



A2X FIX 4.2 Specification

20th July 2022

Version 1.4



Version History

Version	Date	Comments
1.1	01 Aug 2017	Initial version
1.2	02 Feb 2018	Removed MOC ordertype
1.3	13 Apr 2022	Current Production Version - Addition of Large In Scale, Benchmark Cross trade capture reports
1.4	20 Jul 2022	Updated message format for Trade Capture Reports to facilitate Matched Principal Trade (MP) and additional information. Inclusion of Market at Close (MaC) and Auction on Demand (AoD) ordertypes. Expected production go-live date: 3 October 2022



1 Introduction

1.1 Enquiries and Support

Please contact the A2X Support team at support@a2x.co.za with any questions relating to this document.

1.2 Network Connectivity

A2X will provide trading Members (or their representatives) with IP address and port information to establish a TCP/IP connection for the trading session.

One or more connections will be provided to the Member test environment and, on successful certification, connection details to the primary and backup production trading environments will be supplied.

Connectivity options (co-location, leased line, extranet) should be discussed with the A2X networks team.

1.3 Trading Session Configuration

A2X will agree SenderCompID / TargetCompID values with the counterparty to identify their trading session and to identify A2X MTF as the intended trading venue.

These fields are case-sensitive, with a maximum field size of 16 characters. For Service Bureau connections, the trading Member identification is communicated via agreed OnBehalfOfCompID values.

These configuration fields are also case-sensitive, with a maximum field size of 16 characters.



1.4 Note on Account Field

The Account (1) field may be used by Members to specify whether trades against a particular order should be allocated to the House account at the client or to a specific client account. The value 'H' should be used to nominate the House account, the field may also be used to nominate a specific account.

If the field is not supplied, then allocation to the House account is assumed by default and is not echoed back in execution messages.

Please note that all accounts need to be loaded on the A2X engine and in MeCRAS in order to be used. Any client specified values can be used with a maximum length of 16 characters and 65,535 account values per member.

1.5 Note on Symbology

A2X encourages Members to use the Uniform Symbology Code in the Symbol (55) field to identify the security that they wish to trade on the platform. This symbology scheme has been adopted by a number of European venues; please contact the A2X connectivity team for more information if required.

If a Member's trading system does not yet support Uniform symbology, A2X also accepts ISIN and RIC as alternative security identifiers. To do so, the IDSource (22) field must be set to indicate the chosen symbology: value 4 for ISIN, 5 for RIC.

If using an ISIN to identify a security, the ISIN must be provided in the SecurityID (48) field and the fields Currency (15) and SecurityExchange (207) must also be set to the required currency and market (MIC) in order to uniquely identify the security.

If using a RIC to identify a security, either the A2X RIC or the primary market RIC must be provided in the SecurityID (48) field.



If choosing to use the IDSource option to specify the security by ISIN or RIC then the Symbol (55) field will no longer be validated against the A2X security database.

Subsequent FIX Execution Report messages from A2X will include the same symbology information as was supplied in the initial New Order Single message with the exception of the Symbol (55) field, which will return the Uniform Symbology Code

1.6 Clearing Configuration

Before trading is permitted in the cash equities market, the Trading Member must supply their CSDP details to the A2X Settlement Committee. This is verified and set up by A2X as part of the Member's trading configuration and settlement.

1.7 Cancel on Disconnect

By default, all open Orders are cancelled automatically if the trading Member ends their session or the connection drops. If the Member does not want this behaviour to apply, they should notify A2X during the onboarding process.

1.8 Self-Trade Prevention

When a Member has multiple trading connections, A2X offers the option for self-trade prevention to be configured across these trading sessions. This prevents a Member from trading with themselves by cancelling the resting order that would otherwise match.

Cancel Resting Order – If an incoming (or price modified) order would trade with another order from that Member that is already on the A2X order book, the existing resting order is



automatically cancelled. The incoming order may trade with other orders, or is posted to the order book, as normal.

If required, self-trade prevention can be configured by the A2X Support team to apply to the Member's trading sessions. It does not require any changes to the FIX messaging for order entry and order management.

1.9 Post-Only and Post-Only Cancel Replace Order Types

A2X offers post-only (PO) and post-only cancel replace (POCR) order types which a Member may use to ensure that an order can only be passive.

