NYSE Pillar Gateway
FIX
Protocol Specification

NYSE

NYSE Arca Equities

NYSE American Equities

NYSE National

NYSE Chicago

September 23, 2024

SPEC VERSION 5.9

Contents

1. Introduction

This document describes the implementation of the FIX 4.2 protocol used by the NYSE Group markets via the Pillar FIX Gateway. It includes information pertaining to application communication with the following venues.

Current Market Support	Future Market Support
NYSE	NYSE Bonds
NYSE Arca Equities	
NYSE American Equities	
NYSE National	
NYSE Chicago	

This document assumes the reader has a thorough understanding of the FIX 4.2 protocol available at http://www.fixprotocol.org/. As such, it is not intended as a guide to constructing a FIX client. Rather, it is a reference to ensure that a firm's FIX client, constructed according to the FIX 4.2 specifications, will be compatible with the Pillar FIX Gateway.

1.1   About the Pillar FIX Gateway

Pillar FIX Gateway is the application offering a single protocol for firms to transact business with one or more of the NYSE Group markets. It is a component of Pillar, an integrated trading technology platform that has been designed to reduce complexity, while enhancing consistency, performance and resiliency across the NYSE Group markets.

For more information on the Pillar trading platform and gateway rollout, please visit https://www.nyse.com/pillar.

1.2   Session Configuration by Market

Each session on the Pillar Gateway will be configured to access a single NYSE Group market. The market configuration will determine which market-specific FIX tags and values may be transacted over that session. For details on the applicability of each tag and value to the various markets, please refer to the FIX Application Layer message formats.

1.3   Failure Recovery

Each session on the Pillar Gateway is assigned two pairs of destination Pillar IP addresses, and one port number used by all four IPs. The IP/Port pairs correspond to the Pillar Primary and DR production environments.

- **Primary Production Environment** – Pillar FIX Gateway users may be logged in to either the primary or backup destination IP addresses, but not both, at any given time.

  o   Once logged in, a successful login attempt on the other IP address will result in a logout on the first IP.

  o   In the event that the primary destination becomes unavailable, the user should attempt to log in on the secondary IP address.

    ▪   Cancel on Disconnect will be triggered if the outage was caused by a gateway failure or when the login occurs on the secondary IP address, honoring the Cancel on Disconnect configuration for the session.

- The sequence number on the secondary IP address will always continue from the last Application Layer message transacted on the primary IP (and vice versa). That is, Session Layer messages will not be recovered nor counted in determining the next sequence number expected from the client.

  o In the event of an intraday session restart, both Primary and Secondary destination IP addresses will be temporarily unavailable.

    - All open orders entered on the affected session will be cancelled, regardless of the Cancel on Disconnect configuration for the session.

    - Upon restart:

      - If the session restart was not accompanied by a software release rollback, Application Layer messages transacted on the affected session prior to the outage will be recoverable, and the sequence number will continue from the last Application Layer message transacted. That is, Session Layer messages will not be recovered.

      - If the session restart was accompanied by a software release rollback, messages transacted on the affected session prior to the outage will not be recoverable. Sequence numbers will start with 1.

- **DR Production Environment** – In the event that the Pillar Primary Production environment becomes unavailable, Pillar FIX Gateway users may log in to the DR IP addresses configured for their sessions.

  o All open orders will be cancelled automatically, regardless of whether the user attempts to log back in or not and regardless of the Cancel on Disconnect configuration for the session.

  o UROUTs will not be sent for the orders.

  o Messages transacted on the affected session prior to the outage will not be recoverable. Sequence numbers will start with 1.

NYSE Pillar Risk Mitigation

In the event a matching engine enters an unexpected state, the Pillar Risk Mitigation process will be triggered.

- Gateway users will receive unsolicited cancels on all live orders on the impacted matching engine, including MOO, LOO, MOC, LOC, with a reason code '168 – Pillar Risk Mitigation'.

- The impacted matching engine will initiate an automatic recovery during which period new orders will be rejected with a reason code '76 – System not available'.

- Once the resumption is complete, users will need to resubmit MOO, LOO, MOC, and LOC orders.

1.4 Contact Us

The NYSE Group Market Support teams have a centralized phone number. Through this number, clients are able to reach all support contacts for Trading, Technical, Market Data and Client Relationship Services.

+1 212-896-2830

Follow the prompts for menu options.

2. <u>Data Types</u>

A data type and length are provided for each FIX tag in this specification in the "Data Type" column of the message format tables. These length values represent systemic limits enforced by the Pillar FIX Gateway. All values entered by firms are subject to additional validations, as indicated in the "Values" column of the tables.

Firms should not null pad a FIX tag to equal the systemic limit. Instead, each tag should be populated with the natural length of the intended value.

3. <u>Maximum Order Price and Quantity</u>

The maximum allowable limit Price and OrderQty for the NYSE Group equities markets are as follows. Order and Cancel/Replace messages entered with values larger than the following will be rejected.

- **Maximum Price** - for all NYSE Group equities markets except where noted. The maximum value is determined on a per symbol basis, adjusted nightly based on closing last sale.

  It is recommended that at the start of each trading day, firms refer to the Price Scale Code published in the NYSE XDP Symbol Index Mapping message:
  - o **Symbols with price scale code 6** = $2,147.48
  - o **Symbols with price scale code 4** = $214,748.364; except for orders routed to NYSE Floor Broker Systems which have a maximum of $9,999.99
  - o **Symbols with price scale code 3** = $999,999.999; except for orders routed to NYSE Floor Broker Systems which have a maximum of $999,999.99

Price Scale	Closing Last Sale Threshold	Max Price
6	< $500.00	$2,147.480000
4	>= $500.00	$214,748.3640
3	>= $100,000.00	$999,999.999

- **Maximum OrderQty**
  - o **NYSE**
    - **Auction orders routed to matching engine** = 25,000,000 shares. Auction orders consist of MOO, LOO, MOC, LOC, Imbalance Offset for Close, Closing D Order, Opening D Order, and DMM orders representing manual interest for open and close. The maximum does not apply to Issuer Direct Offering (IDO) Order

- All other orders routed to matching engine = 5,000,000 shares
    - Orders routed to NYSE Floor Broker Systems = 99,000,000 shares
  - NYSE Arca Equities, NYSE American Equities, NYSE National = 5,000,000 shares
  - NYSE Chicago
    - Cross orders = 25,000,000 shares
    - All other orders = 5,000,000 shares

4. <u>Mapping Orders and Executions to NYSE XDP Market Data</u>

The NYSE Pillar FIX Gateway provides order and deal identifiers as unique 8 byte integers (unsigned Little Endian), represented as strings up to 20 characters in the following outgoing message types.

FIX Message Type	FIX Tag(s) for Mapping to XDP
MsgType 8 – Execution Report	OrderID (37), DealID (9483)
MsgType 9 – Cancel, Cancel/Replace Reject	OrderID (37)

To correlate the OrderID and TradeID values provided in the Pillar FIX Gateway with XDP 2.1 products:

- The full 8 bytes of the gateway "OrderID" correspond to the 'OrderID' field in XDP messages.

- Bytes 5 through 8 of the gateway "DealID" correspond to the 'TradeID' field in XDP messages.

  - In all XDP feeds, the MarketID and SystemID are provided in the Symbol Index Mapping, and these values are static for the trading day.

  - The table below shows the data structure of the 8-byte DealID value provided in the Pillar FIX Gateway as it maps to XDP fields. This table assumes the client byte ordering is Little Endian. If the client byte ordering is Big Endian, the byte order is reversed.

XDP Field Name	Offset	Size (Bytes)	XDP Format	Description
Reserved	0	1	Binary	0
SystemID	1	1	Binary	Unique ID of the originating Pillar symbol partition. This value is found in the Symbol Index Mapping message's ID field.
MarketID	2	2	Binary	ID of the Originating market in the Symbol Index Mapping.
TradeID	4	4	Binary	Public TradeID as it will appear in XDP products.

For more information, please refer to the XDP Common Client Specification at https://www.nyse.com/market-data/real-time.

NYSE and NYSE Chicago - on response messages for orders routed to Brokerplex and NYSE Floor Broker Systems, the OrderID and TradeID values will not correlate with NYSE XDP Market Data.

5. <u>Trading Services</u>

5.1   Self-Trade Prevention

NYSE Group offers a Self-Trade Prevention (STP) service. This service is designed to allow firms to better manage their order flow and prevent unintended executions with themselves.

STP Firm Identifier - STP may be enforced using one of two alternative firm identifiers:

- **MPID based STP** - two orders with the same MPID (OnBehalfOfCompID) + OnBehalfOfSubID (optional sub identifier) will be prevented from trading with each other.

- **ClientID based STP** - two orders with the same ClientID, an identifier registered with the Exchange, will be prevented from trading with each other regardless of whether the MPIDs are same or different. A firm may register a ClientID in support of a business unit within the same or affiliated firm, or for routing to the exchange through another member. ClientID STP is configuredas a session level default, available to order entry gateway sessions that have one MPID assigned. The default will be echoed back on order acknowledgements via unsolicited FIX tag ClientID (109). To register a new ClientID, please contact Client Relationship Services at CRS@nyse.com.

- The above identifiers are mutually exclusive. An order with a ClientID will always be allowed to trade with an order that does not have a ClientID, even if they are from the same MPID.

STP Types:

- **STP Cancel Newest –** An incoming order marked with this designation will not execute against opposite side resting interest marked with any of the STP Types. Instead, the incoming order or repriced order will be automatically cancelled back to the order originator. The resting order remains on the order book.

- **STP Cancel Oldest –** An incoming order marked with this designation will not execute against opposite side resting interest marked with any of the STP Types. Instead, the resting order will be automatically cancelled back to the order originator. The incoming order will then continue to auto execute or be placed on the order book.

- **STP Cancel Both –** An incoming order marked with this designation will not execute against opposite side resting interest marked with any of the STP Types. Instead, both the incoming order and the resting order will be cancelled back automatically.

- **STP Cancel Decrement –** An incoming order marked with this designation will not execute against opposite side resting interest marked with any of the STP Types. Instead, for price-time allocation, if both orders are equivalent in quantity, both orders will be cancelled back to the order originator. If the orders are not equivalent in quantity, the larger order is decremented by the quantity of the smaller order, and the smaller order is fully cancelled. For parity allocation (applicable only to NYSE), both the portion of a resting order that would receive an allocation and the portion of the incoming order that would be allocated to that resting order will be cancelled back to the order originator.

NYSE - for orders routed to NYSE Floor Broker Systems, STP evaluation is performed as follows:

- ClientID may be specified on an order-by-order basis only (gateway session level default will not be applied)

- **If ClientID (Tag 109) is specified** - orders with the same ClientID (Tag 109) values will not execute against each other

- **If ClientID (Tag 109) is not specified** - orders with the same MPID (OnBehalfOfCompID/Tag 115) will not execute against each other

- OnBehalfOfSubID (Tag 116) will not be considered in STP evaluation, regardless of whether or not it is specified

- STP is not evaluated between orders sent directly to the matching engine versus orders routed to NYSE Floor Broker Systems and then sent by a Broker to the matching engine. These orders will be allowed to trade with each other

5.2   Message Throttling

Inbound messages from a given session are read at a rate of 500 messages per rolling 100 milliseconds (including all Session and Application Layer message types).

A session becomes throttled when the message count reaches a value of 500 during the time window. A session becomes un-throttled when there are no messages to read from the firm.

Throttled messages are queued and processed in time sequence as the message read rate allows. Gap Fill Requests will be processed without impact to processing of inbound messages. However, responses to inbound application messages (acknowledgements, execution reports, etc.) will be sequenced after a Gap Fill Request that is in process.

5.3   Denial of Service Restrictions

Pillar maintains a running counter of log in attempts and session level rejects on a per SenderCompID/Target IP address basis over the course of a trading day. If either of the counters reaches 100, the SenderCompID/Target IP will go into Denial of Service Mode. Upon entering this mode Pillar will:

- Reset counters for the SenderCompID/Target IP to zero

- Cancel orders based on customer cancel on disconnect settings for the SenderCompID

- Disconnect the SenderCompID and refuse connection attempts to that specific TargetIP for 60 seconds

6. FIX Header & Trailer

All FIX messages sent and received via the Pillar FIX Gateway must include a Header and Trailer as defined below.

6.1   Header

Tag	Field Name	Data Type	Req'd	Values
FIX-8	BeginString	String[8]	Y	(ALWAYS FIRST FIELD IN MESSAGE) FIX.4.2
FIX-9	BodyLength	Int[6]	Y	(ALWAYS SECOND FIELD IN MESSAGE) Message length, in bytes, forward to the CheckSum field.
FIX-35	MsgType	String[3]	Y	(ALWAYS THIRD FIELD IN MESSAGE) A = Logon 0 = Heartbeat 1 = Test Request 2 = Resend Request 3 = Session Layer Reject 4 = Sequence Reset 5 = Logout D = New Order Single F = Order Cancel Request G = Order Cancel/Replace Request 8 = Execution Report 9 = Order Cancel Reject
FIX-34	MsgSeqNum	Int[20]	Y	Last sequence number processed. First message sent has sequence of 1.
FIX-43	PossDupFlag	Boolean	C	Y = Yes N = No
FIX-49	SenderCompID	String[32]	Y	Incoming Messages from Firm: Agreed upon Connection identifier set between the Exchange and the entering firm. Outgoing Messages from Exchange: Market Identifier Code (MIC) of the sending Exchange. ARCX = NYSE Arca Equities XNYS = NYSE XASE = NYSE American Equities XCIS = NYSE National XCHI = NYSE Chicago
FIX-50	SenderSubID	String[32]	C	Incoming Messages from Firm: This value represents a Market Maker, LMM, SLP, SLMM or DMM, agreed upon between the firm and the Exchange. These firms must provide their MMID along with its associated MPID on all orders intended to receive credit for satisfying their market making/liquidity obligations. Outgoing Messages from Exchange: Set to the value of the original SenderCompID on the incoming message from the firm. On drop copy sessions, represents the SenderCompID of the order entry session which originated the message.

Tag	Field Name	Data Type	Req'd	Values
FIX-52	SendingTime	UTC Timestamp [27]	Y	Time of message transmission on Incoming Messages from Firms & Outgoing messages from Exchange. UTC time, in Milliseconds - YYYYMMDD-HH:MM:SS.mmm
FIX-56	TargetCompID	String[32]	Y	Incoming Messages from Firm: Market Identifier Code (MIC) of target Exchange. ARCX = NYSE Arca Equities XNYS = NYSE XASE = NYSE American Equities XCIS = NYSE National XCHI = NYSE Chicago Outgoing Messages from Exchange: Agreed upon connection identifier set between the Exchange and the entering firm.
FIX-57	TargetSubID	String[32]	C	On Incoming Messages from Firm: Populate with "RET" (all caps) to designate an order as eligible for retail billing. All other values will be rejected. Not valid for orders entered on NYSE Chicago. On Outgoing Messages from Exchange: If provided on the incoming message from the firm (in SenderSubID), will be populated with the Market Maker ID (MMID). This value represents a Market Maker, LMM, SLP, SLMM or DMM, agreed upon between the firm and the Exchange. These firms must provide their MMID along with its associated MPID on all orders intended to receive credit for satisfying their marking making/liquidity obligations. On Outgoing Messages from Exchange related to orders routed to NYSE Chicago IB Firms: will be populated with the badge of the IB firm personnel that handled the related action.
FIX-97	PossResend	Boolean	C	Y = Yes N = No
FIX-115	OnBehalfOfCompID	String[4]	C	Incoming Messages from Firm: Firm Identifier – MPID. Required on all Application Layer message types. If provided on a Session Layer message type, the value will not be validated. Outgoing Messages from Exchange: If provided on the incoming message from the firm (in DeliverToCompID), will be populated with the NYSE Agency Code, Broker Badge or NYSE Chicago IB Firm Identifier.
FIX-116	OnBehalfOfSubID	String[4]	N	Incoming Messages from Firm to Exchange Matching Engine: Customer defined when sending to Matching engine– identifies specific entity/trading desk of the firm. For pre-trade risk controls, optional SubID. Incoming Messages from Firm to NYSE Chicago IB Firms: Trading Account for Non-Member Participants where applicable.

Tag	Field Name	Data Type	Req'd	Values
				Incoming Messages from Firm to NYSE Floor Broker Systems: Optional mnemonic.

Only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark.
****
Outgoing messages from Exchange Matching Engine: If provided on the incoming message from the firm, will be populated with the specific entity/trading desk of the firm or pre-trade risk controls SubID.

Outgoing messages from NYSE Chicago IB firms: If provided on the incoming message from the firm, will be populated with the Trading Account for Non-Member Participant.

Outgoing messages from NYSE Floor Broker Systems: If provided on the incoming message from the firm, will be populated with mnemonic. |
| FIX-122 | OrigSendingTime | UTC Timestamp [27] | N | Original time of message transmission when transmitting orders as the result of a resend request.

UTC time, in Milliseconds - YYYYMMDD-HH:MM:SS.mmm |
| FIX-128 | DelivertoCompID | String[5] | C | If intended to route to non-Matching Engine destinations, RouteToBroker (FIX-20011) must be populated as "Y" and the value must be a valid NYSE Agency Code or Broker Badge, (must be "zero-padded") or NYSE Chicago IB Firm Identifier.

The incoming message will be accepted and routed to the matching engine regardless of what is provided in the DeliverToCompID field when the abovementioned criteria is not met.

