



# **FIX Specifications for Trade Reporting to the Alternative Display Facility (ADF)**

Version 1.4a

October 3, 2016

**Please note: The Auto-Lock functionality on clearing-eligible trades submitted for Trade Acceptance, as described in Rule 7140(a)(2) and (a)(3), has been disabled until further notice. If an alleged contra party takes no action on a clearing-eligible trade submitted for Trade Acceptance, the trade will be carried over and remain open, and will NOT be automatically locked-in and sent to NSCC for clearing at 2:30 p.m. ET on T+1. FINRA will determine at a future date when to make this functionality available and will make an announcement to that effect.**

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# 1 Overview

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## 1.1 Introduction

The Alternative Display Facility (ADF) is a service of FINRA that supports on-line trade reporting of National Market System (NMS) equity securities. In addition to last sale dissemination of eligible trades, the system also supports trade matching and forwarding to NSCC for clearing. FINRA members (or their designated third parties) are provided with the capability of submitting trade report information on NMS equity securities through the use of the Financial Information eXchange Protocol (FIX) linkage.

The Eastern Time operating hours of the ADF system are as follows:

|                      |                              |
|----------------------|------------------------------|
| <u>System Open:</u>  | <u>8:00 A.M.</u>             |
| <u>Market Open:</u>  | <u>9:30 A.M.</u>             |
| <u>Market Close:</u> | <u>4:00 P.M.</u>             |
| <u>System Close:</u> | <u>8:00 P.M.<sup>1</sup></u> |

This document describes the new formats of the message text to be used to interface through the NASDAQ OMX network to the FINRA application. Updates to this document will be chronicled in the Revision History section of this document.

For questions concerning FIX connectivity, please contact NASDAQ Technical Support at (212) 231-5180 or via email to: [tradingservices@nasdaqomx.com](mailto:tradingservices@nasdaqomx.com). For questions concerning ADF trade reporting, please contact FINRA Product Management at (866) 899-2107 or via email to: [FINRAProductManagement@finra.org](mailto:FINRAProductManagement@finra.org).

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<sup>1</sup> All entries, including contra party Accepts and Declines, will not be allowed past 8:00pm ET.

## 2 FIX Protocol

The messaging described in this specification adheres to the standard FIX 4.4 protocol. Please refer to <http://fixprotocol.org/specifications/FIX.4.4> for further details.

The interface follows the FIX specifications as far as possible. In the majority of cases the structure and semantics of the messages are identical to the standard.

In some cases, the protocol has been extended to cover functions not considered by the standard. These extensions are clearly detailed in the document. In other cases, the standard is ambiguous or indicates that the details should be bilaterally agreed between the parties. In these cases this manual provides a detailed description to avoid any possible ambiguity.

### 2.1 *Supported Messages*

#### 2.1.1 Administrative messages

- Logon (in/out)
- Logout (in/out)
- Sequence Reset (in/out)
- Resend Request (in/out)
- Reject (out)
- Heartbeat (in/out)
- Test Request (in/out)

#### 2.1.2 Application Messages

- Trade Capture Report (in)
- Trade Capture Report (out)
- Trade Capture Report Ack (out)

## 3 The FIX Session

The session layer conforms to the standard FIX session. Please see the standard FIX specification for additional details.

### 3.1 *CompIDs*

The Sender- and TargetCompID uniquely define the FIX session. A session can only be active (established) between two hosts simultaneously. Any attempts to establish a second FIX session using the same CompIDs (for instance to a backup gateway) in parallel will be rejected.

- The TargetCompID (56) on all *inbound* transactions must be set to “FNRA”.
- The SenderCompID (49) on all *outbound* transactions will always be set to “FNRA”.

The Sender- and TargetCompID used by the client are defined in a separate agreement.

### 3.2 *SubIDs*

For *inbound* transactions:

- The TargetSubID (57) must be set to “ADFT”.
- The SenderSubID (50) must be set to the user ID defined in a separate agreement.

For *outbound* transactions:

- The TargetSubID (57) will be set to the user ID (same as inbound SenderSubID).
- The SenderSubID (50) will be set to “ADFT”.

### 3.3 *Logon and authentication*

At Logon, clients are identified by:

- CompIDs (SenderCompID and TargetCompID)
- IP Address

When the client is authenticated, the system responds with a Logon message to the client.

### 3.4 *Heartbeat intervals*

Heartbeat intervals are negotiated at Logon using the HeartBtInt (108) field. The system accepts a heartbeat interval set to 30 s

### 3.5 *Encryption*

The system does not support encryption.

### 3.6 *Datatypes and required fields*

This specification does not change the data type on any fields defined in the standard FIX specification. There may be places where this specification restricts the value range of a field further than specified in standard FIX. This will be clearly marked in the spec.

All fields listed in this specification that are marked as required in the standard specification, are required also in this specification. This document specifies additional fields as required by FINRA. These fields are marked with an ‘F’ in the required column of the message listings.

### 3.7 *Character encoding*

Standard FIX 7-bit US-ASCII character encoding is used.

### 3.8 FIX Timestamps

In FIX all timestamps are expressed in GMT/UTC. Please refer to the standard FIX specification for additional details.

### 3.9 Session lifetime

The FIX session lifetime is restricted to one trading day. The session lifetime is not ended at connectivity loss or even Logouts. The sequence numbers are reset to one each morning.

### 3.10 Failover and message recovery

At reconnect and Logon standard FIX message recovery is performed. All FIX sessions have at least one primary and one secondary gateway to which the session states are fully replicated. This means that regardless to which gateway a client connects, full message recovery is provided.

A client cannot have the same FIX session active towards multiple gateway instances simultaneously.

### 3.11 FIX Session Level Test Cases

This implementation is fully compliant with the session-level test cases specified in the standard FIX 4.4 Specification, Volume 2, section “FIX Session-level Test Cases and Expected Behaviors”. The only exception is the encryption test cases.

### 3.12 Drop Copy Sessions

Drop Copy Sessions, or Drops, can be set up to mirror outbound traffic on one or more FIX sessions. All outbound Quote Status Reports will be seen on the Drop.

Drop Copy Sessions are separate FIX sessions from the sessions which it replicates. This means the Drop session will have its own CompIDs, so the copied messages will differ slightly from the originals. All copied messages will have the CopyMsgIndicator (797) tag set to “Y”.

Note that this is an extension to standard FIX where only Execution Reports and Trade Capture Reports can be copied to a drop.

### 3.13 The Standard Header

All FIX messages contain a Standard Header. The header contains important information such as session identifiers (CompIDs), sequence numbers and message type and length etc.

#### 3.13.1 Inbound Header

| Tag                 | FIX Field name                   | Req'd | Comment                                                                                                  |
|---------------------|----------------------------------|-------|----------------------------------------------------------------------------------------------------------|
| 8                   | BeginString                      | Y     |                                                                                                          |
| 9                   | BodyLength                       | Y     |                                                                                                          |
| 35                  | MsgType                          | Y     |                                                                                                          |
| 49                  | SenderCompID                     | Y     | As specified in separate agreement                                                                       |
| 50                  | SenderSubID                      | F     | Your User ID as defined in separate agreement.                                                           |
| 56                  | TargetCompID                     | Y     | Valid values:<br>“FNRA”                                                                                  |
| 57                  | TargetSubID                      | F     | Valid values:<br>“ADFT”                                                                                  |
| 34                  | MsgSeqNum                        | Y     |                                                                                                          |
| 43                  | PossDupFlag                      |       | Always required for retransmitted messages                                                               |
| 97                  | PossResend                       |       |                                                                                                          |
| 52                  | SendingTime                      | Y     | Time of message transmission (always expressed in UTC (Universal Time Coordinated, also known as “GMT”)) |
| <a href="#">115</a> | <a href="#">OnBehalfOfCompID</a> |       | <a href="#">If present, this MPID will be passed to the ADF</a>                                          |

|                     |                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------|---------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     |                                 |  | <a href="#">application. If not present, the value in Tag 49 will be passed to the application. This allows you to use multiple MPIDs through a single connection.</a><br><a href="#">For Service Bureaus, if you are sending this message on behalf of your customer, their 4-character MPID is placed here.</a><br><a href="#">For both Broker Dealers and regular connections, you can use this field to submit your customer's MPID. This value will be returned to you in Tag 128 on the outbound message. Please note that while it is possible for you to submit a chain of transactions with inconsistent values for this tag in different messages, you are strongly advised not to do so.</a> |
| <a href="#">116</a> | <a href="#">OnBehalfOfSubID</a> |  | <a href="#">For both Broker Dealer and regular connections, you can use this field to submit your customer's I112 (assigned by NASDAQ upon agreement). This value will be returned to you in Tag 129 on the outbound message. Please note that while it is possible for you to submit a chain of transactions with inconsistent values for this tag in different messages, you are strongly advised not to do so.</a>                                                                                                                                                                                                                                                                                   |
| 122                 | OrigSendingTime                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

### 3.13.2 Outbound Header

| Tag                 | FIX Field name                  | Req'd | Comment                                                                                                              |
|---------------------|---------------------------------|-------|----------------------------------------------------------------------------------------------------------------------|
| 8                   | BeginString                     | Y     |                                                                                                                      |
| 9                   | BodyLength                      | Y     |                                                                                                                      |
| 35                  | MsgType                         | Y     |                                                                                                                      |
| 49                  | SenderCompID                    | Y     | Set to "FNRA"                                                                                                        |
| 50                  | SenderSubID                     | F     | Set to "ADFT"                                                                                                        |
| 56                  | TargetCompID                    | Y     | As specified in separate agreement                                                                                   |
| 57                  | TargetSubID                     | F     | Your User ID as defined in separate agreement.                                                                       |
| 34                  | MsgSeqNum                       | Y     |                                                                                                                      |
| 43                  | PossDupFlag                     |       | Always required for retransmitted messages                                                                           |
| 97                  | PossResend                      |       |                                                                                                                      |
| 52                  | SendingTime                     | Y     | Time of message transmission (always expressed in UTC (Universal Time Coordinated, also known as "GMT"))             |
| <a href="#">128</a> | <a href="#">DeliverToCompID</a> |       | <a href="#">Your MPID as stated in Tag 115 in the inbound message is returned to the service bureau in this tag.</a> |
| <a href="#">129</a> | <a href="#">DeliverToSubID</a>  |       | <a href="#">Your I112 as stated in Tag 116 in the inbound message is returned to the service bureau in this tag.</a> |
| 122                 | OrigSendingTime                 |       |                                                                                                                      |

### 3.14 The Standard Trailer

All FIX messages end with a Standard Trailer. The trailer only includes a simple checksum field. The details on how to calculate the checksum can be found in the standard FIX specification.

| Tag | FIX Field name | Req'd | Comment |
|-----|----------------|-------|---------|
| 10  | Checksum       | Y     |         |

### 3.15 Message Details

#### 3.15.1 How to interpret the Required (Req'd) column

A 'Y' marks the field as required in standard FIX (and of course also in this implementation). An 'F' means that the field is required in this implementation although it is not required in standard FIX. No entry at all means the field is optional.

#### 3.15.2 Default values

Fields which has enumerated values, where one is marked as "default value" need not be included in the message at all if the default value is used.

#### 3.15.3 Logon – inbound to FINRA

The response to a logon is either a Logon, which denotes a successful logon, or a Logout.

A client must be prepared to handle failure scenarios including (but not limited to):

A Logon attempt may fail or be rejected for several reasons. The FIX gateway will react differently depending on the kind of failure. The two different actions it may take are:

**Silently ignore the Logon.**

- If the wrong Sender or Target CompID is specified.
- For other reasons specified in the standard FIX specifications.