Post-Only (PO) - If there are orders which a new incoming PO order could immediately match against, then the A2X trading system will cancel the incoming PO order.

Post-Only Cancel Replace (POCR) - POCR allows the submitting Member's resting order on the opposite side of the book to be cancelled and then replaced with the new order. If the incoming POCR order has the correct price limit to aggressively trade against another Member's order then the incoming POCR will be rejected. Please note that Members must have self-trade prevention enabled in order for the POCR order type to function correctly.

A PO/POCR order is specified using the custom FIX tag `PassiveOnlyOrder (27010)` on the New Order Single message. If the order is cancelled back to prevent an aggressive trade the Execution Report message, with `OrdStatus (39) = Cancelled (4)`, will carry the reason 'PO' in the `Text (58)` field.

Cancel/Replace requests for a PO/POCR order (for example to change price) will also require the custom tag to be set. The order will only be updated on the order book if it will not trade on entry, otherwise the order will be cancelled back to the trading Member.

A PO/POCR order can be cancelled like any other order; there is no need for tag 27010 in the Order Cancel request.



Note that the custom tag 27010 is not returned by A2X on any Execution Report messages so as not to affect any processing of order status or trading activity.

1.10 Large In Scale Cross Trade Report

A2X offers the ability to submit large in scale cross trades. These trades will be published on the A2X market data feed as off-book, on-exchange.

This functionality is for members who have two legs of pre-agreed agency flow which is greater than the LIS threshold and is required to be reported on-exchange. In a single message, the A2X member, acting on behalf of both the buyer and seller, can submit an agency block cross if considered large in scale compared to normal market size.

The order consideration must be equal to or larger than the minimum size for the security as defined by A2X.

Cross trades reported using the LIS Cross will not interact with the A2X order book.

1.11 Benchmark Cross Trade Report

A2X offers the ability to submit benchmark (volume weighted average price, VWAP) cross trades. These trades will be published on the A2X market data feed as off-book, on-exchange.

This functionality is for where an A2X member has two legs of pre-agreed agency flow which is required to be reported on-exchange and is benchmarked to an appropriate VWAP.

In a single message, the A2X member, acting on behalf of both the buyer and seller, can submit an agency cross priced accordingly to the VWAP for the crossing period.

Benchmark Cross trades are formalised negotiated transactions but are subject to conditions other than the current market price of the share. Therefore Benchmark Cross trades fall outside of the double volume caps.



Trades reported using the Benchmark Cross will not interact with the A2X order book.

1.12 Matched Principal Trade Report

A matched principal trade is a transaction where a member trades as a principal with a client, on the same day and at the same average price as transactions in the same equity security executed on the central order book of another exchange in the Republic for the member's own account but in the fulfilment of an order received from the client.

1.13 Auction on Demand (AoD)

A2X offers Auction on Demand (AoD) functionality. There is a separate AoD order book (MIC:A2XA). This order book is also separate to the A2X continuous trading order book (MIC:A2XX).

There will be no interaction between the AoD order books. Nor will there be interaction between the AoD and the existing A2X lit continuous order books.

Members can enter buy/sell orders for stocks which will rest on the MIC:A2XA order book until they can be matched with another valid order on the other side.

The following order types will be permitted with the Auction on Demand (AoD): a) Limit Order only; b) Limit Order with 'Trade at Middle' option (allows price improvement on executions which can occur at mid-tick).

The auction process is triggered when a valid order is entered into the book which can successfully match with an existing resting order. At this point the lit auction process begins.



1.14 Market at Close (MaC)

Orders may be submitted to the A2X Market at Close (MaC) at any time during the trading day. Orders submitted during continuous trading phase will be accepted but will not be published until the MaC opens. Up until the MaC lock phase, orders may be entered, replaced or cancelled.

Should a particular security at the Market of Listing not enter an auction phase within 30 seconds of the close of continuous trading on A2X, orders in that security will be cancelled back to the Member.

When the MaC is locked, Members are notified of the quantity accepted for matched orders by an Execution Report (Restatement) message: ExecType (150) = D (Restated).

During the MaC lock phase, the Order Capacity (47) can be modified up to the point when the trade is published.

