

UBS MTF also plans to implement a new execution instruction to allow its Members to seek liquidity in the three order books with one single order, known as Order Book Sweep (OBS).

Both of these functional enhancements will be available in Production from early 2017, the implementation date will be communicated to all Members via Market Notice in due course. These new functionalities are now available in our test environment and we invite all Members to ensure that conformance testing is undertaken in advance.

The additional Order Book Sweep functionality requires UBS MTF to identify the reference price at which (primary best bid, mid, or offer) an order was executed and therefore the *Execution Instruction* FIX tag will be sent back to Members for all execution reports whether or not the Order Book Sweep functionality is used; UBS MTF plans to start sending this tag to Members by 12 December 2016.

With the implementation of the Large in Scale functionality, UBS MTF will also send an additional FIX tag back to its Members on fully filled or partially filled execution reports which indicates which pre-trade transparency waiver the execution occurred under; the *WaiverType* FIX tag is used for this purpose.

A revised Rules of Engagement document has been published on our website under <https://www.ubs.com/global/en/investment-bank/multilateral-trading-facility/member-information.html> and includes a marked-up version highlighting the relevant changes related to the additional waiver and new Order Book Sweep functionality.

Members that wish to validate the new waiver FIX tag or test the new LIS and Order Book Sweep functionalities are invited to start testing from today 18 November 2016. Members can also contact our Deployment & Testing team at dl-dat-uk@ubs.com to schedule their conformance testing.

UBS MTF Notices and documentation are available at <http://ubs.com/mtf>.

If you have any queries regarding this notice please contact the UBS MTF Supervisors at +44 20 7568 2052 or ubs_mtf@ubs.com.

UBS MTF Management

Notice 18, 2016

UBS Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

UBS Limited is a subsidiary of UBS AG.

UBS Limited is a company limited by shares incorporated in the United Kingdom registered in England and Wales with number 2035362. Registered office: 5 Broadgate, London EC2M 2QS.

UBS MTF FIX Interface

Rules of Engagement

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Version	Date	Changes and remarks
4.0	November 2016	Sweep order and Large in Scale execution support (sections 3.10 and 3.11) Introduce optional granularity of microseconds on message timestamps at 3.6
3.5	August 2016	Added information on session times and order expiry at end of day (section 3.5). Typographical correction at 3.4.
3.4.1	August 2016	Updated UBS Ltd company address.
3.4	June 2016	Return an execution report following attempted order modification/ cancellation where this is prevented by an execution immediately prior (3.8, Pending messages).
3.3	April 2016	Added tag 15 – Currency in FIX Message details . Updated examples in Uniform Symbolology to reflect recent changes by Reuters for XVTX instruments.
3.2	February 2016	Added tag 1 – Account.
3.1	October 2015	Clarifications on requirement to send tag 47, and reject reasons documented for tags 102 and 103. Corrected description of replace request handling for unacknowledged orders.
3.0	September 2015	Major update for new connectivity model. Transact time now sent on all execution reports.
2.5	June 2015	New layout. Timestamp precision increased.
2.4	December 2014	Updated to reflect new names of external organisations.
2.3	September 2013	Clarified MinQty usage.
2.2	June 2012	Tag 9004 – Internalization.
2.1	April 2012	Minor clarifications.
2.0	September 2011	Sent LastLiquidityInd on execution reports.
1.9	August 2011	Refer to ESMA, rather than CESR.
1.8	August 2011	Introduces Bid and Offer order books.
1.7	March 2011	Minor clarifications for pegged orders.
1.6	November 2010	Initial version at launch.

1. Introduction

This document defines UBS MTF's implementation of the FIX protocol. The document is designed to facilitate the work required to establish trading connectivity and is intended to supplement the published FIX protocol specification [1] and the UBS MTF Rule Book [2].

2. Background

The Markets in Financial Instruments Directive (MiFID) was a catalyst for change in the European execution market place, with the result that the importance of credible electronic trading technology and the ability to harness technology to source liquidity have become paramount for the broking community.

UBS MTF operates as a "dark order book" and continuous matching is performed at the mid, bid or offer price of the primary market.

Access to UBS MTF is restricted to its members and requires separate documentation to the standard trading terms and conditions that regulate other execution services provided by UBS. This documentation can be obtained via your usual relationship manager, on the web at <http://ubs.com/mtf/>, or by contacting UBS MTF directly at ubs_mtf@ubs.com.