Outgoing Messages from Exchange: Firm Identifier – MPID. Required on all Application Layer message types. |

6.2   Trailer

Tag	Field Name	Data Type	Req'd	Values
FIX-10	CheckSum	String[6]	Y	(ALWAYS LAST FIELD IN MESSAGE; Always unencrypted)

Three byte, simple checksum that serves, with the trailing <SOH>, as the end-of-message delimiter. |

7. FIX Session Layer

This section describes the protocol for the initiation, operation, and termination of FIX sessions with the Pillar FIX Gateway. TCP/IP is the required transmission protocol, and FIX 4.2 is the required application protocol supplemented by certain custom tags and values as defined in this specification. The Pillar FIX Gateway will reject a message with any tags that are not defined for the given message type in this specification.

7.1   Pillar FIX Session Layer Handling

The Pillar FIX Gateway validates and handles inbound Session Layer messages according to the following rules:

- **MsgSeqNum as expected** – all messages with a sequence number equal to the expected value will be accepted and processed in full, provided they pass basic message type format validations. This includes both Session and Application Layer messages, regardless of the PossDup or GapFillFlag values indicated on the inbound message.

- **MsgSeqNum greater than expected** – in general, upon receipt of a message with a sequence number greater than the expected value, Pillar FIX Gateway will neither accept nor process the message and will not increment the expected client-side sequence number. The gateway will respond with a Resend Request with BeginSeqNo = the expected value, and EndSeqNo = 0 (infinity).

  However, there are two cases with special handling:

  - **Login Request with MsgSeqNum greater than expected** – Pillar FIX Gateway will send a Logon Response, immediately followed by the Resend Request.

  - **Resend Request with MsgSeqNum greater than expected** – Pillar FIX Gateway will process the request, provided it passes basic message type format validations. The requested messages will be retransmitted to the client.

  - **Sequence Reset with GapFillFlag set to N, or not set** – Pillar FIX Gateway will accept and process the request, provided it passes basic message type format validations. The expected client-side sequence number will be adjusted according to the NewSeqNo specified in the Sequence Reset message, as long as the requested number is higher than the next expected value.

- **MsgSeqNum less than expected** – in general, upon receipt of a message with a sequence number less than the expected value, Pillar FIX Gateway will respond with a Session-Level Reject message, then close the TCP connection. The expected client-side sequence number will not be incremented.

  However, there are two cases with special handling:

  - **Any Message with PossDup set to Y** – Pillar FIX Gateway will silently ignore the message.

  - **Sequence Reset with GapFillFlag set to N, or not set** – Pillar FIX Gateway will accept and process the request, provided it passes basic message type format validations. The expected client-side sequence number will be adjusted according to the NewSeqNo specified in the Sequence Reset message, as long as the requested number is higher than the next expected value.

7.2   Logon

This single message format is used as either a Logon Request or Logon Response depending on the message direction:

Usage	Description	Direction
Logon Request	Request to establish a FIX session.	Client to Gateway
Logon Response	Confirmation a FIX session has been established successfully.	Gateway to Client

The Pillar FIX Gateway authenticates the Logon Request by checking the SenderCompID [49] against the Username [553] and Password [554]. If either the Username or Password does not match the previously agreed value for that SenderCompID, the Pillar FIX Gateway will send a Logout Message [35=5] with SessionStatus [1409=5], then close the TCP connection. If the Logon Request is authenticated, the Pillar FIX Gateway will respond with a confirmation Logon Response.

The format for the Logon Request message is below:

Tag	Field Name	Data Type	Req'd	Description	Values
	Standard Header		Y	MsgType [35] = A	
FIX-98	EncryptMethod	Int[1]	Y	Must be 0 (No encryption).	0
FIX-108	HeartBtInt	Int[2]	Y	The Heartbeat interval in seconds.	1-60
FIX-95	RawDataLength	Int[1]	C	Length of RawData [96]. Must be included if RawData [96] is present.	3
FIX-96	RawData	String[3]	C	Session configuration settings. Optional on the Logon request, but always included in the Logon response. If included, all positions must be populated. Changes will be persisted for the length of the trading day or until the next time Pillar restarts. Valid values: **Position 1 — Cancel on Disconnect** 0 = Cancel on Disconnect Disabled 1 = Enable Cancel on Disconnect; Cancel – Day; Directed Orders (This will cancel all orders for the Session EXCEPT Auction orders – TIF = 2-At the Opening and 7-On Close*) 2 = Enable Cancel on Disconnect. Cancel – ALL orders for the Session* NYSE and NYSE Chicago - subscription with values 1 and 2 will cancel both orders in the matching engine and orders routed to NYSE Floor Broker Systems and Brokerplex. *Exclusions – The following orders are always excluded from cancellation during a Cancel on Disconnect event: - IOC orders - NYSE Arca Equities and NYSE American Equities - for primary symbols - MOO/LOO orders for 1 minute prior to the Core Opening Auction	Byte1: 0-2

Tag	Field Name	Data Type	Req'd	Description	Values
				- Primary Close Only Market/Limit (PO + MOC/LOC) orders for NYSE symbols after 3:50 PM	
				- MOC/LOC orders during Closing Auction freeze; on NYSE, for primary symbols - MOC/LOC orders after 3:50 PM	
				- NYSE - for primary symbols - all orders after scheduled closing time	
				- NYSE - Issuer Direct Offering (IDO) order	
				Note: Cancel on Disconnect may only be "upgraded" through Logon. If Cancel on Disconnect is Disabled by default, the Logon message can Enable it (setting = 1 or 2). If the default configuration value = 1, the Logon Request can be used to set the configuration = 2.	
				A change in configuration from 2 to 1 or to 0 is not allowed through the Logon Request. To make these changes, the firm must contact NYSE Group Market Support.	
		2		Subscription to Order Priority Update Acknowledgements	0 = Not subscribed to receive the unsolicited "Order Priority Update Ack" message on the Session. 1 = Receive unsolicited "Order Priority Update Ack" message on the Session (for Reserve Order replenishment)	Byte2: 0-1
		3		Self-Trade Prevention	Session level default for the STP value on Order and Cancel/Replace requests entered on the session and destined for Pillar matching engine. Note: if the STP value is set on an individual Order or Cancel/Replace Request, that value will override this session level default. T = No Self Trade Prevention N = Cancel Newest O (letter O) = Cancel Oldest C = Cancel Both D = Cancel Decrement **Orders routed to NYSE Floor Broker Systems** - all default values at login will be ignored. Values N and O are available on an order-by-order basis.	Byte3: T,N,O,C,D
				Example: Tag 96 = 11C: Cancel all orders for the Session for Cancel on Disconnect AND Receive unsolicited "Order Priority Update Ack" message on the Session AND Cancel Both for Self Trade Prevention. If Tag 96 is omitted in the Logon request, Pillar FIX Gateway will use the client defaults. If Tag 96 is included, the default configuration for the client will be overridden for the single session only. Clients must contact NYSE Group Market Support to change default configurations.	
FIX-141	ResetSeqNum Flag	Boolean	N	Indicates both sides of a FIX session should reset sequence numbers. If included, this tag must be set to N.	N

Tag	Field Name	Data Type	Req'd	Description	Values
FIX-553	Username	String [16]	Y	Username agreed in advance with NYSE Group – SenderCompID.	String [16]
FIX-554	Password	String [32]	Y	Password agreed in advance with NYSE Group. Required on Logon Request, but omitted from Logon response.	String [32]
	Standard Trailer		Y		

The format for the successful Logon Response message is below:

Tag	Field Name	Data Type	Req'd	Description	Values
	Standard Header		Y	MsgType [35] = A	
FIX-58	Text	String [100]	N	Text associated with Logon Response	String [100]
FIX-789	NextExpected MsgSeqNum	Int [20]	Y	Next MsgSeqNum [34] expected by Pillar	Next MsgSeqNum [34] expected by Pillar
FIX-98	EncryptMethod	Int [1]	Y	Must be 0 (No encryption).	0
FIX-108	HeartBtInt	Int [2]	Y	The Heartbeat interval in seconds.	1-60
FIX-95	RawDataLength	Int [1]	C	Length of RawData [96]. Must be included if RawData [96] is present.	3
FIX-96	RawData	String [3]	C	Session configuration settings. Optional on the Logon request, but always included in the Logon response. If included, all positions must be populated. Changes will be persisted for the length of the trading day or until the next time Pillar restarts. Valid values: <table><tr><td>**Position**</td><td>**Description**</td><td>**Valid Values**</td></tr><tr><td>**1**</td><td>Cancel on Disconnect</td><td>0 = Cancel on Disconnect Disabled 1 = Enable Cancel on Disconnect; Cancel – Day; Directed Orders (This will cancel all orders for the Session EXCEPT Auction orders – TIF = 2-At the Opening and 7-On Close*) 2 = Enable Cancel on Disconnect. Cancel – ALL orders for the Session* NYSE and NYSE Chicago - subscription with values 1 and 2 will cancel both orders in the matching engine and orders routed to NYSE Floor Broker Systems and Brokerplex. *Exclusions – The following orders are always excluded from cancellation during a Cancel on Disconnect event: - IOC orders</td></tr></table>	Byte1: 0-2

Tag	Field Name	Data Type	Req'd	Description		Values
					- NYSE Arca Equities and NYSE American Equities - for primary symbols - MOO/LOO orders for 1 minute prior to the Core Opening Auction - Primary Close Only Market/Limit (PO + MOC/LOC) orders for NYSE symbols after 3:50 PM - MOC/LOC orders during Closing Auction freeze; on NYSE, for primary symbols - MOC/LOC orders after 3:50 PM - NYSE - for primary symbols - all orders after scheduled closing time - NYSE - Issuer Direct Offering (IDO)order Note: Cancel on Disconnect may only be "upgraded" through Logon. If Cancel on Disconnect is Disabled by default, the Logon message can Enable it (setting = 1 or 2). If the default configuration value = 1, the Logon Request can be used to set the configuration = 2. A change in configuration from 2 to 1 or to 0 is not allowed through the Logon Request. To make these changes, the firm must contact NYSE Group Market Support.	
			2	Subscription to Order Priority Update Acknowledgements	0 = Not subscribed to receive the unsolicited "Order Priority Update Ack" message on the Session. 1 = Receive unsolicited "Order Priority Update Ack" message on the Session (for Reserve Order replenishment)	Byte2: 0-1
			3	Self Trade Prevention	Session level default for the STP value on Order and Cancel/Replace requests entered on the session and destined for Pillar matching engine. Note: if the STP value is set on an individual Order or Cancel/Replace Request, that value will override this session level default. T = No Self Trade Prevention N = Cancel Newest O (letter O) = Cancel Oldest C = Cancel Both D = Cancel Decrement **Orders routed to NYSE Floor Broker Systems** - all default values at login will be ignored. Values N and O are available on an order-by-order basis.	Byte3: T,N,O,C,D
				Example: Tag 96 = 11C: Cancel all orders for the Session for Cancel on Disconnect AND Receive unsolicited "Order Priority Update Ack" message on the Session AND Cancel Both for Self Trade Prevention		
FIX-553	Username	String [16]	Y	Username agreed in advance with NYSE Group – SenderCompID.		String [16]
FIX-1409	SessionStatus	Int [1]	N	Status of FIX Session.		0 (Session Active)

Tag	Field Name	Data Type	Req'd	Description	Values
	Standard Trailer		Y		

7.3 Logout

This single message format is used for different purposes depending on the message direction and SessionStatus [1409] value:

Usage	Description	Direction	SessionStatus [1409]
Logout Request	Client request to the Pillar FIX Gateway to terminate a FIX session.	Client to Pillar	n/a
Logout Response	The Pillar FIX Gateway response to a client Logout Request indicating the client may terminate the session.	Pillar to Client	0 = Session active
Unsolicited Logout	The Pillar FIX Gateway has terminated the FIX session.	Pillar to Client	4 = Session logout complete
Logon Reject	The Pillar FIX Gateway has rejected the client Logon Request.	Pillar to Client	5 = Invalid username or password

The format for the Logout message is below:

Tag	Field Name	Data Type	Req'd	Description	Values
	Standard Header		Y	MsgType[35] = 5	
FIX-1409	SessionStatus	Int[1]	N	Current status of the FIX session provided to indicate the message usage. The Pillar FIX Gateway will ignore this field if received from the client on a Logout message.	0 = Session Active 4 = Session logout complete 5 = Invalid username or password
FIX-58	Text	String [100]	N	Logout description.	String [100]
FIX-789	NextExpected MsgSeqNum	Int[20]	Y	Next MsgSeqNum [34] expected by Pillar	Next MsgSeqNum [34] expected by Pillar
	Standard Trailer		Y		

7.4 Heartbeat and Test Request

The client must send a Heartbeat message [35=0] if the interval specified in the Logon Message HeartBtInt [108] passes without the client sending any messages. If HeartBtInt seconds pass without the Pillar FIX Gateway receiving any messages from the client, the Pillar FIX Gateway will send a Test Request [35=1] to solicit a Heartbeat from the client. If an additional HeartBtInt seconds pass without receiving any messages, the Pillar FIX Gateway will send a logout and close the TCP connection.

It is recommended that the client implements similar monitoring for messages received from the Pillar FIX Gateway.

The Heartbeat message format is below:

Tag	Field Name	Data Type	Req'd	Description	Values
	Standard Header		Y	MsgType[35] = 0	
FIX-112	TestReqId	String[20]	C	Required when the Heartbeat is in response to a Test Request. Must be the same value as in the Test Request that solicited the Heartbeat.	String[20]
	Standard Trailer		Y		

The Test Request message format is below:

Tag	Field Name	Data Type	Req'd	Description	Values
	Standard Header		Y	MsgType[35] = 1	
FIX-112	TestReqID	String[20]	Y	Identifier included in Test Request message to be returned in resulting Heartbeat.	String[20]
	Standard Trailer		Y		

7.5   Message Retransmission

If Pillar receives a MsgSeqNum [34] higher than expected, Pillar will disregard or process the message, and may issue a Resend Request, as described in the "Pillar FIX Session Layer Handling" section of this specification.

Clients may issue a Resend Request to Pillar. In response, Pillar will retransmit Application Layer messages only. Pillar will never retransmit any Session Layer messages (including Session-Level Rejects).

The format for the Resend Request message is below:

Tag	Field Name	Data Type	Req'd	Description	Values
	Standard Header		Y	MsgType[35] = 2	
FIX-7	BeginSeqNo	Int[20]	Y	The message sequence number of the first message in the range of messages to be re-sent.	1-18446744073709551615
FIX-16	EndSeqNo	Int[20]	Y	The message sequence number of the last message in the range of messages to be re-sent. If the request is for all the messages since the BeginSeqNo, set EndSeqNo to 0.	0-18446744073709551615
	Standard Trailer		Y		

Note: Pillar will ignore the contents of PossResend [97] beyond basic message integrity validations and will treat all messages with PossResend = Y as new messages.

7.6   Sequence Reset

The client may send Pillar a Sequence Reset message to advance the next expected MsgSeqNum [34] Pillar should expect from the client:

Tag	Field Name	Data Type	Req'd	Description	Values
	Standard Header		Y	MsgType[35] = 4	

Tag	Field Name	Data Type	Req'd	Description	Values
FIX-123	GapFillFlag	Boolean	Y	Indicates the mode in which the message is to be interpreted: Y = Gap Fill Reset (MsgSeqNum [34] validated) N = Sequence Reset (MsgSeqNum [34] ignored)	Y, N
FIX-36	NewSeqNo	Int[20]	Y	The new valid sequence number	1-18446744073709551615
	Standard Trailer		Y		

7.7 Session-Level Rejects

Pillar generates a Session-Level Reject upon receipt of a message containing a session-level rule violation (e.g. a required FIX tag is missing). Error details are contained in SessionRejectReason [373] and 58 [Text], while the tag causing the error (if applicable) is identified in RefTagID [371].

The Session-Level Reject message format is below:

Tag	Field Name	Data Type	Req'd	Description	Values
	Standard Header		Y	MsgType [35] = 3	
FIX-45	RefSeqNum	Int[20]	Y	The sequence number of the rejected message.	1-18446744073709551615
FIX-373	SessionRejectReason	Int[2]	N	A code, which identifies the reason for the session level reject. Valid values: 0 = Invalid Tag Number 1 = Required Tag Missing 2 = Tag Not Defined For This Message Type 3 = Undefined Tag 4 = Tag specified without a value 5 = Value is incorrect (out of range) for this tag 6 = Incorrect data format for value 7 = Decryption problem 8 = Signature problem 9 = CompID problem (SenderCompID, TargetCompID, or both) 10 = SendingTime accuracy problem 11 = Invalid MsgType 13 = Tag Appears More than Once (non-repeating group tags only) 14 = Tag specified out of required order 15 = Repeating group fields out of order 99 = Other	0 1 2 3 4 5 6 7 8 9 10 11 13 14 15 99
FIX-371	RefTagId	Int[9]	N	The tag number of the FIX field being referenced.	1-999999999
FIX-372	RefMsgType	String[2]	N	The MsgType of the FIX message being referenced.	String[2]
FIX-58	Text	String[100]	N	Reject text, which identifies the reason for the rejected message.	String[100]
FIX-789	NextExpectedMsgSeqNum	Int[20]	Y	Next MsgSeqNum [34] expected by Pillar	Next MsgSeqNum [34] expected by Pillar
	Standard Trailer		Y		

8. FIX Application Layer

This section describes the FIX Application messages currently supported by the Pillar FIX Gateway. Only the message types represented here will be accepted.

Order, Cancel, and Cancel/Replace acknowledgments will be returned with all tags submitted on the original request.