If the order has only partially matched, the accepted quantity is reported in the OrderQty (38) field. The ExecRestatementReason (378) also indicates that there has been a partial cancel of order quantity. Note that, for clarity, the A2X MaC will still send a restatement message if the order fully matches. In this case, the OrderQty will not be reduced and the ExecRestatementReason will be used to indicate that the order has fully matched.

If an order is unmatched at lock time then the order will expire and cancel back to the Member.

When the Market of Listing auction ends, the locked matched orders on A2X are executed at the closing price. Trade reports are sent to the Member. Note that these Execution Report messages carry LastLiquidityInd (851) = 4 (Auction). LastMkt (30) will be A2XX.

If for any reason the Market of Listing auction is cancelled or extended for a security, the locked orders in that security will be cancelled back to the Member.



1.15 Iceberg Order Refresh

When the currently displayed quantity of an iceberg order has been traded, it is refreshed from the non-displayed reserve quantity. This new displayed quantity is published on A2X market data as a new order, with a new market data order ID.

The trading Member is notified of this display quantity refresh by an Execution Report (Restatement) message: ExecType (150) = D (Restated). The new market data order ID is provided in the SecondaryOrderID (198) field, for tracking purposes against the market data feed.

Note that the A2X OrderID (37) applies to the iceberg order as a whole and remains unchanged.

1.16 Sequence Numbers

A2X will re-set inbound and outbound sequence numbers back to one overnight, ready for the next trading day. Trading counterparties should do the same.

Messages must be sent, received, and processed in a sequenced order. During an established FIX session, if a message is received with a lower than expected sequence number (i.e. number already seen) then A2X will logout the session and drop the connection. If a message is received with an unexpectedly high sequence number then A2X will respond with a Resend Request to recover the missing messages before proceeding.



2 FIX Message Header and Trailer

2.1 StandardHeader

The standard FIX message header.

Please note that A2X will not re-transmit application messages other than in response to a Resend Request, and so does not use *PossResend*.

Tag	Field Name	Req'd	Comments
97	PossResend	N	<p>Set to Y to indicate that message may contain information that has been sent under another sequence number. A2X will process Order cancel messages that are flagged as possible re-sends under a new sequence number. It will not process Order entry or Order modification (cancel/replace) messages that are flagged as re-sent under a new sequence number.</p> <p>Please note that A2X will not re-transmit application messages other than in response to a Resend Request, and so does not use <i>PossResend</i>.</p> <p>N = Original transmission Y = Possible resend</p>
9	BodyLength	Y	(Always unencrypted, must be second field in message)
52	SendingTime	Y	Time of message transmission in UTC
122	OrigSendingTime	N	For retransmitted messages (<i>PossDupFlag</i> = Y), the time in UTC that the message was initially sent. If



			not available, then set to same value as <i>SendingTime</i> .
115	OnBehalfOfCompID	N	Inbound to A2X only. ID representing trading Member, as agreed with A2X, for service bureau connections.
8	BeginString	Y	Always unencrypted, must be first field in message. FIX.4.2 = FIX 4.2
56	TargetCompID	Y	Inbound to A2X: ID representing A2X MTF (case-sensitive), as agreed. Outbound from A2X: ID of counterparty firm, the value originally sent to A2X as the <i>SenderCompID</i> in the related incoming message.
35	MsgType	Y	(Always unencrypted, must be third field in message)
34	MsgSeqNum	Y	Message sequence number for today's trading session.
49	SenderCompID	Y	ID of sending firm (case-sensitive)
43	PossDupFlag	N	Set to Y on retransmitted messages (e.g. following a Resend Request) N = Original transmission Y = Possible duplicate
128	DeliverToCompID	N	Outbound from A2X only. The value originally sent to A2X as the <i>OnBehalfOfCompID</i> if received from a service bureau.



2.2 StandardTrailer

The standard FIX message trailer

Tag	Field Name	Req'd	Comments
10	Checksum	Y	(Always unencrypted, always last field in message) Three byte, simple checksum



3 FIX Session Level Management

3.1 Logon

The first message A2X expects to receive from a client after the TCP/IP connection has been established is a Logon message (*MsgType* (35) = A).

