



# UBS MTF Trading Notice

## Technical changes for MiFID II

28 April 2017

Dear Member,

UBS MTF would like to announce details of upcoming changes to prepare for the implementation of MiFID II in January 2018.

UBS MTF will deliver a functional update to our FIX interfaces for trading and drop copy in early July 2017, providing support for exchange of additional information, as required under MiFID II, and introducing microsecond granularity on timestamps generated by the trading venue, removing the option to deliver milliseconds only.

We are also introducing a new mechanism to specify the desired CCP account to be used in processing executions arising from an order, via the AccountType field. Use of this field will become mandatory with the implementation of the following functional release, planned for Q4 2017 at a date to be announced in due course.

This functional release is described in version 4.2 of our FIX trading interface, attached to this notice and available for member testing in UAT from 5 May, ahead of production release 10 July 2017. Members are invited to test their IT systems against our test environment in advance of this release.

UBS MTF is also preparing a registration interface for the management of short code identifiers as used in the updated FIX RoE, in line with the FIX-AFME MiFID II Order Record Keeping Venue Subgroup. A provisional specification of the planned interface is available for review at <https://www.ubs.com/global/en/investment-bank/multilateral-trading-facility/member-information.html> and attached to this notice. We would appreciate members' feedback on the specification prior to May 12, and will publish a final specification following this date.

UBS MTF Notices and documentation are available at <http://ubs.com/mtf>. If you have any queries regarding this notice, or comments on the above, please contact the UBS MTF Supervisors at +44 20 7568 2052 or [ubs\\_mtf@ubs.com](mailto:ubs_mtf@ubs.com).

UBS MTF Management

### **Notice N6, 2017**

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Registered office: 5 Broadgate, London EC2M 2QS.

# UBS MTF FIX Interface

## *Rules of Engagement*

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## Table of Contents

<b>Version history</b> .....	<b>6</b>
<b>1. Introduction</b> .....	<b>7</b>
<b>2. Background</b> .....	<b>7</b>
<b>3. Functional Overview</b> .....	<b>7</b>
3.1. General.....	7
3.2. Order Priority.....	7
3.3. Minimum Acceptable Quantity (MAQ).....	7
3.4. Internalization.....	8
3.5. Session Times.....	8
3.5.1. Order Expiry.....	8
3.6. Time Stamps.....	8
3.7. Cancel on Disconnect.....	8
3.8. Pending messages.....	8
3.9. Drop Copy.....	9
3.10. Sweep functionality.....	9
3.11. Large in Scale execution.....	9
3.12. Party Identifiers.....	10
3.13. Order Capacity & Account Type.....	11
<b>4. Connectivity</b> .....	<b>11</b>
<b>5. Symbology</b> .....	<b>12</b>
5.1. Uniform Symbology.....	12
5.2. Exchange Codes.....	13
<b>6. UBS MTF-Specific FIX Fields</b> .....	<b>14</b>
<b>7. FIX Message details</b> .....	<b>15</b>
7.1. Components.....	15
7.1.1. Standard Header.....	15
7.1.2. Standard Trailer.....	15
7.1.3. Parties.....	15
7.2. Session-Level Messages.....	16
7.2.1. Login.....	16
7.2.2. Heartbeat.....	17
7.2.3. Test Request.....	17
7.2.4. Resend Request.....	17
7.2.5. Reject.....	17
7.2.6. Sequence Reset.....	17
7.2.7. Logout.....	18
7.3. Messages from Member to UBS MTF.....	18
7.3.1. New Order Single.....	18
7.3.2. Order Cancel Request.....	20
7.3.3. Order Cancel Replace Request.....	21
7.3.4. Don't Know Trade (DK).....	22
7.4. Messages from UBS MTF to Member.....	23
7.4.1. Execution Report.....	23