**Respond with a Logout.**

- If the FIX gateway has no connection with the back-end system.
- Logon failure for other reasons than authentication/security.

The Logout response to a Logon will always contain a note on why in the Text (58) field.

| Tag | FIX Field name   | Req'd | Comment                                                        |
|-----|------------------|-------|----------------------------------------------------------------|
|     | Standard Header  | Y     | MsgType = A                                                    |
| 98  | EncryptMethod    | Y     | Encryption not supported.<br>Valid values:<br>0 = None / Other |
| 108 | HeartBtInt       | Y     | Heartbeat interval. Valid value: 30 s                          |
|     | Standard Trailer | Y     |                                                                |

#### 3.15.4 Logon – outbound from Marketplace

| Tag | FIX Field name   | Req'd | Comment                                                        |
|-----|------------------|-------|----------------------------------------------------------------|
|     | Standard Header  | Y     | MsgType = A                                                    |
| 98  | EncryptMethod    | Y     | Encryption not supported.<br>Valid values:<br>0 = None / Other |
| 108 | HeartBtInt       | Y     | Heartbeat interval. Valid value: 30 s                          |
|     | Standard Trailer | Y     |                                                                |

#### 3.15.5 Logout (in/out)

The Logout message is used to gracefully disconnect a FIX session. When receiving a Logout, the counterparty should respond with a Logout. A Logout can also be the response to an unsuccessful Logon attempt.

| Tag | FIX Field name   | Req'd | Comment     |
|-----|------------------|-------|-------------|
|     | Standard Header  | Y     | MsgType = 5 |
| 58  | Text             |       | Free text   |
|     | Standard Trailer | Y     |             |

### 3.15.6 Sequence Reset (in/out)

This message has two uses. The common usage is with GapFillFlag set to 'Y', which is used in a response to a Resend Request to indicate that a range of messages will not be resent. This is commonly used to avoid resending administrative messages like Heartbeats.

The other (very rare) usage is to reset the sequence numbers to a higher number to get out of a deadlock. This is only triggered by manual intervention.

| Tag | FIX Field name   | Req'd | Comment                                                                                                                 |
|-----|------------------|-------|-------------------------------------------------------------------------------------------------------------------------|
|     | Standard Header  | Y     | MsgType = 4                                                                                                             |
| 123 | GapFillFlag      |       | Indicates that the Sequence Reset message is replacing administrative or application messages which will not be resent. |
| 36  | NewSeqNo         | Y     | New sequence number. The next Sequence Number to be expected after this message.                                        |
|     | Standard Trailer | Y     |                                                                                                                         |

### 3.15.7 Resend Request (in/out)

Resend Request is used to recover messages when a sequence number gap has been detected.

| Tag | FIX Field name   | Req'd | Comment                                                                                                                                                                                                                                 |
|-----|------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | Standard Header  | Y     | MsgType = 2                                                                                                                                                                                                                             |
| 7   | BeginSeqNo       | Y     | Message sequence number of first message in range to be resent                                                                                                                                                                          |
| 16  | EndSeqNo         | Y     | Message sequence number of last message in range to be resent. If request is for a single message BeginSeqNo (7) = EndSeqNo. If request is for all messages subsequent to a particular message, EndSeqNo = "0" (representing infinity). |
|     | Standard Trailer | Y     |                                                                                                                                                                                                                                         |

### 3.15.8 Reject (out)

The Reject, or session-level reject, message is sent whenever the FIX gateway is able to at least partially parse the message, but the message does not adhere to the specification and cannot be delivered to the back-end system.

| Tag | FIX Field name      | Req'd | Comment                                                                                                                                                                                                                                                                                                                                                                  |
|-----|---------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | Standard Header     | Y     | MsgType = 3                                                                                                                                                                                                                                                                                                                                                              |
| 572 | TradeReportRefID    | Y     | TradeReportID (Tag 571) of rejected message.                                                                                                                                                                                                                                                                                                                             |
| 45  | RefSeqNum           | Y     | MsgSeqNum of rejected message                                                                                                                                                                                                                                                                                                                                            |
| 371 | RefTagID            |       | The tag number of the FIX field being referenced.                                                                                                                                                                                                                                                                                                                        |
| 372 | RefMsgType          |       | The MsgType of the FIX message being referenced.                                                                                                                                                                                                                                                                                                                         |
| 373 | SessionRejectReason | F     | Valid values:<br>0 = Invalid Tag Number<br>1 = Required Tag Missing<br>2 = Tag Not Defined For This Message Type<br>3 = Undefined Tag<br>4 = Tag Specified Without a Value<br>5 = Value Is Incorrect Out Of Range For This Tag<br>6 = Incorrect Data Format For Value<br>9 = CompID Problem<br>10 = Sending Time Accuracy Problem<br>11 = Invalid Msg Type<br>99 = Other |
| 58  | Text                |       | Where possible, message to explain reason for rejection                                                                                                                                                                                                                                                                                                                  |

|  |                  |   |  |
|--|------------------|---|--|
|  | Standard Trailer | Y |  |
|--|------------------|---|--|

### 3.15.9 Heartbeat (in/out)

A heartbeat message is sent at the interval set at Logon. It is also the response to a Test Request message.

| Tag | FIX Field name   | Req'd | Comment                                                              |
|-----|------------------|-------|----------------------------------------------------------------------|
|     | Standard Header  | Y     | MsgType = 0                                                          |
| 112 | TestReqID        |       | Required when the heartbeat is the result of a Test Request message. |
|     | Standard Trailer | Y     |                                                                      |

### 3.15.10 Test Request (in/out)

Test Request is used to “ping” the counterparty whenever a heartbeat has not arrived at the negotiated heartbeat interval.

| Tag | FIX Field name   | Req'd | Comment                                                                           |
|-----|------------------|-------|-----------------------------------------------------------------------------------|
|     | Standard Header  | Y     | MsgType = 1                                                                       |
| 112 | TestReqID        | Y     | Identifier included in Test Request message to be returned in resulting Heartbeat |
|     | Standard Trailer | Y     |                                                                                   |

## 4 General Trade Reporting in FIX

### 4.1 Introduction

Trades may, subject to regulations or bilateral agreement, be reported to the marketplace in the following cases:

- Trades negotiated between market participants without using execution mechanisms provided by the Marketplace
- Trades formed at other execution venues but reported to the marketplace for regulatory or publication reasons. Such execution venues may include (systematic) internalizers, ECN's, ATS's, and others regulated markets.

### 4.2 Trade Capture Report Processing

Trade Capture Reports (TCR) have two related purposes; to confirm trades and reporting of privately negotiated trades. Usage of tags differ slightly depending on the purpose of the message:

The confirmed Trade:

Identifier: **TradeID**  
Action: **TradeReportType**

The process of confirming a trade:

Identifier: **TradeReportID**. Each actor issues their own id for every message sent (excluding TCR Ack messages). To reference a previous message, the **TradeReportRefID** tag is used.

- An initiator always uses TradeReportRefID when referring to a previous report.
- The marketplace uses TradeReportRefID in confirmed trades to reference external actors previous TradeReportIDs.

Action: **TradeReportTransType**

### 4.3 As-Of Trades

In FIX, an As-Of Trade is submitted by setting the TradeDate field to the date when the trade occurred and setting the AsOfIndicator (1015) to 1. An original T Date Trade is reported by setting TradeDate to the current date and setting the AsOf Indicator to 0 or omitting the tag.

For As-Of Reporting beyond T+365, Tape Only or No Tape and No Clearing designations may be submitted on trade entry. For As-Of Reporting beyond T+365 where the client publish indicator = 'Y', the trade must be suppressed from dissemination (Publish Indicator must be set to "N"). For As-Of Reporting beyond T+365 the clearing number is required and must be a valid NSCC clearing number on report date and a valid relationship on Trade Date.

As-of trade reports with an execution date that is a non-business date must be submitted as non-clearing and may be published or non-published. Non-business dates are considered to be weekend days and any day the US markets are closed. If the Publish Indicator is "Y" and the trade is executed on a non-business day, the trade must be appended with the "outside normal market hours" modifier in Trade Modifier 3.

If the Publish Indicator is 'Y', and the trade is executed on a non-business day, the trade must be reported by 8:15 a.m. the next business day following execution. Trades not reported by this time must be appended with the "outside normal market hours reported late" modifier in Trade Modifier 3.

## 4.4 Reversals

The FINRA reporting facility system is designed to retain 4 business days of trade report data, inclusive of the current day (T date through T minus 3), on a rolling basis. A deletion of a previously reported trade submitted prior to this rolling T-3 day period is allowed via submission of a *Reversal*. This message is used to cancel a trade entry which was originally reported prior to T-3, including trades submitted prior to the migration of the ADF from the legacy FINRA system to the new technological platform. A Reversal must contain all the values submitted in the original Trade, including the Side code (Buy or Sell) that was originally submitted. Trade identifiers generated on the original trade are required on Reversals. See section 5.1.3 for message details. To correct a trade entry which was originally reported prior to T-3, a Reversal, followed by an As-Of Trade with the correct trade details, are required.

Reversals are also used to support the cancellation of a trade originally reported to another FINRA reporting facility (e.g., ORF, FINRA/NYSE TRF, FINRA/NASDAQ TRF) in the event the security has moved from one market place to another (e.g., listed to un-listed). The reversal message layout includes a field that indicates which reporting facility the trade was originally reported. This supports proper audit trail processing of historical reports. Note that in these cases, the Original Trade ID (Tag 1126) must be a 10-digit “dummy” number that starts with the digit “6”, followed by all zeros (e.g., 6000000000).

## 4.5 Identifiers

### 4.5.1 Trade Report ID

The TradeReportID (571) is similar to the ClOrdID used for orders and executions. A unique Trade Report ID assigned by the reporting executing broker/dealer must be set on all reported trades (TCR) inbound to the marketplace. There is one important exception to the analogy of ClOrdIDs. The marketplace sets its own TradeReportIDs on outbound TCRs (like confirmed trades).

### 4.5.2 Trade Report Reference ID

The TradeReportRefID (572) is used to refer to a previous TCR. The marketplace, which sets its own TradeReportIDs on outbound trade confirmations, uses the TradeReportRefID to reference *the submitters TradeReportID* from the original trade report, for example on confirmations to reported trades.

### 4.5.3 Trade ID (aka FINRA Control Number)

*TradeID (1003) is a FINRA extension to FIX 4.4.* TradeID carries the ten digit FINRA Control Number assigned to the trade upon acceptance. All Control Numbers shall start with the digit “6” followed by nine digits (numeric) representing the incremental sequence number of the trade. All Control Numbers will be unique within a given day.

### 4.5.4 Control Date

*ControlDate (22011) is a FINRA extension to FIX 4.4.* ControlDate, in combination with Control Number, uniquely identifies a trade throughout the life of the system. Since Control Numbers can be duplicated from day to day, ControlDate allows for the specific identification of a trade record based on the date of entry. ControlDate shall be generated in the format YYYYMMDD and shall reflect the date that the trade was received by FINRA from the submitting firm. ControlDate is required on all subsequent Trade Cancels and Corrections.

### 4.5.5 Original Trade ID

*OrigTradeID (1126) is a FINRA extension to FIX 4.4.* OrigTradeID carries the ten digit FINRA control number referenced on Corrections and Reversals.

### 4.5.6 Firm Trade ID

*FirmTradeID (1041)* contains the internal ID assigned to a trade by the reporting firm (Client Trade Identifier). Must not exceed 20 characters.