The *SenderCompID* and *TargetCompID* fields are validated by A2X against the expected trading configuration. If this validation fails, the connection is terminated without sending any message.

The sequence number on the initial Logon for each trading day should be one. If the Logon is to re-establish a broken connection, the sequence number should correspond to the next expected inbound sequence number. If there have been connection problems, or following a drop in connectivity where messages were lost, the sequence number may be higher than expected and message recovery will follow (see below). However, if the sequence number is unexpectedly low then the connection is terminated without sending any message.

The heartbeat interval *HeartBtInt* (108) must also be specified in the Logon message. This value is specified in seconds and should be set at value between 5 and 120 seconds, as required by the counterparty.

On receipt of a valid Logon message, A2X will respond with a Logon message back (echoing the requested heartbeat interval) and then deal with any message recovery (see below). The counterparty should wait until it receives a valid Logon response before sending further messages to A2X.

If unexpectedly high sequence numbers were detected by either party, message recovery should be initiated. Otherwise the session is now established and should be maintained throughout the trading day.



Tag	Field Name	Req'd	Comments
	StandardHeader	Y	
98	EncryptMethod	N	(Always unencrypted) Method of encryption. 0 = None
108	HeartBtInt	N	Requested heartbeat interval in seconds. Value should be between 5 and 120 seconds. Default of 30 seconds if not present.
	StandardTrailer	Y	

3.2 Heartbeat

The Heartbeat monitors the status of the communication link and identifies when the last of a string of messages was not received.

A2X will send a Heartbeat message (*MsgType* = 0) if no other messages have been sent for the agreed heartbeat interval, *HeartBtInt*.

Tag	Field Name	Req'd	Comments
	StandardHeader	Y	
112	TestReqID	N	Present when the heartbeat is the result of a Test Request message.
	StandardTrailer	Y	



3.3 TestRequest

If no messages have been received for *HeartBtInt* +1 seconds then A2X will send a Test Request message (*MsgType* = 1) to test the connection and the responsiveness of the counterparty application. The Test Request message carries a *TestReqID* (112) value and the expected response is a Heartbeat message echoing back this *TestReqID* value.

If there is no response to the Test Request and overall no messages have been received for 2 x *HeartBtInt* seconds then A2X will logout the client and terminate the connection.

A2X expects the client FIX application to behave similarly, to maintain the session and to detect and react to abnormal behaviour.

Tag	Field Name	Req'd	Comments
	StandardHeader	Y	
112	TestReqID	Y	Identifier to be returned in resulting Heartbeat
	StandardTrailer	Y	

3.4 ResendRequest

After a drop in connectivity, it is possible that the client will have missed execution messages. This will be detected by the client receiving an unexpectedly high sequence number on the Logon response and they should initiate message recovery by sending a Resend Request (*MsgType* = 2).

A Resend Request should be processed, even if it is received with a high sequence number.

As per the FIX protocol the Resend Request may be for a set range of messages, or open ended by setting *EndSeqNo* (16) = 0. A2X will handle either type of request.



A2X will respond to the Resend Request by resending any application messages that have been missed and by using the Sequence Reset – Gap Fill message (*MsgType* = 4, *GapFillFlag* (123) = Y) to cover consecutive administrative messages. All retransmitted messages will be sent with *PossDup* (43) = Y.

Similarly, if there have been connectivity problems, it is possible that the sequence number on the inbound Logon from the client will be unexpectedly high. A2X will issue a Resend Request for the missed messages. The client may wish to consider sending a gap fill rather than resending any new Order messages, to avoid entering stale Orders into different market conditions.

Tag	Field Name	Req'd	Comments
	StandardHeader	Y	
7	BeginSeqNo	Y	Message sequence number of first message in range to be resent
16	EndSeqNo	Y	Message sequence number of last message in range to be resent. If request is for a single message BeginSeqNo = EndSeqNo. If request is for all messages subsequent to a particular message, EndSeqNo = "0" (representing infinity).
	StandardTrailer	Y	

3.5 Reject

A2X will use a session level Reject message (*MsgType* = 3) to respond to messages that break the session protocol or contain missing or incorrect fields. However this should be rare, and where possible A2X will respond with application level reject messages, such as OrderCancelReject or Execution Report – *OrdStatus* Rejected.