7.4.2.	Order Cancel Reject .....	26
7.5.	Order Rejection Codes .....	28
<b>8.</b>	<b>References .....</b>	<b>29</b>
<b>9.</b>	<b>Disclaimer .....</b>	<b>30</b>
<b>1.</b>	<b>Introduction .....</b>	<b>5</b>
<b>2.</b>	<b>Background .....</b>	<b>5</b>
<b>3.</b>	<b>Functional Overview .....</b>	<b>5</b>
3.1.	General .....	5
3.2.	Order Priority (effective January 2017) .....	5
3.3.	Minimum Acceptable Quantity (MAQ) .....	5
3.4.	Internalization .....	6
3.5.	Session Times .....	6
3.5.1.	Order Expiry .....	6
3.6.	Time Stamps .....	6
3.7.	Cancel on Disconnect .....	6
3.8.	Pending messages .....	6
3.9.	Drop Copy .....	7
3.10.	Sweep functionality (effective January 2017) .....	7
3.11.	Large in Scale execution (effective January 2017) .....	7
<b>4.</b>	<b>Connectivity .....</b>	<b>8</b>
<b>5.</b>	<b>Symbology .....</b>	<b>9</b>
5.1.	Uniform Symbology .....	9
5.2.	Exchange Codes .....	10
<b>6.</b>	<b>UBS MTF Specific FIX Fields .....</b>	<b>10</b>
<b>7.</b>	<b>FIX Message details .....</b>	<b>11</b>
7.1.	Components .....	11
7.1.1.	Standard Header .....	11
7.1.2.	Standard Trailer .....	11
7.2.	Session-Level Messages .....	12
7.2.1.	Login .....	12
7.2.2.	Heartbeat .....	12
7.2.3.	Test Request .....	12
7.2.4.	Resend Request .....	12
7.2.5.	Reject .....	13
7.2.6.	Sequence Reset .....	13
7.2.7.	Logout .....	13
7.3.	Messages from Member to UBS MTF .....	13
7.3.1.	New Order Single .....	13
7.3.2.	Order Cancel Request .....	15
7.3.3.	Order Cancel Replace Request .....	16
7.3.4.	Don't Know Trade (DK) .....	17
7.4.	Messages from UBS MTF to Member .....	18
7.4.1.	Execution Report .....	18

7.4.2.	Order Cancel Reject .....	21
7.5.	Order Rejection Codes .....	21
<b>8.</b>	<b>References .....</b>	<b>22</b>
<b>9.</b>	<b>Disclaimer .....</b>	<b>23</b>



## Version history

Version	Date	Changes and remarks
<a href="#">4.2</a>	<a href="#">April 2017</a>	<a href="#">Added new fields on order messages in support of MiFID II requirements: (see section <a href="#">3.12</a>, Party Identifiers, and FIX Message details, section <a href="#">7</a>)</a> <a href="#">Introduces AccountType for specification of CCP account to use at <a href="#">3.13</a></a> <a href="#">Mandatory granularity of microseconds on message timestamps at <a href="#">3.6</a></a> <a href="#">Remove field 20061(WaiverType) in favour of the standard field 8013 on Execution Report at <a href="#">6</a> and <a href="#">7.4.1</a>.</a> <a href="#">Updated symbology examples (<a href="#">5.1</a>), and added details of further order rejection codes (<a href="#">7.5</a>).</a>
4.1	January 2017	Added specification for content of ExecId and ExecRefId (section 7.4.1, Execution Report)
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 <a href="#">session times</a> and <a href="#">order expiry</a> 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 ( <a href="#">3.8</a> , <a href="#">Pending messages</a> ).
3.3	April 2016	Added tag 15 – Currency in <a href="#">FIX Message details</a> . Updated examples in <a href="#">Uniform Symbology</a> 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](mailto: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

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].

UBS MTF will transmit timestamps at microsecond granularity in all timestamps.

~~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
Pending New	Pending Cancel	<b>Allowed</b>
Pending New	Pending Amend	<b>Amend is Rejected</b>
Pending Amend / Pending Cancel	Pending Amend/ Pending Cancel	<b>Second Request is Rejected</b>
Working, Fill message in flight	Replace requested	<b>Fill is delivered Replace Request is rejected as order is fully filled</b>
Working, Partial Fill message in flight	Replace Requested	<b>Fill is delivered Replace Request is rejected if unsuccessful</b>
Working, Fill message in flight	Cancel requested	<b>Fill is Delivered Cancel request is rejected as order is fully filled</b>
Working, Partial Fill message in flight	Cancel requested	<b>Fill is Delivered Cancel request is accepted</b>

### 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 MiFID<sup>1</sup>. 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.

### **3.12. Party Identifiers**

UBS MTF will support submission of MiFID II identifiers via short code in the Parties component on order messages. These will become mandatory, where applicable, on the implementation of MiFID II but may be optionally submitted before this time.

<b>MiFID II Field<sup>2</sup></b>	<b>Party Role</b>	<b>PartyRoleQualifier</b>
<u>Client Identification code</u>	<u>ClientId (3)</u>	<u>Firm or Legal Entity (23)</u>
		<u>Natural Person (24)</u>
<u>Execution within firm</u>	<u>Executing Trader (Executing decision maker) (12)</u>	<u>Algorithm (22)</u>
		<u>Natural Person (24)</u>
<u>Investment decision within firm</u>	<u>Investment Decision Maker (122)</u>	<u>Algorithm (22)</u>
		<u>Natural Person (24)</u>

The following four values are reserved and may not be registered as short codes, but should be used as applicable on order messages:

For PartyRole=3 (ClientId):

0 = NONE – No client for this order

1 = AGGR – An aggregation of multiple client orders

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

<sup>2</sup> RTS 27 Annex, Table 2

2 = PNAL – Clients are pending allocation

For PartyRole = 12

3 = CLIENT - Time and venue of the order instructed by the client of the participant

### **3.13. Order Capacity & Account Type**

UBS MTF currently derives the CCP account used in processing any executions on an order from the Order Capacity (field 47). Effective with UBS MTF's Q4 functional release prior to MiFID II implementation Order Capacity will no longer be used to determine the CCP account to use, and AccountType must be specified.