8.1 New Order – Single

This message is used to send a New Order.

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
	Standard FIX Header		Y	MsgType = D	Yes	Yes	Yes	Yes	Yes
FIX-1	Account	String[16]	N	Customer defined up to 16 characters; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark.	Yes	Yes	Yes	Yes	Yes
FIX-11	ClOrdID	String[20]	Y	Unique ID of the new Order, Cancel, or Cancel/Replace request as assigned by the firm. Pillar will validate that the ClOrdID is unique for the combination of SenderCompID + OnBehalfOfCompID (MPID) that entered the order, among open orders only. However, the firm is responsible for ensuring that the ClOrdID provided is unique among all orders sent for the full length of the trading day by the given SenderCompID + MPID. Customer defined up to 20 characters; only printable ASCII characters allowed, excluding	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, if alpha characters are used for the first two consecutive characters, then one of them must be lowercase.					
FIX-18	ExecInst	Char[1]	C	d = Tracking Order f = ISO B = OK to Cross E = DNI F = DNR G = All or None R = Primary Peg P = Market Peg M = MPL (Midpoint Liquidity) N = Non-displayed (Retail Price Improvement and Limit-Non Displayed orders) y = Trade-at ISO L = Last Sale Peg	f M N y L	d f R P M N y	d f R P M N y	d f R P M N y	d f R P M N y
FIX-38	OrderQty	Qty[9]	Y	1 - 999,999,999	Yes	Yes	Yes	Yes	Yes
FIX-40	OrdType	Char[1]	Y	1 = Market 2 = Limit 7 = Inside Limit 9 = AutoMatch Limit P = Pegged	1 2 7 P	1 2 7 P	1 2 7 P	1 2 7 P	1 2 7 P
FIX-44	Price	Price[16]	C	0.000001-999,999,999.999999	Yes	Yes	Yes	Yes	Yes
FIX-54	Side	Char[1]	Y	1 = Buy 2 = Sell 5 = Sell Short 6 = Sell Short Exempt 8 = Cross 9 = Cross Short A = Cross Short Exempt	1 2 5 6	1 2 5 6	1 2 5 6	1 2 5 6	1 2 5 6 8 9 A
FIX-55	Symbol	String[16]	Y	Valid Equities Ticker Symbol.	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
FIX-58	Text	String[80]	N	On Incoming Messages from Firm: Freeform text field; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, max length is 40 characters. However, will not be passed back in Acknowledgments or any subsequent response messages. On Outgoing Message from Exchange: Reason code and text description for order activity. For example, reason for cancel/cancel-replace rejection.	Yes	Yes	Yes	Yes	Yes
FIX-59	TimeInForce	Char[1]	Y	0 = Day 1 = GTC 2 = At the Opening 3 = IOC 4 = FOK 5 = GTX 6 = GTD 7 = On Close	0 2 3 7	0 2 3 7	0 2 3 7	0 2 3 7	0 2 3 7
FIX-60	TransactTime	UTC Timestamp [27]	N	On Incoming Messages from Firm: Customer application time. On Outgoing Message from Exchange: Exchange application time. UTC time, in Milliseconds	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				YYYYMMDD-HH:MM:SS.mmm					
FIX-63	SettlementType	Char[1]	N	0 = Regular Way 1 = Cash* *Only supported on Cross Orders. If not specified, the settlement type is assumed as regular way					0 1
FIX-65	SymbolSfx	String[10]	N	Valid Suffix value	Yes	Yes	Yes	Yes	Yes
FIX-109	ClientID	String[4]	C	Not supported when sending to Matching Engine. NYSE Chicago - Required for orders sent to Chicago IB Firms (Brokerplex). Should be agreed upon Originator ID. *NYSE - Optional identifier for CAT SenderIMID for NYSE Floor Broker Systems, also used for Self Trade Prevention. See "Self-Trade Prevention" section of this spec for more details.	Yes*				Yes
FIX-110	MinQty	Qty[5]	N	Must be ≤ OrderQty	Yes	Yes	Yes	Yes	Yes
FIX-111	MaxFloor	Qty[5]	C	Must be entered in Round Lots.	Yes	Yes	Yes	Yes	Yes
FIX-114	LocateReqd	Boolean	C	N = No Orders with Side of Sell Short, Sell Short Exempt, Cross Short, and Cross Short Exempt must be entered as LocateReqd = N. If entered as LocateReqd = Y or tag is not provided, order will be rejected.	N	N	N	N	N
FIX-386	NoTradingSessions	Int[1]	Y	1	1	1	1	1	1

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
FIX-336	TradingSessionID	Char[1]	Y	1 = Early Trading Session 2 = Core Trading Session 3 = Late Trading Session 4 = Early & Core Trading Sessions 5 = Core & Late Trading Sessions 6 = Early, Core, & Late Trading Sessions *Note: for symbols trading on NYSE, all values that include Core designation (Core, Early/Core, Core/Late, and Early/Core/Late) will be allowed, if the order type supports the combination on other Pillar markets. However, for each of those values, Pillar will honor the applicable trading sessions included in the instruction based on Tape (B/C symbols - Early and Core; A symbols - Core only), and ignore the other trading sessions specified in the instruction (Tape B/C symbols - Late; Tape A symbols - Early and Late)	1 2 4* 5* 6*	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
FIX-528	OrderCapacity	Char[1]	Y	A = Agency P = Principal R = Riskless Principal Q = Error Account *NYSE and NYSE Chicago - supported only on orders routed to NYSE Floor Broker Systems and Brokerplex	A P R Q*	A P R	A P R	A P R	A P R Q*
FIX-5700	LocateBroker	String[4]	C	For orders with Side of Sell Short, Sell Short Exempt, Cross Short, and Cross Short Exempt, identifies which broker has loaned the stock to settle the short sale. For firms using Pillar Pre-trade Risk Controls, use of	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				this tag may be configured as mandatory.					
FIX-7928	SelfTradeType	Char[1]	N	0 (number 0) = Use current Session Configuration STP setting for the SenderCompID T = No Self Trade Prevention N = Cancel Newest O (letter O)= Cancel Oldest C = Cancel Both D = Cancel Decrement *NYSE - supported only on orders routed to matching engine; not supported on orders routed to NYSE Floor Broker Systems	0 T* N O C* D*	0 T N O C D	0 T N O C D	0 T N O C D	0 T N O C D
FIX-9202	SpecialOrdType	Char[1]	C	1 = DMM Open/Re-open/Close with or without Auction (AOC) - drop copy only 2 = DMM Pre-auction - drop copy only 3 = DMM After-auction - drop copy only T = QCT (DeliverToComp ID must be populated with IB Firm Identifier) 8 = *Reserved for future use*					T
FIX-9303	RoutingInst	Char[1]	C	N = Non Routable R = Routable D = Directed (Primary Only) S = Directed + Routable (PO+S) 1 = Primary Market until 9:45 2 = Primary Market after 3:55 3 = BOTH Primary Market until 9:45 AND Primary Market after 3:55 8 = Minimum Fill (must be entered with MinQty tag	N R 8	N R D S 1 2 3 8	N R D S 1 2 3 8	N R D S 1 2 3 8	N R D S 1 2 3 8

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				populated with a non-zero value) A = Route to ATS	A	A	A	A	A
FIX-9403	OffsetPrice	Price[16]	C	Value must be zero, or otherwise: • For Market Peg order - equal to or multiple of 0.01 • For Retail Price Improvement order (optional modifier on NYSE only) - equal to or multiple of 0.001	Yes	Yes	Yes	Yes	Yes
FIX-9416	ExtendedExecInst	Char[1]	C	A = Add Liquidity Only (ALO) 2 = No route to IOI 4 = Retail Order Type 1 5 = Retail Order Type 2 7 = Retail Provider 8 = Imbalance Offset L = Limit dOrder C = Complex Order Auction 9 = Discretionary Peg D = Dark (Non-Displayed) Primary Peg I = Issuer Direct Offering (IDO)	A 4 7 8 I	A 8	A 2 5 7 9 D	A 2 8 9	A 2
FIX-9448	IntroducingBadgeID	String[4]	C	1 – 4 numeric characters. Present on orders from Brokerplex to Pillar. Present on orders from NYSE Floor Broker Systems to Pillar.					Yes
FIX-9451	ParentFirmClOrdID	String[20]	C	<= 20 chars Present on orders from Brokerplex to Pillar. Present on orders from NYSE Floor Broker Systems to Pillar.					Yes
FIX-9453	ParentFirmMPID	String[4]	C	Firm Identifier - MPID.					Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				Present on orders from Brokerplex to Pillar. Present on orders from NYSE Floor Broker Systems to Pillar.					
FIX-9478	InterestType	Char[1]	C	Q = Q-Order		Q	Q	Q	
FIX-9479	*Reserved*	Char[1]	N	*Reserved for future use.*					
FIX-9563	*Reserved*	String[9]	N	Reserved for future use.					
FIX-20001	AttributedQuote	Char[1]	N	0 = Not Attributed 1 = Attributed for Market Data Feeds 2 = Include in Broker Volume 3 = Attributed for Market Data Feeds, and Include in Broker Volume	0	0 1	0 1	0 1	0 1
FIX-20002	ProactiveIfLocked	Char[1]	N	0 = No locked functionality 1 = Proactive if Locked for routable orders 2 = Proactive trade non-display (Non-display remove liquidity for non-displayed orders locked by contraside ALOs)	0 1 2	0 1 2	0 1 2	0 1 2	0 1 2
FIX-20003	CancelInsteadOf Reprice	Char[1]	N	0 = Not applicable (follow default order behavior) 1 = Cancel order instead of repricing – for LULD only 3 = Cancel order instead of repricing for any reason	0 3	0 1 3	0 1 3	0 1 3	0 1 3
FIX-20011	RouteToBroker	Char[1]	C	Required when intending to route message to non-Matching Engine destination (i.e. NYSE Chicago Brokerplex or NYSE Floor Broker Systems) based on value provided in DelliverToCompID on incoming messages from Firm					

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				Y = Route to non-Matching Engine destination	Y				Y
				N = Route to Matching Engine	N				N
				If not specified, will be assumed as a value of "N", and will be routed directly to Matching Engine					
FIX-20012	BrokerOMSID	String[4]	C	Present on orders from Brokerplex to Pillar to identify the Broker ID targeted by the parent order.					Yes
FIX-20013	SubIDIndicator	Char[1]	N	When populating both OnBehalfOfSubID (116) and SelfTradeType (7928) on an order, allows the firm to specify whether the OnBehalfOfSubID should be used or ignored for Self-Trade Prevention (STP) evaluation. See "Self-Trade Prevention" section of this spec for more details. If also using Pillar Pre-trade Risk Controls, the OnBehalfOfSubID will be used for Risk Entity purposes regardless of the value specified in this field. 0 = for this order, use OnBehalfOfSubID (within the MPID) for STP evaluation					
				0 = for this order, use OnBehalfOfSubID (within the MPID) for STP evaluation	0	0	0	0	0
				1 = for this order, ignore the OnBehalfOfSubID for STP (conduct STP evaluation at MPID level only)	1	1	1	1	1

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				If not specified, will be assumed as a value of 0.					
	Standard FIX Trailer		Y	Standard FIX Trailer	Yes	Yes	Yes	Yes	Yes

8.2   Order Cancel Request

This message is used to either cancel a single targeted order, or to bulk cancel multiple orders based on the combination of criteria specified in the message.

Single Order Cancel Request:

- OnBehalfOfCompID (115) in the FIX Header of the Cancel Request must be populated with the same MPID that was sent on the order intended for cancellation.

- NYSE and NYSE Chicago - if Pillar can find the OrigClOrdID specified, the cancel request will be routed either to the matching engine or to NYSE Floor Broker Systems/Brokerplex, regardless of how RouteToBroker (20011) is specified on the cancel request message.

Bulk Cancel Request:

- As with all Application Layer FIX messages, OnBehalfOfCompID (115) in the FIX Header must be populated with a valid MPID configured for use on that session.
    - When selecting a Bulk Cancel Code in OrderID (37) for MPID-level order cancellation, the MPID provided in OnBehalfOfCompID will determine the MPID whose orders are cancelled.

    - When selecting a Bulk Cancel Code in OrderID (37) for Session-level order cancellation, all orders entered on the session will be cancelled, regardless of their MPIDs and the value provided in OnBehalfOfCompID.

- To enter a Bulk Cancel Request for a particular MMID, the firm may populate SenderSubID (50) in the FIX Header with the MMID targeted for cancellation. This will limit the scope of cancellation to Q Orders entered with the specified MMID.

- NYSE and NYSE Chicago - the bulk cancel request will be routed to both the matching engine and to NYSE Floor Broker Systems/Brokerplex, regardless of how RouteToBroker (20011) is specified on the cancel request message. This will result in cancellation of both orders in the matching engine as well as orders routed to brokers.

- Exclusions – the following orders are always excluded from cancellation by a Bulk Cancel Request:
    - IOC orders
    - NYSE Arca Equities and NYSE American Equities - for primary symbols - MOO/LOO orders for 1 minute prior to the Core Opening Auction
    - Primary Close Only Market/Limit (PO + MOC/LOC) orders for NYSE symbols after 3:50 PM
    - MOC/LOC orders during Closing Auction freeze; on NYSE, for primary symbols - MOC/LOC orders after 3:50 PM
    - NYSE - for primary symbols - all orders after scheduled closing time
    - NYSE - Issuer Direct Offering (IDO)order

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
	Standard FIX Header		Y	MsgType = F	Yes	Yes	Yes	Yes	Yes
FIX-11	ClOrdID	String[20]	Y	Unique ID of the new Order, Cancel, or Cancel/Replace request as assigned by the firm. Pillar will validate that the ClOrdID is unique for the combination of SenderCompID + OnBehalfOfCompID (MPID) that entered the order, among open orders only. However, the firm is responsible for ensuring that the ClOrdID provided is unique among all orders sent for the full length of the trading day by the given SenderCompID + MPID. Customer defined up to 20 characters; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, if alpha characters are used for the first two consecutive characters, then one of them must be lowercase.	Yes	Yes	Yes	Yes	Yes
FIX-37	OrderID	String[20]	C	Required for Bulk Cancel - populate with Bulk Cancel Code: 1 = Cancel orders for the individual gateway	1	1	1	1	1

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				session only. Cancel – Day; Directed Orders					
				2 = Cancel orders for the individual gateway session only. Cancel – ALL orders	2	2	2	2	2
				3 = Cancel orders for the individual gateway session only. Cancel – At the Opening; Day; Directed orders	3	3	3	3	3
				4 = Cancel orders for the MPID. Cancel – At the Opening; Day; Directed orders	4	4	4	4	4
				5 = Cancel orders for the MPID. Cancel – Day; Directed orders	5	5	5	5	5
				6 = Cancel orders for the MPID. Cancel – GTC orders (NYSE Arca & American Options only)					
				7 = Cancel orders for the MPID. Cancel – At the Opening and On Close orders	7	7	7	7	7
				8 = Cancel orders for the MPID. Cancel – Day orders	8	8	8	8	8
				9 = Cancel orders for the MPID, and Block all new order entry for the MPID. Cancel – Day; Directed orders	9	9	9	9	9
				10 = Block all new order entry for the MPID	10	10	10	10	10
				11 = Unblock new order entry for the MPID	11	11	11	11	11

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				12 = Cancel orders for the MPID. Cancel – Directed orders	12	12	12	12	12
FIX-41	OrigClOrdID	String[20]	C	Required for single order cancellation. Represents the ClOrdID of the previously entered order intended for cancellation (NOT necessarily the initial order of the day). Customer defined up to 20 characters; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, if alpha characters are used for the first two consecutive characters, then one of them must be lowercase.	Yes	Yes	Yes	Yes	Yes
FIX-54	Side	Char[1]	C	Required for single order cancellation. Optional for Bulk Cancel. On a Bulk Cancel Request, 1 (Buy) and 2 (Sell) are supported. In that case, 2 (Sell) will cancel all Sell, Sell Short, and Sell Short Exempt orders. 1 = Buy 2 = Sell 5 = Sell Short 6 = Sell Short Exempt 8 = Cross	1 2 5 6	1 2 5 6	1 2 5 6	1 2 5 6	1 2 5 6 8

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				9 = Cross Short A = Cross Short Exempt					9 A
FIX-55	Symbol	String[16]	C	Required for single order cancellation; Valid Equities Ticker Symbol. Optional for Bulk Cancel.	Yes	Yes	Yes	Yes	Yes
FIX-60	TransactTime	UTC Timestamp [27]	N	On Incoming Messages from Firm: Customer application time. On Outgoing Message from Exchange: Exchange application time. UTC time, in Milliseconds YYYYMMDD-HH:MM:SS.mmm	Yes	Yes	Yes	Yes	Yes
FIX-65	SymbolSfx	String[10]	N	Valid Suffix value	Yes	Yes	Yes	Yes	Yes
FIX-20011	RouteToBroker	Char[1]	C	Required when intending to route message to non-Matching Engine destination (i.e. NYSE Chicago Brokerplex or NYSE Floor Broker Systems) based on value provided in DelliverToCompID on incoming messages from Firm Y = Route to non-Matching Engine destination N = Route to Matching Engine If not specified, will be assumed as a value of "N", and will be routed directly to Matching Engine	Y N				Y N
	Standard FIX Trailer		Y	Standard FIX Trailer	Yes	Yes	Yes	Yes	Yes

8.3   Order Cancel/Replace Request

This message may be used in two ways:

- **Full Cancel/Replace Request –** used to make changes to an order without preserving its ranking in the Exchange order book. The replacement order will get a new ClOrdID (equal to the ClOrdID of the Cancel/Replace Request), a new Timestamp, and a new OrderID.