Tag	Field Name	Req'd	Comments
	StandardHeader	Y	
45	RefSeqNum	Y	MsgSeqNum of rejected message Reference message sequence number
58	Text	N	Where possible, message to explain reason for rejection Free format text string. Note: this field does not have a specified maximum length
	StandardTrailer	Y	

3.6 SequenceReset

Used by A2X to convey consecutive administrative messages following a Resend Request (MsgType = 2) which are not resent.

Tag	Field Name	Req'd	Comments
	StandardHeader	Y	
123	GapFillFlag	Y	Indicates that the Sequence Reset message is replacing administrative messages which will not be resent. Y = Gap Fill message, MsgSeqNum field valid
36	NewSeqNo	Y	New sequence number
	StandardTrailer	Y	



3.7 Logout

Either side may send a Logout message (*MsgType* = 5) to end the FIX session. The initiator should continue to process messages until it receives a Logout message in response and it may then terminate the connection.

Under normal circumstances, A2X will maintain the FIX session throughout the trading day and only issue a Logout prior to the maintenance window at the end of the day, after market close.

A2X will respond to a client Logout and will also issue a Logout if it receives a client message with a sequence number lower than expected and the *PossDupFlag* (43) is not set. A network level disconnection or an absence of messages for two heartbeat intervals are also treated as if the client had logged out.

Tag	Field Name	Req'd	Comments
	StandardHeader	Y	
58	Text	N	Optional test message
	StandardTrailer	Y	



4 FIX Application Messages

4.1 OrderSingle

A2X supports the FIX New Order Single message for order entry.

Tag	Field Name	Req'd	Comments
	StandardHeader	Y	
1	Account	N	Optional account field to specify House or Client Account for use with clearing CCP. If not supplied, A2X will assume House. Values must be pre-loaded on the A2X systems, any client specified values can be sent with a maximum length of 16 characters.
11	ClOrdID	Y	Unique for each Order on this session for the trading day. Maximum length 20 characters.
15	Currency	N	Required if ISIN is used to identify the security, <i>IDSource</i> (22) = 4 (ISIN) ZAC = South African Cents
21	HandlInst	N	Only acceptable value (and default if not supplied). 1 = Automated execution order, private, no Broker intervention
22	IDSource	N	Security identifier 4 = ISIN



			5 = RIC
38	OrderQty	Y	Number of shares
40	OrdType	Y	Order type <i>Note that the order type value supplied in this tag will be overridden by the 'Order Attribute' supplied in tag 27010</i> 2 = Limit 5 = Market at Close
44	Price	N	Limit price, required for limit orders. Not supported on MaC orders.
47	OrderCapacity	N	By default, if not supplied, orders are accepted as Principal A = Agency Order P = Principal
48	SecurityID	N	If using alternative symbology, RIC or ISIN depending on the value of <i>IDSource</i> (22)
54	Side	Y	Side of order 1 = Buy 2 = Sell
55	Symbol	N	A2X security - Uniform code. Not required if alternative symbology used.
59	TimeInForce	N	Default, if not supplied, is Day. Good Til Date orders will expire at time in <i>ExpireTime</i>



			(126) field, date must be today's date. Only Day orders are valid for Market at Close (MaC) and Auction on Demand (AoD) GFA orders are only valid for the AoD 0 = Day 3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date 8 = Good for Auction (GFA)
60	TransactTime	Y	Time this order entry request was initiated by the trading Member
111	MaxFloor	N	Display quantity for an iceberg order. The remainder of the order quantity is held in reserve and is not visible. The display quantity of all orders at a given price level will be traded first and then the hidden quantity. When the display quantity has been fully traded it is refreshed from the reserve.
126	ExpireTime	N	Date/time in UTC of order expiry for a Good Til Date order, with <i>TimeInForce</i> (59) = 6. Date must be today's date
207	SecurityExchange	N	Required if ISIN is used to identify the security, <i>IDSource</i> (22) = 4 (ISIN). XJSE = JSE (Johannesburg) 4AXE = Cape Town Exchange
27010	OrderAttribute	N	0 = Continuous Limit Order Book Regular Order (default)



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- 1 = Continuous Limit Order Book Post-Only Order
 - 2 = Continuous Limit Order Book POCR Order
 - 3 = Auction on Demand Limit Order
 - 4 = Auction on Demand Limit Trade at Middle Order
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StandardTrailer Y

4.2 ExecutionReport

A2X uses the FIX Execution Report message to accept or to reject a New Order Single, and to accept an Order Cancel Request or an Order Cancel/Replace Request.