AccountType may be entered on orders starting with the July functional release, and if specified will take precedence over Order Capacity in determining the CCP account.

## 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.

## 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	<del>BASEXS1</del>	<del>BASdEXS1d</del>	<del>BASE</del> <del>SEiShares</del> <del>DAX-ETF</del>	DE
Euronext Amsterdam	XAMS	a	<del>AGFB</del> <del>HEIA</del>	<del>AGFBbHEIAa</del>	<del>AGFA-</del> <del>Gevaert</del> <del>NVHeineken</del>	AS
Euronext Brussels	XBRU	b	INB	INBb	INBEV	BR
Euronext Paris	XPAR	p	RNO	RNOp	Renault	PA
Euronext	XLIS	u	ALTR	ALTRu	ALTRI SGPS	LS

Lisbon/Portugal						
Helsinki Stock Exchange	XHEL	h	<del>HUH1VNOK1V</del>	<del>HUH1VhNOK1Vh</del>	<del>Huhtamaki OY/Nokia</del>	HE
Irish Stock Exchange	XDUB	i	<del>IPDCGNC</del>	<del>IPDCiGNCi</del>	<del>Independent News &amp; Media PLC/Greencore Group plc</del>	I
Prague Stock Exchange	XPRA	k	<del>CEZBOREY</del>	<del>CEZkBOREY</del>	<del>CEZ AS/Borealis Exploration</del>	PR
London Stock Exchange	XLON	l	VOD	VODI	Vodafone Group Ord	L
Madrid/Spain (Espana)	XMCE	e	<del>SANCOE</del>	<del>SANeCOEe</del>	<del>Banco Santander SAINMOB Colonial</del>	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	<del>ABBVOLB</del>	<del>ABBsVOLBs</del>	<del>ABB Ltd/Volve B-Ord</del>	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	<del>SCHNUBSG</del>	<del>SCHNzUBSGz</del>	<del>Schindler Holding AG/UBS Group AG</del>	S
Swiss Exchange/Zurich (non-blue chip)	XSWX	z	<del>UHRACIN</del>	<del>UHRzACINz</del>	<del>Swatch Group AG/TheAcino Holding AG</del>	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 <b>4</b> (Do not execute against own orders). See section 3.4 above.	N
D	20060	RequestedCrossingWaiverType	Specifies whether an order may be executed under <b>1</b> Either Reference Price Waiver (RPW) or Large In Scale (LIS) Waiver, or <b>2</b> Only under LIS Waiver	N
<del>8</del>	<del>20061</del>	<del>WaiverType<sup>3</sup></del>	<del>Indicates the pre-trade transparency waiver under which the trade was conducted. <b>R</b> Reference Price Waiver (RPW) <b>L</b> Large In Scale (LIS)</del>	<del>Populated if 150=1 or 2</del>

7. —

<sup>3</sup>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.

## 8.7. FIX Message details

### 8.1.7.1. Components

#### 7.1.1. Standard Header

Present on all messages

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

Present on all messages

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

#### 7.1.3. Parties

Supported on New Order – Single, Order Cancel Replace Request, and Execution Report.



Tag	Name	Comments	Required	Possible Values
<a href="#">453</a>	<a href="#">NoPartyIDs</a>	Repeating group below must contain unique combinations of PartyID, PartyIDSource, and PartyRole	Post MiFID II implementation	
<a href="#">448</a>	<a href="#">PartyID</a>	The short code representing the client or decision maker represented by this block. Data corresponding to this short code must have been previously supplied, or will be supplied by the end of the calendar day.	If NoPartyIDs (453) > 0.	Whole number short code. Values 0,1,2, and 3 are reserved; see Party Identifiers
<a href="#">447</a>	<a href="#">PartyIDSource</a>		If NoPartyIDs (453) > 0.	<b>P</b> Short code identifier
<a href="#">452</a>	<a href="#">PartyRole</a>	See Party Identifiers	If NoPartyIDs (453) > 0.	<b>3</b> ClientID <b>12</b> Executing Trader (Executing decision maker) <b>122</b> Investment Decision Maker
<a href="#">2376</a>	<a href="#">PartyRoleQualifier</a>	Used to further qualify the value of PartyRole	If NoPartyIDs (453) > 0.	<b>22</b> Algorithm (for PartyRole 12 or 122) <b>23</b> Firm or legal entity (for PartyRole 3) <b>24</b> Natural Person (for PartyRole 3,12, or 122)