#### 4.5.7 Secondary Firm Trade ID

*SecondaryFirmTradeID (1042)* is a FINRA Extension to FIX 4.4. It contains the internal ID assigned to a trade by the contra side (Contra Client Trade Identifier). This field can only be submitted on Locked-In (AGU/QSR) trades, Cross trades and Customer trades.

#### 4.5.8 Party Identifiers

There may be many parties involved in a trade. In FIX, the identifiers and roles of each party is defined in the Parties block. The Parties block is a repeating group of identifiers which can carry an unlimited number of parties and their roles. The Parties block consists of the following fields:

| Tag | FIX Field name | Comment                                                                                                                                                                      |
|-----|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 453 | NoPartyIDs     | Number of parties included in the message                                                                                                                                    |
| 448 | PartyID        | The actual identifier of the party. In this case always the 4 character MPID on interdealer trades. On Customer trades, the contra party must be submitted with the value C. |
| 447 | PartyIDSource  | Defines the type of the identifier used as PartyID. In this solution always C = Generally accepted market participant identifier (e.g. FINRA mnemonic)                       |
| 452 | PartyRole      | Defines the role of the current party.                                                                                                                                       |

The last three fields listed above are required for each party.

The following party roles are supported:

| Party Role               | Comment                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Giveup Firm              | MPID of the Giveup Firm, when applicable. A Uniform Service Bureau/Executing Broker Agreement (Attachment A of the Agreement) must be in place in order for firms to submit trade reports on behalf of their give ups.                                                                                                                                    |
| Executing Firm           | MPID of Reporting party (owner of the trade).                                                                                                                                                                                                                                                                                                             |
| <del>Entering Firm</del> | <del>MPID of the party (Service Bureau) sending the trade on behalf of a client. A Uniform Service Bureau/Executing Broker Agreement (Attachment A of the Agreement) must be in place in order for firms to submit trade reports on behalf of their correspondents.</del>                                                                                 |
| Clearing Firm Number     | Clearing Firm ID Number assigned by the NSCC. Not really a party but treated as such in FIX. If not submitted on the reporting side, will default to the primary clearing number for the reporting party. On Locked-In trades, may be submitted on both the reporting and the contra side, else will default to the primary clearing firms of both sides. |
| Contra Firm              | MPID of Contra party or "C" to denote the contra is a non-FINRA member (Customer trade). An AGU or QSR trade can be submitted as a Locked-in trade provided the reporting party has Uniform Service Agreement with the contra party.                                                                                                                      |

In addition to the above three main party identifier fields, there is also a Parties Sub identifier group that may be added to certain parties. This group contains the following fields:

- **NoPartySubIDs** (802) – Number of Party sub identifiers. In this solution always set to 1 if present.
- **PartySubID** (523) – The actual Party Sub Identifier. In this solution only used for identifying a branch office of a reporting party or a contra party (Contra party branch office may only be submitted on Locked-In trades). Maximum of 8 alphanumeric characters allowed.
- **PartySubIDType** (803) – Type of sub identifier. In this solution always set to 24 = Department.

The Parties sub identifiers are only allowed to be attached to the reporting party or to the contra party (on Locked-In trades). These fields are optional.

In this solution the Trade Capture Reports contains one set of parties for each Side (Buy/Sell) of the trade. The parties are found in the repeating group called TrdCapRptSideGrp. This group will always contain two sides (NoSides = 2), one buy and one sell<sup>2</sup>. Each of these contains a Parties repeating group.

- The reporting side (buy or sell) *must* contain a PartyID with PartyRole = Executing Firm.
- The contra side (opposite of reporting side) *must* contain a PartyID with PartyRole = Contra Firm.

For Cross trades (Tag 54 Side = 8), the reporting and contra sides must be the same and must both be submitted, therefore the NoSides must also be set to “2”.

The field Reporting Obligation (Tag 22030) is a FINRA required field that allows the submitter of the trade report to identify whether or not they are the party that has the responsibility to report the trade, as defined in FINRA Rule 6282(b)<sup>3</sup>.

For the purpose of reporting Step-Outs/ Step-Ins, the firm stepping-out (transferring the position out) must always populate the Reporting Obligation Flag with a ‘Y’ value, and the firm stepping-in (receiving the shares in) must always populate the field with an ‘N’ value. The rule for Step-Outs includes Special/Step-Out, Step-Out with Fees and Special/Step-Out with Fees. The rule for Step-Ins includes Special/Step-In.

Cross trades and Customer trades may never be submitted with the Reporting Obligation value of “N”, they must always be submitted with the value “Y”.

On trades where the firm submitted Publish Indicator = Y, the Reporting Obligation must also = Y, otherwise ADF shall reject the trade.

PartyIDs with other Party Roles may be added as necessary to both sides.

#### 4.5.9 Trades reported by a Service Bureau

In order to report trades as a Service Bureau, you would need to utilize the “On Behalf Of” FIX functionality. In the header of the message, you must include Tags 115 (OnBehalfOfCompID) and 116 (OnBehalfOfSubID). Tags 128 (DeliverToCompID) and 129 (DeliverToSubID) will be returned in the outbound messages to you. You will set up a standard FIX session with your MPID. For additional clients, the port will be turned into a service bureau port and client connections can be added to it. In order for you to send trade reports on behalf of these clients, you must send Tags 115 and 116 with the corresponding values given to you by NASDAQOMX for each client.

**Note: A fully executed Uniform Service Bureau/Executing Broker Agreement (Attachment A of the Agreement) must be in place in order for service bureaus to submit trade reports on behalf of their clients.**

Here is a sample set up of a service bureau port with multiple clients (MPIDs, I1I2s and port used for illustrative purposes):

|        |               |                            |
|--------|---------------|----------------------------|
| Tag 49 | SenderCompID: | WXYZ (Service Bureau MPID) |
| Tag 50 | SenderSubID:  | 1111                       |
| Tag 56 | TargetCompID: | FNRA                       |

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<sup>2</sup> The exception is Trade Cancels, which only contains one side (the reporting side).

<sup>3</sup> In transactions between two members, the executing party shall report the transaction. In transactions between a member and a non-member or customer, the member shall report the transaction. The "executing party" shall mean the member that receives an order for handling or execution or is presented an order against its quote, does not subsequently re-route the order, and executes the transaction. In a transaction between two members where both members may satisfy the definition of executing party (e.g., manually negotiated transactions via the telephone), the member representing the sell-side shall report the transaction, unless the parties agree otherwise and the member representing the sell-side contemporaneously documents such agreement.

Tag 57 TargetSubID: ADF  
Port: 12345

Client #1

Tag 115 OnBehalfOfCompID: ABCD  
Tag 116 OnBehalfOfSubID: 2222

Client #2

Tag 115 OnBehalfOfCompID: EFGH  
Tag 116 OnBehalfOfSubID: 3333

Client #3

Tag 115 OnBehalfOfCompID: IJKL  
Tag 116 OnBehalfOfSubID: 4444

Client #4

Tag 115 OnBehalfOfCompID: MNOP  
Tag 116 OnBehalfOfSubID: 5555

#### 4.5.10 OATS Identifier

Required by FINRA on all trade reports where either the reporting or contra party was also required to submit an OATS Execution Report to FINRA pursuant to FINRA Rule 7450. The OATS Identifier shall be reported in Tag 376 ComplianceID. This field allows up to 20 alphanumeric characters. Allowed on Locked-In (AGU/QSR) trades (Tag 22013=Y), Cross trades (Side = 8), and Customer (Contra Firm MPID = C) trades. Allowed on Trade Accepts. Allowed on trades where the contra party will not submit a matching trade or trade accept.

## 4.6 Timestamps and dates

Timestamps and dates can be represented in several ways in FIX. The data types used in this solution are:

| Data Type    | Format                | Comment                                                                                                                                                                                                                |
|--------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UTCTimestamp | YYYYMMDD<br>-HH:MM:SS | The most common data type in FIX. Used in standard FIX tags such as TransactTime (60), SendingTime (52) etc.<br><b>NOTE 1:</b> times are given in <b>UTC</b> (GMT).<br><b>NOTE 2:</b> FIX allows milliseconds as well. |
| LocalMktDate | YYYYMMDD              | Standard date. Notice that it is <b>NOT</b> in UTC. Used in standard tags such as TradeDate (75).                                                                                                                      |
| UTCTimeOnly  | HH:MM:SS.sss          | Basically the time part of a UTCTimestamp.<br><b>NOTE:</b> times are given in <b>UTC</b> (GMT).                                                                                                                        |

### 4.6.1 TransactTime

TransactTime (60) is a standard FIX tag that is set to the time the transaction it is contained in occurred. May be the same as ExecutionTime (22007) on initial trade reports.

**Format:** UTCTimestamp

### 4.6.2 SendingTime

SendingTime (52) is contained in the header of every FIX message and must contain the time of message transmission.

**Format:** UTCTimestamp

#### 4.6.3 TradeDate

TradeDate (75) is used to indicate the date the trade occurred. Non-business days are allowed to be reported as valid Trade Dates. Non-business dates are considered to be weekend days and any day the US markets are closed. Refer to section 4.3 for processing of non-business day trade reports.

**Format:** LocalMktDate

#### 4.6.4 ExecutionTime

ExecutionTime (22007) is a field defined by FINRA. It denotes the time of execution. Outbound messages contain the value set in the inbound message.

**Format:** UTCTimeOnly

#### 4.6.5 PreparationTime

PreparationTime (22009) is an optional field defined by FINRA. Denotes the time the submitter prepared the transaction for submission. Outbound messages contain the value set in the inbound message.

**Format:** UTCTimeOnly

#### 4.6.6 ControlDate

ControlDate (22011) is a field defined by FINRA. ControlDate shall be generated by FINRA in the format YYYYMMDD and shall reflect the date that the trade was received by FINRA from the participant firm. The ControlDate together with the Control Number (TradeID) uniquely identifies a trade throughout the life of the system. Control Date is required in conjunction with Control Number (TradeID) to subsequently cancel or correct a trade.

**Format:** LocalMktDate

#### 4.6.7 OrigControlDate

OrigControlDate (22012) is a field defined by FINRA. The OrigControlDate reflects the date when the system received and processed the *original* trade entry. It is found on trade reversal inbound and outbound messages, and on trade correction outbound messages.

**Format:** LocalMktDate

#### 4.6.8 ServiceBureauPrepTime

ServiceBureauPrepTime (22022) is an optional field defined by FINRA. If a participant firm used a Service Bureau to submit the trade, this field denotes the time the Service Bureau prepared the transaction for submission. Outbound messages contain the value set in the inbound message.

**Format:** UTCTimeOnly

#### 4.6.9 TradeModifier4Time

TradeModifier4Time (22018) is a conditionally required field defined by FINRA. If a participant firm reports a TradeModifier4 (22004) value of “S” (Stopped Stock) or “P” (Prior Reference Price), this field would be required and must denote the time associated with this condition. Outbound messages contain the value set in the inbound message. ADF shall validate that the Modifier 4 Time field is populated when the Modifier 4 field is populated with either Prior Reference Price or Stop Stock. If the validation fails, the trade will reject.

**On T-Date trades** (i.e., non-As Of trades), the Modifier 4 Time field, when present, must be more than 10 seconds prior to both the execution time of the trade and the time the trade is reported to ADF, otherwise the trade will reject. On As-Of trades, this time validation is not required and the trade will be accepted regardless of the Modifier 4 Time in comparison to the Execution Time and report time.