Trade reports, and any subsequent trade busts, are also sent using the Execution Report.

Tag	Field Name	Req'd	Comments
	StandardHeader	Y	
1	Account	N	If provided on the original New Order Single message
6	AvgPx	Y	Average price of quantity so far traded on this order
11	ClOrdID	Y	The current <i>ClOrdID</i> identifier of the order, or the <i>ClOrdID</i> of the request that is being accepted
14	CumQty	Y	Cumulative quantity so far traded on this order
15	Currency	N	As provided on the original order ZAC = South African Cents
17	ExecID	Y	Unique id for the trading day for this Execution Report
19	ExecRefID	N	Sent for a trade bust (<i>ExecTransType</i> = 1) to identify



			the earlier Execution Report for the trade
			Identifies transaction type
20	ExecTransType	Y	0 = New (for order related messages and trade reports) 1 = Cancel (for a trade bust)
			As provided on the original order
22	IDSource	N	4 = ISIN 5 = RIC
			Market of execution for last fill, or an indication of the market where an order was routed A2XX = A2X Market Trade
30	LastMkt	N	
31	LastPx	Y	Price of this trade (zero if not a trade)
32	LastShares	Y	Quantity of this trade (zero if not a trade)
37	OrderID	Y	A2X order reference number
38	OrderQty	Y	Quantity of the order
			Status of the order
			0 = New 1 = Partially filled 2 = Filled 4 = Canceled 5 = Replaced 8 = Rejected C = Expired
39	OrdStatus	Y	
			As provided on the original order
40	OrdType	N	



			2 = Limit
41	OrigClOrdID	N	ClOrdId of the order that is being cancelled or replaced (for solicited cancel or replace responses only)
44	Price	N	Limit price, if provided on the original order
47	OrderCapacity	N	As provided on the original order A = Agency Order P = Principal
48	SecurityID	N	As provided on the original order
54	Side	Y	As provided on the original order 1 = Buy 2 = Sell
55	Symbol	Y	Uniform symbology code for the security.
58	Text	N	To provide error text in case of a reject message
59	TimeInForce	N	As provided on the original order 0 = Day 3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date
60	TransactTime	Y	Time of this event in UTC
111	MaxFloor	N	Display quantity for an iceberg order. The remainder of the order quantity is held in reserve and is not visible.



			The display quantity of all orders at a given price level will be traded first and then the hidden quantity. When the display quantity has been fully traded it is refreshed from the reserve.
126	ExpireTime	N	As provided on the original order
			Reason for this report
			0 = New 1 = Partially filled 2 = Filled 4 = Cancelled 5 = Replaced 8 = Rejected C = Expired D = Restated
150	ExecType	Y	
151	LeavesQty	Y	Quantity still open for execution
198	SecondaryOrderID	N	The A2X market data order id for tracking purposes, sent on a restatement message after the refresh of displayed quantity for an iceberg order
			As provided on the original order
207	SecurityExchange	N	XJSE = JSE (Johannesburg) 4AXE = Cape Town Exchange
382	NoContraBrokers	N	Only provided on trade reports, if present value will be 1
375	ContraBroker	N	Only provided on trade reports, the identifier of the CCP unless a CCP-suppressed 'self trade' where the value is set to 'SELF'



851	LastLiquidityInd	N	FIX 4.4 Tag for trade liquidity indicator. Only provided on trade reports. 1 = Added Liquidity 2 = Removed Liquidity
880	TrdMatchID	N	Identifier assigned to a trade by a matching system.
378	ExecRestatementReason	N	Code to identify reason for an Execution Report (8) message sent with ExecType (150) =Restated 4 = Broker Option 5 = Partial Decline of Order Quantity
	StandardTrailer	Y	

4.3 OrderCancelReplaceRequest

A2X supports the FIX Order Cancel/Replace message for order modification as detailed below.