### 8.2.7.2. 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

#### 8.2.1.7.2.1. Login

Tag	Field Name	Comments	Required
-----	------------	----------	----------

	<a href="#">Standard Header</a>	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
	<a href="#">Standard Trailer</a>		Y

#### 8.2.2.7.2.2. Heartbeat

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

#### 8.2.3.7.2.3. Test Request

Tag	Field Name	Comments	Required
	<a href="#">Standard Header</a>	MsgType = 1	Y
112	TestReqID		Y
	<a href="#">Standard Trailer</a>		Y

#### 8.2.4.7.2.4. Resend Request

Tag	Field Name	Comments	Required
	<a href="#">Standard Header</a>	MsgType = 2	Y
7	BeginSeqNo		Y
16	EndSeqNo		Y
	<a href="#">Standard Trailer</a>		Y

#### 8.2.5.7.2.5. Reject

Tag	Field Name	Comments	Required
	<a href="#">Standard Header</a>	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
	<a href="#">Standard Trailer</a>		Y

#### 8.2.6.7.2.6. Sequence Reset

Tag	Field Name	Comments	Required
	<a href="#">Standard Header</a>	MsgType = 4	Y

123	GapFillFlag		N
36	NewSeqNo		Y
	<a href="#">Standard Trailer</a>		Y

### 8.2.7.7.2.7. Logout

Tag	Field Name	Comments	Required
	<a href="#">Standard Header</a>	MsgType = 5	Y
58	Text		N
	<a href="#">Standard Trailer</a>		Y

### 8.3.7.3. 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

#### 8.3.1.7.3.1. New Order Single

Tag	Name	Comments	Required	Possible Values
	<a href="#">Standard Header</a>	MsgType =D	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 member. Must be unique per session, per day.	Y	
18	ExecInst	Instructions for order handling. Amendments to tag 18 are rejected.	Y	<b>M</b> if buying or selling at the mid <b>P</b> if buying at offer or selling at bid (market peg) <b>R</b> if buying at bid or selling at offer (primary peg)

				<b>h</b> Half-sweep <sup>4</sup>
				<b>f</b> Full sweep
55	Symbol	Ticker Symbol	Y	UMTF Code
54	Side	Side of order	Y	<b>1</b> Buy <b>2</b> Sell
38	OrderQty	Number of shares ordered	Y	
40	OrdType	Order type	Y	<b>P</b> Pegged
60	TransactTime	Time the order was initiated	Y	
47	OrderCapacity	Designates the capacity of the firm placing the order	Y	<b>Pre MiFID II implementation:</b> <b>A</b> Agency (default) <b>P</b> Principal <b>R</b> Riskless Principal  <b>Post MiFID II implementation:</b> <b>A</b> Agency (default) 'AOTC' <b>P</b> 'DEAL' <b>R</b> 'MTCH'
59	TimeInForce	Day or IOC	Y	<b>0</b> Day <b>3</b> 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.
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) <b>Default: 1</b>

<sup>4</sup>Half and full sweep will be available from January 2017

9004	Internalization	Self-execution prevention	N	<b>4</b> (Do not execute against own orders). See section 2.5. <b>Default:</b> Can cross against own orders
1	Account	Returned on execution reports associated with this order	N	
20060 <sup>5</sup>	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	<b>1</b> Either <b>2</b> LIS only <b>Default:</b> 1 (Either)
<a href="#">581</a>	<a href="#">AccountType</a>	<a href="#">Specifies the CCP account</a>	<a href="#">N, required in future</a>	<b>1 Client</b> <b>3 House</b>
<a href="#">8015</a>	<a href="#">OrderAttributeTypes</a>	<a href="#">Flattened set of order attribute flags. If more than one attribute is applicable to an order, this field can contain multiple attributed separated by space. Absence of a flag indicates that the corresponding order attribute is false.</a>	<a href="#">N</a>	<a href="#">2 Liquidity Provision activity flag</a> <a href="#">4 Algorithmic order flag. Indicated the order</a>
<a href="#">1724</a>	<a href="#">OrderOrigination</a>	<a href="#">Indicates DEA activity, as defined by MiFID II</a>	<a href="#">N</a>	<a href="#">5 Order received from a direct access or sponsored access customer</a>
	<a href="#">Parties</a>	<a href="#">Parties component</a>		
	<a href="#">Standard Trailer</a>		Y	

### 8.3.2.7.3.2. Order Cancel Request

Tag	Name	Comments	Required
	<a href="#">Standard Header</a>	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	CIOrdID	Unique identifier of cancel request as assigned by participant	Y
41	OrigCIOrdID	CIOrdID of the originating order	Y

<sup>5</sup>-effective from January 2017

55	Symbol	Must match original order	Y
54	Side	Must match original order	Y
60	TransactTime	Time the cancel request was initiated	Y
	<a href="#">Standard Trailer</a>		Y

### **7.3.3. Order Cancel Replace Request**

Only the Price (44), OrderQty (38), and MinQty (110) may be modified on cancel/replace.

