

UBS ATS

Class B Direct and Indirect Subscriber FIX Specification Including Conditional Indications

October 2019



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1 UBS ATS Operations and UBS Form ATS-N

This specification is intended to be a technical supplement to the UBS Form ATS-N filing, available at <https://www.sec.gov/divisions/marketreg/form-ats-n-filings.htm>.

For a detailed description of the UBS ATS and its operations please refer to the UBS Form ATS-N.

2 Direct FIX Messages for Orders

Any tags not explicitly supported as indicated in this section will be ignored.

2.1 Pegged Orders (Mid, Primary, Market)

FIX Tag	Field Name	Required	Description / Comment
1	Account	N	If sent, the value will be echoed back.
11	CLOrdID	Y	Unique identifier of the order as assigned by institution. Max 25 Char.
15	Currency	N	If sent, value must be USD
18	ExecInst	Y	Can only be one of the following values: M (Mid-Price Peg), R (Primary Peg), P (Market Peg). Values unrelated to peg type will be ignored.
21	HandlInst	Y	1 (Automated execution order)
22	IDSOURCE	N	Required if using RIC Code
38	OrderQty	Y	Number of shares ordered
40	OrdType	Y	P (Pegged)
44	Price	N	Absolute price constraint
47	OrderCapacity	Y	Must send A (Agency) or P (Principal)
48	SecurityID	N	Required if using RIC Code
54	Side	Y	1 (Buy), 2 (Sell), 5 (Sell Short), 6 (Sell Short Exempt)
55	Symbol	Y	Can include Symbol or Symbol, separator, and suffix. Separator must always be "." This field must be populated but will not be used if tags 22/48 are present.
65	SymbolSfx	N	Send Symbol Suffix in 65 if not included in tag 55. Do not include separator.
59	TimeInForce	Y	0 (Day), 3(IOC)
60	TransactTime	Y	Time the order was initiated
110	MinQty	N	Minimum quantity for each execution on the order
439	MPID	Y	Nasdaq Assigned MPID for of the routing Broker Dealer when applicable. Clearing firm assigned MPID for BD's that are not a member of Nasdaq or FINRA.
5301	PeggedMidpointMode	N	Valid only for MidPoint Pegged Order. How the crossing engine treats the midpoint (between the bid & ask) for a pegged order. 1 - FillToLimit: Fill to the limit price, meaning it could be away from the midpoint (default) 2 - FillToMidpoint: Executions that add liquidity will execute at the midpoint only. Executions removing liquidity may execute at a price better than the midpoint if the limit price of the order is equal to or more aggressive than the midpoint (ie. a buy order with a limit price at or above the midpoint or a sell order with a limit price at or below the midpoint).
5303	MinQuantityLeavesMode	N	If tag 110 (MinQty) is present, this tag specifies how the order is handled when the leaves quantity of an order becomes smaller than MinQty. Possible values are: 1 - No MinQty in affect when leaves < MinQty (default)

			<p>2 - MinQty becomes the leaves quantity when leaves < MinQty</p> <p>3 - Remainder of order is cancelled if leaves < MinQty. An unsolicited cancel ack ("OUT") message is sent to the originator of the order and the order is removed from the book.</p>
6884	ConditionalInviteGrade	N	<p>Minimum Conditional Score required for a Conditional Indication to get invites from this order.</p> <p>0: Do not generate any invitations to Conditional Indications (default if not sent)</p> <p>1: invite all</p> <p>2: invite if score is medium, high or UBS algo</p> <p>3: invite if score is high or UBS algo</p> <p>4: invite if score is UBS algo</p>
9004	Crossing Restrictions	Y	<p>1 - No restrictions</p> <p>3 - Do not execute against UBS Principal orders</p> <p>4 - Do not execute against own orders (e.g. do not cross two orders sent by the same source client)</p> <p>5- Do not execute against UBS Principal orders or own orders</p> <p>S – Do not execute against Source Category 5 orders</p> <p>T – Do not execute against Source Category 5 or UBS Principal Orders</p> <p>U - Do not execute against Source Category 5 or UBS Principal or own orders</p> <p>V - Do not execute against Source Category 5 or own Orders</p>
9007	RoundLotOnly	N	Y (Yes) – indicates round lot fills only