**Format:** UTCTimeOnly

#### 4.6.10 TradeModifier2Time

TradeModifier2Time (22033) is a conditionally required field defined by FINRA. If a participant firm reports a TradeModifier2 (22002) value of “3” (Intermarket Sweep Outbound, *aka* ISO), this field would be required and must denote the time associated with this condition. Outbound messages contain the value set in the inbound message. ADF shall validate that the Modifier 2 is populated with Outbound ISO when the Modifier 2 Time field is populated. If the validation fails, the trade will reject.

The Modifier 2 Time field, when present, must be prior to or equal to the execution time of the trade, otherwise the trade will reject.

**Format:** UTCTimeOnly

#### 4.6.11 MatchControlDate

MatchControlDate (22027) is a field defined by FINRA (YYYYMMDD format). Reflects the date when the system matched the trade on match/compared trades. If the trade was matched against the contra party's trade report (where ReportingObligation = N), then this tag will contain the Control Date of the contra party's trade report (Tag 9857 will be set to "C"). If the contra party accepted the executing reporting party's trade report, then this tag will be omitted. It is found on outbound confirmed match messages (ARMA/ACMA).

**Format:** LocalMktDate.

## 5 Equity Trade Message Formats

### 5.1 Inbound Trade Report Messages

#### 5.1.1 Trade Capture Report – Reporting a trade (in)

| Tag  | FIX tag name         | Req'd | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------|----------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | Standard Header      | Y     | MsgType = AE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 571  | TradeReportID        | Y     | Client-generated identifier (reporting participant firm), not to exceed 20 characters.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 1041 | FirmTradeID          |       | The client identifier assigned to a trade by the Firm to track a trade within the Firm's system. Must be unique for the day.                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1042 | SecondaryFirmTradeID |       | <i>FINRA Extension to FIX 4.4:</i><br>The Contra Client Identifier assigned to a trade by the contra side. Only allowed on Locked-in, Cross and Customer Trade Reports.                                                                                                                                                                                                                                                                                                                                                                                                     |
| 487  | TradeReportTransType | F     | Valid values:<br>0 = New                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 856  | TradeReportType      | F     | Valid values:<br>0 = Submit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 570  | PreviouslyReported   | Y     | Indicates if the trade capture report was previously reported to the counterparty<br>Valid values:<br>N = No                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1015 | AsOfIndicator        |       | Used to indicate that a trade was executed "as of" a prior date.<br>Valid values:<br>0 = false – trade is not an AsOf trade (default)<br>1 = true – trade is an AsOf trade                                                                                                                                                                                                                                                                                                                                                                                                  |
| 55   | Symbol               | F     | Ticker symbol. Max size: 14 characters.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 65   | SymbolSfx            |       | Symbol suffix. Additional information about the security (e.g., preferred, warrants, etc.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 32   | LastQty              | Y     | Trade Volume as number of shares.<br>Format: max 8 characters, no decimal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 31   | LastPx               | Y     | Trade Price. Can be entered as a decimal unit price or as a contract amount price (see Tag 423 Price Type).<br>Format: nnnnnn.nnnnnn (6v6), when Tag 423 = 98.<br><i>Maximum of 6 digits allowed before the decimal.<br/>Maximum of 6 digits allowed after the decimal.</i><br>Format: nnnnnnnnnn.nn (10v2), when Tag 423 = 99.<br><i>Maximum of 10 digits allowed before the decimal.<br/>Maximum of 2 digits allowed after the decimal.</i><br><i>Note: decimal price or contract amount of zero (0.0; .00; 0, etc) is not allowed and will be rejected if submitted.</i> |
| 423  | PriceType            | F     | 98 = Decimal Unit Price<br>99 = Contract Amount                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 9822 | ClearingPrice        |       | Price inclusive of Explicit Fee. Cannot equal trade price.<br>Can be entered as a decimal unit price or as a contract amount price (see Tag 423 Price Type).                                                                                                                                                                                                                                                                                                                                                                                                                |

|       |                          |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------|--------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                          |                    | Format: nnnnnn.nnnnnn (6v6), when Tag 423 = 98.<br>Maximum of 6 digits allowed before the decimal.<br>Maximum of 6 digits allowed after the decimal.<br>Format: nnnnnnnnnn.nn (10v2), when Tag 423 = 99.<br>Maximum of 10 digits allowed before the decimal.<br>Maximum of 2 digits allowed after the decimal.<br>Note: decimal price or contract amount of zero (0.0; .00; 0, etc) is not allowed and will be rejected if submitted                                                                                                                                        |
| 75    | TradeDate                | Y                  | Execution Date. Interpreted as an As-Of trade if not current date. Format: YYYYMMDD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 60    | TransactTime             | Y                  | Time the transaction represented by this Trade Capture Report occurred (in <b>UTC/GMT</b> ).<br>Format: YYYYMMDD-HH:MM:SS.sss                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 64    | SettlDate                |                    | Optional, used for informational purposes only. Specific date of trade settlement (Settlement Date) in YYYYMMDD format. Note: if settlement is other than regular way, the appropriate settlement modifier must be entered in Trade Modifier 1 (Tag 22001).                                                                                                                                                                                                                                                                                                                 |
| 22030 | ReportingObligation      | F                  | Specifies whether or not this trade report represents the submission from the member with the trade reporting obligation, as defined under FINRA Rule 6282(b).<br>Valid values:<br>Y = Trade reported by the member with the reporting obligation.<br>N = Trade reported by the member who <u>does not</u> have the reporting obligation.<br>Note: All Customer and Cross trades must be submitted as Reporting Obligation = Y. In addition, all trades where firms indicate the trade is to be sent to the tape (published) must be submitted as Reporting Obligation = Y. |
| 552   | TrdCapRptSideGrp/NoSides | Y                  | Set value to 2 (One side for the Reporting party and one side for the Contra party).<br>On Cross trades, set value to 2 and Reporting party and Contra party must be the same MPID.                                                                                                                                                                                                                                                                                                                                                                                         |
| →     | 54                       | Side               | Y<br>Side of trade.<br>Valid values:<br>1 = Buy<br>2 = Sell<br>8 = Cross                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| →     | 37                       | OrderID            | Y<br>Required in FIX, but ignored                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| →     | 453                      | Parties/NoPartyIDs | F<br>Number of parties on the reporting/contra side of the trade.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| →     | →                        | 448                | PartyID<br>F<br>Identifier for the type of party defined in PartyRole. Either an MPID or a Clearing Firm number or "C" for customer on the contra side.                                                                                                                                                                                                                                                                                                                                                                                                                     |
| →     | →                        | 447                | PartyIDSource<br>F<br>Valid values:<br>C = Generally accepted market participant identifier (e.g. FINRA mnemonic)                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| →     | →                        | 452                | PartyRole<br>F<br>Valid values:<br>1 = Executing Firm<br>14 = Giveup Firm<br>17 = Contra Firm<br>83 = Clearing Firm Number (if not entered, will default to                                                                                                                                                                                                                                                                                                                                                                                                                 |

|       |                       |               |               |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------|-----------------------|---------------|---------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                       |               |               |                | primary clearing firm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| →     | →                     | 802           | NoPartySubIDs |                | PartySubID is only allowed for PartyRole = 1 or 17.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| →     | →                     | →             | 523           | PartySubID     | Sub-identifier. Branch office of executing/contra firm (Branch Sequence Number /Contra Branch Sequence Number). Up to 8 characters allowed.<br>Contra PartySubID may only be entered on Locked-In, Cross and Customer trades.                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| →     | →                     | →             | 803           | PartySubIDType | Type of PartySubID (523) value<br>Valid values:<br>24 = Department                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| →     | 528                   | OrderCapacity |               | F              | Designates the capacity of the reporting/contra party.<br>Valid values:<br>A = Agency<br>P = Principal<br>R = Riskless Principal<br><br>Required on the reporting side. Contra side is required on all Locked-In trades and allowed on Cross and Customer trades.                                                                                                                                                                                                                                                                                                                                                                                                    |
| →     | 58                    | Text          |               |                | Free format user Memo field. Not to exceed 10 characters.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| →     | 376                   | ComplianceID  |               | F              | OATS Identifier. Required field. Contra side OATS Identifier required on Locked-In trades and allowed on Cross and Customer trades. Not to exceed 20 characters.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 9854  | OverrideFlag          |               |               |                | <i>FINRA Extension to FIX 4.4.</i><br>Valid values:<br>Y = Yes<br>N = No (default value)<br>Price override may only be submitted after the initial trade report is rejected due to price out of range.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 22013 | LockedInIndicator     |               |               |                | <i>FINRA Extension to FIX 4.4.</i><br>Indicates that the firm entering the trade is reporting for both sides of the trade. This occurs on an AGU trade when two of its give-ups trade with each other (Two-sided giveup) or the firm trades with one of its own give-ups (One-sided giveup), or on a QSR trade (no giveups or giveup on the contra side only).<br>Valid values:<br>A = AGU<br>Q = QSR<br>A Uniform Service Agreement (USA) must be in place in order for firms to submit trade reports on behalf of their give ups or contra parties and as Locked-In trades.<br>Note: Per FINRA Rules, Cross trades (54=8) cannot be submitted as Locked-In trades. |
| 22005 | SpecialProcessingFlag |               |               |                | <i>FINRA Extension to FIX 4.4.</i><br>This field allows a trade to be marked for special processing. Where indicated, certain fields <b>MUST</b> be authorized by FINRA Operations prior to submission of trades.<br>Valid values:<br>N = No Special Processing (default)<br>Y = Position Transfer ( <b>AUTHORIZATION REQ'D</b> )                                                                                                                                                                                                                                                                                                                                    |

|       |                    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------|--------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                    |   | <p>O = Clearing Only/Non Regulatory</p> <p>Notes: a Clearing Only/Non Regulatory designation (value = O) is used to identify a clearing-only submission that is tied to a previously reported trade that was published. Can also be used on the offsetting portion of a riskless principal or agency transaction for which a non-tape, non-clearing trade report was already submitted.</p> <p>A Position Transfer (value = Y) is used when reporting a transfer of proprietary positions in debt or equity securities, as outlined in <a href="#">Regulatory Notice 09-21</a>.</p> |
| 22001 | TradeModifier1     |   | <p><i>FINRA Extension to FIX 4.4.</i><br/>Settlement modifiers. Valid values are:</p> <p>0 = regular (T+3, default)<br/>C = Cash (same day)<br/>N = Next Day<br/>R = Seller's Option</p>                                                                                                                                                                                                                                                                                                                                                                                            |
| 855   | SecondaryTrdType   |   | <p>Days to settlement:<br/>02, 04 – 60 = Seller's Option</p> <p>Can only be submitted when Tag 22001 TradeModifier1 = R.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 22002 | TradeModifier2     |   | <p><i>FINRA Extension to FIX 4.4.</i><br/>Rule 611 Trade Thru Exempt reason modifiers. Valid values are:</p> <p>2 = FINRA Self help indicator<br/>3 = Intermarket sweep outbound<br/>4 = Derivatively priced<br/>6 = Intermarket sweep inbound<br/>7 = Qualified Contingent Trade<br/>8 = FINRA subpenny indicator<br/>E = Error Correction<br/>P = Print Protection</p>                                                                                                                                                                                                            |
| 829   | TrdSubType         | Y | <p>0 = no Trade Through Exemption<br/>1 = Trade Through Exemption</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 22033 | TradeModifier2Time |   | <p>Time associated with Intermarket sweep outbound trades, (in <b>UTC/GMT</b>). Format: HH:MM:SS.sss</p> <p>May only be submitted when Tag 22002 TradeModifier2 = 3 (Intermarket sweep outbound).</p>                                                                                                                                                                                                                                                                                                                                                                               |
| 22003 | TradeModifier3     |   | <p><i>FINRA Extension to FIX 4.4.</i><br/>Time modifiers. Submitted by the participant firm. Valid values are:</p> <p>T = Executed outside normal market hours<br/>Z = Executed during normal market hours and reported late<br/>U = Executed outside normal market hours and reported late</p>                                                                                                                                                                                                                                                                                     |
| 22004 | TradeModifier4     |   | <i>FINRA Extension to FIX 4.4.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