- **Modify Request –** used to reduce the total number of shares/contract order quantity, or to change the side of an existing order between Sell, Sell Short, and Sell Short Exempt only, while preserving the order's ranking in the Exchange order book as well as its original OrderID.

    The modified order, however, will get a new ClOrdID (equal to the ClOrdID of the Modify Request).

    Note: Reducing the total quantity to 0 will cancel the order.

In both cases, the following tags in the FIX Header of the Cancel/Replace Request must be populated with the same values that were sent on the original order intended for replacement:

- **OnBehalfOfCompID (115)** – MPID

- **SenderSubID (50)** – MMID

- **DeliverToCompID[128]** – if applicable, NYSE Agency Code, Broker Badge, or NYSE Chicago IB Firm Identifier

- **NYSE and NYSE Chicago** – for cancel/replacement of orders routed to NYSE Floor Broker Systems and Brokerplex, the combination of values in tags **OnBehalfOfCompID (115) + OnBehalfOfSubID (116) + DeliverToCompID (128) + RouteToBroker (20011)**

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chciago
	Standard FIX Header		Y	MsgType = G	Yes	Yes	Yes	Yes	Yes
FIX-1	Account	String[16]	N	Customer defined up to 16 characters; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark.	Yes	Yes	Yes	Yes	Yes
FIX-11	ClOrdID	String[20]	Y	Unique ID of the new Order, Cancel, or Cancel/Replace request as assigned by the firm.	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				Pillar will validate that the ClOrdID is unique for the combination of SenderCompID + OnBehalfOfCompID (MPID) that entered the order, among open orders only. However, the firm is responsible for ensuring that the ClOrdID provided is unique among all orders sent for the full length of the trading day by the given SenderCompID + MPID. Customer defined up to 20 characters; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, if alpha characters are used for the first two consecutive characters, then one of them must be lowercase.					
FIX-18	ExecInst	Char[1]	C	d = Tracking Order		d	d	d	d
				f = ISO	f	f	f	f	f
				B = OK to Cross					
				E = DNI					
				F = DNR					
				G = All or None					
				R = Primary Peg		R	R	R	R
				P = Market Peg		P	P	P	P
				M = MPL (Midpoint Liquidity)	M	M	M	M	M
				N = Non-displayed (Retail Price Improvement and Limit-Non Displayed	N	N	N	N	N

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chciago
				orders) y = Trade-at ISO L = Last Sale Peg	y L	y	y	y	y
FIX-38	OrderQty	Qty[9]	Y	1 - 999,999,999	Yes	Yes	Yes	Yes	Yes
FIX-40	OrdType	Char[1]	Y	1 = Market 2 = Limit 7 = Inside Limit 9 = AutoMatch Limit P = Pegged	1 2 7 P	1 2 7 P	1 2 7 P	1 2 7 P	1 2 7 P
FIX-41	OrigClOrdID	String[20]	Y	ClOrdID of the previously entered order intended for cancellation or replacement (NOT necessarily the initial order of the day). Customer defined up to 20 chars; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, if alpha characters are used for the first two consecutive characters, then one of them must be lowercase.	Yes	Yes	Yes	Yes	Yes
FIX-44	Price	Price[16]	C	0.000001-999,999,999.999999	Yes	Yes	Yes	Yes	Yes
FIX-54	Side	Char[1]	Y	1 = Buy 2 = Sell 5 = Sell Short 6 = Sell Short Exempt 8 = Cross 9 = Cross Short A = Cross Short Exempt	1 2 5 6	1 2 5 6	1 2 5 6	1 2 5 6	1 2 5 6 8 9 A
FIX-55	Symbol	String[16]	Y	Valid Equities Ticker Symbol.	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chciago
FIX-58	Text	String[80]	N	On Incoming Messages from Firm: Freeform text field; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, max length is 40 characters. However, will not be passed back in Acknowledgments or any subsequent response messages. On Outgoing Messages from Exchange: Reason code and text description for order activity. For example, reason for cancel/cancel-replace rejection.	Yes	Yes	Yes	Yes	Yes
FIX-59	TimeInForce	Char[1]	Y	0 = Day 1 = GTC 2 = At the Opening 3 = IOC 4 = FOK 5 = GTX 6 = GTD 7 = On Close	0 2 3 7	0 2 3 7	0 2 3 7	0 2 3 7	0 2 3 7
FIX-60	TransactTime	UTC Timestamp [27]	N	On Incoming Messages from Firm: Customer application time. On Outgoing Messages from Exchange: Exchange application time. UTC time, in Milliseconds	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chciago
				YYYYMMDD-HH:MM:SS.mmm					
FIX-65	SymbolSfx	String[10]	N	Valid Suffix value	Yes	Yes	Yes	Yes	Yes
FIX-109	ClientID	String[4]	C	Not supported when sending to Matching Engine. NYSE Chicago - Required for orders sent to Chicago IB Firms (Brokerplex). Should be agreed upon Originator ID. *NYSE - Optional identifier for CAT SenderIMID for NYSE Floor Broker Systems, also used for Self Trade Prevention. See "Self-Trade Prevention" section of this spec for more details.	Yes*				Yes
FIX-110	MinQty	Qty[5]	N	Must be ≤ OrderQty	Yes	Yes	Yes	Yes	Yes
FIX-111	MaxFloor	Qty[5]	C	Must be entered in Round Lots.	Yes	Yes	Yes	Yes	Yes
FIX-114	LocateReqd	Boolean	C	N = No Orders with Side of Sell Short, Sell Short Exempt, Cross Short, and Cross Short Exempt must be entered as LocateReqd = N. If entered as LocateReqd = Y or tag is not provided, order will be rejected.	N	N	N	N	N
FIX-386	NoTradingSessions	Int[1]	Y	1	1	1	1	1	1
→ FIX-336	TradingSessionID	Char[1]	Y	1 = Early Trading Session 2 = Core Trading Session 3 = Late Trading Session 4 = Early & Core Trading	1 2 4*	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chciago
				Sessions 5 = Core & Late Trading Sessions 6 = Early, Core, & Late Trading Sessions *Note: for symbols trading on NYSE, all values that include Core designation (Core, Early/Core, Core/Late, and Early/Core/Late) will be allowed, if the order type supports the combination on other Pillar markets. However, for each of those values, Pillar will honor the applicable trading sessions included in the instruction based on Tape (B/C symbols - Early and Core; A symbols - Core only), and ignore the other trading sessions specified in the instruction (Tape B/C symbols - Late; Tape A symbols - Early and Late)	5* 6*	5 6	5 6	5 6	5 6
FIX-528	OrderCapacity	Char[1]	Y	A = Agency P = Principal R = Riskless Principal Q = Error Account *NYSE and NYSE Chicago - supported only on orders routed to NYSE Floor Broker Systems and Brokerplex	A P R Q*	A P R	A P R	A P R	A P R Q*
FIX-5700	LocateBroker	String[4]	C	For orders with Side of Sell Short, Sell Short Exempt, Cross Short, and Cross Short Exempt, identifies which broker has loaned the stock to settle the short sale. For firms using Pillar Pre-trade Risk Controls, use of this tag may be configured as mandatory.	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chciago
FIX-7928	SelfTradeType	Char[1]	N	0 (number 0) = Use current Session Configuration STP setting for the SenderCompID T = No Self Trade Prevention N = Cancel Newest O (letter O)= Cancel Oldest C = Cancel Both D = Cancel Decrement *NYSE - supported only on orders routed to matching engine; not supported on orders routed to NYSE Floor Broker Systems	0 T* N O C* D*	0 T N O C D	0 T N O C D	0 T N O C D	0 T N O C D
FIX-9202	SpecialOrdType	Char[1]	N	1 = DMM Open/Re-open/Close with or without Auction (AOC) - drop copy only 2 = DMM Pre-auction - drop copy only 3 = DMM After-auction - drop copy only T = QCT (DeliverToComp ID must be populated with IB Firm Identifier) 8 = *Reserved for future use*					T
FIX-9303	RoutingInst	Char[1]	C	N = Non Routable R = Routable D = Directed (Primary Only) S = Directed + Routable (PO+S) 1 = Primary Market until 9:45 2 = Primary Market after 3:55 3 = BOTH Primary Market until 9:45 AND Primary Market after 3:55 8 = Minimum Fill (must be entered with MinQty tag populated with a non-zero value)	N R 8	N R D S 1 2 3 8	N R D S 1 2 3 8	N R D S 1 2 3 8	N R D S 1 2 3 8

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chciago
				A = Route to ATS	A	A	A	A	A
FIX-9403	OffsetPrice	Price[16]	C	Value must be zero, or otherwise: • For Market Peg order - equal to or multiple of 0.01 • For Retail Price Improvement order (optional modifier on NYSE only) - equal to or multiple of 0.001	Yes	Yes	Yes	Yes	Yes
FIX-9416	ExtendedExecInst	Char[1]	C	A = Add Liquidity Only (ALO) 2 = No route to IOI 4 = Retail Order Type 1 5 = Retail Order Type 2 7 = Retail Provider 8 = Imbalance Offset L = Limit dOrder C = Complex Order Auction 9 = Discretionary Peg D = Dark (Non-Displayed) Primary Peg I = Issuer Direct Offering (IDO)	A 4 7 8 I	A 8 9 D	A 2 5 7	A 2 7 8 9	A 2
FIX-9448	IntroducingBadgeID	String[4]	C	1 – 4 numeric characters. Present on orders from Brokerplex to Pillar. Present on orders from NYSE Floor Broker Systems to Pillar.					Yes
FIX-9451	ParentFirmClOrdID	String[20]	C	<= 20 chars Present on orders from Brokerplex to Pillar. Present on orders from NYSE Floor Broker Systems to Pillar.					Yes
FIX-9453	ParentFirmMPID	String[4]	C	Firm Identifier - MPID.					Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chciago
				Present on orders from Brokerplex to Pillar. Present on orders from NYSE Floor Broker Systems to Pillar.					
FIX-9478	InterestType	Char[1]	C	Q = Q-Order		Q	Q	Q	
FIX-9479	*Reserved*	Char[1]	N	*Reserved for future use.*					
FIX-9563	*Reserved*	String[9]	N	Reserved for future use.					
FIX-20001	AttributedQuote	Char[1]	N	0 = Not Attributed 1 = Attributed for Market Data Feeds 2 = Include in Broker Volume 3 = Attributed for Market Data Feeds, and Include in Broker Volume	0	0 1	0 1	0 1	0 1
FIX-20002	ProactiveIfLocked	Char[1]	N	0 = No locked functionality 1 = Proactive if Locked for routable orders 2 = Non-display remove liquidity for non-displayed orders locked by contraside ALOs	0 1 2	0 1 2	0 1 2	0 1 2	0 1 2
FIX-20003	CancelInsteadOfReprice	Char[1]	N	0 = Not applicable (follow default order behavior) 1 = Cancel order instead of repricing – for LULD only 3 = Cancel order instead of repricing for any reason	0 3	0 1 3	0 1 3	0 1 3	0 1 3
FIX-20011	RouteToBroker	Char[1]	C	Required when intending to route message to non-Matching Engine destination (i.e. NYSE Chicago Brokerplex or NYSE Floor Broker Systems) based on value provided in DelliverToCompID on incoming messages from Firm					

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chciago
				Y = Route to non-Matching Engine destination N = Route to Matching Engine If not specified, will be assumed as a value of "N", and will be routed directly to Matching Engine	Y N				Y N
FIX-20012	BrokerOMSID	String[4]	C	Present on orders from Brokerplex to Pillar to identify the Broker ID targeted by the parent order.					Yes
FIX-20013	SubIDIndicator	Char[1]	N	When populating both OnBehalfOfSubID (116) and SelfTradeType (7928) on an order, allows the firm to specify whether the OnBehalfOfSubID should be used or ignored for Self-Trade Prevention (STP) evaluation. See "Self-Trade Prevention" section of this spec for more details. If also using Pillar Pre-trade Risk Controls, the OnBehalfOfSubID will be used for Risk Entity purposes regardless of the value specified in this field. 0 = for this order, use OnBehalfOfSubID (within the MPID) for STP evaluation 1 = for this order, ignore the OnBehalfOfSubID for STP (conduct STP evaluation at MPID level only)	0 1	0 1	0 1	0 1	0 1

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chciago
				If not specified, will be assumed as a value of 0.					
	Standard FIX Trailer		Y	Standard FIX Trailer	Yes	Yes	Yes	Yes	Yes

8.4 Order Cancel Reject

This message is used to reject a Cancel or Cancel/Replace Request.

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
	Standard FIX Header		Y	MsgType = 9	Yes	Yes	Yes	Yes	Yes
FIX-11	ClOrdID	String[20]	Y	Returned from the Cancel or Cancel/Replaced Request – the ClOrdID of the message that is rejected (Cancel or Cancel/Replace request). Pillar will validate that the ClOrdID is unique for the combination of SenderCompID + OnBehalfOfCompID (MPID) that entered the order, among open orders only. However, the firm is responsible for ensuring that the ClOrdID provided is unique among all orders sent for the full length of the trading day by the given SenderCompID + MPID. Customer defined up to 20 characters; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, if alpha characters are used for the first two consecutive characters, then one of them must be lowercase.	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
FIX-37	OrderID	String[20]	Y	OrderID of the order intended for cancellation or replacement. Unique identifier of most recent order as assigned by the Exchange. Published externally to market data feeds. Numerical up to 20 characters.	Yes	Yes	Yes	Yes	Yes
FIX-39	OrdStatus	Char[1]	Y	Status of the order: 0 = New 1 = Partially Filled 2 = Filled 3 = Done For Day 4 = Cancelled 5 = Replaced 6 = Pending Cancel 8 = Rejected C = Billable Cancel (Self Trade Prevention) E = Pending Replace M = Pending Modify	8	8	8	8	8
FIX-41	OrigClOrdID	String[20]	C	Returned from Order Cancel or Cancel/Replace Request. Represents the ClOrdID of the previously entered order intended for cancellation or replacement (NOT necessarily the initial order of the day). Customer defined up to 20 chars; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark.	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				*NYSE - for orders routed to NYSE Floor Broker Systems, if alpha characters are used for the first two consecutive characters, then one of them must be lowercase.					
FIX-58	Text	String[40]	N	On Incoming Messages from Firm: Freeform text field; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, max length is 40 characters. However, will not be passed back in Acknowledgments or any subsequent response messages. On Outgoing Message from Exchange: Reason code and text description for order activity, up to 40 characters. For example, reason for cancel/cancel-replace rejection.	Yes	Yes	Yes	Yes	Yes
FIX-60	TransactTime	UTC Timestamp [27]	N	On Incoming Messages from Firm: Customer application time. On Outgoing Message from Exchange: Exchange application time.	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				UTC time, in Milliseconds YYYYMMDD-HH:MM:SS.mmm					
FIX-434	CxlRejResponseTo	Char[1]	Y	1 = Order Cancel Request 2 = Order Cancel/Replace Request	1 2	1 2	1 2	1 2	1 2
FIX-20009	Nanosecond SendingTime	String[27]	Y	Time of message transmission on outgoing message from Exchange. UTC time, in Nanoseconds – YYYYMMDD-HH:MM:SS.sssssssss Note: this represents the same reference time as provided in the Standard FIX Header tag SendingTime (52), with more granular resolution.	Yes	Yes	Yes	Yes	Yes
FIX-20010	Nanosecond TransactTime	String[27]	Y	Exchange application time. UTC time, in Nanoseconds – YYYYMMDD-HH:MM:SS.sssssssss Note: this represents the same reference time as provided in the standard FIX tag TransactTime (60), with more granular resolution.	Yes	Yes	Yes	Yes	Yes
FIX-20011	RouteToBroker	Char[1]	C	Required when intending to route message to non-Matching Engine destination (i.e. NYSE Chicago Brokerplex or NYSE Floor Broker Systems) based on value provided in					

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				DelliverToCompID on incoming messages from Firm					
				Y = Route to non-Matching Engine destination	Y				Y
				N = Route to Matching Engine	N				N
				If not specified, will be assumed as a value of "N", and will be routed directly to Matching Engine					
	Standard FIX Trailer		Y	Standard FIX Trailer	Yes	Yes	Yes	Yes	Yes

8.5   Execution Report

This message is used to confirm new orders, cancellations, replacements, fills, trade busts, trade corrections (NYSE Chicago only), and order rejections.

It is also used as a Billable Cancel message when ExecType = C (Billable Cancel). This message is sent only for STP types Cancel Both and Cancel Decrement, and is generated for the quantity that was prevented from trading (matching quantity). Then, if the balance of either order needs to be cancelled as a result of the STP instruction, a UROUT will be sent for the remaining shares with with ExecType = 4 (Canceled).

On the Billable Cancel message, 'LastQty' represents the matching quantity and 'LastPx' represents the price at which the orders would have executed had they been allowed to trade.

This message may also be sent unsolicited by the Exchange as an Order Priority Update Acknowledgement to notify the firm of a Reserve Order replenishment event. Firms control receipt of these Acks by session level subscription via the Logon Request message. The Ack indicates that the displayed portion of a Reserve Order has been replenished according to the order's 'MaxFloor'. The replenishment order is assigned a new OrderID, which is provided in the message.