All other fields must be consistent with the original order.

Tag	Name	Comments	Required	Possible Values
	<a href="#">Standard Header</a>	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	<b>P</b>
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	<p><b>Pre MiFID II implementation:</b>  <u>A Agency (default)</u>  <u>P Principal</u>  <u>R Riskless Principal</u></p> <p><b>Post MiFID II implementation:</b>  <u>A (default) 'AOTC'</u>  <u>P 'DEAL'</u>  <u>R 'MTCH'A</u>  <u>Agency (default)</u></p>
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) <b>Default: 1</b>
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	
	<a href="#">Parties</a>	<a href="#">Parties component</a>		
	<a href="#">Standard Trailer</a>		Y	

#### 8.3.3.7.3.4. Don't Know Trade (DK)

Tag	Field Name	Comments	Required	Possible Values
	<a href="#">Standard Header</a>	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	<i>ExecID</i>	Execution ID of problem execution	Y	
127	<i>DKReason</i>		Y	<b>A</b> = Unknown Symbol <b>B</b> = Wrong Side <b>C</b> Quantity exceeds order <b>D</b> No matching order <b>E</b> Price exceeds limit <b>Z</b> Other
55	<i>Symbol</i>	Must match original order	Y	
54	<i>Side</i>	Must match original order	Y	
38	<i>OrderQty</i>	Must match original order	N	
	<a href="#">Standard Trailer</a>		Y	

#### 8.4.7.4. Messages from UBS MTF to Member

UBS MTF may send the following messages to members:

##### 8.4.1.7.4.1. Execution Report

Tag	Name	Comments	Required	Possible Values
	<a href="#">Standard Header</a>	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 <sup>6</sup>	
17	ExecID	Identifier of the execution message. Unique on a daily basis For new executions (ExecTransType=0), the ExecId is structured as follows: (1) One character side indicator: 'S' → sell, 'B' → buy, (2) Four character code 'xubs' (3) Two digit matching engine identifier (4) One dash character (ASCII hyphen) (5) Integer match identifier (unique per matching engine identifier)	Y	New trades e.g: • Bxubs06-2906 • Sxubs07-1342237 Cancellation e.g: • 1Bxubs06-2906

<sup>6</sup> Required if sent in response to Cancel or Cancel/Replace



		per day and side) For cancelled trades (ExecTransType=1), the ExecId follows the same syntax, with the addition of a one-character prefix of the digit '1'		
150	ExecType	Describes the type of execution report	Y	<b>0</b> New <b>1</b> Partial Fill <b>2</b> Fill <b>4</b> Cancelled <b>5</b> Replaced <b>8</b> Rejected
20	ExecTransType	Identifies transaction type	Y	<b>0</b> New <b>1</b> Cancel
19	ExecRefID	Identifies cancelled execution. The value given will correspond to an ExecId from an earlier new Fill or Partial Fill.	Y <sup>7</sup>	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 <b>M</b> , <b>P</b> , or <b>R</b> . See 3.10 above	Y	<b>M</b> if buying or selling at the mid <b>P</b> if buying at offer or selling at bid <b>R</b> if buying at bid or selling at offer <b>h</b> Half-sweep <b>f</b> Full sweep
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	<b>0</b> New <b>1</b> Partially Filled <b>2</b> Filled <b>4</b> Cancelled <b>5</b> Replaced <b>6</b> Pending Cancel (i.e. result of Order Cancel Request) <b>8</b> Rejected

<sup>7</sup> If ExecTransType=1 (Trade cancel)

				<b>E</b> 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 ( <a href="#">35=D</a> )	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	<b>XUBS</b>
29	LastCapacity	Capacity on order execution. This reflects the order capacity.	If 150=1 or 2	<b>1</b> Agent → <a href="#">AOTC</a> <b>3</b> Riskless Principal ( <a href="#">cross as principal</a> ) → <a href="#">'MTCH'</a> <b>4</b> Principal → <a href="#">DEAL</a>
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.		<b>1</b> Added Liquidity <b>2</b> Removed Liquidity
58	Text	Additional information if ExecType=8(Rejected)	N	
103	OrdRejReason	Additional information if ExecType=8(Rejected)		<b>0</b> Broker Option <b>1</b> Unknown Symbol <b>2</b> Exchange Closed <b>3</b> <a href="#">Order Exceeds Limit (?)</a> <b>6</b> Duplicate