2.2 Limit Order

FIX Tag	Field Name	Required	Description / Comment
1	Account	N	If sent, the value will be echoed back.
11	ClOrdID	Y	Unique identifier of the order as assigned by institution. Max 25 Char.
15	Currency	N	If sent, value must be USD
21	HandlInst	Y	1 (Automated execution order)
22	IDSorce	N	Required if using RIC code
38	OrderQty	Y	Number of shares ordered
40	OrdType	Y	2 (Limit)
44	Price	Y	Limit Price of order
47	OrderCapacity	Y	Must send A (Agency) or P (Principal)
48	SecurityID	N	Required if using RIC Code
54	Side	Y	1 (Buy), 2 (Sell), 5 (Sell Short), 6 (Sell Short Exempt)
55	Symbol	Y	Can include Symbol or Symbol, separator, and suffix. Separator must always be "." This field must be populated but will not be used if tags 22/48 are present.
65	SymbolSfx	N	Send Symbol Suffix in 65 if not included in tag 55. Do not include separator.
59	TimeInForce	Y	0 (Day), 3(IOC)
60	TransactTime	Y	Time the order was initiated
110	MinQty	N	Minimum quantity for each execution on the order
439	MPID	Y	Nasdaq Assigned MPID for of the routing Broker Dealer when applicable. Clearing firm assigned MPID for BD's that are not a member of Nasdaq or FINRA.

5303	MinQuantityLeavesMode	N	If tag 110 (MinQty) is present, this tag specifies how the order is handled when the leaves quantity of an order becomes smaller than MinQty. Possible values are: 1 - No MinQty in affect when leaves < MinQty (default) 2 - MinQty becomes the leaves quantity when leaves < MinQty 3 - Remainder of order is cancelled if leaves < MinQty. An unsolicited cancel ack ("OUT") message is sent to the originator of the order and the order is removed from the book.
6884	ConditionallInviteGrade	N	Minimum Conditional Score required for a Conditional Indication to get invites from this order. 0: Do not generate any invitations to Conditional Indications (default if not sent) 1: invite all 2: invite if score is medium, high or UBS algo 3: invite if score is high or UBS algo 4: invite if score is UBS algo
9004	Crossing Restrictions	Y	1 - No restrictions 3 - Do not execute against UBS Principal orders 4 - Do not execute against own orders (e.g. do not cross two orders sent by the same source client) 5- Do not execute against UBS Principal orders or own orders S – Do not execute against Source Category 5 orders T – Do not execute against Source Category 5 or UBS Principal Orders U - Do not execute against Source Category 5 or UBS Principal or own orders V - Do not execute against Source Category 5 or own Orders
9007	RoundLotOnly	N	Y (Yes) – indicates round lot fills only

2.3 Market Order

FIX Tag	Field Name	Required	Description / Comment
1	Account	N	If sent, the value will be echoed back
11	ClOrdID	Y	Unique identifier of the order as assigned by institution. Max 25 Char.
15	Currency	N	If sent, value must be USD
21	HandlInst	Y	1 (Automated execution order)
22	SecurityIDSource	N	Required if using RIC code
38	OrderQty	Y	Number of shares ordered
40	OrdType	Y	1 (Market)
47	OrderCapacity	Y	Must send A (Agency) or P (Principal)
48	SecurityID	N	Required if using RIC code
54	Side	Y	1 (Buy), 2 (Sell), 5 (Sell Short), 6 (Sell Short Exempt)
55	Symbol	Y	Can include Symbol or Symbol, separator, and suffix. Separator must always be "." This field must be populated but will not be used if tags 22/48 are present.
65	SymbolSfx	N	Send Symbol Suffix in 65 if not included in tag 55. Do not include separator.
59	TimeInForce	Y	0 (Day), 3(IOC)
60	TransactTime	Y	Time the order was initiated
110	MinQty	N	Minimum quantity for each execution on the order