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
	Standard FIX Header		Y	MsgType = 8	Yes	Yes	Yes	Yes	Yes
FIX-1	Account	String[16]	N	Customer defined up to 16 characters; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark.	Yes	Yes	Yes	Yes	Yes
FIX-11	ClOrdID	String[20]	Y	Unique ID of the new Order, Cancel, or Cancel/Replace request as assigned by the firm. Pillar will validate that the ClOrdID is unique for the combination of SenderCompID + OnBehalfOfCompID (MPID) that entered the order, among open orders only. However, the firm is responsible for ensuring that the ClOrdID provided is unique among all orders sent for the full length of the trading day	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				by the given SenderCompID + MPID. Customer defined up to 20 characters; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, if alpha characters are used for the first two consecutive characters, then one of them must be lowercase.					
FIX-14	CumQty	Qty[9]	C	0 - 999,999,999	Yes	Yes	Yes	Yes	Yes
FIX-17	ExecID	String[32]	Y	Unique identifier of the outgoing FIX message, assigned by the Exchange to all FIX MsgType 8. Up to 32 characters.	Yes	Yes	Yes	Yes	Yes
FIX-18	ExecInst	Char[1]	C	d = Tracking Order f = ISO B = OK to Cross E = DNI F = DNR G = All or None R = Primary Peg P = Market Peg M = MPL (Midpoint Liquidity) N = Non-displayed (Retail Price Improvement and Limit-Non Displayed orders) y = Trade-at ISO L = Last Sale Peg v = Stock-Option/Stock-Future Contingent (only	f M N y L	d f R P M N y	d f R P M N y	d f R P M N y	d f R P M N y v

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				present on outbound drop copy messages)					
FIX-19	ExecRefID	String[32]	C	Contains the ExecID (Tag 17) value of the Fill that is busted or corrected. Up to 32 characters.	Yes	Yes	Yes	Yes	Yes
FIX-20	ExecTransType	Char[1]	Y	0 = New (ack, pending cancel, pending replace, partial fill, fill, order reject) 1 = Cancel (Trade Break Only) 2 = Correct (Trade Correction Only) *NYSE - supported only for orders routed to NYSE Floor Broker Systems	0 1 2*	0 1	0 1	0 1	0 1 2
FIX-30	LastMkt	String[4]	C	On fills and partial fills, Market Identifier Code (MIC) of the sending Exchange (regardless of local or away market execution) or other destinations for NYSE and NYSE Chicago, as noted below. ARCX = NYSE Arca Equities XNYS = NYSE XASE = NYSE American Equities XCIS = NYSE National XCHI = NYSE Chicago TRFN = NYSE TRF (Chicago EQ only via Brokerplex) NOTH = Manual Destination (Chicago EQ only via Brokerplex) ALGO = algorithm away market execution (NYSE only via NYSE Floor Broker Systems)	Yes	Yes	Yes	Yes	Yes
FIX-31	LastPx	Price[16]	C	Price of current partial fill or fill message (set to 0 on all non-fills).	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				0 - 999999.999999					
FIX-32	LastQty	Qty[9]	C	Quantity of current partial fill or fill message (set to 0 on all non-fills). 0 - 999,999,999	Yes	Yes	Yes	Yes	Yes
FIX-37	OrderID	String[20]	C	Unique identifier of most recent order as assigned by the Exchange. Published externally to market data feeds. Numerical up to 20 characters.	Yes	Yes	Yes	Yes	Yes
FIX-38	OrderQty	Qty[9]	Y	1 - 999,999,999	Yes	Yes	Yes	Yes	Yes
FIX-39	OrdStatus	Char[1]	Y	Status of the order: 0 = New 1 = Partially Filled 2 = Filled 3 = Done For Day 4 = Cancelled 5 = Replaced 6 = Pending Cancel 8 = Rejected C = Billable Cancel (Self Trade Prevention) E = Pending Replace M = Pending Modify	0 1 2 3 4 5 6 8 C E M	0 1 2 3 4 5 6 8 C E M	0 1 2 3 4 5 6 8 C E M	0 1 2 3 4 5 6 8 C E M	0 1 2 3 4 5 6 8 C E M
FIX-40	OrdType	Char[1]	Y	1 = Market 2 = Limit 7 = Inside Limit 9 = AutoMatch Limit P = Pegged	1 2 7 P	1 2 7 P	1 2 7 P	1 2 7 P	1 2 7 P
FIX-41	OrigClOrdID	String[20]	C	Returned from Order Cancel or Cancel/Replace Request. Represents the ClOrdID of the previously entered order intended for cancellation or replacement (NOT necessarily the initial order of the day).	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				Customer defined up to 20 chars; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, if alpha characters are used for the first two consecutive characters, then one of them must be lowercase.					
FIX-44	Price	Price[16]	C	0.000001-999,999,999.999999	Yes	Yes	Yes	Yes	Yes
FIX-54	Side	Char[1]	Y	1 = Buy 2 = Sell 5 = Sell Short 6 = Sell Short Exempt 8 = Cross 9 = Cross Short A = Cross Short Exempt	1 2 5 6	1 2 5 6	1 2 5 6	1 2 5 6	1 2 5 6 8 9 A
FIX-55	Symbol	String[16]	Y	Valid Equities Ticker Symbol.	Yes	Yes	Yes	Yes	Yes
FIX-58	Text	String[40]	N	On Incoming Messages from Firm: Freeform text field; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, max length is 40 characters.	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				However, will not be passed back in Acknowledgments or any subsequent response messages. On Outgoing Messages from Exchange: Reason code and text description for order activity, up to 40 characters. For example, reason for cancel/cancel-replace rejection.					
FIX-59	TimeinForce	Char[1]	Y	0 = Day 1 = GTC 2 = At the Opening 3 = IOC 4 = FOK 5 = GTX 6 = GTD 7 = On Close	0 2 3 7	0 2 3 7	0 2 3 7	0 2 3 7	0 2 3 7
FIX-60	TransactTime	UTC Timestamp [27]	N	On Incoming Messages from Firm: Customer application time. On Outgoing Message from Exchange: Exchange application time. UTC time, in Milliseconds YYYYMMDD-HH:MM:SS.mmm	Yes	Yes	Yes	Yes	Yes
FIX-63	SettlementType	Char[1]	N	0 = Regular Way 1 = Cash* *Only supported on Cross Orders. If not specified, the settlement type is assumed as regular way					0 1
FIX-65	SymbolSfx	String[10]	N	Valid Suffix value	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
FIX-109	ClientID	String[4]	C	Not supported when sending to Matching Engine. NYSE Chicago - Required for orders sent to Chicago IB Firms (Brokerplex). Should be agreed upon Originator ID. *NYSE - Optional identifier for CAT SenderIMID for NYSE Floor Broker Systems, also used for Self Trade Prevention. See "Self-Trade Prevention" section of this spec for more details.	Yes*				Yes
FIX-110	MinQty	Qty[5]	N	Must be ≤ OrderQty	Yes	Yes	Yes	Yes	Yes
FIX-111	MaxFloor	Qty[5]	C	Must be entered in Round Lots.	Yes	Yes	Yes	Yes	Yes
FIX-114	LocateReqd	Boolean	C	N = No Orders with Side of Sell Short, Sell Short Exempt, Cross Short, and Cross Short Exempt must be entered as LocateReqd = N. If entered as LocateReqd = Y or tag is not provided, order will be rejected.	N	N	N	N	N

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
FIX-150	ExecType	Char[1]	Y	0 = New 1 = Partially Filled 2 = Filled 3 = Done For Day 4 = Cancelled 5 = Replaced 6 = Pending Cancel 8 = Rejected C = Billable Cancel (Self Trade Prevention) E = Pending Cancel/Replace L = Eligible for Cross (Used for Broker Cross Orders) M = Pending Modify	0 1 2 3 4 5 6 8 C E M	0 1 2 3 4 5 6 8 C E M	0 1 2 3 4 5 6 8 C E M	0 1 2 3 4 5 6 8 C E M	0 1 2 3 4 5 6 8 C E M
FIX-151	LeavesQty	Qty[9]	C	0 - 999,999,999	Yes	Yes	Yes	Yes	Yes
FIX-386	NoTradingSessions	Int[1]	Y	1	1	1	1	1	1
FIX-336	TradingSessionID	Char[1]	Y	1 = Early Trading Session 2 = Core Trading Session 3 = Late Trading Session 4 = Early & Core Trading Sessions 5 = Core & Late Trading Sessions 6 = Early, Core, & Late Trading Sessions *Note: for symbols trading on NYSE, all values that include Core designation (Core, Early/Core, Core/Late, and Early/Core/Late) will be allowed, if the order type supports the combination on other Pillar markets. However, for each of those values, Pillar will honor the applicable trading sessions included in the instruction based on Tape (B/C symbols - Early and Core; A symbols - Core only), and ignore the other trading sessions specified in the instruction (Tape B/C symbols - Late;	1 2 4* 5* 6*	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				Tape A symbols - Early and Late)					
FIX-528	OrderCapacity	Char[1]	Y	A = Agency P = Principal R = Riskless Principal Q = Error Account *NYSE and NYSE Chicago - supported only on orders routed to NYSE Floor Broker Systems and Brokerplex	A P R Q*	A P R	A P R	A P R	A P R Q*
FIX-5700	LocateBroker	String[4]	C	For orders with Side of Sell Short, Sell Short Exempt, Cross Short, and Cross Short Exempt, identifies which broker has loaned the stock to settle the short sale. For firms using Pillar Pre-trade Risk Controls, use of this tag may be configured as mandatory.	Yes	Yes	Yes	Yes	Yes
FIX-7928	SelfTradeType	Char[1]	N	0 (number 0) = Use current Session Configuration STP setting for the SenderCompID T = No Self Trade Prevention N = Cancel Newest O (letter O) = Cancel Oldest C = Cancel Both D = Cancel Decrement *NYSE - supported only on orders routed to matching engine; not supported on orders routed to NYSE Floor Broker Systems	0 T* N O C* D*	0 T N O C D	0 T N O C D	0 T N O C D	0 T N O C D
FIX-9202	SpecialOrdType	Char[1]	C	1 = DMM Open/Re-open/Close with or without Auction (AOC) - drop copy only					

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				2 = DMM Pre-auction - drop copy only 3 = DMM After-auction - drop copy only T = QCT (DeliverToComp ID must be populated with IB Firm Identifier) 8 = *Reserved for future use*					T
FIX-9303	RoutingInst	Char[1]	C	N = Non Routable R = Routable D = Directed (Primary Only) S = Directed + Routable (PO+S) 1 = Primary Market until 9:45 2 = Primary Market after 3:55 3 = BOTH Primary Market until 9:45 AND Primary Market after 3:55 8 = Minimum Fill (must be entered with MinQty tag populated with a non-zero value) A = Route to ATS	N R 8 A	N R D S 1 2 3 8 A	N R D S 1 2 3 8 A	N R D S 1 2 3 8 A	N R D S 1 2 3 8 A
FIX-9403	OffsetPrice	Price[16]	C	Value must be zero, or otherwise: • For Market Peg order - equal to or multiple of 0.01 • For Retail Price Improvement order (optional modifier on NYSE only) - equal to or multiple of 0.001	Yes	Yes	Yes	Yes	Yes
FIX-9416	ExtendedExecInst	Char[1]	C	A = Add Liquidity Only (ALO) 2 = No route to IOI 4 = Retail Order Type 1 5 = Retail Order Type 2	A 4	A	A 2 5	A 2	A 2

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				7 = Retail Provider 8 = Imbalance Offset L = Limit dOrder C = Complex Order Auction 9 = Discretionary Peg D = Dark (Non-Displayed) Primary Peg I = Issuer Direct Offering (IDO)	7 8 I	8 9 D	7	8 9	
FIX-9448	IntroducingBadgeID	String[4]	C	1 – 4 numeric characters NYSE - sent on executions of orders routed to NYSE Floor Broker Systems; populated with Broker badge	Yes				
FIX-9451	ParentFirmClOrdID	String[20]	C	<= 20 chars *Present on drop copy messages of cross allocations done by NYSE Chicago IB Firms					Yes*
FIX-9453	ParentFirmMPID	String[4]	C	Firm Identifier - MPID *Present on drop copy messages of cross allocations done by NYSE Chicago IB Firms					Yes*
FIX-9478	InterestType	Char[1]	C	Q = Q-Order		Q	Q	Q	
FIX-9479	Reserved	Char[1]	N	Reserved for future use.					
FIX-9483	DealID	String[20]	C	Unique identifier of a transaction, assigned by the Exchange to both Execution reports representing the two sides of a single trade. Numerical up to 20 characters. Busts - original DealID of the transaction that is being busted or corrected.	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				Corrections - new DealID for the corrected transaction.					
FIX-9563	*Reserved*	String[9]	N	Reserved for future use.					
FIX-9730	LiquidityIndicator	String	C	On Order Acknowledgements: 1 = Candidate for setting a new displayed bid or offer on the local market 4 = Candidate for setting a new displayed bid or offer on the local market and joining the NBBO 5 = Candidate for setting a new displayed bid or offer on the local market and setting the NBBO Note: Order Priority Update Acks will only be populated with value 0 or 1. The value 1 will be returned when the original order ack was populated with 1, 4, or 5 On Partial Fills and Fills: See Appendix for Values.	Yes	Yes	Yes	Yes	Yes
FIX-2000 1	AttributedQuote	Char[1]	N	0 = Not Attributed 1 = Attributed for Market Data Feeds 2 = Include in Broker Volume 3 = Attributed for Market Data Feeds, and Include in Broker Volume	0	0 1	0 1	0 1	0 1
FIX-2000 2	ProactiveIfLocked	Char[1]	C	0 = No locked functionality 1 = Proactive if Locked for routable orders 2 = Non-display remove liquidity for non-displayed orders locked by contraside ALOs	0 1 2	0 1 2	0 1 2	0 1 2	0 1 2
FIX-2000 3	CancelInsteadOf Reprice	Char[1]	N	0 = Not applicable (follow default order behavior)	0	0 1	0 1	0 1	0 1

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				1 = Cancel order instead of repricing – for LULD only 3 = Cancel order instead of repricing for any reason	3	3	3	3	3
FIX-2000 4	WorkingPrice	Price[16]	C	0.000001-999999.999999	Yes	Yes	Yes	Yes	Yes
FIX-2000 5	FlowIndicator	Char[1]	Y	Indicates whether a corresponding inbound message was throttled. For outgoing messages without a corresponding inbound message, the tag will default to 0. 0 = Inbound message was not throttled 1 = Inbound message was throttled	0 1	0 1	0 1	0 1	0 1
FIX-2000 6	WorkingAwayFrom Display	Char[1]	C	On Order Acknowledgements, indicates whether the working price of the order is equal to or different than the display price. 0 = Working Price is equal to Display Price 1 = Working Price is different from Display Price	0 1	0 1	0 1	0 1	0 1
FIX-2000 7	UnsolicitedAck Type	Char[1]	C	On Order Priority Update Acknowledgements, indicates the type of event that produced the unsolicited Ack. 2 = Order Priority Update – New OrderID (reserve order replenishment)	2	2	2	2	2

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				3 = Order Priority Update – Same OrderID (working price update)					
FIX-20008	ParticipantType	Char[1]	C	Sent on fills. 1 = Customer 2 = Market Maker/LMM 3 = DMM 4 = SLP 5 = NYSE Floor Broker/NYSE Chicago IB	1 2 3 4 5	1 2	1 2	1 2	1 5
FIX-20009	Nanosecond SendingTime	String[27]	Y	Time of message transmission on outgoing message from Exchange. UTC time, in Nanoseconds – YYYYMMDD-HH:MM:SS.sssssssss Note: this represents the same reference time as provided in the Standard FIX Header tag SendingTime (52), with more granular resolution.	Yes	Yes	Yes	Yes	Yes
FIX-20010	Nanosecond TransactTime	String[27]	Y	Exchange application time. UTC time, in Nanoseconds – YYYYMMDD-HH:MM:SS.sssssssss Note: this represents the same reference time as provided in the standard FIX tag TransactTime (60), with more granular resolution.	Yes	Yes	Yes	Yes	Yes
FIX-20011	RouteToBroker	Char[1]	C	Required when intending to route message to non-Matching Engine destination (i.e. NYSE Chicago Brokerplex or NYSE Floor Broker					

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				Systems) based on value provided in DelliverToCompID on incoming messages from Firm					
				Y = Route to non-Matching Engine destination	Y				Y
				N = Route to Matching Engine	N				N
				If not specified, will be assumed as a value of "N", and will be routed directly to Matching Engine					
FIX-20012	BrokerOMSID	String[4]	C	Present on orders from Brokerplex to Pillar to identify the Broker ID targeted by the parent order. Present on drop copy messages of cross allocations done by NYSE Chicago IB Firms					Yes
FIX-20013	SubIDIndicator	Char[1]	N	When populating both OnBehalfOfSubID (116) and SelfTradeType (7928) on an order, allows the firm to specify whether the OnBehalfOfSubID should be used or ignored for Self-Trade Prevention (STP) evaluation. See "Self-Trade Prevention" section of this spec for more details. If also using Pillar Pre-trade Risk Controls, the OnBehalfOfSubID will be used for Risk Entity purposes regardless of the value specified in this field.					

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				0 = for this order, use OnBehalfOfSubID (within the MPID) for STP evaluation	0	0	0	0	0
				1 = for this order, ignore the OnBehalfOfSubID for STP (conduct STP evaluation at MPID level only) If not specified, will be assumed as a value of 0.	1	1	1	1	1
FIX-3000 2	RefDealID	String[20]	C	Unique identifier of a transaction, assigned to both sides of a single trade. Numerical up to 20 characters.	Yes				Yes
	Standard FIX Trailer		Y	Standard FIX Trailer	Yes	Yes	Yes	Yes	Yes

9. <u>FIX Drop Copies</u>

Drop copies of order activity transacted over the Pillar FIX Gateway are available via a separate FIX gateway interface. When ordering new FIX drop copy sessions, recipients may choose from the following configuration options.