|       |                       |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------|-----------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                       |   | <p>SRO detail sale condition. Required indicator if a trade falls under one of the following transaction types (otherwise the field must not be set):</p> <p>W = Weighted Average Price<br/> S = Stopped Stock<br/> P = Prior Reference Price<br/> X = Trade related to option exercises<br/> R = Trade price unrelated to the current market</p> <p>Note: values S and P may only be submitted if the associated SS or PRP time is more than 10 seconds prior to both the execution time and the time the trade is reported to ADF .</p> |
| 22018 | TradeModifier4Time    |   | <p>Time associated with Prior Reference Price or Stopped Stock trade, (in <b>UTC/GMT</b>). Format: HH:MM:SS.sss</p> <p>May only be submitted when Tag 22004 TradeModifier4 = S (Stopped Stock) or P (Prior Reference Price) and the Modifier 4 Time field is more than 10 seconds prior to the execution and report time of the trade, as described in section 4.6.9.</p>                                                                                                                                                                 |
| 22007 | ExecutionTime         | F | Execution time (in <b>UTC/GMT</b> ). Format: HH:MM:SS.sss                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 22009 | PreparationTime       |   | Time of trade submission (in <b>UTC/GMT</b> ) by the participant firm. Optional. Format: HH:MM:SS.sss                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 22022 | ServiceBureauPrepTime |   | Time Service Bureau prepared the trade for submission (in <b>UTC/GMT</b> ). Format: HH:MM:SS.sss                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 81    | ProcessCode           |   | <p>0 = regular (default)<br/> 2 = Step In trade<br/> 3 = Step Out trade<br/> 7 = Special trade<br/> 8 = Special and Step Out trade<br/> 9 = Special and Step In trade<br/> A = Step Out trade with Fees (<i>for Section 3</i>)<br/> B = Special and Step Out trade with Fees (<i>for Section 3</i>)</p>                                                                                                                                                                                                                                   |
| 527   | SecondaryExecID       |   | <p>Trade Reference Number used to discretely tie a Media eligible trade to one or more non-Media eligible trades. E.g., same ref number used on a Media trade and on a Riskless Principal trade. May only be submitted on reporting/executing party trades.<br/> Up to 20 characters.</p>                                                                                                                                                                                                                                                 |
| 577   | ClearingInstruction   | F | <p>0 = send to clearing<br/> 97 = don't send to clearing<br/> Note: On AGU trades (Tag 22013 = A), ClearingInstruction MUST be set to '0' (send to clearing).</p>                                                                                                                                                                                                                                                                                                                                                                         |
| 852   | PublishTrdIndicator   | F | <p>Y = Report to the tape<br/> N = Do not report to the tape</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 22024 | ShortSaleIndicator    |   | <p>S = Sold Short<br/> E = Sold Short Exempt</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 9277  | RelatedMarketCenter   |   | <p>Q = NQ Exchange Trade for NQ securities<br/> N = NYSE trade<br/> A = AMEX trade<br/> B = BSE trade</p>                                                                                                                                                                                                                                                                                                                                                                                                                                 |

|  |                  |   |                                                                                                                                                                                                                                                                                                                                                             |
|--|------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |                  |   | C = NSX trade<br>I = ISE trade<br>M = Chgo Stock Exch trade<br>P = PSE trade<br>W = CBOE trade<br>X = Phil Stock Exch trade<br>O = unknown mkt ctr<br>U = unspecified mult mkt trades<br>0 = ADF<br>1 = NQ TRF<br>3 = NYSE TRF<br>F = Foreign Mkt<br>H = BATS Exch trade<br>G = BATS Y Exch trade<br>J = DirectEdge A Ex trade<br>K = DirectEdge X Ex trade |
|  | Standard Trailer | Y |                                                                                                                                                                                                                                                                                                                                                             |

### 5.1.2 Trade Capture Report – Trade Cancel (in)

To be used to cancel trades submitted T-Date through T-3. Cancels may also be used to Break a matched/locked-in trade (matched by trade comparison or matched by acceptance). Trades that were matched by comparison may be broken by both reporting parties using the TradeReportType value “6” (Tag 856=6) as outlined below. On matched trades where the reported trade was Accepted by the alleged contra party, the contra party must use the TradeReportType value “7” (Tag 856=7) as outlined below to indicate they are breaking their acceptance of the trade. ADF will automatically send a reversal to DTCC if the trade was originally submitted with instructions to send to clearing. Unless otherwise noted, all fields follow rules/definitions as outlined in the Comments column of the Trade Capture Report inbound message.

| Tag   | FIX tag name         | Req'd | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------|----------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header      | Y     | MsgType = AE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 571   | TradeReportID        | Y     | Unique client-generated identifier. Must be different from the TradeReportID submitted on the original trade report.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1041  | FirmTradeID          |       | Client Trade Identifier may be used to Cancel a trade in lieu of FINRA Control Number (TradeID). May not be submitted by the contra party on a Break.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 1003  | TradeID              |       | FINRA Control Number used to identify the trade being cancelled. Used in lieu of FirmTradeID to reference the trade being cancelled.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 22011 | ControlDate          | F     | Control Date of the original trade.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 487   | TradeReportTransType | F     | Valid values:<br>1 = Cancel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 856   | TradeReportType      | F     | Valid values:<br><b><u>6 = Trade Report Cancel</u></b><br><u>This code must be used only by the reporting party of a trade. If the trade was matched for clearing, this entry will cancel the trade's Status and act as a Break for clearing purposes.</u><br><br><b><u>7 = Locked In Trade Break</u></b><br><u>This code must be used only by the contra party of an Accepted trade. This entry will allow the contra party to indicate a Break of the reported trade for clearing purposes. The trade will not be cancelled until the reporting party submits a Cancel entry. The Contra Party MUST reference the ControlDate and TradeID of the trade that was accepted.</u><br><del>6 = Trade Report Cancel</del><br><del>7 = Locked In Trade Break (to be used only by the Contra Party on Accepted trades). The Contra Party MUST reference the ControlDate and TradeID of the trade that was accepted.</del> |
| 570   | PreviouslyReported   | Y     | Indicates if the trade capture report was previously reported to the counterparty. Required in FIX, but ignored in cancels.<br>Valid values:<br>N = No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 1015  | AsOfIndicator        |       | Must reflect value submitted on original trade report. Valid values:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

|     |                          |   |                                                                                                                                                        |
|-----|--------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                          |   | 0 = false – trade is not an AsOf trade (default)<br>1 = true – trade is an AsOf trade.                                                                 |
| 55  | Symbol                   | F | Ticker symbol submitted on original trade report.                                                                                                      |
| 65  | SymbolSfx                |   | Symbol suffix submitted on original trade report.                                                                                                      |
| 32  | LastQty                  | Y | Required in FIX, but ignored in cancels. Can be set to zero.                                                                                           |
| 31  | LastPx                   | Y | Required in FIX, but ignored in cancels. Can be set to zero.                                                                                           |
| 75  | TradeDate                | Y | Required in FIX but ignored.                                                                                                                           |
| 60  | TransactTime             | Y | Time the transaction represented by this Trade Capture Report was cancelled (in <b>UTC/GMT</b> ).<br>Format: YYYYMMDD-HH:MM:SS.sss                     |
| 552 | TrdCapRptSideGrp/NoSides | Y | For Trade Cancels this is always set to 1.                                                                                                             |
| →   | 54Side                   | Y | Side of trade. Valid values:<br>1 = Buy<br>2 = Sell<br>8 = Cross                                                                                       |
| →   | 37OrderID                | Y | Required in FIX, but ignored                                                                                                                           |
| →   | 453Parties/NoPartyIDs    | F | Number of parties. Always set to “1”.                                                                                                                  |
| →   | → 448PartyID             | F | Identifier (MPID) for the reporting party of the original trade to be cancelled. On breaks of accepted trades, the contra party must enter their MPID. |
| →   | → 447PartyIDSource       | F | Valid values :<br>C = Generally accepted market participant identifier (e.g. FINRA mnemonic)                                                           |
| →   | → 452PartyRole           | F | Valid values:<br>1 = Executing Firm<br>17 = Contra Firm (this value only to be used by the contra party on breaks of accepted trades.                  |
|     | Standard Trailer         | Y |                                                                                                                                                        |

### 5.1.3 Trade Capture Report – Reversal (in)

To be used to cancel trades submitted prior to the T-3 day period. May also be used to correct a trade submitted prior to T-3 (submitted in conjunction with a separate As-Of trade report). Unless otherwise noted, all fields follow rules/definitions as outlined in the Comments column of the Trade Capture Report inbound message.

| Tag   | FIX tag name               | Req'd | Comment                                                                                                                                                                                                                                                                                                                        |
|-------|----------------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header            | Y     | MsgType = AE                                                                                                                                                                                                                                                                                                                   |
| 571   | TradeReportID              | Y     | Unique client-generated identifier. Must be different from the TradeReportID submitted on the original trade report.                                                                                                                                                                                                           |
| 1041  | FirmTradeID                |       | Client Trade Identifier of the original trade.                                                                                                                                                                                                                                                                                 |
| 1042  | SecondaryFirmTradeID       |       | As submitted on original trade report, if applicable.                                                                                                                                                                                                                                                                          |
| 22012 | OrigControlDate            | F     | Control Date of the original trade.                                                                                                                                                                                                                                                                                            |
| 1126  | OrigTradeID                | F     | FINRA Control Number of the original trade.                                                                                                                                                                                                                                                                                    |
| 22029 | ReferenceReportingFacility |       | Used if a participant transitions from one FINRA Reporting Facility to another and the participant needs to reverse a trade on the new reporting facility that was originally entered on the old reporting facility.<br>Valid values:<br>Q = FINRA/NASDAQ TRF<br>N = FINRA/NYSE TRF<br>O = ORF (OTC Equity Reporting Facility) |
| 487   | TradeReportTransType       | F     | Valid values:<br>4 = Reverse                                                                                                                                                                                                                                                                                                   |
| 856   | TradeReportType            | F     | Valid values:<br>0 = Submit                                                                                                                                                                                                                                                                                                    |
| 570   | PreviouslyReported         | Y     | Indicates if the trade capture report was previously reported to the counterparty. Required in FIX, but ignored in Reversals.<br>Valid values:<br>N = No                                                                                                                                                                       |
| 1015  | AsOfIndicator              | F     | Valid values:<br>1 = true – trade is an AsOf trade                                                                                                                                                                                                                                                                             |
| 55    | Symbol                     | F     | Ticker symbol submitted on original trade report.                                                                                                                                                                                                                                                                              |
| 65    | SymbolSfx                  |       | Symbol suffix submitted on original trade report.                                                                                                                                                                                                                                                                              |
| 32    | LastQty                    | Y     | Trade Volume submitted on original trade report.                                                                                                                                                                                                                                                                               |
| 31    | LastPx                     | Y     | Trade Price submitted on original trade report.                                                                                                                                                                                                                                                                                |
| 423   | PriceType                  | F     | As submitted on original trade report.<br>98 = Decimal Unit Price<br>99 = Contract Amount                                                                                                                                                                                                                                      |
| 9822  | ClearingPrice              |       | As submitted on the original trade report.                                                                                                                                                                                                                                                                                     |
| 75    | TradeDate                  | Y     | Execution Date reported on the original trade report.                                                                                                                                                                                                                                                                          |
| 60    | TransactTime               | Y     | Time the transaction represented by this Trade Capture Report occurred (in <b>UTC/GMT</b> ). Format: YYYYMMDD-HH:MM:SS.sss                                                                                                                                                                                                     |
| 64    | SettlDate                  |       | Settlement Date submitted on original trade report.                                                                                                                                                                                                                                                                            |
| 22030 | ReportingObligation        | F     | As submitted on original trade report.                                                                                                                                                                                                                                                                                         |