3. Functional Overview

3.1. General

UBS MTF accepts and matches Pegged orders only, on a non-discretionary basis using a price/time priority at the Bid, Mid or Offer of the Primary market. There is no minimum order size on UBS MTF. Members of UBS MTF may send either IOC or Day duration orders, and have the ability to set a Minimum Acceptable Quantity and Limit Price on all orders. Open orders are automatically cancelled at the end of each trading day.

3.2. Order Priority (effective January 2017)

Orders are matched according to waiver eligibility, price and time as specified in the UBS MTF Rulebook. If multiple orders are eligible to execute at the prevailing reference price, they are executed in the order in which they were received.

3.3. Minimum Acceptable Quantity (MAQ)

Where a partial fill occurs on an order that had an MAQ, should the remaining quantity on that order be below the MAQ the Minimum Acceptable Quantity will fall to one share. Orders received by UBS MTF with an MAQ that is greater than the order quantity are rejected.

3.4. Internalization

By default, orders from a member may be self-crossed.

Members can use a FIX instruction of '9004=4' on orders to prevent self-trading or intra-team trading (within the same member entity, see section 6 below).

Where a member operates under more than one member code, these may be configured by UBS MTF to act as a single family for the purpose of this instruction.

3.5. Session Times

UBS MTF operates during regular market hours in Europe, between 08:00 and 16:30 (UK time), and session times match those of the primary market where the underlying security is listed.

Matching is not performed outside the primary market's continuous trading phase.

There is no trading during auctions or halts. If trading on the primary market is suspended UBS MTF will suspend execution for each affected instrument until continuous trading is resumed. During these times orders may be entered, amended, and cancelled, but will not be executed.

Orders entered before market open, or after market close, will be rejected.

3.5.1. Order Expiry

Day orders remaining on the order book after market close will be cancelled at or shortly after 16:45. An unsolicited Execution Report (35=8) will be returned via FIX, with ExecType=Cancelled (150=4), OrdStatus=Cancelled (49=4).

3.6. Time Stamps

The *UTCTimestamp* fields (TransactTime, SendingTime, and OrigSendingTime) may be sent to UBS MTF in either whole seconds, milliseconds, or microseconds UTC, as specified in [3].

Members may elect to receive timestamps from UBS MTF at either microsecond- or millisecond-level precision. This is configured on a per-session basis, and defaults to microseconds for new sessions.

3.7. Cancel on Disconnect

Order entry sessions are configured by default to automatically cancel all open orders in the event of disconnection. Any outstanding execution reports will be returned during session recovery when connectivity is re-established.

3.8. Pending messages

UBS MTF allows cancellation when a new order has not yet been acknowledged, i.e. the order is in a 'Pending New' state. Amends / Cancels will be rejected by UBS MTF if the order is already in a 'Pending Amend' or 'Pending Cancel' state.

If an order Cancel or Cancel/Replace request is received by the FIX gateway, and is not accepted due to a fill occurring on the order immediately beforehand, a reject message will also be returned in a second Execution Report following the initial Execution Report notifying the member of the fill.

In summary:

Current Order State	Request	Outcome
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Current Order State	Request	Outcome
Pending New	Pending Cancel	Allowed
Pending New	Pending Amend	Amend is Rejected
Pending Amend / Pending Cancel	Pending Amend/ Pending Cancel	Second Request is Rejected
Working, Fill message in flight	Replace requested	Fill is delivered Replace Request is rejected as order is fully filled
Working, Partial Fill message in flight	Replace Requested	Fill is delivered Replace Request is rejected if unsuccessful
Working, Fill message in flight	Cancel requested	Fill is Delivered Cancel request is rejected as order is fully filled
Working, Partial Fill message in flight	Cancel requested	Fill is Delivered Cancel request is accepted

3.9. Drop Copy

Members may request a drop copy feed for executions on their FIX sessions. The format of the execution reports provided by this feed, and session-level messages, correspond to the details in section 7 below.

3.10. Sweep functionality (effective January 2017)

As an alternative to specifying a single peg price as an execution instruction, a participant may instruct that an order conduct either a half, or a full, sweep across peg types.