- **Market Participant Filters** – receive drop copies of activity filtered by one of the following criteria:
    - SenderCompID(s) – a single or multiple order entry session SenderCompIDs
    - MPID(s) – a single or multiple MPIDs
    - Clearing Number(s) – a single or multiple clearing numbers
    - IntroducingBadgeID(s) (NYSE only) - a single or multiple broker badges

- **Order Activity Filters** – receive drop copies of outbound messages for either:

    - **All order activity** – all Execution Reports (MsgType = 8) regardless of OrdStatus, and all Order Cancel Rejects (MsgType = 9)

    - **Fills and Partial Fills only** – only Execution Reports (MsgType = 8) with OrdStatus = 1 (Partially Filled) and 2 (Filled)

NYSE Chicago - recipients configured with MPID or Clearing Number filters on their drop copy sessions will be able to identify cross allocations done by NYSE Chicago IB Firms in the following manner via single sided execution report messages:

- Parent Firm MPID (9453) and Parent ClordID (9451) fields will be present

- Liquidity indicators (9730) will be one of the following:
    - Z
    - ZT
    - ZTZ

- The Sell side will be identified as a cross side, with the following mapping:
    - 8 (cross) = 2 (sell)
    - 9 (cross short) = 5 (sell short)
    - A (cross short exempt) = 6 (sell short exempt)

- Other key attributes:
    - OnBehalfOfSubID (116) will contain a Trading Account or MPID (more details in FIX header section)
    - Account (1) will contain a Subaccount related to the MPID or Trading Account
    - BrokerOMSID (20012) will contain the MPID of the NYSE Chicago IB Firm that executed the trade and handled the allocation
    - BillTo (9449) will contain values that that correspond to clearing/billing workflows for NYSE Chicago IB Firms

- In the event of a cancel or correction, the initial execution report for an allocation will always be busted. In the case of a correction, a new execution report may be received based on the terms that were changed (e.g. if firm was changed, then new execution report may not be received, vs if price was changed and firm was same, new execution report will be received).

NYSE Floor Broker Cross - recipients configured with SenderCompID, MPID, Clearing Number or IntroducingBadgeID filters on their drop copy sessions will be able to identify cross allocations done by NYSE Floor Broker Firms in the following manner via single sided execution report messages:

- Parent ClordID [9451] field will be present

- Liquidity indicators [9730] will be one of the following:
    - ZB
    - ZBZ

- *AllocationFirmMPID [20022]* -
    - Self-Allocation - if the Initiating Broker allocates both sides of the trade to self, this field will be present on both sides of the allocation pair
    - Allocations to Third Party - if the Initiating Broker allocates either side of a trade to a third party, this field will only be present on the side that is allocated to self

- *AllocationIndicator [30003]* = Y will distinguish an Allocation from an original execution via FIX Drop Copy

- *OrigDealID [30006]* - on allocations, busts, and corrections will be populated with the *DealID* of the corresponding trade

- Allocations to Third Party - if the Initiating Broker allocates either side of a trade to a third party via the FIX Gateway or NYSE Pillar Trade Ops Portal, allocation fill messages for both sides will be sent exclusively to FIX Drop Copy, after the third-party approval has been entered via the Trade Ops Portal. Allocation fill messages will not be sent back to the OMS order entry session, even if the Initiating Broker remains on one side

- Busts by NYSE - will be sent back to the OMS order entry session

- All Other Adjustments - such as allocations/changes to firm identifier, clearing changes, etc. will be sent exclusively to FIX Drop Copy and not to the OMS order entry session

- For firms interested in correlating trades and allocations with the original Broker Cross order, if *OrigClOrdID [41]* is present on the drop copy message, this tag will refer to the *ClOrdID [11]* of the open outcry order. If tag 41 is not present, *ClOrdID [11]* on drop copy will refer to the Broker Cross order.

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
	Standard FIX Header		Y	MsgType = 8	Yes	Yes	Yes	Yes	Yes
FIX-1	Account	String[16]	N	Customer defined up to 16 characters; only printable ASCII characters allowed, excluding comma, semicolon,	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark.					
FIX-11	ClOrdID	String[20]	Y	Unique ID of the new Order, Cancel, or Cancel/Replace request as assigned by the firm. Pillar will validate that the ClOrdID is unique for the combination of SenderCompID + OnBehalfOfCompID (MPID) that entered the order, among open orders only. However, the firm is responsible for ensuring that the ClOrdID provided is unique among all orders sent for the full length of the trading day by the given SenderCompID + MPID. Customer defined up to 20 characters; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, if alpha characters are used for the first two consecutive characters, then one of them must be lowercase.	Yes	Yes	Yes	Yes	Yes
FIX-14	CumQty	Qty[9]	C	0 - 999,999,999	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
FIX-17	ExecID	String[32]	Y	Unique identifier of the outgoing FIX message, assigned by the Exchange to all FIX MsgType 8. Up to 32 characters.	Yes	Yes	Yes	Yes	Yes
FIX-18	ExecInst	Char[1]	C	d = Tracking Order f = ISO B = OK to Cross E = DNI F = DNR G = All or None R = Primary Peg P = Market Peg M = MPL (Midpoint Liquidity) N = Non-displayed (Retail Price Improvement and Limit-Non Displayed orders) y = Trade-at ISO L = Last Sale Peg v = Stock-Option/Stock-Future Contingent (only present on outbound drop copy messages)	f R M N y L	d f R P M N y	d f R P M N y	d f R P M N y	d f R P M N y v
FIX-19	ExecRefID	String[32]	C	Contains the ExecID (Tag 17) value of the Fill that is busted or corrected. Up to 32 characters.	Yes	Yes	Yes	Yes	Yes
FIX-20	ExecTransType	Char[1]	Y	0 = New (ack, pending cancel, pending replace, partial fill, fill, order reject) 1 = Cancel (Trade Break Only) 2 = Correct (Trade Correction Only) *NYSE - supported only for orders routed to NYSE Floor Broker Systems	0 1 2*	0 1	0 1	0 1	0 1 2
FIX-30	LastMkt	String[4]	C	On fills and partial fills, Market Identifier Code (MIC) of the sending Exchange (regardless of local or away market execution) or other destinations for NYSE and	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				NYSE Chicago, as noted below. ARCX = NYSE Arca Equities XNYS = NYSE XASE = NYSE American Equities XCIS = NYSE National XCHI = NYSE Chicago TRFN = NYSE TRF (Chicago EQ only via Brokerplex) NOTH = Manual Destination (Chicago EQ only via Brokerplex) ALGO = algorithm away market execution (NYSE only via NYSE Floor Broker Systems)					
FIX-31	LastPx	Price[16]	C	Price of current partial fill or fill message (set to 0 on all non-fills). 0 - 999999.999999	Yes	Yes	Yes	Yes	Yes
FIX-32	LastQty	Qty[9]	C	Quantity of current partial fill or fill message (set to 0 on all non-fills). 0 - 999,999,999	Yes	Yes	Yes	Yes	Yes
FIX-37	OrderID	String[20]	C	Unique identifier of most recent order as assigned by the Exchange. Published externally to market data feeds. Numerical up to 20 characters.	Yes	Yes	Yes	Yes	Yes
FIX-38	OrderQty	Qty[9]	Y	1 - 999,999,999	Yes	Yes	Yes	Yes	Yes
FIX-39	OrdStatus	Char[1]	Y	Status of the order: 0 = New 1 = Partially Filled 2 = Filled 3 = Done For Day 4 = Cancelled 5 = Replaced 6 = Pending Cancel	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6	0 1 2 3 4 5 6

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				8 = Rejected	8	8	8	8	8
				C = Billable Cancel (Self Trade Prevention)	C	C	C	C	C
				E = Pending Replace	E	E	E	E	E
				G = Pillar OMS Allocation Pending	G				
				H = Pillar OMS Allocation Reject	H				
				J = Pillar OMS Trade Reject	J				
				K = OMS Allocation Request					
				L = Eligible for Cross	L				
				M = Pending Modify	M	M	M	M	M
				T = OMS Trade Request					
FIX-40	OrdType	Char[1]	Y	1 = Market	1	1	1	1	1
				2 = Limit	2	2	2	2	2
				7 = Inside Limit	7	7	7	7	7
				9 = AutoMatch Limit					
				P = Pegged	P	P	P	P	P
FIX-41	OrigClOrdID	String[20]	C	Returned from Order Cancel or Cancel/Replace Request. Represents the ClOrdID of the previously entered order intended for cancellation or replacement (NOT necessarily the initial order of the day). Customer defined up to 20 chars; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, if alpha characters are used for the first two consecutive characters, then one of them must be lowercase.	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
FIX-44	Price	Price[16]	C	0.000001-999,999,999.999999	Yes	Yes	Yes	Yes	Yes
FIX-54	Side	Char[1]	Y	1 = Buy 2 = Sell 5 = Sell Short 6 = Sell Short Exempt 8 = Cross 9 = Cross Short A = Cross Short Exempt	1 2 5 6 8 9 A	1 2 5 6	1 2 5 6	1 2 5 6	1 2 5 6 8 9 A
FIX-55	Symbol	String[16]	Y	Valid Equities Ticker Symbol or Options Underlying symbol.	Yes	Yes	Yes	Yes	Yes
FIX-58	Text	String[40]	N	On Incoming Messages from Firm: Freeform text field; only printable ASCII characters allowed, excluding comma, semicolon, pipe delimiter, "at" symbol, greater than/less than, ampersand (&) and single/double quotation mark. *NYSE - for orders routed to NYSE Floor Broker Systems, max length is 40 characters. However, will not be passed back in Acknowledgments or any subsequent response messages. On Outgoing Messages from Exchange: Reason code and text description for order activity, up to 40 characters. For example, reason for cancel/cancel-replace rejection.	Yes	Yes	Yes	Yes	Yes
FIX-59	TimeinForce	Char[1]	Y	0 = Day 1 = GTC 2 = At the Opening 3 = IOC 4 = FOK 5 = GTX	0 2 3	0 2 3	0 2 3	0 2 3	0 2 3

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				6 = GTD 7 = On Close	7	7	7	7	7
FIX-60	TransactTime	UTC Timestamp [27]	N	On Incoming Messages from Firm: Customer application time. On Outgoing Message from Exchange: Exchange application time. UTC time, in Milliseconds YYYYMMDD-HH:MM:SS.mmm	Yes	Yes	Yes	Yes	Yes
FIX-63	SettlementType	Char[1]	N	0 = Regular Way 1 = Cash* *Only supported on Cross Orders. If not specified, the settlement type is assumed as regular way					0 1
FIX-65	SymbolSfx	String[10]	N	Valid Suffix value	Yes	Yes	Yes	Yes	Yes
FIX-109	ClientID	String[4]	C	Not supported when sending to Matching Engine. NYSE Chicago - Required for orders sent to Chicago IB Firms (Brokerplex). Should be agreed upon Originator ID. *NYSE - Optional identifier for CAT SenderIMID for NYSE Floor Broker Systems, also used for Self Trade Prevention. See "Self-Trade Prevention" section of this spec for more details.	Yes*				Yes
FIX-110	MinQty	Qty[5]	N	Must be ≤ OrderQty	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
FIX-111	MaxFloor	Qty[5]	C	Must be entered in Round Lots.	Yes	Yes	Yes	Yes	Yes
FIX-114	LocateReqd	Boolean	C	N = No For orders with Side of Sell Short and Sell Short Exempt, must be entered as LocateReq = N. If tag is not included, or is entered as LocateReq = Y, order will be rejected.	N	N	N	N	N
FIX-150	ExecType	Char[1]	Y	0 = New 1 = Partially Filled 2 = Filled 3 = Done For Day 4 = Cancelled 5 = Replaced 6 = Pending Cancel 8 = Rejected C = Billable Cancel (Self Trade Prevention) E = Pending Cancel/Replace G = Pillar OMS Allocation Pending H = Pillar OMS Allocation Reject J = Pillar OMS Trade Reject K = OMS Allocation Request L = Eligible for Cross M = Pending Modify T = OMS Trade Request	0 1 2 3 4 5 6 8 C E G H J L M	0 1 2 3 4 5 6 8 C E M	0 1 2 3 4 5 6 8 C E M	0 1 2 3 4 5 6 8 C E M	0 1 2 3 4 5 6 8 C E M
FIX-151	LeavesQty	Qty[9]	C	0 - 999,999,999	Yes	Yes	Yes	Yes	Yes
FIX-386	NoTradingSessions	Int[1]	Y	1	1	1	1	1	1
FIX-336	TradingSessionID	Char[1]	Y	1 = Early Trading Session 2 = Core Trading Session 3 = Late Trading Session 4 = Early & Core Trading Sessions 5 = Core & Late Trading Sessions 6 = Early, Core, & Late Trading Sessions	1 2 4* 5* 6*	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				*Note: for symbols trading on NYSE, all values that include Core designation (Core, Early/Core, Core/Late, and Early/Core/Late) will be allowed, if the order type supports the combination on other Pillar markets. However, for each of those values, Pillar will honor the applicable trading sessions included in the instruction based on Tape (B/C symbols - Early and Core; A symbols - Core only), and ignore the other trading sessions specified in the instruction (Tape B/C symbols - Late; Tape A symbols - Early and Late)					
FIX-528	OrderCapacity	Char[1]	Y	A = Agency P = Principal R = Riskless Principal Q = Error Account *NYSE and NYSE Chicago - supported only on orders routed to NYSE Floor Broker Systems and Brokerplex	A P R Q*	A P R	A P R	A P R	A P R Q*
FIX-5700	LocateBroker	String[4]	C	For Sell Short, Sell Short Exempt, Cross Short, and Cross Short Exempt orders, identifies which broker has loaned the stock to settle the short sale. For firms using Pillar Pre-trade Risk Controls, use of this tag may be configured as mandatory.	Yes	Yes	Yes	Yes	Yes
FIX-7928	SelfTradeType	Char[1]	N	0 (number 0) = Use current Session Configuration STP setting for the SenderCompID T = No Self Trade Prevention N = Cancel Newest O (letter O) = Cancel Oldest C = Cancel Both D = Cancel Decrement	0 T* N O C* D*	0 T N O C D	0 T N O C D	0 T N O C D	0 T N O C D

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				*NYSE - supported only on orders routed to matching engine; not supported on orders routed to NYSE Floor Broker Systems					
FIX-9202	SpecialOrdType	Char[1]	C	1 = DMM Open/Re-open/Close with or without Auction (AOC) - drop copy only 2 = DMM Pre-auction - drop copy only 3 = DMM After-auction - drop copy only T = QCT (DeliverToComp ID must be populated with IB Firm Identifier) 8 = *Reserved for future use*					T
FIX-9303	RoutingInst	Char[1]	C	N = Non Routable R = Routable D = Directed (Primary Only) S = Directed + Routable (PO+S) 1 = Primary Market until 9:45 2 = Primary Market after 3:55 3 = BOTH Primary Market until 9:45 AND Primary Market after 3:55 8 = Minimum Fill (must be entered with MinQty tag populated with a non-zero value) A = Route to ATS	N R 8 A	N R D S 1 2 3 8 A	N R D S 1 2 3 8 A	N R D S 1 2 3 8 A	N R D S 1 2 3 8 A
FIX-9403	OffsetPrice	Price[16]	C	Value must be zero, or otherwise: • For Market Peg order - equal to or multiple of 0.01 • For Retail Price Improvement order (optional modifier on NYSE only) - equal to or multiple of 0.001	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
FIX-9416	ExtendedExecInst	Char[1]	C	A = Add Liquidity Only (ALO) 2 = No route to IOI 4 = Retail Order Type 1 5 = Retail Order Type 2 7 = Retail Provider 8 = Imbalance Offset L = Limit dOrder C = Complex Order Auction 9 = Discretionary Peg D = Dark (Non-Displayed) Primary Peg I = Issuer Direct Offering (IDO)	A 4 7 8 I	A 8 9 D	A 2 5 7	A 2 8 9	A 2
FIX-9448	IntroducingBadge ID	String[4]	C	1 – 4 numeric characters NYSE - sent on executions of orders routed to NYSE Floor Broker Systems; populated with Broker badge	Yes				
FIX-9449	BillTo	String[4]	C	If provided, this information will be used for billing, instead of OnBehalfOf detail. *May be present on drop copy messages of cross allocations done by NYSE Chicago IB Firms with the following values: B - Bill R - Remote BR - Bill and Remote	Yes				Yes*
FIX-9451	ParentFirmClOrdID	String[20]	C	<= 20 chars Internal OrderID provided by the Floor Broker to identify the Floor Broker order being handled. *Present on drop copy messages of cross allocations done by NYSE Chicago IB Firms and NYSE Floor Brokers	Yes				Yes*
FIX-9453	ParentFirmMPID	String[4]	C	Firm Identifier - MPID *Present on drop copy messages of cross allocations					Yes*