439	MPID	Y	Nasdaq Assigned MPID for of the routing Broker Dealer when applicable. Clearing firm assigned MPID for BD's that are not a member of Nasdaq or FINRA.
5303	MinQuantityLeavesMode	N	If tag 110 (MinQty) is present, this tag specifies how the order is handled when the leaves quantity of an order becomes smaller than MinQty. Possible values are: 1 - No MinQty in affect when leaves < MinQty (default) 2 - MinQty becomes the leaves quantity when leaves < MinQty 3 - Remainder of order is cancelled if leaves < MinQty. An unsolicited cancel ack ("OUT") message is sent to the originator of the order and the order is removed from the book.
6884	ConditionalInviteGrade	N	Minimum Conditional Score required for a Conditional Indication to get invites from this order. 0: Do not generate any invitations to Conditional Indications (default if not sent) 1: invite all 2: invite if score is medium, high or UBS algo 3: invite if score is high or UBS algo 4: invite if score is UBS algo
9004	Crossing Restrictions	Y	1 - No restrictions 3 - Do not execute against UBS Principal orders 4 - Do not execute against own orders (e.g. do not cross two orders sent by the same source client) 5- Do not execute against UBS Principal orders or own orders S – Do not execute against Source Category 5 orders T – Do not execute against Source Category 5 or UBS Principal Orders U - Do not execute against Source Category 5 or UBS Principal or own orders V - Do not execute against Source Category 5 or own Orders
9007	RoundLotOnly	N	Y (Yes) – indicates round lot fills only

2.4 Execution Message

Tag Id	Field Name	Required	Description / Comment
1	Account	N	Echo of value in Order message
6	AvgPx	Y	Average price of all fills on the order
11	ClOrdID	Y	Unique identifier of the order as assigned by the Subscriber. Max 25 Char.
14	CumQty	Y	Amount of executed shares on order
15	Currency	N	Echo value in the order message
17	ExecID	Y	Unique identifier of the execution message
19	ExecRefID	N	Sent on Trade Cancel
20	ExecTransType	Y	0=New 1=Cancel; ExecTransType=1 is used for busts from the ATS
22	IDSource	N	Echo value in the order message
29	LastCapacity	Y	2(Cross as Agent), 4(Principal) or 4(Principal) with Text "Riskless"
30	LastMkt	Y	MIC Code "UBSA". Can send "65" upon request.
31	LastPx	N	Price of last fill
32	LastShares	N	Qty bought/sold on last fill
37	OrderID	Y	Unique identifier of the order as assigned by the ATS.
38	OrderQty	Y	

39	OrdStatus	Y	Current Status of the order
40	OrdType	N	
41	OrigClOrdID	N	Conditionally required for response Cancel or Cancel/Replace
44	Price	N	
47	OrderCapacity	N	
48	SecurityID	N	
54	Side	Y	Side of order
55	Symbol	Y	Ticker Symbol
59	TimeInForce	N	
60	TransactTime	Y	Time the transaction represented by this ER occurred
65	SymbolSfx	N	Symbol suffix
75	TradeDate	N	
76	ExecBroker	Y	"UBSA"
110	MinQty	N	
132	BidPx	N	National best BID price known by the matching engine at the time of execution
133	OfferPx	N	National best Offer price known by the matching engine at the time of execution
150	ExecType	Y	Describes the type of execution report.
151	LeavesQty	Y	Amount of shares open for further execution
375	ContraBroker	Y	"UBSA"
167	SecurityType	Y	CS=Common Stock
527	SecondaryExecId	Y	Unique identifier assigned to both sides of a cross.
851	LastLiquidityInd	Y	1 (Adding Liquidity), 2 (Removing Liquidity), Y (Add vs Conditional), Z (Remove vs Conditional)

2.5 Order Cancel Replace Request

Only OrderQty, Price and MinQty can be modified. All other fields should be sent in accordance with FIX 4.2 requirements.

Tag Id	Field Name	Required	Description / Comment
1	Account	N	Must match original order
11	ClOrdID	Y	Unique identifier of replacement order assigned by Subscriber . Max 25 Char.
15	Currency	N	Must match original order
18	ExecInst	N	Must match original order
21	HandlInst	Y	1 (Automated execution order)
22	IDSource	N	Must match original order
37	OrderID	N	
38	OrderQty	Y	Number of shares ordered
40	OrderType	Y	Must match original order
41	OrigClOrdID	Y	As sent on the previous order
44	Price	N	Required for Limit OrdTypes. Absolute Price Constraint
47	OrderCapacity	N	Must match original order
48	SecurityID	N	Must match original order