If a half sweep is instructed (FIX tag 18=h), UBS MTF will attempt to execute the order at the primary peg, and if no immediate execution is possible, the order will be eligible for execution at the mid-peg price.

If a full sweep is instructed (FIX tag 18=f), UBS MTF will attempt to execute the order at the primary peg, and if no immediate execution is possible, the order will be eligible for immediate execution at the mid-peg. If still not executed partially or fully at the mid, the order is lastly eligible for execution at the market peg.

If a day order is partially filled, the remaining quantity will be eligible for execution solely at the reference price at which the first execution occurred.

3.11. Large in Scale execution (effective January 2017)

Orders that are large in scale (LIS) compared to normal market size as defined in MiFID are eligible for execution on UBS under a MiFID pre-transparency waiver ("Large in Scale waiver"). Orders will only execute under the Large in Scale waiver if both the buy and sell orders meet the LIS criteria. If not fully filled against facing LIS orders, the remaining quantity of a resident LIS-eligible order may execute against either further Large in Scale orders, or against non-large in scale orders under the reference price waiver.

Orders that are not large in scale (LIS) compared to normal market size may only be executed on UBS MTF under the reference price waiver (RPW)

All orders on UBS MTF execute using the prevailing reference price of the instrument, i.e. the bid, mid or offer prices from the most relevant market for the instrument.

At each point in time where crossing may occur, if an order may be executed against either a large in scale order or a non-large in scale order, the former will take priority. Where multiple large in scale orders are eligible to execute against, price and time priority will then apply.

UBS MTF offers a choice to its members, and when submitting a LIS order a member may instruct UBS MTF that orders must match against other orders exclusively under the LIS waiver, by using the order attribute RequestedCrossingWaiverType, defined below.

For all instruments available for trading on UBS MTF, the minimum order value which qualifies as large in scale is determined using the Average Daily Turnover published by ESMA, considered in conjunction with the Large in Scale table as specified under MiFID¹. For instruments that are not priced in Euros, UBS MTF applies a currency conversion using the foreign exchange reference rates published the previous working day by the European Central Bank.

Orders that do not meet the criteria to be Large in Scale compared with normal market size under MiFID may only execute on UBS MTF under Reference Price Waiver according to the conditions set out in MAR 5.7.1(2)a, and will therefore be rejected if instructed as LIS only. If not instructed as LIS only they will be eligible for execution under reference price waiver only.

4. Connectivity

UBS MTF is vendor neutral, although there is existing connectivity with the following providers: Radianz, TNS and Fixnetix. It is also possible for members to cross-connect if they have presence in the Equinix LD4 Data Centre in Slough, or in Interxion London.

A restricting factor on the number of FIX sessions a member can have is the overall bandwidth of the member's line. The suggested bandwidth for a managed service is a 1MB line and 1G or 10G for a direct cross-connect.

Each member is allocated a TCP/IP port per connection – this port is unique to the member and a single connection is allowed per port.

In UAT, the use of an Internet session is recommended, as this allows members to begin testing and certification whilst awaiting the establishment of production connectivity. A UAT session via the member's chosen transport vendor is also possible, but certification would be delayed until this connectivity is in place.

¹ FCA Handbook, MAR 5.7 Pre-trade transparency requirements for shares, <https://www.handbook.fca.org.uk/handbook/MAR/5/7.html>, retrieved

5. Symbology

UBS MTF lists a subset of stocks in the ESMA list of approved securities for regulated markets, as well as Swiss listed stocks.

5.1. Uniform Symbology

In all cases the Symbol[55] value must be the Uniform Symbology (UMTF) code. This code has been adopted by a number of European execution venues to uniformly identify securities traded across Europe. The following details on how this code is generated have been extracted from the Wikipedia article - [Uniform Symbology](#) [4].

The Uniform Symbology Algorithm is designed to be human readable, fit into 6 characters, have no symbol clashes and where possible, be derivable from another, freely available code.

It will consist of a stock code followed by a single, lower case letter designating the primary listing exchange. The stock code will be derived from the "local code" published by the primary exchange. These will be truncated where necessary.

If the local code contains a single letter class designator of A through Z (eg. "STE A") then the single letter class designator shall be retained and the code will be truncated to a maximum of 4 characters, plus the single letter class (A through Z) designator. For some Nordic stocks the share designator will be prefixed with "SDB" (eg. "SDBA"). In this case the "SDB" should be removed and the single letter class (A through Z) designator will be retained.