It may be used to modify the limit price of an order and/or to increase or decrease the order quantity.

For MaC orders, the Order Capacity (47) can be modified up to the point when the trade is published.

For iceberg orders, the display quantity may be modified using MaxFloor (111). If the field is not sent, the original display quantity will be reused and will be applied to the modified order. Note that A2X does not support the modification of a regular limit order into an iceberg order.

A2X does not support the re-opening of a fully filled order by increasing order quantity or the sending of "Pending Replace" messages.



For Cancel and Cancel/Replace Request messages, alternate symbology (ISIN, RIC) is also still supported.

Tag	Field Name	Req'd	Comments
	StandardHeader	Y	
11	ClOrdID	Y	Unique identifier for the replacement order on this session for the trading day. Maximum length 20 characters.
38	OrderQty	Y	New total order quantity (number of shares)
40	OrdType	Y	As provided on the original order 2 = Limit 5 = Market at Close
41	OrigClOrdID	Y	Identifier for the original or last modified version of the order
44	Price	N	New limit price, required for limit orders.
54	Side	Y	As provided on the original order. 1 = Buy 2 = Sell
55	Symbol	N	As provided on the original order
59	TimeInForce	N	As sent on the original order, this field cannot be modified 0 = Day



			3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date
60	TransactTime	Y	Time this order modification request was initiated by the trading Member
111	MaxFloor	N	Display quantity for an iceberg order. The remainder of the order quantity is held in reserve and is not visible. The display quantity of all orders at a given price level will be traded first and then the hidden quantity. When the display quantity has been fully traded it is refreshed from the reserve.
27010	OrderAttribute	N	0 = Continuous Limit Order Book Regular Order (default) 1 = Continuous Limit Order Book Post-Only Order 2 = Continuous Limit Order Book POCR Order 3 = Auction on Demand Limit Order 4 = Auction on Demand Limit Trade at Middle Order
	StandardTrailer	Y	

4.4 OrderCancelRequest

A2X supports the FIX Order Cancel Request message to fully cancel an open order or the balance on a partially traded order.

Tag	Field Name	Req'd	Comments
	StandardHeader	Y	
11	ClOrdID	Y	Unique identifier of the cancel request. Maximum length



			20 characters.
15	Currency	N	As provided on the original order ZAC = South African Cents
22	IDSource	N	As provided on the original order 4 = ISIN 5 = RIC
41	OrigClOrdID	Y	Identifier for the original or last modified version of the order.
48	SecurityID	N	As provided on the original order
54	Side	Y	As provided on the original order. 1 = Buy 2 = Sell
55	Symbol	N	As provided on the original order.
60	TransactTime	Y	Time this order entry request was initiated by the trading Member
	StandardTrailer	Y	

4.5 OrderCancelReject

A2X rejects an Order Cancel Request or an Order Cancel/Replace Request that it cannot act upon with a FIX Order Cancel Reject message.

Tag	Field Name	Req'd	Comments
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StandardHeader		Y	
11	CIOrdID	Y	The <i>CIOrdID</i> of the request that is being rejected
37	OrderID	Y	A2X order reference number. If an unknown order, value will be 0
			Status of the order that failed to be cancelled or replaced. If an unknown order, value will be set to 8 (Rejected)
39	OrdStatus	Y	0 = New 1 = Partially filled 2 = Filled 4 = Canceled 5 = Replaced 8 = Rejected
41	OrigCIOrdID	Y	The CIOrdID that could not be cancelled or replaced
44	Price	N	Limit price, if provided on the original order
58	Text	N	To provide a reason for the reject
			The type of request that this is a response to.
434	CxlRejResponseTo	Y	1 = Order Cancel Request 2 = Order Cancel/Replace Request Request
StandardTrailer		Y	

4.6 Large In Scale / Benchmark Cross Trade Capture

A2X uses the Trade Capture Report message from later versions of the FIX specification (specifically 4.4) as an extension to our existing 4.2 FIX ports for the purposes of allowing



members to submit negotiated trades to the exchange. Trade Capture Report messages are used by members to submit a trade which conforms to either of the following standards:

- » A Large in Scale (LS) cross where both legs of the trade must be considered large in scale compared with normal market size if it is equal to or larger than the minimum size of order specified per security.
- » A Negotiated Benchmark Cross (NC) trade between either an A2X member and their client or two clients of a member where both legs of the cross must be pre-agreed.
- » A Matched Principal Trade (MP) where both legs must have a capacity of Principipl (P) set.