54	Side	Y	Must match original order
55	Symbol	Y	Must match original order
59	TIF	Y	Must match original order
60	TransactTime	Y	Time the Replace was initiated
65	SymbolSfx	N	Symbol suffix
110	Min Qty	N	Can be replaced if present on the original order
439	MPID	N	Must match original order
5303	MinQuantityLeavesMode	N	Must match original order
6884	ConditionallInviteGrade	N	Must match original order
9004	CrossingRestrictions	N	Must match original order

2.6 Order Cancel Request

Tag Id	Field Name	Required	Description / Comment
11	ClOrdID	Y	Unique identifier of cancel request assigned by Subscriber. Max 25 Char.
22	IDSource	N	Must match original order
37	OrderID	N	
38	OrderQty	Y	
41	OrigClOrdID	Y	As sent on the previous order
48	SecurityID	N	Must match original order
54	Side	Y	1 (Buy), 2 (Sell), 5 (Sell Short), 6 (Sell Short Exempt)
55	Symbol	Y	Must match original order
60	TransactTime	Y	Time the cancel request was originated
65	SymbolSfx	N	Symbol suffix

2.7 Order Cancel Reject

Tag Id	Field Name	Required	Description / Comment
11	ClOrdID	Y	As assigned by the order cancel or replace request. Max 25 Char.
37	OrderID	Y	
39	OrdStatus	Y	OrdStatus value after this cancel reject is applied
41	OrigClOrdID	Y	As sent on the previous order
102	CxlRejReason	N	
22	IDSource	N	Echo value in the order message
48	SecurityID	N	
58	Text	N	
434	CxlRejResponseTo	Y	1 (Order cancel request), 2 (Order cancel/replace request)

3 Conditional Indications (CIs) FIX Messages

Please see "Conditional Orders and Indications of Interest" section of the UBS Form ATS-N for detailed information about CIs.

3.1 Entering a New CI

UBS ATS CIs are sent using the NewOrderSingle (Tag 35=D) message including tag 5253.

FIX Tag	Field Name	Required	Description / Comment
11	ClOrdID	Y	Unique identifier of the order as assigned by institution. Max 25 Char.
18	ExecInst	Y	Can only be one of the following values: M (Mid-Price Peg), R (Primary Peg), P (Market Peg) Values unrelated to peg type will be ignored.
21	HandlInst	Y	1 (Automated execution order)
22	IDSource	N	Required if using RIC Code
38	OrderQty	Y	Conditional Indication Quantity
40	OrdType	Y	1 (Market),2(Limit), P (Pegged)
44	Price	N	Limit Price
47	OrderCapacity	Y	Must send A (Agency) or P (Principal)
48	SecurityID	N	Required if using RIC Code
54	Side	Y	1 (Buy), 2 (Sell),5 (Sell Short), 6 (Sell Short Exempt)
55	Symbol	Y	Can include Symbol or Symbol, separator, and suffix. Separator must always be "." This field must be populated but will not be used if tags 22/48 are present.
65	SymbolSfx	N	Send Symbol Suffix in 65 if not included in tag 55. Do not include separator.
59	TimeInForce	Y	0 (Day)
60	TransactTime	Y	Time the order was initiated
110	MinQty	N	Conditional Minimum quantity
439	MPID	Y	Nasdaq Assigned MPID for of the routing Broker Dealer when applicable. Clearing firm assigned MPID for BD's that are not a member of Nasdaq or FINRA.
9004	Crossing Restrictions	Y	<p>1 - No restrictions</p> <p>3 - Do not execute against UBS Principal orders</p> <p>4 - Do not execute against own orders (e.g. do not cross two orders sent by the same source client)</p> <p>5- Do not execute against UBS Principal orders or own orders</p> <p>S – Do not execute against Source Category 5 orders</p> <p>T – Do not execute against Source Category 5 or UBS Principal Orders</p> <p>U - Do not execute against Source Category 5 or UBS Principal or own orders</p> <p>V - Do not execute against Source Category 5 or own Orders</p>
5253	OrdTypeExt	Y	C (Conditional Indication)
6884	ConditionallInviteGrade	Y	<p>Minimum Conditional Score required for a CI to get invites.</p> <p>0: Do not generate any invitations to CIs (default if not sent)</p> <p>1: invite all</p> <p>2: invite if score is medium, high or UBS algo</p> <p>3: invite if score is high or UBS algo</p> <p>4: invite if score is UBS algo</p>

3.2 Receiving an Invite Message

An Invite Message is represented as an UnsolicitedCancel Execution Report (Tag 35=8).