Any codes containing spaces, periods, underscores or second words (other than the single letter class (A through Z) described above) will be truncated at the space, period, etc. All remaining non-alphanumeric characters should be removed.

Market codes by market centre (including examples)

Market Centre	MIC	Market Code	Sample Local Code	Sample UMTF Code	Sample Company Name	RIC Suffix
Copenhagen Stock Exchange	XCSE	c	DANSK	DANSKc	Danske Bank Ord	CO
Deutsche Borse/Germany	XETR	d	EXS1	EXS1d	iShares DAX ETF	DE
Euronext Amsterdam	XAMS	a	HEIA	HEIAa	Heineken	AS
Euronext Brussels	XBRU	b	INB	INBb	INBEV	BR
Euronext Paris	XPAR	p	RNO	RNOp	Renault	PA
Euronext Lisbon/Portugal	XLIS	u	ALTR	ALTRu	ALTRI SGPS	LS
Helsinki Stock Exchange	XHEL	h	NOK1V	NOK1Vh	Nokia	HE

Irish Stock Exchange	XDUB	i	GNC	GNCi	Greencore Group plc	I
Prague Stock Exchange	XPRA	k	BOREY	BOREY	Borealis Exploration	PR
London Stock Exchange	XLON	l	VOD	VODI	Vodafone Group Ord	L
Madrid/Spain (Espana)	XMCE	e	COL	COLe	INMOB Colonial	MC
Borsa Italiana/Milan	XMIL	m	SPM	SPMm	Saipem	MI
Oslo Stock Exchange	XOSL	o	NHY	NHYo	Norsk Hydro	OL
Stockholm Stock Exchange	XSTO	s	VOLB	VOLBs	Volvo B Ord	ST
Budapest Stock Exchange	XBUD	t	OTP	OTPt	OTP Bank PLC	BU
Vienna Stock Exchange	XWBO	v	VIG	VIGv	Vienna Insurance Group	VI
Swiss Exchange/Zurich (blue chip)	XVTX	z	UBSG	UBSGz	UBS Group AG	S
Swiss Exchange/Zurich (non-blue chip)	XSWX	z	ACIN	ACINz	Acino Holding AG	S

5.2. Exchange Codes

UBS MTF sends its assigned ISO 10383 MIC Code in the LastMkt<30> field on execution reports. The MIC code for UBS MTF is **XUBS**.

On the incoming order, there is no need to specify an exchange and hence ExDestination<100> is not required. Any value sent in this field will be ignored.

6. UBS MTF-Specific FIX Fields

The following FIX fields are specific to UBS MTF:

MsgType	Tag	Field Name	Notes	Required
D	9004	Internalization	Provides crossing restrictions 4 (Do not execute against own orders). See section 3.4 above.	N
D	20060	RequestedCrossingWaiverType	Specifies whether an order may be executed under 1 Either Reference Price Waiver (RPW) or Large In Scale (LIS) Waiver, or 2 Only under LIS Waiver	N

8	20061	WaiverType ²	Indicates the pre-trade transparency waiver under which the trade was conducted. R Reference Price Waiver (RPW) L Large In Scale (LIS)	Populated if 150=1 or 2
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7. FIX Message details

7.1. Components

7.1.1. Standard Header

Tag	Name	Notes	Required
8	BeginString	FIX.4.2 Must be the first field in the message.	Y
9	BodyLength	Must be the second field in the message.	Y
35	MsgType	Must be the third field in the message.	Y
43	PossDupFlag	Always required for retransmitted messages, whether prompted by the sending system or as the result of a resend request.	N
52	SendingTime		Y
49	SenderCompID	As specified by UBS MTF	Y
56	TargetCompID	As specified by UBS MTF	Y
34	MsgSeqNum		Y
50	SenderSubID	May be used to provide the identity of the trader who entered the order.	N
97	PossResend	Required when message may be duplicate of another message sent under a different sequence number.	N
122	OrigSendingTime	Required for message resent as a result of a ResendRequest. If data is not available set to same value as SendingTime	N

7.1.2. Standard Trailer

Tag	Name	Required	Required
10	Checksum	Three byte, simple checksum (see [1] Volume 2: "Checksum Calculation" for description).	Y

² This field is currently being considered for standardisation by the FIX Trading Community. If a standard tag is defined in FIX for WaiverType, UBS MTF intends to adopt the standard definition in a future platform update.