1	Account		If received on original order	Order
<a href="#">200618013</a>	<a href="#">TrdRegPublicationReasonsWaiverType<sup>e8</sup></a>	Indicates the pre-trade transparency waiver under which the trade was conducted	If 150=1 or 2	<b>3 = Reference Price (RFPT)</b> <b>R = RPW</b> <b>L = LIS</b> <b>9 = Large in Scale (LRGS)</b>
<a href="#">581</a>	<a href="#">AccountType</a>	<a href="#">Specifies the CCP account</a>	<a href="#">N, required in future</a>	<b>1 Client</b> <b>3 House</b>
<a href="#">8015</a>	<a href="#">OrderAttributeTypes</a>	<a href="#">Flattened set of order attribute flags. If more than one attribute is applicable to an order, this field can contain multiple attributed separated by space. Absence of a flag indicates that the corresponding order attribute is false.</a>	<a href="#">If received on original order</a>	<b>2 Liquidity Provision activity flag</b> <b>4 Algorithmic order flag.</b> <a href="#">Indicated the order</a>
<a href="#">1724</a>	<a href="#">OrderOrigination</a>	<a href="#">Indicates DEA activity, as defined by MiFID II</a>	<a href="#">As received on original order</a>	<b>5 Order received from a direct access or sponsored access customer</b>
	<a href="#">Parties</a>	<a href="#">Parties component</a>	<a href="#">As received on original order</a>	
	<a href="#">Standard Trailer</a>		Y	

#### 8.4.2.7.4.2. Order Cancel Reject

Tag	Name	Comments	Required	Possible Values
	<a href="#">Standard Header</a>	MsgType =9	Y	
37	OrderID	Identifier of the order as assigned by UBS MTF.	Y	

<sup>e8</sup>This will be returned in production beginning January 2017

39	OrdStatus	Current status of the order	Y	<b>0</b> New <b>1</b> Partially Filled <b>2</b> Filled <b>4</b> Cancelled <b>5</b> Replaced <b>6</b> Pending <b>C</b> ancel (i.e. result of Order Cancel Request) <b>8</b> Rejected <b>E</b> Pending Replace (i.e. result of Order Cancel/Replace Request)
11	CIOrdID	CIOrdID as assigned by the order cancel or replace request	Y	
41	OrigCIOrdID	As sent on the originating order	Y	
58	Text		N	
102	<u>CxlRejReason</u>	<del>CxlRejReason</del>	Y	<b>0</b> Too late to cancel <b>1</b> Unknown order <b>2</b> Exchange option <b>3</b> Order already in Pending Cancel or Pending Replace status
434	<u>CxlRejResponseTo</u>	<del>CxlRejResponseTo</del>	N	<b>1</b> Order cancel request <b>2</b> Order cancel/replace request
	<u>Standard Trailer</u>		Y	

### 8-5.7.5. 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.

<b>Code Text (Tag 58)</b>	<b>Description</b>
<u>EXEC INST</u>	
<u>Invalid waiver type (LIS) crossing instruction</u>	<u>The RequestedCrossingWaiverType value received on New order – Single message is undefined</u>
<u>Market closed</u>	<u>Market is closed</u>
<u>MIN QTY</u>	<u>The given MAQ is invalid</u>
<u>MinQty exceeds OrderQty</u>	<u>The given MAQ is larger than the OrderQty</u>
<u>NOT AUTH</u>	<u>The member is not authorised to submit orders in this instrument (no central counterparty relationship defined)</u>
<u>Order does not meet required LIS threshold</u>	<u>The order was submitted for execution under solely Large in Scale Waiver, but does not meet the notional value threshold for doing so.</u>
<u>ORDERTYPE</u>	<u>The specified OrderType is invalid</u>
<u>UNKNOWN SECUID</u>	<u>The given symbol is not available for trading</u>
<u>Validation breach:{reason}</u>	<u>The order failed pre-trade controls. One of more reasons are given in the message, eg: <u>OrderQuantity (OrderQty exceeds pre-defined risk limit)</u> <u>OrderNotional (notional value of the order exceeds pre-defined risk limit)</u></u>
<u>XE001</u>	<u>System is not enabled</u>
<u>XE002</u>	<u>Market is not open</u>
<u>XE003</u>	<u>Order is not eligible for trading</u>
<u>XE004</u>	<u>Order is not eligible for crossing</u>
<u>XE006</u>	<u>Instrument is not open</u>
<u>XE007</u>	<u>Market manually disabled</u>
<u>XE008</u>	<u>Instrument manually disabled</u>
<u>XE010</u>	<u>Account disabled</u>
<u>XE011</u>	<u>Instrument suspended</u>
<u>Code (Tag 58)</u>	<u>Description</u>
<u>XE001</u>	<u>System is not enabled</u>
<u>XE002</u>	<u>Market is not open</u>
<u>XE003</u>	<u>Order is not eligible for trading</u>
<u>XE004</u>	<u>Order is not eligible for crossing</u>
<u>XE006</u>	<u>Instrument is not open</u>
<u>XE007</u>	<u>Market manually disabled</u>