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				done by NYSE Chicago IB Firms					
FIX-9478	InterestType	Char[1]	C	3 = NYSE Floor Broker Cross - 72D Q = Q-Order Y = Yield Order	3 Y	Q	Q	Q	
FIX-9479	*Reserved*	Char[1]	N	*Reserved for future use.*					
FIX-9483	DealID	String[20]	C	Unique identifier of a transaction, assigned by the Exchange to both Execution reports representing the two sides of a single trade. Numerical up to 20 characters. Busts - original DealID of the transaction that is being busted or corrected. Corrections - new DealID for the corrected transaction.	Yes	Yes	Yes	Yes	Yes
FIX-9563	*Reserved*	String[9]	N	Reserved for future use.					
FIX-9565	DOrderAuctionPrice	Price[16]	N	0.000100 - 999,999.990000	Yes				
FIX-9730	LiquidityIndicator	String	C	On Order Acknowledgements: 1 = Candidate for setting a new displayed bid or offer on the local market 4 = Candidate for setting a new displayed bid or offer on the local market and joining the NBBO 5 = Candidate for setting a new displayed bid or offer on the local market and setting the NBBO Note: Order Priority Update Acks will only be populated with value 0 or 1. The value 1 will be	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				returned when the original order ack was populated with 1, 4, or 5 On Partial Fills and Fills: See Appendix for Values.					
FIX-20001	AttributedQuote	Char[1]	N	0 = Not Attributed 1 = Attributed for Market Data Feeds 2 = Include in Broker Volume 3 = Attributed for Market Data Feeds, and Include in Broker Volume	0	0 1	0 1	0 1	0 1
FIX-20002	ProactiveIfLocked	Char[1]	C	0 = No locked functionality 1 = Proactive if Locked for routable orders 2 = Non-display remove liquidity for non-displayed orders locked by contraside ALOs	0 1 2	0 1 2	0 1 2	0 1 2	0 1 2
FIX-20003	CancelInsteadOf Reprice	Char[1]	N	0 = Not applicable (follow default order behavior) 1 = Cancel order instead of repricing – for LULD only 3 = Cancel order instead of repricing for any reason	0 3	0 1 3	0 1 3	0 1 3	0 1 3
FIX-20004	WorkingPrice	Price[16]	C	0.000001-999999.999999	Yes	Yes	Yes	Yes	Yes
FIX-20005	FlowIndicator	Char[1]	Y	Indicates whether a corresponding inbound message was throttled. For outgoing messages without a corresponding inbound message, the tag will default to 0. 0 = Inbound message was not throttled 1 = Inbound message was throttled	0 1	0 1	0 1	0 1	0 1
FIX-20006	WorkingAwayFro mDisplay	Char[1]	C	On Order Acknowledgements, indicates whether the working price of the order is equal to or					

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				different than the display price.					
				0 = Working Price is equal to Display Price	0	0	0	0	0
				1 = Working Price is different from Display Price	1	1	1	1	1
FIX-20007	UnsolicitedAck Type	Char[1]	C	On Order Priority Update Acknowledgements, indicates the type of event that produced the unsolicited Ack. 2 = Order Priority Update – New OrderID (reserve order replenishment) 3 = Order Priority Update – Same OrderID (working price update)	2	2	2	2	2
FIX-20008	ParticipantType	Char[1]	C	Sent on fills. 1 = Customer 2 = Market Maker/LMM 3 = DMM 4 = SLP 5 = NYSE Floor Broker/NYSE Chicago IB	1 2 3 4 5	1 2	1 2	1 2	1 5
FIX-20009	Nanosecond SendingTime	String[27]	Y	Time of message transmission on outgoing message from Exchange. UTC time, in Nanoseconds – YYYYMMDD-HH:MM:SS.sssssssss Note: this represents the same reference time as provided in the Standard FIX Header tag SendingTime (52), with more granular resolution.	Yes	Yes	Yes	Yes	Yes
FIX-20010	Nanosecond TransactTime	String[27]	Y	Exchange application time.	Yes	Yes	Yes	Yes	Yes

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				UTC time, in Nanoseconds – YYYYMMDD-HH:MM:SS.sssssssss Note: this represents the same reference time as provided in the standard FIX tag TransactTime (60), with more granular resolution.					
FIX-20011	RouteToBroker	Char[1]	C	Required when intending to route message to non-Matching Engine destination (i.e. NYSE Chicago Brokerplex or NYSE Floor Broker Systems) based on value provided in DelliverToCompID on incoming messages from Firm Y = Route to non-Matching Engine destination N = Route to Matching Engine If not specified, will be assumed as a value of "N", and will be routed directly to Matching Engine	Y N				Y N
FIX-20012	BrokerOMSID	String[4]	C	Present on orders from Brokerplex to Pillar to identify the Broker ID targeted by the parent order. Present on drop copy messages of cross allocations done by NYSE Chicago IB Firms					Yes
FIX-20013	SubIDIndicator	Char[1]	N	When populating both OnBehalfOfSubID (116) and SelfTradeType (7928) on an order, allows the firm to specify whether the OnBehalfOfSubID should be					

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				used or ignored for Self-Trade Prevention (STP) evaluation. See "Self-Trade Prevention" section of this spec for more details. If also using Pillar Pre-trade Risk Controls, the OnBehalfOfSubID will be used for Risk Entity purposes regardless of the value specified in this field.					
				0 = for this order, use OnBehalfOfSubID (within the MPID) for STP evaluation	0	0	0	0	0
				1 = for this order, ignore the OnBehalfOfSubID for STP (conduct STP evaluation at MPID level only)	1	1	1	1	1
				If not specified, will be assumed as a value of 0.					
FIX-20022	AllocationFirmMPID	String[4]	C	Identifier of the allocated party - MPID. Required for Broker Cross orders, except on contra side of the Allocation fill for Broker-to-broker Cross orders. Must be populated with: **Initiating Broker MPID** - for self-allocation. Broker must specify self-allocation on at least one side of every allocation pair. The MPID populated in this tag must match the MPID specified in *OnBehalfOfCompID (115)*	Yes				
FIX-20024	AllocationFirmIntroducingBadgeID	String[4]	C	Identifier of the allocated party - Contra Broker Badge.	Yes				

Tag	Field Name	Data Type	Req'd	Values	NYSE	American EQ	National	Arca EQ	Chicago
				Required on Trade fill for Broker-to-broker Cross orders. Must be populated with: **Third party Broker Badge**					
FIX-20042	CATIMID	String[4]	N	Firm Identifier - IMID/MPID Identifies the IMID to be reported to CAT as the Broker Dealer responsible for the order. Required for FBA sessions and must be a valid MPID for the session.	Yes				
FIX-30002	RefDealID	String[20]	C	Unique identifier of a transaction, assigned to both sides of a single trade. Numerical up to 20 characters.	Yes				Yes
FIX-30003	AllocationIndicator	Char[1]	C	Populated on allocations Y = Allocation message	Y				
FIX-30006	OriginalDealID	String[20]	C	For Broker Cross trade allocations and busts, identifier of the DealID from the Trade Request Acknowledgement. Numerical up to 20 characters.	Yes				
FIX-30016	RefExecTimestamp	UTC Timestamp [27]	C	Populated for Broker Cross orders on Pending Allocation and Allocation Fill messages with the time the Trade Request was printed. Sent on Pending Allocation and Allocation Fill messages for open outcry orders.	Yes				
	Standard FIX Trailer		Y	Standard FIX Trailer	Yes	Yes	Yes	Yes	Yes

10. Appendix A: Liquidity Indicators

Pillar will populate the tag LiquidityIndicator (9730) on Execution Report fills. This value represents the conditions under which an order was executed and whether it added or removed liquidity from the Exchange order book. Billing rates are determined in part by this value.

A list of all Liquidity Indicators is available at the web link below:

https://www.nyse.com/publicdocs/nyse/NYSE_Pillar_Reason_Codes_and_Liquidity_Indicators.xlsx

11. Appendix B: Pillar Reason Codes

Pillar will return a set of event reason codes and descriptions as text (Tag 58) on Execution Reports and Cancel Reject messages. These codes qualify the event that produced the message.

NYSE Chicago: the text may be different for outgoing messages generated by Brokerplex (the system that handles messages that are routed to Chicago IB firms).

Format: Text (58) = 'Rxxx: Description'

A list of all Pillar Reason Codes is available at the web link below:

https://www.nyse.com/publicdocs/nyse/NYSE_Pillar_Reason_Codes_and_Liquidity_Indicators.xlsx

12. Appendix C: Order Types

An inventory of the order types and modifiers available to firms via the Pillar FIX Gateway is available at:

https://www.nyse.com/publicdocs/NYSE_Pillar_FIX_Gateway_Order_Type_Matrix.xlsx

13. Appendix D: Field/Value Applicability - by Participant & Symbol

In addition to differences between markets denoted throughout this specification, within a given market there are certain fields and values applicable only to a subset of participants and/or symbols (Tape A or Tape B/C).

Description	Field Name/Value	NYSE				
		Customer/ Market Maker or Service Bureau - to Matching Engine	Customer/ Market Maker or Service Bureau - to NYSE Floor Broker Systems	Designated Market Maker (DMM)	Tape - A Symbols	Tape - B/C Symbols
Order Entry from Firm to Exchange - fields/values marked as "No" will be rejected						
ExecInst	ExecInst (18)	Yes	No	Yes	Yes	Yes
Market Order	OrdType (40) = 1	Yes	Yes	No	Yes	Yes
Inside Limit Order	OrdType = 7	Yes	No	No	Yes	Yes

Description	Field Name/Value	NYSE				
		Customer/ Market Maker or Service Bureau - to Matching Engine	Customer/ Market Maker or Service Bureau - to NYSE Floor Broker Systems	Designated Market Maker (DMM)	Tape - A Symbols	Tape - B/C Symbols
Limit On Close	OrdType (40) = 2 with TimeInForce (59) = 7	Yes	Yes	No	Yes	Yes
SenderSubID	SenderSubID (50)	Yes	No	Yes	Yes	Yes
ClientID	ClientID (109)	No	Yes	No	Yes	Yes
MinQty	MinQty (110)	Yes	No	Yes	Yes	Yes
MaxFloor	MaxFloor (111)	Yes	No	Yes	Yes	Yes
Trading Session Designation - Early	TradingSessionID (336) = 1	Yes	Yes	No	No	Yes
Trading Session Designation - Late	TradingSessionID (336) = 3	No	No	No	No	No
SelfTradeType - explicit instruction for No Self Trade Prevention	SelfTradeType (7928) = T	Yes	No	Yes	Yes	Yes
ExtendedExecInst - overall support for field/tag	ExtendedExecInst (9416)	Yes	No	Yes	Yes	Yes
ExtendedExecInst - Retail Order Type 1	ExtendedExecInst (9416) = 4	Yes	No	No	Yes	Yes
ExtendedExecInst - Imbalance Offset (On Close)	ExtendedExecInst (9416) = 8	Yes	No	No	Yes	No
SpecialOrdType	SpecialOrdType (9202)	No	No	Yes	Yes	No
RoutingInst	RoutingInst (9303)	Yes	No	Yes	Yes	Yes
InterestType	InterestType (9478)	No	No	Yes	Yes	No
Route to ATS	RoutingInst (9303) = A	Yes	No	No	Yes	Yes
Response Messages from Exchange to Firm - fields/values marked as "No" will not be sent						
Trade Corrections	ExecTransType (20) = 2	No	Yes	No	Yes	Yes
OrdStatus - Pending Modify	OrdStatus (39) = M *Instead, will be sent as E - Pending Replace	Yes	No*	Yes	Yes	Yes
LocateReqd	LocateReqd (114)	Yes	No	Yes	Yes	Yes
OffsetPrice	OffsetPrice (9403)	Yes	No	Yes	Yes	Yes
IntroducingBadgeID	IntroducingBadgeID (9448)	No	Yes	No	Yes	Yes

Description	Field Name/Value	NYSE				
		Customer/ Market Maker or Service Bureau - to Matching Engine	Customer/ Market Maker or Service Bureau - to NYSE Floor Broker Systems	Designated Market Maker (DMM)	Tape - A Symbols	Tape - B/C Symbols
AttributedQuote	AttributedQuote (20001)	Yes	No	Yes	Yes	Yes
ProactiveIfLocked	ProactiveIfLocked (20002)	Yes	No	Yes	Yes	Yes
CancelInsteadOf Reprice	CancelInsteadOf Reprice (20003)	Yes	No	Yes	Yes	Yes
FlowIndicator - value to indicate "corresponding inbound message was throttled"	FlowIndicator (20005) = 1 *Instead, will be sent as 0 regardless of whether or not the corresponding inbound message was throttled	Yes	No*	Yes	Yes	Yes
UnsolicitedAckType	UnsolicitedAckType (20007)	Yes	No	Yes	Yes	Yes
ParticipantType - NYSE Floor Broker	ParticipantType (20008) = 5	No	Yes	No	Yes	Yes
SubIDIndicator	SubIDIndicator (20013)	Yes	No	Yes	Yes	Yes

14. Document Version History

Date	Spec Version #	Change Summary
September 23, 2024	5.9	MinQty - removed the requirement for MinQty to be ≥ Round Lot Removal of 'Next Day' support for NYSE Chicago
March 11, 2024	5.8	The Liquidity Indicator and Pillar Reason Code tables have been relocated from the Appendix to a dedicated document. A link to this document is now available within the Appendix for easy access.
June 27, 2023	5.7	Removed support for following values on NYSE Arca Equities and added support on NYSE National:

		- ExtendedExecInst (9416) - values 4 (Retail Order Type 1), 5 (Retail Order Type 2), 7 (Retail Provider) - Appendix A liquidity indicators - ARP, ARM, RRT Removed support for following liquidity indicators (Appendix A) - AMLR, AMLO, ARER, AREO, ARRI, AROI. SpecialOrdType (9202) - removed support for value 8 (No Interaction with Retail Taker). Trading Services: Self-Trade Prevention - clarified use cases for ClientID registration.
March 9, 2023	5.6	ExtendedExecInst (9416) - removed support for value 5 (Retail Order Type 2). SpecialOrdType (9202) - added support for value 8 (No Interaction with Retail Taker). Appendix A Liquidity Indicators: - Added support for new indicators - AMLR, AMLO, AREI, ARER, AREO, ARRI, AROI, ARIZ, RR, RRZ, RIR, RIRZ, RBD, RBI, RBDZ, RBIZ, RNDR, RNRZ, OMR, OR, CMR, CR - Updated descriptions of existing indicators - ARP, RRT - Removed support for ARP on NYSE Arca Equities
January 9, 2023	5.5	Self-Trade Prevention - added support for ClientID based STP.
November 18, 2022	5.4	ExecRefID (30002) - added to Execution Report for NYSE & NYSE Chicago; added to Drop Copy for NYSE Chicago.
October 25, 2022	5.3	Appendix A - updated descriptions of following liquidity indicators - AML, AMZ, AND, ANZ, ARP, ARM, RML. Appendix B - added reason codes 326, 327, 906, 999. Updated text for reason code 313.
August 12, 2022	5.2	Trading Services - added section "Denial of Service Restrictions." FIX Drop Copies - added support for Clearing Number and IntroducingBadgeID filters. Added Drop Copy Spec table. Added NYSE Floor Broker Cross order related details.
July 25, 2022	5.1	LocateReqd (114) and LocateBroker (5700) - added reference to orders with Side of Cross Short and Cross Short Exempt. Appendix B - removed code 326.
June 30, 2022	5.0	LocateReqd (114) for orders with Side of Sell Short and Sell Short Exempt, must be entered as LocateReqd = N. If tag is not included, or is entered as LocateReqd = Y, order will be rejected. LocateBroker (5700) - added support for tag. RoutingInst (9303) - added support for A = Route to ATS; Appendix A - added liquidity indicators XWA and XDA. ExtendedExecInst (9416) - removed support for 0 = No trade against MPL and 3 = No trade against MPL and no route to IOI.