7.2. Session-Level Messages

The following messages are supported in both directions:

MsgType	Description
A	Logon
0	Heartbeat
1	Test Request
2	Resend Request
3	Reject
4	Sequence Reset
5	Logout

7.2.1. Login

Tag	Field Name	Comments	Required
	Standard Header	MsgType = A	Y
98	EncryptMethod	0 (<i>Always unencrypted</i>)	N
108	HeartBtInt	Note same value used by both sides	Y
141	ResetSeqNumFlag	Indicates both sides of a FIX session should reset sequence numbers	N
	Standard Trailer		Y

7.2.2. Heartbeat

Tag	Field Name	Comments	Required
	Standard Header	MsgType = 0	Y
112	TestReqID	Required when the heartbeat is the result of a Test Request message.	N
	Standard Trailer		Y

7.2.3. Test Request

Tag	Field Name	Comments	Required
	Standard Header	MsgType = 1	Y
112	TestReqID		Y
	Standard Trailer		Y

7.2.4. Resend Request

Tag	Field Name	Comments	Required
	Standard Header	MsgType = 2	Y
7	BeginSeqNo		Y
16	EndSeqNo		Y
	Standard Trailer		Y

7.2.5. Reject

Tag	Field Name	Comments	Required
	Standard Header	MsgType = 3	Y
45	RefSeqNum	MsgSeqNum of rejected message	Y
371	RefTagID	The tag number of the FIX field being referenced.	N
372	RefMsgType	The MsgType of the FIX message being referenced.	N
373	SessionRejectReason	Code to identify reason for a session-level Reject message.	N
58	Text	Where possible, message to explain reason for rejection	N
	Standard Trailer		Y

7.2.6. Sequence Reset

Tag	Field Name	Comments	Required
	Standard Header	MsgType = 4	Y
123	GapFillFlag		N
36	NewSeqNo		Y
	Standard Trailer		Y

7.2.7. Logout

Tag	Field Name	Comments	Required
	Standard Header	MsgType = 5	Y
58	Text		N
	Standard Trailer		Y

7.3. Messages from Member to UBS MTF

The following messages may be sent by a Member to UBS MTF:

MsgType	Description
D	New Order - Single
F	Order Cancel Request
G	Order Cancel/Replace Request
Q	Don't know trade

7.3.1. New Order Single

Tag	Name	Comments	Required	Possible Values
	Standard Header	MsgType =D	Y	
109	ClientID	The member ID. If not set will use default configured per session. We will validate set of members per	N	As assigned by UBS MTF

		session.		
11	ClOrdID	Identifier of the order as assigned by the member. Must be unique per session, per day.	Y	
18	ExecInst	Instructions for order handling. Amendments to tag 18 are rejected.	Y	M if buying or selling at the mid P if buying at offer or selling at bid (market peg) R if buying at bid or selling at offer (primary peg) h Half-sweep ³ f Full sweep
55	Symbol	Ticker Symbol	Y	UMTF Code
54	Side	Side of order	Y	1 Buy 2 Sell
38	OrderQty	Number of shares ordered	Y	
40	OrdType	Order type	Y	P Pegged
60	TransactTime	Time the order was initiated	Y	
47	OrderCapacity	Designates the capacity of the firm placing the order	Y	A Agency (default) P Principal R Riskless Principal
59	TimeInForce	Day or IOC	Y	0 Day 3 IOC
44	Price	Optional price limit, specified in the currency of the instrument	N	
15	Currency	If specified, must match the instrument currency code as specified in UBS MTF symbology file.	N	ISO 4217 Currency code; with the addition of GBX for instruments traded in Pence sterling.