XE008	Instrument manually disabled
XE010	Account disabled
XE011	Instrument suspended

## 9.8. References

- [1] FIX Protocol Ltd, "FIX 4.2," 2001. [Online]. Available:  
<http://www.fixtradingcommunity.org/pg/structure/tech-specs/fix-version/42>.
- [2] UBS Ltd, "Member Information," 2015. [Online]. Available: <http://ubs.com/mtf>.
- [3] FIX Trading Community, "EP206 Clock Synchronization Datatype Enhancement," 14 February 2016. [Online]. Available: <http://www.fixtradingcommunity.org/pg/extensions/extension-pack?ExtensionID=EP206>.
- [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](https://en.wikipedia.org/w/index.php?title=Uniform_Symbology&oldid=664368300).

## ~~10.9.~~ Disclaimer

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UBS MTF

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# UBS MTF

## MiFID II Identifier Management

Classification	Public
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Status	Provisional Specification

**UBS Limited is a subsidiary of UBS AG**

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## Table of Contents

<b>1.</b>	<b>Revision History .....</b>	<b>3</b>
<b>2.</b>	<b>Summary.....</b>	<b>3</b>
2.1.	Background .....	3
2.2.	Functionality .....	3
2.3.	Service Access.....	4
2.3.1.	SFTP.....	4
2.4.	Interface changes.....	4
<b>3.</b>	<b>Submission .....</b>	<b>4</b>
3.1.	Naming.....	4
3.2.	Content.....	4
3.3.	Example.....	5
<b>4.</b>	<b>View missing identifiers.....</b>	<b>5</b>
4.1.	Heading.....	5
4.2.	Data.....	5
4.3.	Example.....	6
<b>5.</b>	<b>References .....</b>	<b>6</b>

Classification	Public
Date	28 April 2017
Status	Provisional Specification

# 1. Revision History

Version	Date	Changes and remarks
1.0	2017-04-28	Initial release

# 2. Summary

The document describes the provisional interface for use by UBS MTF Participants to manage the registration of identifiers, as required under MiFIR and RTS 24.

This specification is published to assist participants in planning their implementation work, and to solicit feedback from users on the functionality described.

## 2.1. Background

MiFID II ORK requirements outlined within MiFIR Article 25 [1] & RTS 24 [2] Article 2 state that trading venues are required to store specific data relating to individual orders submitted by their participants. The following fields are part of the regulatory mandate. UBS MTF participants will need to send this data on the order message where applicable:

- 1) Identification of the entity which submitted the order
- 2) DEA indicator
- 3) Client identification code (LEI/National ID/AGGR/PNAL)
- 4) An identifier for the party within the participant firm who is responsible for the investment decision
- 5) An identifier for the party within the participant firm who is responsible for the execution of the transaction resulting from the order
- 6) Any non-executing broker (N/A for UBS MTF)
- 7) Liquidity provision indicator

UBS MTF will support entry of this information on order submission via FIX protocol, however in order to reduce the amount of sensitive data entering the trading system, and to reduce message sizes and to improve system performance, the client identifier, decision maker and the party responsible for the execution are not provided as raw identifiers on the order message, and must instead be sent as integer short codes. These short codes provide a reference to the raw value (the 'long code'), which must be provided separately by the participant via a mapping file as described in this document.

With code the short codes and long codes stored, UBS MTF then has the full information required under RTS 24 and MiFIR.

## 2.2. Functionality

UBS MTF will support submission and reconciliation of identifier data via the following operations:

- **Registration of short code mappings**  
Via bulk upload in CSV format, with effective date range and identifier types.
- **Listing of missing mappings**  
Download of a CSV file containing a list of short codes supplied on orders, but which do not yet have a mapping registered for that date. Missing mappings will be reported for the current trade date and prior two days only.

### 2.3. Service Access

#### 2.3.1. SFTP

Files will be exchanged via SFTP to `sftp://sftp.ibb.ubs.com`.  
Please contact UBS MTF support to request access.

### 2.4. Interface changes

UBS MTF may add additional columns to the files specified in this document in future, however existing columns will not be removed or reordered without prior communication via market notice. It is strongly recommended that users these file be prepared to ignore new columns which are added over time.

## 3. Submission

### 3.1. Naming

`/uploads/MXXX_identifiers_YYYYMMDD_NNNN.csv`

Where MXXX is the member's primary participant code, and YYYYMMDD is the current calendar day, and NNN is a counter, starting at 0001. If necessary, further submissions can be made for the same day, with counter incremented, i.e., 0002, 0003, etc.