			ProactiveIfLocked (20002) - added support on NYSE for 1 = Proactive if Locked for routable orders and 2 = Proactive trade non display (non-display remove liquidity for non-displayed orders locked by contraside ALOs. CancelInsteadOfReprice (20003) - added support for 3 = Cancel order instead of repricing for any reason. Appendix B - added new reject codes 311-326. Updated text of the following codes to "Session Transition" instead of "Symbol Transition": 154-157.
February 17, 2022		4.9	Added support for: • NYSE - Inside Limit order - OrdType (FIX-40) = 7 (Inside Limit); updated Appendix D with Inside Limit details • NYSE Arca Equities - Discretionary Peg order - ExtendedExecInst (FIX-9416) = 9 (Discretionary Peg) Added new section - Maximum Order Price and Quantity Self-Trade Prevention - added details regarding orders routed to NYSE Floor Broker Systems. Logon message - RawData (FIX-96) - clarified that session configuration changes will be persisted for the length of the trading day or until the next time Pillar restarts. Cancel on Disconnect and Bulk Cancel - clarified that on NYSE, MOC/LOC orders for primary symbols are excluded from cancellation after 3:50 PM (added time reference). Prohibited characters in freeform text fields - added guidance regarding character restrictions in the following fields: • ClOrdID (11) • OrigClOrdID (41) • Text (58) • OnBehalfOfSubID (116) Text (FIX-58) - clarified that for orders routed to NYSE Floor Broker Systems, max length is 40 characters. TargetSubID (FIX-57) - added support for value "RET" (to designate an order as eligible for retail execution billing) on NYSE American Equities and NYSE National. Appendix A - added support for the following liquidity indicators by market: • NYSE Arca Equities - ADB, ADM, ADZ, RDB, RDM, RDZ • NYSE American Equities & NYSE National - ARE, AREZ, RRM, XNRT, XPRT, XDRT • NYSE National - XART Appendix B: • Added new codes: 191, 213-214, 228 - 269, 271-279, 281-289, 291-310, 400, 800

		- Removed codes: 900-906 - Updated text of the following codes to cover options series in addition to equities symbol ("symbol/series" instead of "symbol"): 20, 79, 80, 84, 110, 138, 139
December 9, 2020	4.8	NYSE - added support for: - SelfTradeType (7928) = C (Cancel Both) - SelfTradeType (7928) = D (Cancel Decrement) Clarifications for order routing to NYSE Floor Broker Systems: - ClientID (109) - added details regarding CAT SenderIMID - SelfTradeType (7928) = T, C, and D are not supported - Trade Corrections are supported - ExecTransType (20) = 2
October 28, 2020	4.7	Added support for Issuer Direct Offering (IDO) order: - ExtendedExecInst = I - Excluded from cancel on disconnect; bulk cancel - Pillar Reason Codes 270, 280, 290 Clarifications for order routing to NYSE Floor Broker Systems: - OrderCapacity (528) = Q (error account) is supported - Liquidity Indicators (Appendix) - added XI and XIZ for routed to IOI/Ping - BrokerOMSID (20012) - updated as not applicable for NYSE
August 3, 2020	4.6	Introduced support for order routing to NYSE Floor Broker Systems: - Account (1), ClOrdID (11), OrigClOrdID (41), Text (58) - updated to indicate list of printable characters that must not be sent, else will be rejected - LastMkt (30) - added value "ALGO" for algorithm away market executions - Cancel on Disconnect (RawData/tag 96) - both orders in the matching engine and orders routed to NYSE Floor Broker Systems will be cancelled if session is subscribed to cancel on disconnect - Order Cancel Request - added details regarding single and bulk cancellation of orders routed to the matching engine and NYSE Floor Broker Systems - Order Cancel/Replace Request - added details regarding combination of tags that must be populated the same way on a Cancel/Replace Request compared to original order routed to NYSE Floor Broker Systems - Self-Trade Prevention (STP) section, ClientID (109) - NYSE - STP evaluation may be conducted for orders routed to NYSE Floor Broker Systems using either MPID or ClientID - OnBehalfOfSubID (116) - may optionally be populated with mnemonic - DeliverToCompID (128) - values entered for NYSE Floor Broker Agency ID or Badge must not be "zero padded" to fill the max length of the tag - IntroducingBadgeID (9448) - added support (Execution Report only) - ParticipantType (20008) - added support for 5 = NYSE Floor Broker - RouteToBroker (20011) - added support - Field/Value Applicability by Participant Type & Symbol (Appendix) - updated to indicate fields/values that firms must not send on orders routed to NYSE Floor Broker Systems else will be rejected, and fields/values

that NYSE Floor Broker Systems will not send on response messages to firms
- Liquidity Indicators (Appendix) - added new values
- Mapping Orders and Executions to NYSE XDP Market Data section - on response messages for orders routed to NYSE Floor Broker Systems, the OrderID and TradeID values will not correlate with NYSE XDP Market Data

Updated support for orders routed to NYSE Chicago Brokerplex:
- Cancel on Disconnect (RawData/tag 96) - both orders in the matching engine and orders routed to Brokerplex will be cancelled if session is subscribed to cancel on disconnect
- Order Cancel Request - added details regarding single and bulk cancellation of orders routed to the matching engine and Brokerplex
- Order Cancel/Replace Request - added details regarding combination of tags that must be populated the same way on a Cancel/Replace Request compared to original order routed to Brokerplex

Message Throttling section - eliminated throttle formula that approximated a point in time when messages arrived during the previous 100 milliseconds, in favor of a true 100 millisecond rolling window

LiquidityIndicator (9730) - added support for pre-liquidity indicator values 4 (Candidate for setting a new displayed bid or offer on the local market and joining the NBBO) and 5 (Candidate for setting a new displayed bid or offer on the local market and setting the NBBO)

Liquidity Indicators (Appendix) - added new NYSE liquidity indicators for executions of orders routed to MEMX (XU, XUZ); MIAX (XH, XHZ); LTSE (XL, XLZ, XLA, XLT, XLRT, XLZD)

Pillar Reason Codes (Appendix) - added new codes 200, 223-227, 800

May 11, 2020	4.5	Added support for tag 20013 - SubIDIndicator.
November 4, 2019	4.4	NYSE American - added support for values to be introduced on a date announced via Trader Update: • ExtendedExecInst field (9416) - added A = Add Liquidity Only (ALO) as a valid value • ProactiveIfLocked field (20002) - added 2 = Non-display Remove liquidity as a valid value
October 31, 2019	4.3	Increased length of Text field (58) to the following values: • Logon, Logout, Session-Level Reject messages - to 100 characters • New Order Single, Order Cancel/Replace Request messages - to 80 characters Added details on FIX drop copy messages for cross allocations on NYSE Chicago: • Provided detail in FIX Drop Copies section • Updated applicable fields for NYSE Chicago in execution report based on their presence in cross allocation FIX drop copy messages: BillTo (9449), ParentFirmMPID (9453), ParentFirmClOrdID (9451)
October 17, 2019	4.2	NYSE Chicago:

		• Execution Report - in DealID field, updated description for busts and corrections • ExecInst field (18) - removed v = Options/Futures Related; will not be supported • SpecialOrdType field (9202) - for value T = QCT, added clarification that DeliverToCompID must be populated with IB Firm Identifier • Further Details on NYSE Chicago related identifiers in TargetSubID (57) and OnBehalfOfSubID (116) • Participant Type field (20008) - added value of 5 and removed value of 2 • ClientID (109) is required when sending to NYSE Chicago IB Firms Liquidity Indicators (Appendix) - added support for new indicators RBN/RBNZ for all markets on a date announced via Trader Update; added back missing indicators OIO/OIOZ, previously removed in error. Designated Limit Cross - IOC for elimination on NYSE Arca Equities, NYSE American Equities, and NYSE National on a date announced via Trader Update.
September 5, 2019	4.1	FIX Header - corrected description of OnBehalfOfSubID (116) to indicate that the value provided by the firm on the incoming message to the Exchange is echoed back in the same tag on outgoing messages from the Exchange to the firm. Removed DeliverToSubID (129) as this tag is not currently used in Pillar FIX Gateway protocol. Cancel Request - removed bulk cancel value 0 from field OrderID (37), as this is not a valid value. Liquidity Indicators (Appendix): • Merged the updated liquidity indicators for "Executions in Opening/Re-opening Auctions" and "Executions in Closing Auctions" from addendum table into main table. Removed designation that these codes will be introduced "beginning on a date announced via Trader Update" as they have since been implemented. • Corrected the indicators for "additional manual PRIN interest - NYSE DMM only" as OL and "additional manual PRIN interest - NYSE DMM only - Sub Dollar" as "OLZ." Corrected the cancel cutoff time for Primary Close Only Market/Limit (PO + MOC/LOC) orders for NYSE symbols - 3:50 PM. NYSE Chicago: - Included additional values in LastMkt field if receiving execution report messages from Brokerplex - Added ClientID to execution report message (was previously added to New Order - Single and Order Cancel/Replace Request messages) - Added RouteToBroker field (FIX-20011) to support routing orders to Brokerplex OffsetPrice - updated description to cover both Market Peg and Retail Price Improvement (optional modifier on NYSE only).
June 17, 2019	4.0	Added support for NYSE Chicago throughout all data structures and sections of the document, including the following:

		- SpecialOrdType supported on Inbound Messaging from firms to support QCT entry - Added SettlementType tag to support Non-Regular Way Settlement on Cross Orders - Added ClientID tag to support Institutional Broker workflows - Included details in DeliverToCompID to facilitate routing order orders to Institutional Brokers Appendix B, "Pillar Reason Codes": - Updated R191, R202, R213, and R214 as reserved for future use - Added R212: No Prev Closing Price, R220: Dry Run, R221: Unsupported by BrokerPlex, and R222: Cross Blocked by BBO/PBBO
March 29, 2019	3.2	Pillar Gateway support for NYSE: • Appendix "Liquidity Indicators" - added codes for Executions on Routed Orders; Primary Only to NASDAQ; Primary Only to BATZ; Primary Only to IEX • TradingSessionID (336) - added clarification for NYSE, that all values that include Core designation (Core, Early/Core, Core/Late, and Early/Core/Late) will be allowed, but only if the order type supports the combination on other Pillar markets. See field description for how the values are processed based on Tape of the Symbol • Appendix "Pillar Reason Codes" - updated text for code 171; added codes 184+ • Added FIX tag 9202 - SpecialOrdType - for NYSE DMM drop copy of Opening/Re-opening/Closing with and without Auction, Pre-auction order instruction, and After-auction order instruction Clarification that MMID must be provided along with its associated MPID on Market Maker, LMM, SLP, SLMM and DMM orders intended to receive credit for satisfying their market making/liquidity obligations. RoutingInstruction (9303) - changed description of the value for "Routable IOC" to "Routable" for greater flexibility in future use.
January 14, 2019	3.1	Appendix B, "Pillar Reason Codes" - updated text for R065 to "Invalid InterestType"; R070 to "Invalid DOrderAuctionPrice." Clarification that MMID must be provided on all market maker orders.

November 19, 2018	3.0	Liquidity Indicators (Appendix) - added supplemental table with planned changes for Opening/Re-opening and Closing auction liquidity indicators on all Pillar markets with auction eligible securities - NYSE Arca Equities, NYSE American Equities, and NYSE.
		Pillar Gateway support for NYSE, general:
		- Throughout spec, updated field/value applicability for NYSE market
		- Eliminated business descriptions of the following fields; updated as reserved for future use - MinPegQty (9563), DisplayInd (9479)
		- Re-named QuoteType as InterestType (9478)
		- Introduced new value to the following field:
		    ○ ExecInst (18) - added support for Last Sale Peg
		- Liquidity Indicators (Appendix)
		    ○ Updated value applicability for NYSE market
		    ○ Introduced new values - ASPZ, AJPZ, ASP, AJP, ADR, AC, RDA, ZB, ZBZ
		- Pillar Reason Codes (Appendix) - added new reason codes 169+

		- Added new Appendix - Order Type/Modifier Applicability by Participant & Symbol - Bulk Cancel Request and Cancel on Disconnect - updated list of exclusions for order cancellation Denoted changes to protocol support for the following markets beginning on a date announced via Trader Update - NYSE Arca Equities and NYSE National - introduction of Minimum Fill (via RoutingInstruction)
May 24, 2018	2.1	Added new Liquidity Indicators for NYSE Arca Equities (Appendix) - Add Retail Provider Sub Dollar (AREZ); 945/355 Executed on NYSE Retail (XNRT); 945/355 Executed on NYSE American Retail (XART); 945/355 Executed on Away Market Non-NYSE Group (XDRT).
February 8, 2018	2.0	Added protocol support for NYSE National.
October 3, 2017	1.10	Updated message throttle rate to 500 messages/100 milliseconds. Updated protocol support for NYSE Arca Equities and NYSE American Equities – new ExtendedExecInst (9416) value 8 = Imbalance Offset. New liquidity indicators for NYSE Arca Equities and NYSE American in support of Imbalance Offset order.
September 14, 2017	1.9	Updated protocol support for NYSE American Equities – new RoutingInst (9303) value 8 = Minimum Fill (must be entered with MinQty tag populated with a non-zero value)
July 17, 2017	1.8	Added implementation detail in section Message Throttling. Removed duplicate entries of liquidity indicators AND, RND for Dark Primary Peg, and simplified original descriptions to be applicable to non-displayed orders in general (including Dark Primary Peg), in Appendix.
June 22, 2017	1.7	Added New Liquidity Indicators for NYSE American Equities – in support of Discretionary Peg Order and Dark Primary Peg Order. Updated references of "Arca/American/NYSE Only" order to "Non-Routable Limit Order" (for NYSE Arca Equities, still known as Arca Only Order pending official name change).
May 16, 2017	1.6	Updated protocol support for NYSE American Equities – removed MinPegQty (9563) and DiscPriceRng (9565)
April 12, 2017	1.5	Updated protocol support for NYSE American Equities (formerly known as NYSE MKT Equities): - TargetSubID (57) – removed support for RET (Retail Order) - TradingSessionID (336) – added support all trading sessions - OrderCapacity (528) – removed support for Error Account - ExtendedExecInst (9416) – removed support for Add Liquidity Only; No Route to IOI; No Trade against MPL and No Route to IOI; Retail Order Type 1; Retail Order Type 2; Retail Provider; Imbalance Offset. Added support for Discretionary Peg; Dark Primary Peg - QuoteType (9478) – added support for Q-Order - ProactiveIfLocked (20002) – removed support for Proactive Trade Non Display

		Added Liquidity Indicator values and definitions in support of NYSE American Equities (Appendix). Added new Liquidity Indicators for both NYSE Arca Equities and NYSE American Equities – Add MPL Sub Dollar Execution; Add Non-Displayed Sub Dollar Execution; Remove Regular Limit IOC; Remove Sub Dollar IOC; Remove Sub Dollar MPL Order; Remove Non-Displayed Sub Dollar Limit Order.
		Updated the binary Order Types matrix in support of NYSE American Equities (link to the matrix in Appendix) – added Discretionary Peg Order and Dark Primary Peg order types.
February 23, 2017	1.4	Added the tag OrigSendingTime (122) to the FIX Header.
		Updated max length of the following tags to 20 characters (previously 32): • ClOrdID (11) • OrigClOrdID (41) • ParentFirmClOrdID (9451) Added descriptive detail to the following sections: • Failure Recovery – added sub-section Pillar Risk Mitigation; added detail regarding next expected client sequence number on a secondary Pillar destination IP address, and after an intraday session restart • Pillar FIX Session Layer handling – regarding Pillar FIX Gateway handling of Resend Requests from the firm with MsgSeqNum greater than expected • Message Retransmission – regarding Pillar FIX Gateway responses to Resend Requests from the firm • Appendix: Pillar Reason Codes – regarding the text format of Reason Code 133 (STP Cancel)
		Clarification on values provided in the tag LastMarket (30).
		Added detail on validation of the tag Account (1).
		Added Pillar Reason Code 168 (Pillar Risk Mitigation) to Appendix.
		Added hyperlink and guidelines for interpretation of NYSE Arca Equities order type validation matrix to Appendix. Clarification that the tags MinPegQty (9563) and DiscPriceRng (9565) are not currently available for NYSE Arca Equities.
January 5, 2017	1.3	Removed the following tags: • Account (1), from Order Cancel Request • ClearingAccount (440), from Execution Report • Clarified valid values in Logon Request and Logon Response (MsgType A), tag RawData (96) for position 3 (Self Trade Prevention).
December 8, 2016	1.2	Added section, "Pillar FIX Session Layer Handling."
		Updated the following message types: • Order Cancel Request (MsgType F) – removed tag OrderQty (38). Updated valid values and description for tag Side (54) as used on a Bulk Cancel Request. Added details regarding OnBehalfOfCompID (115) • Order Cancel/Replace Request (MsgType G) – Added details regarding OnBehalfOfCompID (115) and SenderSubID (50) • Order Cancel Reject (MsgType 9) – added tags NanosecondSendingTime (20009) and NanosecondTransactTime (20010)
		Updated the following tags:

		• ClOrdID (11) – updated details about uniqueness validation • CumQty (14), LastPx (31), LastQty (32), LeavesQty (151) – updated minimum value to 0 • LastMkt (30) – updated to be conditional • SendingTime (52) and TransactTime (60) – updated format to be compliant with standard FIX 4.2 Protocol • TargetCompID (56) – added list of values • DeliverToCompID (128) – updated max length • ExecType (150) – added value M (Pending Modify) • AttributedQuote (20001) – removed values 2 and 3 from list of currently accepted values (descriptions remain; reserved for future use) • FlowIndicator (20005) – updated to be required; updated description Added Pillar Reason Code 166 (Invalid Permission for SenderCompID) to Appendix.
October 28, 2016	1.1	Added the following new tags to existing message types: • Text (58) – to Logout • DeliverToSubID (129) – to FIX Header • FlowIndicator (20005) – to Execution Report • UnsolicitedAckType (20007) – to Execution Report • NanosecondSendingTime (20009) – to Execution Report • NanosecondTransactTime (20010) – to Execution Report Modifications to existing tags: • ClOrdID (11) and OrigClOrdID (41) – updated max length • ExecID (17) and ExecRefID (19) – updated max length • HeartBtInt (108) – updated max length • ParentFirmClOrdID (9451) – updated max length • AttributedQuote (20001) – assigned tag number (previously TBD) • ProactiveIfLocked (20002) – assigned tag number (previously TBD) • CancelInsteadOfReprice (20003) – replaced RepriceOrCancel; assigned tag number (previously TBD); values updated • Updated "Req'd" status (Y, N, C) – various tags • WorkingPrice (20004) – assigned tag number (previously TBD); updated max length • WorkingAwayFromDisplay (20006) – assigned tag number (previously TBD) • ParticipantType (20008) – assigned tag number (previously TBD) Updated values for existing tags: • MsgType (35) • OrderID (37) – bulk cancel codes • SendingTime (52) • TransactTime (60) – updated timestamp format (standard FIX) • RawData (96) • OnBehalfOfCompID (115) • GapFillFlag (123) • DeliverToCompID (128) • ExecType (150) • SelfTradeType (7928) • LiquidityIndicator (9730) • Pillar Reason Codes – added 154 through 165; see Appendix Added/updated descriptive detail to the following sections: • Failure Recovery • Self Trade Prevention

		• FIX Drop Copies • Order Cancel Request • Heartbeat and Test Request • Message Retransmission • Sequence Reset • Session-Level Rejects
August 12, 2016	1.0	Initial version of the specification.