³ Half and full sweep will be available from January 2017

110	MinQty	Displaying the minimum quantity of an order to be executed acting as an MAQ within UBS MTF	N	The value placed in tag 110 must be either equal or less than the OrderQty (tag 38). If the remaining quantity of a partially filled order falls below the value given here, the effective MinQty becomes one (1) Default: 1
9004	Internalization	Self-execution prevention	N	4 (Do not execute against own orders). See section 2.5. Default: Can cross against own orders
1	Account	Returned on execution reports associated with this order	N	
20060 ⁴	RequestedCrossingWaiverType	Specific whether an order may be executed under (1) either Reference Price Waiver (RPW) or Large In Scale (LIS) Waiver, or (2) only under LIS Waiver See 3.11 above	N	1 Either 2 LIS only Default: 1 (Either)
	Standard Trailer		Y	

7.3.2. Order Cancel Request

Tag	Name	Comments	Required
	Standard Header	MsgType =F	Y
109	ClientID	The member ID. If not set will use default configured per session. We will validate set of members per session.	N
11	ClOrdID	Unique identifier of cancel request as assigned by participant	Y
41	OrigClOrdID	ClOrdID of the originating order	Y
55	Symbol	Must match original order	Y
54	Side	Must match original order	Y
60	TransactTime	Time the cancel request was initiated	Y

⁴ effective from January 2017

	Standard Trailer		Y
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7.3.3. Order Cancel Replace Request

Tag	Name	Comments	Required	Possible Values
	Standard Header	MsgType =G	Y	
109	ClientID	The member ID. If not set will use default configured per session. We will validate set of members per session.	N	As assigned by UBS MTF
11	ClOrdID	Identifier of the order as assigned by the participant. Must be unique per session, per day.	Y	
41	OrigClOrdID	ClOrdID of the order to be replaced.	Y	
18	ExecInst	Must match original order.	Y	
55	Symbol	Must match original order.	Y	UMTF Code
54	Side	Must match original order.	Y	
38	OrderQty	New order quantity	Y	
40	OrdType	Must match original order.	Y	P
60	TransactTime	Time the replace request was initiated	Y	
47	OrderCapacity	Designates the capacity of the firm placing the order. Must match original order if set.	N	A Agency (default) P Principal R Riskless Principal
59	TimInForce	Must match original order if set.	N	
44	Price	New limit price	N	Optional price limit
15	Currency	Must match original order if set.	N	ISO 4217 Currency code; with the addition of GBX for instruments traded in Pence sterling.
110	MinQty	Displaying the minimum quantity of an order to be executed acting as an MAQ within UBS MTF.	N	The value placed in tag 110 must be either equal or less than the OrderQty (tag 38). If the remaining quantity of a partially filled order falls below the value given

				here, the effective MinQty becomes one (1) Default: 1
9004	Internalization	Must match original order if set.	If received on original order	
1	Account	Returned on execution reports associated with this order Must match original order if set. Otherwise amend will be rejected.	If not set value from original order is preserved.	
	Standard Trailer		Y	

7.3.4. Don't Know Trade (DK)

Tag	Field Name	Comments	Required	Possible Values
	Standard Header	MsgType = Q	Y	
109	ClientID	The member ID. If not set will use default configured per session. We will validate set of members per session.	N	As assigned by UBS MTF
37	OrderID	Order ID as identified on problem execution	Y	
17	ExecID	Execution ID of problem execution	Y	
127	DKReason		Y	A = Unknown Symbol B = Wrong Side C Quantity exceeds order D No matching order E Price exceeds limit Z Other
55	Symbol	Must match original order	Y	
54	Side	Must match original order	Y	
38	OrderQty	Must match original order	N	
	Standard Trailer		Y	

7.4. Messages from UBS MTF to Member

UBS MTF may send the following messages to members:

7.4.1. Execution Report

Tag	Name	Comments	Required	Possible Values
	Standard Header	MsgType =8	Y	
37	OrderID	Identifier of the order as assigned by UBS MTF. Unique across all orders on a daily basis.	Y	
11	ClOrdID	Identifier of replacement order as assigned by participant.	Y	
41	OrigClOrdID	OrderID for which cancellation or replacement was requested	Y ⁶	
17	ExecID	Identifier of the execution message. Unique on a daily basis.	Y	
150	ExecType	Describes the type of execution report	Y	0 New 1 Partial Fill 2 Fill 4 Cancelled 5 Replaced 8 Rejected
20	ExecTransType	Identifies transaction type	Y	0 New 1 Cancel
19	ExecRefID	Identifies cancelled execution	Y ⁷	Execid of the cancelled execution, if ExecTransType=1
18	ExecInst	On ExecType=New, Cancelled, Replaced, Rejected - reflects value entered by member on corresponding prior message. On ExecType=Fill or Partial Fill, reflects the Peg on which the trade occurred, i.e. one of always M , P , or R . See 3.10 above	Y	M if buying or selling at the mid P if buying at offer or selling at bid R if buying at bid or selling at offer h Half-sweep f Full sweep