Tag	Field Name	Req'd	Comments
	StandardHeader	Y	
828	TrdType	N	Sub type(829) value 0 permitted for Block Trade (1) Sub type(829) values 2 or 4 permitted for Weighted Average Price Trade (6) 1 = Block Trade 6 = Benchmark Cross
			Further qualification of the trade type
829	TrdSubType	Y	0 = Block Trade for clearing 2 = Volume Weighted Average Price Trade for clearing 4 = Matched Principal Trade (MP)
571	TradeReportId	Y	Unique identifier for the Trade Capture Report
15	Currency	N	Required if using ISIN or RIC ZAC = South African Cents



			Security identifier
22	IDSource	N	4 = ISIN 5 = RIC
48	SecurityID	N	If using alternative symbology, RIC or ISIN depending on the value of <i>IDSource</i> (22)
55	Symbol	N	A2X security - Uniform code. Not required if alternative symbology used.
207	SecurityExchange	N	Required if using ISIN or RIC XJSE = JSE (Johannesburg) 4AXE = Cape Town Exchange
31	LastPx	Y	Price of the trade
32	LastShares	Y	Quantity of the trade
60	TransactTime	Y	Time this order entry request was initiated by the trading Member
552	NoSides	N	
>54	Side	N	Required when NoSides(552) is greater than 0. 1 = Buy 2 = Sell
>1	Account	N	Optional account field, if omitted it will be assumed to be 'H' (House account). Values need to be pre-loaded on the trading platform.
>528	OrderCapacity	N	The capacity for this side of the trade



A = Agency
P = Principal
R = MTCH

75	TradeDate	Y	Date of trade referenced in this message in YYYYMMDD format. Acceptable values are for current day.
StandardTrailer		Y	

4.7 Large In Scale/Benchmark Cross Trade Capture Report Acknowledgement

In response to a member submitted Trade Capture Report, A2X will send the member back the following acknowledgement:

Tag	Field Name	Req'd	Comments
StandardHeader		Y	
15	Currency	N	Copied from the incoming TradeCaptureReport ZAC = South African Cents
17	TrdMatchID	N	Unique ID for the trading day for this Trade Capture Report
22	IDSource	N	Security identifier 4 = ISIN 5 = RIC



31	LastPx	Y	Price of this trade (zero if not a trade)
32	LastShares	Y	Quantity of this trade (zero if not a trade)
48	SecurityID	N	As provided on the original order
55	Symbol	N	A2X security - Uniform code. Not required if alternative symbology used.
58	Text	N	To provide error text in case of a reject message
60	TransactTime	Y	Time this order entry request was initiated by the trading Member
75	TradeDate	Y	Date of trade referenced in this message in YYYYMMDD format.
128	DeliverToCompID	N	Outbound from A2X only. The value originally sent to A2X as the <i>OnBehalfOfCompID</i> if received from a service bureau.
150	ExecType	Y	Reason for this report 8 = Rejected F = Trade
207	SecurityExchange	N	Copied from the incoming TradeCaptureReport XJSE = JSE (Johannesburg) 4AXE = Cape Town Exchange
552	NoSides	N	Copied from the incoming TradeCaptureReport
54	Side	Y	As provided on the original order.



			1 = Buy 2 = Sell
1	Account	N	Copied from the incoming TradeCaptureReport
528	OrderCapacity	N	A = Agency P = Principal R = MTCH
571	TradeReportId	Y	Unique identifier for the Trade Capture Report
828	TrdType	N	Trade type 1 = Block Trade (LIS_CROSS) 6 = Weighted Average Price Trade
829	TrdSubType	Y	Further qualification of the trade type 0 = Block Trade for clearing 2 = Volume Weighted Average Price Trade for clearing 4 = Matched Principal Trade (MP)
	StandardTrailer	Y	