|       |                          |                    |                   |                                                                                                                                                                                              |
|-------|--------------------------|--------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                          |                    |                   | Valid values:<br>Y = Trade reported by the member with the reporting obligation.<br>N = Trade reported by the member who <u>does not</u> have the reporting obligation.                      |
| 552   | TrdCapRptSideGrp/NoSides |                    |                   | Y<br>Set value to 2 (One side for the Reporting party and one side for the Contra party).<br>On Cross trades, set value to 2 and the Reporting party and Contra party must be the same MPID. |
| →     | 54                       | Side               |                   | Y<br>Side of trade submitted on original trade report.<br>Valid values:<br>1 = Buy<br>2 = Sell<br>8 = Cross                                                                                  |
| →     | 37                       | OrderID            |                   | Y<br>Required in FIX, but ignored                                                                                                                                                            |
| →     | 453                      | Parties/NoPartyIDs |                   | F<br>Number of parties on the reporting/contra side of the trade as submitted on the original trade report.                                                                                  |
| →     | →                        | 448                | PartyID           | F<br>Identifier for the type of party defined in PartyRole. Either an MPID or a Clearing Firm number or “C” for customer on the contra side.                                                 |
| →     | →                        | 447                | PartyIDSource     | F<br>Valid values :<br>C = Generally accepted market participant identifier (e.g. FINRA mnemonic)                                                                                            |
| →     | →                        | 452                | PartyRole         | F<br>Valid values:<br>1 = Executing Firm<br>14 = Giveup Firm<br>17 = Contra Firm<br>83 = Clearing Firm Number                                                                                |
| →     | →                        | 802NoPartySubIDs   |                   | PartySubID is only allowed for PartyRole = 1 or 17.                                                                                                                                          |
| →     | →                        | →                  | 523PartySubID     | As submitted on original trade report.                                                                                                                                                       |
| →     | →                        | →                  | 803PartySubIDType | Type of PartySubID (523) value<br>Valid values:<br>24 = Department                                                                                                                           |
| →     | 528                      | OrderCapacity      |                   | F<br>The capacity of the reporting/contra party as submitted on original trade report. Valid values:<br>A = Agency<br>P = Principal<br>R = Riskless Principal                                |
| →     | 58                       | Text               |                   | As submitted on original trade report.                                                                                                                                                       |
| →     | 376                      | ComplianceID       |                   | F<br>OATS Identifier(s) submitted on original trade report. Not to exceed 20 characters.                                                                                                     |
| 9854  | OverrideFlag             |                    |                   | As submitted on original trade report.                                                                                                                                                       |
| 22013 | LockedInIndicator        |                    |                   | As submitted on original trade report.                                                                                                                                                       |
| 22005 | SpecialProcessingFlag    |                    |                   | As submitted on original trade report.                                                                                                                                                       |
| 22001 | TradeModifier1           |                    |                   | As submitted on original trade report.                                                                                                                                                       |
|       |                          |                    |                   | As submitted on original trade report.                                                                                                                                                       |
| 855   | SecondaryTrdType         |                    |                   | Can only be submitted when Tag 22001 TradeModifier1 = R.                                                                                                                                     |
| 22002 | TradeModifier2           |                    |                   | As submitted on original trade report.                                                                                                                                                       |
| 829   | TrdSubType               |                    |                   | Y<br>As submitted on original trade report.<br>0 = no Trade Through Exemption                                                                                                                |

|       |                       |   |                                                                                                                    |
|-------|-----------------------|---|--------------------------------------------------------------------------------------------------------------------|
|       |                       |   | 1 = Trade Through Exemption                                                                                        |
| 22033 | TradeModifier2Time    |   | As submitted on original report, if TradeModifier2 (22002) = 3.                                                    |
| 22003 | TradeModifier3        |   | As submitted on original trade report.                                                                             |
| 22004 | TradeModifier4        |   | As submitted on original trade report.                                                                             |
| 22018 | TradeModifier4Time    |   | As submitted on original trade report.                                                                             |
| 22007 | ExecutionTime         | F | Execution time (in <b>UTC/GMT</b> ) submitted on original trade report. Format: HH:MM:SS.sss                       |
| 22009 | PreparationTime       |   | Time of trade reversal submission (in <b>UTC/GMT</b> ) by the participant firm to ADF. Format: HH:MM:SS.sss        |
| 22022 | ServiceBureauPrepTime |   | Time Service Bureau prepared the reversal for submission (in <b>UTC/GMT</b> ). Format: HH:MM:SS.sss                |
| 81    | ProcessCode           |   | As submitted on original trade report.                                                                             |
| 527   | SecondaryExecID       |   | As submitted on original trade report.                                                                             |
| 577   | ClearingInstruction   | F | Indicates if the Reversal should be forwarded for clearing.<br>0 = send to clearing<br>97 = don't send to clearing |
| 852   | PublishTrdIndicator   | F | As submitted on original trade report.                                                                             |
| 22024 | ShortSaleIndicator    |   | As submitted on original trade report.                                                                             |
| 9277  | RelatedMarketCenter   |   | As submitted on the original trade report.                                                                         |
|       | Standard Trailer      | Y |                                                                                                                    |

#### 5.1.4 Trade Capture Report – Trade Correction (in)

To be used to correct trades submitted T-Date through T-3. Please note that only unmatched trades and trades submitted as Locked-In (AGU or QSR) can be corrected. Matched trades (by trade comparison or by acceptance, or auto-locked by ADF on T+1 2:30pm ET), must be Canceled (Broken) first, with a new trade submission, in order to correct them, during the 4-day period. ADF will automatically send a reversal and new clearing instructions to DTCC if the trade was originally submitted with instructions to send to clearing. If the correction only involves editing of a non-clearing relevant field (e.g., ComplianceID, SecondaryExecID, etc), ADF will NOT send a reversal/new clearing instructions to DTCC.

Unless otherwise noted, all fields follow rules/definitions as outlined in the Comments column of the Trade Capture Report inbound message.

| Tag   | FIX tag name         | Req'd | Comment                                                                                                                                                                                                                                                                                                                                                          |
|-------|----------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header      | Y     | MsgType = AE                                                                                                                                                                                                                                                                                                                                                     |
| 571   | TradeReportID        | Y     | Client-generated identifier (reporting participant firm), not to exceed 20 characters. Must be different from the TradeReportID submitted on the original trade report.                                                                                                                                                                                          |
| 572   | TradeReportRefID     |       | TradeReportID of report to amend.                                                                                                                                                                                                                                                                                                                                |
| 1041  | FirmTradeID          |       | Client Trade Identifier may be used to Correct a trade in lieu of FINRA Control Number (TradeID). If a new client identifier is desired for the corrected trade, then the FINRA Control Number MUST be submitted as well. The FINRA Control Number will be used to reference the original trade and the new record will contain the new Client Trade Identifier. |
| 1042  | SecondaryFirmTradeID |       | The Contra Client Identifier assigned to a trade by the contra side. Only used for Locked-in, Customer and Cross Trade Reports.                                                                                                                                                                                                                                  |
| 22011 | ControlDate          | F     | Control Date of the trade being corrected.                                                                                                                                                                                                                                                                                                                       |
| 1003  | TradeID              |       | FINRA Control Number used to identify the trade being corrected. Used in lieu of FirmTradeID to reference the trade being corrected.                                                                                                                                                                                                                             |
| 487   | TradeReportTransType | F     | Valid values:<br>2 = Replace                                                                                                                                                                                                                                                                                                                                     |
| 856   | TradeReportType      | F     | Valid values:<br>5 = Correction                                                                                                                                                                                                                                                                                                                                  |
| 570   | PreviouslyReported   | Y     | Indicates if the trade capture report was previously reported to the counterparty. Required in FIX, but ignored in Corrections.<br>Valid values:<br>N = No                                                                                                                                                                                                       |
| 1015  | AsOfIndicator        | F     | Valid values:<br>0 = false – trade is not an AsOf trade<br>1 = true – trade is an AsOf trade<br>Note: Trades submitted during the T-1 through T-3 period must be submitted with AsOfIndicator set to "1" on the correction, regardless if the original trade was submitted as a non AsOf trade.                                                                  |
| 55    | Symbol               | F     | Ticker symbol submitted on original trade report.<br><b>Please note Symbol cannot be amended on a</b>                                                                                                                                                                                                                                                            |

|       |                          |                    |                                                                                                                                                                                                     |            |                                                                                                                                                                 |
|-------|--------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                          |                    | <b>Correction.</b>                                                                                                                                                                                  |            |                                                                                                                                                                 |
| 65    | SymbolSfx                |                    | Symbol suffix submitted on original trade report.<br><b>Please note Symbol Suffix cannot be amended on a Correction.</b>                                                                            |            |                                                                                                                                                                 |
| 32    | LastQty                  | Y                  | Trade Volume (original amount reported or amended amount).                                                                                                                                          |            |                                                                                                                                                                 |
| 31    | LastPx                   | Y                  | Trade Price (original price reported or amended price).                                                                                                                                             |            |                                                                                                                                                                 |
| 423   | PriceType                | F                  | Original or amended price type.<br>98 = Decimal Unit Price<br>99 = Contract Amount                                                                                                                  |            |                                                                                                                                                                 |
| 9822  | ClearingPrice            |                    | Original value or amended value.                                                                                                                                                                    |            |                                                                                                                                                                 |
| 75    | TradeDate                | Y                  | Execution Date (original date reported or amended date).                                                                                                                                            |            |                                                                                                                                                                 |
| 60    | TransactTime             | Y                  | Time the transaction represented by this Trade Correction Report occurred (in <b>UTC/GMT</b> ).<br>Format: YYYYMMDD-HH:MM:SS.sss                                                                    |            |                                                                                                                                                                 |
| 64    | SettlDate                |                    | Settlement Date (original date reported or amended date).                                                                                                                                           |            |                                                                                                                                                                 |
| 22030 | ReportingObligation      | F                  | Original or amended Reporting Obligation.<br>Y = Trade reported by the member with the reporting obligation.<br>N = Trade reported by the member who <u>does not</u> have the reporting obligation. |            |                                                                                                                                                                 |
| 552   | TrdCapRptSideGrp/NoSides | Y                  | Set value to 2 (One side for the Reporting party and one side for the Contra party).<br>On Cross trades, set value to 2 and the Reporting party and the Contra party must be the same MPID.         |            |                                                                                                                                                                 |
| →     | 54                       | Side               | Side of trade (original side reported or amended side).<br>Valid values:<br>1 = Buy<br>2 = Sell<br>8 = Cross                                                                                        |            |                                                                                                                                                                 |
| →     | 37                       | OrderID            | Required in FIX, but ignored                                                                                                                                                                        |            |                                                                                                                                                                 |
| →     | 453                      | Parties/NoPartyIDs | Number of parties on the reporting/contra side of the trade                                                                                                                                         |            |                                                                                                                                                                 |
| →     | →                        | 448                | PartyID                                                                                                                                                                                             | F          | Identifier for the type of party defined in PartyRole. Either an MPID or a Clearing Firm number or “C” for customer on the contra side. PartyID may be amended. |
| →     | →                        | 447                | PartyIDSource                                                                                                                                                                                       | F          | Valid values :<br>C = Generally accepted market participant identifier (e.g. FINRA mnemonic)                                                                    |
| →     | →                        | 452                | PartyRole                                                                                                                                                                                           | F          | Valid values:<br>1 = Executing Firm<br>14 = Giveup Firm<br>17 = Contra Firm<br>83 = Clearing Firm Number                                                        |
| →     | →                        | 802                | NoPartySubIDs                                                                                                                                                                                       |            | PartySubID is only allowed for PartyRole = 1 or 17.                                                                                                             |
| →     | →                        | →                  | 523                                                                                                                                                                                                 | PartySubID | Sub-identifier. Branch office of executing/contra                                                                                                               |