FIX Tag	Field Name	Required	Description / Comment
6	AvgPx	Y	Avg price of executions. 0 since there are no executions
11	ClOrdID	Y	Unique identifier of the order as assigned by institution. Max 25 Char.
14	CumQty	Y	Quantity Executed. 0 since there are no executions
17	ExecID	Y	Unique ID for each Execution Report message
20	ExecTransType	Y	Value of 0 (New)
31	LastPx	Y	Value of 0
32	LastShares	Y	Value of 0
44	Price	N	Absolute price constraint
38	OrderQty	Y	Number of shares ordered
37	OrderID	Y	Unique identifier of the order as assigned by the ATS.
39	OrdStatus	Y	Status of the order. Value of 4 (Cancelled)
54	Side	Y	1 (Buy), 2 (Sell), 5 (Sell Short), 6 (Sell Short Exempt)
55	Symbol	Y	Can include Symbol or Symbol, separator, and suffix. Separator must always be "." This field must be populated but will not be used if tags 22/48 are present.
65	SymbolSfx	N	Send Symbol Suffix in 65 if not included in tag 55. Do not include separator.
22	IDSource	N	Required if using RIC Code
48	SecurityID	N	Required if using RIC Code
150	ExecType	Y	State of the Execution Report. Value of 4 (Cancelled)
151	LeavesQty	Y	Value of 0
6214	InviteID	Y	Unique ID to be used for reference on the Firm-Up Order

3.3 Responding to an Invite

The originator of the CI is expected to respond to an Invite Message by sending a Day order (a "Firm-Up Order") (NewOrderSingle, Tag 35=D) message to the UBS ATS with a reference to the Invite ID.

Please note that Invite Grade (Tag 6884) is not supported on a Firm-Up order and a Firm-Up Order should not include Tag 5253 (OrdTypeExt).

FIX Tag	Field Name	Required	Description / Comment
1	Account	N	If sent, the value will be echoed back.
11	ClOrdID	Y	Unique identifier of the order as assigned by institution. Max 25 Char.
15	Currency	N	If sent, value must be USD
18	ExecInst	Y	Can only be one of the following values: M (Mid-Price Peg), R (Primary Peg), P (Market Peg) Values unrelated to peg type will be ignored.
21	HandlInst	Y	1 (Automated execution order)

22	IDSource	N	Required if using RIC Code
38	OrderQty	Y	Number of shares ordered
40	OrdType	Y	1(Market), 2 (Limit), P(Pegged)
44	Price	N	Limit Price. Required for Limit orders.
47	OrderCapacity	Y	Must send A (Agency) or P (Principal)
48	SecurityID	N	Required if using RIC Code
54	Side	Y	1 (Buy), 2 (Sell), 5 (Sell Short), 6 (Sell Short Exempt)
55	Symbol	Y	Can include Symbol or Symbol, separator, and suffix. Separator must always be "." This field must be populated but will not be used if tags 22/48 are present.
65	SymbolSfx	N	Send Symbol Suffix in 65 if not included in tag 55. Do not include separator.
59	TimeInForce	Y	0 (Day)
60	TransactTime	Y	Time the order was initiated
110	MinQty	N	Minimum quantity for each execution on the order
6214	InviteID	Y	Unique ID to reference the Invite
439	MPID	Y	Nasdaq Assigned MPID for of the routing Broker Dealer when applicable. Clearing firm assigned MPID for BD's that are not a member of Nasdaq or FINRA.
5301	PeggedMidpointMode	N	Valid only for MidPoint Pegged Order. How the crossing engine treats the midpoint (between the bid & ask) for a pegged order. 1 - FillToLimit: Fill to the limit price, meaning it could be away from the midpoint (default) 2 - FillToMidpoint: Executions that add liquidity will execute at the midpoint only. Executions removing liquidity may execute at a price better than the midpoint if the limit price of the order is equal to or more aggressive than the midpoint (ie. a buy order with a limit price at or above the midpoint or a sell order with a limit price at or below the midpoint).
5303	MinQuantityLeavesMode	N	If tag 110 (MinQty) is present, this tag specifies how the order is handled when the leaves quantity of an order becomes smaller than MinQty. Possible values are: 1 - No MinQty in affect when leaves < MinQty (default) 2 - MinQty becomes the leaves quantity when leaves < MinQty 3 - Remainder of order is cancelled if leaves < MinQty. An unsolicited cancel ack ("OUT") message is sent to the originator of the order and the order is removed from the book.
9004	Crossing Restrictions	Y	1 - No restrictions