### 3.2. Content

Column Name	Data Type	Description
Short Code	Integer	Mandatory. Values between 4 to 4,294,967,295 are permitted. Values 0 to 3 are reserved (see UBS MTF FIX RoE [3]). Attempting to register a long code against these values will result in the registration failing.
Long Code	String	Mandatory. Algorithm ID (free text, up to 50 characters), or Legal entity identifier as defined in ISO 17442 (20 characters), or National ID (35 characters), as specified in [3].
Type	String	Mandatory. Specifies which of the six types of identifier the short code represents <ul style="list-style-type: none"><li>• "Client-Person" (long code is a National ID)</li><li>• "Client-Entity" (long code is an LEI)</li></ul>

		<ul style="list-style-type: none"> <li>• "InvestorDecisionMaker-Person" (National ID)</li> <li>• "InvestorDecisionMaker-Algo" (Algorithm ID)</li> <li>• "ExecutionDecisionMaker-Person" (National ID)</li> <li>• "ExecutionDecisionMaker-Algo" (Algorithm ID)</li> </ul>
Effective Date	ISO 8601 Date	Mandatory (as YYYY-MM-DD) Date which this registration is effective from.
End Date	ISO 8601 Date	Optional, as (as YYYY-MM-DD) Mandatory (as YYYY-MM-DD), if an end date for the registration is known, otherwise leave empty if an end date for the registration is not known.

### 3.3. Example

```
Short Code,Long Code,Identifier Type,Effective Date,End Date
27,221454659,Client-Person,2017-06-01,2018-01-01
27,13341233423,Client-Person,2018-01-02,
29,335123053,Client-Entity,2017-02-01,
30,ABCx76x,InvestorDecisionMaker-Person,2017-01-01,
```

## 4. View missing identifiers

UBS MTF will generate a daily report containing a list of missing identifiers for all days prior to the current day. This file will be available each trading day following market close. If no identifiers are missing, the file will be generated with the header line only.

### 4.1. Heading

```
/feedback/MXXX_missing_registrations_YYYYMMDD.csv
```

### 4.2. Data

Column Name	Data Type	Description
Short Code	Integer	The short code.
Identifier Type	String	This corresponds to FIX order tag PartyID(448) The type of identifier submitted. This corresponds to the FIX order PartyRole and PartyRoleQualifier as follows:

FIX PartyRole	FIX PartyRoleQualifier	Identifier Type
ClientId (FIX field value:3)	Firm or Legal Entity (FIX field value:23)	Client-Entity
ClientId (3)	Natural Person (24)	Client-Person
Executing Trader (Executing decision maker) (12)	Algorithm (22)	ExecutionDecisionMaker- Algo

Executing Trader (Executing decision maker) (12)	Natural Person (24)	ExecutionDecisionMaker- Person
Investment Decision Maker (122)	Algorithm (22)	InvestorDecisionMaker- Algo
Investment Decision Maker (122)	Natural Person (24)	InvestorDecisionMaker- Person

Effective Date	ISO 8601Date	First date of the period for which the short code does not have a corresponding long code registered.
End Date	ISO 8601Date	Last date of the period for which the short code does not have a corresponding long code registered.

### 4.3. Example

```
Short Code, Identifier Type, Start Date, End Date
101, Client-Person, 2018-01-03, 2018-01-05
101, Client-Person, 2018-01-15, 2018-01-16
103, Client-Person, 2018-01-03,
104, Client-Entity, 2018-01-03,
105, Client-Entity, 2018-02-29,
```

## 5. References

- [1] European Commission, "Markets in Financial Instruments (MiFIR) - Regulation (EU) No 600/2014," [Online]. Available: [https://ec.europa.eu/info/law/markets-financial-instruments-mifir-regulation-eu-no-600-2014\\_en](https://ec.europa.eu/info/law/markets-financial-instruments-mifir-regulation-eu-no-600-2014_en).
- [2] European Commission, "Regulatory technical standards for the maintenance of relevant data relating to orders in financial instruments," 24 6 2016. [Online]. Available: [http://ec.europa.eu/finance/securities/docs/isd/mifid/rts/160714-rts-23\\_en.pdf](http://ec.europa.eu/finance/securities/docs/isd/mifid/rts/160714-rts-23_en.pdf).
- [3] European Commission, "Commission Delegated Regulation (EU) on transaction reporting obligations under Article 26 of Regulation (EU) No 600/2014," [Online]. Available: [http://ec.europa.eu/finance/docs/level-2-measures/mifir-rts-22\\_en.pdf](http://ec.europa.eu/finance/docs/level-2-measures/mifir-rts-22_en.pdf).