|       |     |   |     |                       |                                                                                                                                                                                                                                                                     |
|-------|-----|---|-----|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |     |   |     |                       | firm (Branch Sequence Number/Contra Branch Sequence Number). May be amended. Contra PartySubID may only be entered on Locked-In trades, Cross and Customer trades.                                                                                                  |
| →     | →   | → | 803 | PartySubIDType        | Type of PartySubID (523) value<br>Valid values:<br>24 = Department                                                                                                                                                                                                  |
| →     | 528 |   |     | OrderCapacity         | Original or amended capacity of the reporting/contra party. Valid values:<br>A = Agency<br>P = Principal<br>R = Riskless Principal<br><br>Required on the reporting side. Contra side is required on all Locked-In trades and allowed on Cross and Customer trades. |
| →     | 58  |   |     | Text                  | Memo field may be amended. Not to exceed 10 characters.                                                                                                                                                                                                             |
| →     | 376 |   |     | ComplianceID          | OATS Identifier(s) (original or amended). Not to exceed 20 characters.                                                                                                                                                                                              |
| 9854  |     |   |     | OverrideFlag          | Original value or amended value.                                                                                                                                                                                                                                    |
| 22013 |     |   |     | LockedInIndicator     | Original value or amended value.                                                                                                                                                                                                                                    |
| 22005 |     |   |     | SpecialProcessingFlag | Original value or amended value.                                                                                                                                                                                                                                    |
| 22001 |     |   |     | TradeModifier1        | Original value or amended value.                                                                                                                                                                                                                                    |
| 855   |     |   |     | SecondaryTrdType      | Original value or amended value.<br>Can only be submitted when Tag 22001 TradeModifier1 = R.                                                                                                                                                                        |
| 22002 |     |   |     | TradeModifier2        | Original value or amended value.                                                                                                                                                                                                                                    |
| 829   |     |   |     | TrdSubType            | Original value or amended value.<br>0 = no Trade Through Exemption<br>1 = Trade Through Exemption                                                                                                                                                                   |
| 22033 |     |   |     | TradeModifier2Time    | Original value or amended value, if TradeModifier2 = 3.                                                                                                                                                                                                             |
| 22003 |     |   |     | TradeModifier3        | Original value or amended value.                                                                                                                                                                                                                                    |
| 22004 |     |   |     | TradeModifier4        | Original value or amended value.                                                                                                                                                                                                                                    |
| 22018 |     |   |     | TradeModifier4Time    | Original value or amended value.<br><br>May only be submitted when Tag 22004 TradeModifier4 = S (Stopped Stock) or P (Prior Reference Price).                                                                                                                       |
| 22007 |     |   |     | ExecutionTime         | Execution time (in <b>UTC/GMT</b> ). May be amended (earlier than original time submitted only).<br>Format: HH:MM:SS.sss                                                                                                                                            |
| 22009 |     |   |     | PreparationTime       | Time of trade correction submission (in <b>UTC/GMT</b> ) by the participant firm to the Exchange. Format: HH:MM:SS.sss                                                                                                                                              |
| 22022 |     |   |     | ServiceBureauPrepTime | Time Service Bureau prepared the correction for submission (in <b>UTC/GMT</b> ). Format: HH:MM:SS.sss                                                                                                                                                               |
| 81    |     |   |     | ProcessCode           | Original value or amended value.                                                                                                                                                                                                                                    |
| 527   |     |   |     | SecondaryExecID       | Original value or amended value.<br>Up to 20 characters.                                                                                                                                                                                                            |

|       |                     |   |                                                                                                                    |
|-------|---------------------|---|--------------------------------------------------------------------------------------------------------------------|
|       |                     |   | As submitted by the participant firm on the correction.<br>Y = Report to the tape<br>N = Do not report to the tape |
| 852   | PublishTrdIndicator | F |                                                                                                                    |
| 22024 | ShortSaleIndicator  |   | Original value or amended value.                                                                                   |
| 9277  | RelatedMarketCenter |   | Original value or amended value.                                                                                   |
|       | Standard Trailer    | Y |                                                                                                                    |

### 5.1.5 Trade Capture Report – Trade Accept (in)

Can be used by the contra party (the member who does not have the reporting obligation) alleged on a trade report to confirm and accept trade details, in lieu of submission of their version of the trade.

Unless otherwise noted, all fields follow rules/definitions as outlined in the Comments column of the Trade Capture Report inbound message.

| Tag   | FIX tag name             |                    |               | Req'd | Comment                                                                                                                       |
|-------|--------------------------|--------------------|---------------|-------|-------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header          |                    |               | Y     | MsgType = AE                                                                                                                  |
| 571   | TradeReportID            |                    |               | Y     | Client-generated identifier (accepting participant firm), not to exceed 20 characters.                                        |
| 1042  | SecondaryFirmTradeID     |                    |               |       | Client Trade Identifier of the accepting firm, not to exceed 20 characters.                                                   |
| 22011 | ControlDate              |                    |               | F     | Control Date of the trade being matched against the Accept (the executing/reporting side).                                    |
| 1003  | TradeID                  |                    |               | F     | FINRA Control Number of the trade being matched against the Accept (the executing/reporting side).                            |
| 487   | TradeReportTransType     |                    |               | F     | Valid values:<br>0 = New                                                                                                      |
| 856   | TradeReportType          |                    |               | F     | Valid values:<br>2 = Accept                                                                                                   |
| 570   | PreviouslyReported       |                    |               | Y     | Indicates if the trade capture report was previously reported to the counterparty<br>Valid values:<br>N = No                  |
| 55    | Symbol                   |                    |               | F     | Ticker symbol from the matched trade.                                                                                         |
| 65    | SymbolSfx                |                    |               |       | Symbol suffix from the matched trade.                                                                                         |
| 32    | LastQty                  |                    |               | Y     | Trade Volume as number of shares from the matched trade.                                                                      |
| 31    | LastPx                   |                    |               | Y     | Trade Price from the matched trade.                                                                                           |
| 75    | TradeDate                |                    |               | Y     | Execution Date from the matched trade. Interpreted as an As-Of trade if not current date. Format: YYYYMMDD                    |
| 60    | TransactTime             |                    |               | Y     | Time the transaction represented by this Trade Capture Report occurred (in <b>UTC/GMT</b> ).<br>Format: YYYYMMDD-HH:MM:SS.sss |
| 552   | TrdCapRptSideGrp/NoSides |                    |               | Y     | Set value to 1 (One side for the Accepting party).                                                                            |
| →     | 54                       | Side               |               | Y     | Side of trade <b>from the Accepting party's perspective</b> .<br>Valid values:<br>1 = Buy<br>2 = Sell                         |
| →     | 37                       | OrderID            |               | Y     | Required in FIX, but ignored                                                                                                  |
| →     | 453                      | Parties/NoPartyIDs |               | F     | Number of parties on the contra side of the trade.                                                                            |
| →     | →                        | 448                | PartyID       | F     | Identifier for the type of party defined in PartyRole. Either an MPID or a Clearing Firm number.                              |
| →     | →                        | 447                | PartyIDSource | F     | Valid values:<br>C = Generally accepted market participant identifier (e.g. FINRA mnemonic)                                   |
| →     | →                        | 452                | PartyRole     | F     | Valid values:<br>17 = Contra Firm<br>83 = Clearing Firm Number                                                                |

|       |                    |               |               |                |                                                                                                                                                                                                                                                                   |
|-------|--------------------|---------------|---------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| →     | →                  | 802           | NoPartySubIDs |                | PartySubID is only allowed for PartyRole = 1 or 17.                                                                                                                                                                                                               |
| →     | →                  | →             | 523           | PartySubID     | Sub-identifier. Branch office of contra firm (Branch Sequence Number). Up to 8 characters allowed..                                                                                                                                                               |
| →     | →                  | →             | 803           | PartySubIDType | Type of PartySubID (523) value<br>Valid values:<br>24 = Department                                                                                                                                                                                                |
| →     | 528                | OrderCapacity |               |                | F<br>Designates the capacity of the accepting party. Valid values:<br>A = Agency<br>P = Principal<br>R = Riskless Principal                                                                                                                                       |
| →     | 376                | ComplianceID  |               |                | F<br>OATS Identifier. Not to exceed 20 characters.                                                                                                                                                                                                                |
| 22024 | ShortSaleIndicator |               |               |                | S = Sold Short<br>E = Sold Short Exempt<br><b>Note: The Short Sale Indicator may only be used when the Accepting party's side is a Sell (54=2). If the Accepting party's side is a Buy and the Short Sale Indicator is used, the submission will be rejected.</b> |
|       | Standard Trailer   |               |               | Y              |                                                                                                                                                                                                                                                                   |

### 5.1.6 Trade Capture Report – Trade Decline (DK) (in)

To be used by either side alleged on a trade report to decline the trade report. [Either party to a trade will use this message to decline \(DK\) a trade that is alleged against them. ADF will forward an ARDK \(Decline confirmation\) message to both parties of the trade to advise them that the specified trade has been declined by the contra party. Trades that have been declined are carried over to the next business day and remain available for cancellation or correction by the reporting party, or for Accepting by the contra party until 2:30 p.m. ET of T+1. Declined trades that are carried over are not eligible for the automatic lock-in at 2:30 p.m. ET and will not be sent to clearing unless the parties take action. Reporting firms must Cancel a declined trade that was previously reported for dissemination purposes to have the trade removed from the tape.](#)

Unless otherwise noted, all fields follow rules/definitions as outlined in the Comments column of the Trade Capture Report inbound message.