			<p>3 - Do not execute against UBS Principal orders</p> <p>4 - Do not execute against own orders (e.g. do not cross two orders sent by the same source client)</p> <p>5- Do not execute against UBS Principal orders or own orders</p> <p>S – Do not execute against Source Category 5 orders</p> <p>T – Do not execute against Source Category 5 or UBS Principal Orders</p> <p>U - Do not execute against Source Category 5 or UBS Principal or own orders</p> <p>V - Do not execute against Source Category 5 or own Orders</p>
9007	RoundLotOnly	N	Y (Yes) – indicates round lot fills only

3.4 Execution Messages for Firmed Up Orders

Tag Id	Field Name	Required	Description / Comment
1	Account	N	Echo of value in Order message
6	AvgPx	Y	Average price of all fills on the order
11	ClOrdID	Y	Unique identifier of the order as assigned by the Subscriber. Max 25 Char.
14	CumQty	Y	Amount of executed shares on order
15	Currency	N	Echo value in the order message
17	ExecID	Y	Unique identifier of the execution message
19	ExecRefID	N	Sent on Trade Cancel
20	ExecTransType	Y	0=New 1=Cancel; ExecTransType=1 is used for busts from the ATS
22	IDSrc	N	Echo value in the order message
29	LastCapacity	Y	2(Cross as Agent), 4(Principal) or 4(Principal) with Text "Riskless"
30	LastMkt	Y	MIC Code "UBSA". Can send "65" upon request.
31	LastPx	N	Price of last fill
32	LastShares	N	Qty bought/sold on last fill
37	OrderID	Y	Unique identifier of the order as assigned by the ATS.
38	OrderQty	Y	
39	OrdStatus	Y	Current Status of the order
40	OrdType	N	
41	OrigClOrdID	N	Conditionally required for response Cancel or Cancel/Replace
44	Price	N	
47	OrderCapacity	N	
48	SecurityID	N	
54	Side	Y	Side of order
55	Symbol	Y	Ticker Symbol
59	TimeInForce	N	
60	TransactTime	Y	Time the transaction represented by this ER occurred



65	SymbolSfx	N	Symbol suffix
75	TradeDate	N	
76	ExecBroker	Y	"UBSA"
110	MinQty	N	
132	BidPx	N	National best BID price known by the matching engine at the time of execution
133	OfferPx	N	National best Offer price known by the matching engine at the time of execution
150	ExecType	Y	Describes the type of execution report.
151	LeavesQty	Y	Amount of shares open for further execution
375	ContraBroker	Y	"UBSA"
167	SecurityType	Y	CS=Common Stock
527	SecondaryExecId	Y	Unique identifier assigned to both sides of a cross.
851	LastLiquidityInd	Y	1 (Adding Liquidity), 2 (Removing Liquidity), Y (Add vs Conditional), Z (Remove vs Conditional)

4 Regulatory Reporting

When a match occurs, the UBS ATS will report the trade to a recognized trade reporting facility (TRF) operated by a self-regulatory organization using the UBSA MPID. The UBS ATS has the ability to report trades to the NYSE TRF and the NASDAQ TRF. Both are used as primary and backup for each other and both are actively used on a regular basis.

For OATS and OTS reporting orders sent to UBS ATS, please use the following information, for linkage:

Item	Related To	Value
Clearing Number	DTCC	642
Executing Broker	TRF	UBSA
Sent to Firm MPID	OATS	UBSA
Destination Code	OATS	M
Recipient's Market Participant Symbol	OTS	8-22651
Recipient Type	OTS	M
Last Market (UBS ATS)	FIX	65
MIC Code	FIX	UBSA

5 Clearing

The UBS ATS is operated by UBS Securities LLC as the Broker-Dealer Operator. UBS Securities LLC ("UBS") is a broker and dealer registered with the Securities and Exchange Committee (SEC). The Broker-Dealer Operator is a self-clearing broker-dealer and a member of the National Securities Clearing Corporation ("NSCC") and the Depository Trust Company ("DTC").

For more information regarding clearing please see "Clearance and Settlement" section of the UBS Form ATS-N.

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