⁶ Required If sent in response to Cancel or Cancel/Replace

⁷ If ExecTransType=1 (Trade cancel)

55	Symbol	As sent on the originating order	Y	
54	Side	As sent on the originating order	Y	
38	OrderQty	As sent on the originating order	Y	
39	OrdStatus	Current status of the order	Y	0 New 1 Partially Filled 2 Filled 4 Cancelled 5 Replaced 6 Pending Cancel (i.e. result of Order Cancel Request) 8 Rejected E Pending Replace (i.e. result of Order Cancel/Replace Request)
32	LastShares	Quantity of shares bought/sold on this (last) fill	If 150=1 or 2	Integer
31	LastPx	Price of this (last) fill	If 150=1 or 2	
15	Currency	Populated if specified on New Order – Single message (35=D)	If sent on 35=D	ISO 4217 Currency code; with the addition of GBX for instruments traded in Pence sterling.
30	LastMkt	Venue of execution of this (last) fill	If 150=1 or 2	XUBS
29	LastCapacity	Capacity on order execution. This reflects the order capacity.	If 150=1 or 2	1 Agent 3 Riskless Principal 4 Principal
151	LeavesQty	Amount of shares open for further execution	Y	
14	CumQty	Amount of executed shares on the order	Y	
6	AvgPx	Average price of all fills on the order	Y	
60	TransactTime	Time the transaction represented by this Execution Report occurred	Y	
851	LastLiquidityInd	Applicable only on ExecTransType(150) of Partial or Filled.		1 Added Liquidity 2 Removed Liquidity

58	Text	Additional information if ExecType=8(Rejected)	N	
103	OrdRejReason	Additional information if ExecType=8(Rejected)		0 Broker Option 1 Unknown Symbol 2 Exchange Closed 6 Duplicate Order
1	Account		If received on original order	
20061	WaiverType ⁸	Indicates the pre-trade transparency waiver under which the trade was conducted	If 150=1 or 2	R = RPW L = LIS
	Standard Trailer		Y	

7.4.2. Order Cancel Reject

Tag	Name	Comments	Required	Possible Values
	Standard Header	MsgType =9	Y	
37	OrderID	Identifier of the order as assigned by UBS MTF.	Y	
39	OrdStatus	Current status of the order	Y	0 New 1 Partially Filled 2 Filled 4 Cancelled 5 Replaced 6 Pending Cancel (i.e. result of Order Cancel Request) 8 Rejected E Pending Replace (i.e. result of Order Cancel/Replace Request)
11	ClOrdID	ClOrdID as assigned by the order cancel or replace request	Y	
41	OrigClOrdID	As sent on the originating order	Y	
58	Text		N	
102		CxlRejReason	Y	0 Too late to cancel

⁸ This will be returned in production beginning January 2017

				1 Unknown order
				2 Exchange option
				3 Order already in Pending Cancel or Pending Replace status
434		CxlRejResponseTo	N	1 Order cancel request
				2 Order cancel/replace request
	Standard Trailer		Y	

7.5. Order Rejection Codes

The following Rejection Codes may be sent back to Members in the event of an order reject; these are in addition to the reason code in tag 103. This is not a comprehensive list, and other messages may also appear in tag 58. Additional values for tags 102 and tag 103 are reserved for future use.

Code (Tag 58)	Description
XE001	System is not enabled
XE002	Market is not open
XE003	Order is not eligible for trading
XE004	Order is not eligible for crossing
XE006	Instrument is not open
XE007	Market manually disabled
XE008	Instrument manually disabled
XE010	Account disabled
XE011	Instrument suspended

8. References

- [1] FIX Protocol Ltd, "FIX 4.2," 2001. [Online]. Available: <http://www.fixtradingcommunity.org/pg/structure/tech-specs/fix-version/42>.
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- [4] Wikipedia contributors, "Uniform Symbology," Wikipedia, The Free Encyclopedia, July 2015. [Online]. Available: https://en.wikipedia.org/w/index.php?title=Uniform_Symbology&oldid=664368300.

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