| Tag   | FIX tag name             | Req'd | Comment                                                                                                                                                                                               |
|-------|--------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header          | Y     | MsgType = AE                                                                                                                                                                                          |
| 571   | TradeReportID            | Y     | Client-generated identifier, not to exceed 20 characters.                                                                                                                                             |
| 22011 | ControlDate              | F     | Control Date of the trade being declined.                                                                                                                                                             |
| 1003  | TradeID                  | F     | FINRA Control Number of the trade being declined.                                                                                                                                                     |
| 487   | TradeReportTransType     | F     | Valid values:<br>0 = New                                                                                                                                                                              |
| 856   | TradeReportType          | F     | Valid values:<br>3 = Decline                                                                                                                                                                          |
| 570   | PreviouslyReported       | Y     | Indicates if the trade capture report was previously reported to the counterparty<br>Valid values:<br>N = No                                                                                          |
| 55    | Symbol                   | F     | Ticker symbol from the declined trade.                                                                                                                                                                |
| 65    | SymbolSfx                |       | Symbol suffix from the declined trade.                                                                                                                                                                |
| 32    | LastQty                  | Y     | Trade Volume as number of shares from the declined trade.                                                                                                                                             |
| 31    | LastPx                   | Y     | Trade Price from the declined trade.                                                                                                                                                                  |
| 75    | TradeDate                | Y     | Execution Date from the declined trade. Interpreted as an As-Of trade if not current date. Format: YYYYMMDD                                                                                           |
| 60    | TransactTime             | Y     | Time the transaction represented by this Trade Capture Report occurred (in <b>UTC/GMT</b> ).<br>Format: YYYYMMDD-HH:MM:SS.sss                                                                         |
| 552   | TrdCapRptSideGrp/NoSides | Y     | Always set value to 1.                                                                                                                                                                                |
| →     | 54 Side                  | Y     | Side submitted on the alleged trade.<br>Valid values:<br>1 = Buy<br>2 = Sell                                                                                                                          |
| →     | 37 OrderID               | Y     | Required in FIX, but ignored                                                                                                                                                                          |
| 127   | DKReason                 | F     | Reason for decline of trade.<br>Valid values:<br>A = Unknown symbol<br>B = Wrong side<br>C = Quantity exceeds order<br>D = No matching order<br>E = Price exceeds limit<br>F = Calculation difference |

|    |                  |   |                                                                                                                                     |
|----|------------------|---|-------------------------------------------------------------------------------------------------------------------------------------|
|    |                  |   | Z = Other                                                                                                                           |
| 58 | Text             |   | Memo field. May be used to further define the reason for the DK, when Tag 127 = Z, e.g., "DUPE TRADE". Not to exceed 10 characters. |
|    | Standard Trailer | Y |                                                                                                                                     |

## 5.2 Outbound Trade Report Acknowledgements

All inbound messages accepted by the system will produce an acknowledgement confirming the details submitted to FINRA. Reporting party and contra party will receive the proper acknowledgement. These acknowledgments are identified by the first two characters “ARxx” in Tag 1011. If elected, correspondent clearing firm copies of these acknowledgments will also be forwarded to the specified clearing firms of each party. The clearing copies are identified by the first two characters “ACxx” in Tag 1011 and are identical to the AR versions.

### 5.2.1 Trade Capture Report – Acknowledgement: AREN / ACEN (out)

Unless otherwise specified, the fields returned on the acknowledgement will echo back the values submitted on the Trade Capture Report.

| Tag   | FIX tag name         | Req'd | Comment                                                                                                                                                                                                                        |
|-------|----------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header      | Y     | MsgType = AE                                                                                                                                                                                                                   |
| 1011  | MessageEventSource   | F     | Used to identify the type of acknowledgement.<br>Value “AREN” identifies a Trade Capture Report accepted by FINRA.<br><br>Value “ACEN” identifies the version forwarded to the specified clearing firm of the submitting firm. |
| 571   | TradeReportID        | Y     | Identifier assigned by FINRA (not Control Number).                                                                                                                                                                             |
| 572   | TradeReportRefID     | F     | TradeReportID from inbound TCR.                                                                                                                                                                                                |
| 1041  | FirmTradeID          |       | FirmTradeID from inbound TCR.                                                                                                                                                                                                  |
| 1042  | SecondaryFirmTradeID |       | SecondaryFirmTradeID from inbound TCR.                                                                                                                                                                                         |
| 22011 | ControlDate          | F     | ControlDate assigned by FINRA on accepted trade report. Format: YYYYMMDD.                                                                                                                                                      |
| 1003  | TradeID              | F     | Control Number assigned by FINRA on accepted trade report. 10 digits, starting with the value “6”.                                                                                                                             |
| 487   | TradeReportTransType | F     | Valid values:<br>0 = New                                                                                                                                                                                                       |
| 856   | TradeReportType      | F     | Valid values:<br>0 = Submit                                                                                                                                                                                                    |
| 570   | PreviouslyReported   | Y     | Will always be set to:<br>N = No                                                                                                                                                                                               |
| 1015  | AsOfIndicator        |       | AsOfIndicator from inbound TCR.                                                                                                                                                                                                |
| 55    | Symbol               | F     | Symbol from inbound TCR.                                                                                                                                                                                                       |
| 65    | SymbolSfx            |       | SymbolSfx from inbound TCR.                                                                                                                                                                                                    |
| 32    | LastQty              | Y     | LastQty from inbound TCR.                                                                                                                                                                                                      |
| 31    | LastPx               | Y     | LastPx from inbound TCR.                                                                                                                                                                                                       |
| 423   | PriceType            | F     | PriceType from inbound TCR.                                                                                                                                                                                                    |
| 9822  | ClearingPrice        |       | ClearingPrice from inbound TCR.                                                                                                                                                                                                |
| 75    | TradeDate            | Y     | TradeDate from inbound TCR.                                                                                                                                                                                                    |
| 60    | TransactTime         | Y     | Time the transaction represented by this Trade Capture Report occurred (in <b>UTC/GMT</b> ). Format: YYYYMMDD-HH:MM:SS.sss                                                                                                     |
| 64    | SettlDate            |       | SettlDate from inbound TCR.                                                                                                                                                                                                    |

|       |                          |   |                                                                                                                                                                                                                                                                                                                                       |
|-------|--------------------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 22030 | ReportingObligation      | F | ReportingObligation from inbound TCR.                                                                                                                                                                                                                                                                                                 |
| 552   | TrdCapRptSideGrp/NoSides | Y | TrdCapRptSideGrp/NoSides from inbound TCR.                                                                                                                                                                                                                                                                                            |
| →     | 54Side                   | Y | Side from inbound TCR.                                                                                                                                                                                                                                                                                                                |
| →     | 37OrderID                | Y | Required in FIX, set to NONE.                                                                                                                                                                                                                                                                                                         |
| →     | 453Parties/NoPartyIDs    | F | Parties/NoPartyIDs from inbound TCR.                                                                                                                                                                                                                                                                                                  |
| →     | → 448PartyID             | F | PartyID from inbound TCR.                                                                                                                                                                                                                                                                                                             |
| →     | → 447PartyIDSource       | F | Will always be set to:<br>C = Generally accepted market participant identifier (e.g. FINRA mnemonic)                                                                                                                                                                                                                                  |
| →     | → 452PartyRole           | F | PartyRoles from inbound TCR.                                                                                                                                                                                                                                                                                                          |
| →     | → 802NoPartySubIDs       |   | NoPartySubIDs from inbound TCR.                                                                                                                                                                                                                                                                                                       |
| →     | → → 523PartySubID        |   | PartySubID from inbound TCR.                                                                                                                                                                                                                                                                                                          |
| →     | → → 803PartySubIDType    |   | PartySubIDType from inbound TCR.                                                                                                                                                                                                                                                                                                      |
| →     | 528OrderCapacity         | F | OrderCapacity from inbound TCR.                                                                                                                                                                                                                                                                                                       |
| →     | 58Text                   |   | Text from inbound TCR. User memo will not be provided to contra party on Allege confirmation (ARAL).                                                                                                                                                                                                                                  |
| →     | 376ComplianceID          | F | ComplianceID from inbound TCR.                                                                                                                                                                                                                                                                                                        |
| 9854  | OverrideFlag             |   | OverrideFlag from inbound TCR.                                                                                                                                                                                                                                                                                                        |
| 22013 | LockedInIndicator        |   | LockedInIndicator from inbound TCR.                                                                                                                                                                                                                                                                                                   |
| 22005 | SpecialProcessingFlag    |   | SpecialProcessingFlag from inbound TCR.                                                                                                                                                                                                                                                                                               |
| 22001 | TradeModifier1           |   | TradeModifier1 from inbound TCR.                                                                                                                                                                                                                                                                                                      |
| 855   | SecondaryTrdType         |   | SecondaryTrdType from inbound TCR.                                                                                                                                                                                                                                                                                                    |
| 22002 | TradeModifier2           |   | TradeModifier2 from inbound TCR.                                                                                                                                                                                                                                                                                                      |
| 829   | TrdSubType               | Y | TrdSubType from inbound TCR.                                                                                                                                                                                                                                                                                                          |
| 22033 | TradeModifier2Time       |   | TradeModifier2Time from inbound TCR.                                                                                                                                                                                                                                                                                                  |
| 22032 | FINRATradeModifier2      |   | If applicable, FINRA will determine if one of the Rule 611 Trade Through Exempt conditions is applicable and will append on the trade.                                                                                                                                                                                                |
| 22003 | TradeModifier3           |   | TradeModifier3 from inbound TCR.                                                                                                                                                                                                                                                                                                      |
| 22020 | FINRATradeModifier3      |   | Single character Time Modifier determined by FINRA based on comparing Execution Time (22007) against the time FINRA receives the inbound TCR.<br>Valid values:<br>T = Executed outside normal market hours<br>Z = Executed during normal market hours and reported late<br>U = Executed outside normal market hours and reported late |
| 22004 | TradeModifier4           |   | TradeModifier4 from inbound TCR.                                                                                                                                                                                                                                                                                                      |
| 22018 | TradeModifier4Time       |   | TradeModifier4Time from inbound TCR.                                                                                                                                                                                                                                                                                                  |
| 22031 | FINRATradeModifier4      |   | If applicable, FINRA will determine if one of the SRO detail sale conditions is applicable and will append on the trade.                                                                                                                                                                                                              |
| 22007 | ExecutionTime            | F | ExecutionTime from inbound TCR.                                                                                                                                                                                                                                                                                                       |
| 22009 | PreparationTime          |   | PreparationTime from inbound TCR.                                                                                                                                                                                                                                                                                                     |
| 22022 | ServiceBureauPrepTime    |   | ServiceBureauPrepTime from inbound TCR.                                                                                                                                                                                                                                                                                               |
| 81    | ProcessCode              |   | ProcessCode from inbound TCR.                                                                                                                                                                                                                                                                                                         |
| 527   | SecondaryExecID          |   | SecondaryExecID from inbound TCR.                                                                                                                                                                                                                                                                                                     |

|       |                     |   |                                                                                                                                |
|-------|---------------------|---|--------------------------------------------------------------------------------------------------------------------------------|
| 577   | ClearingInstruction | F | ClearingInstruction from inbound TCR.                                                                                          |
| 852   | PublishTrdIndicator | F | PublishTrdIndicator from inbound TCR.                                                                                          |
| 22024 | ShortSaleIndicator  |   | ShortSaleIndicator from inbound TCR.                                                                                           |
| 9277  | RelatedMarketCenter |   | RelatedMarketCenter from inbound TCR.                                                                                          |
|       |                     |   | Indicates whether or not this message is a drop copy of another message.<br>Valid values:<br>Y = Yes<br>N = No (default value) |
| 797   | CopyMsgIndicator    |   |                                                                                                                                |
|       | Standard Trailer    | Y |                                                                                                                                |

### 5.2.2 Trade Capture Report – Allege: ARAL / ACAL (out)

Confirmation sent to the contra party alleged on the reported trade. Unless otherwise specified, the fields returned on this allege confirmation will echo back the values submitted on the Trade Capture Report (TCR) by the reporting party.

| Tag   | FIX tag name             | Req'd | Comment                                                                                                                                                                                                                                                                                             |
|-------|--------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header          | Y     | MsgType = AE                                                                                                                                                                                                                                                                                        |
| 1011  | MessageEventSource       | F     | Used to identify the type of acknowledgement.<br>Value "ARAL" identifies a Trade Capture Report accepted by FINRA alleging the recipient of this message as the contra party on the trade.<br><br>Value "ACAL" identifies the version forwarded to the specified clearing firm of the alleged firm. |
| 571   | TradeReportID            | Y     | Identifier assigned by FINRA (not Control Number).                                                                                                                                                                                                                                                  |
| 1042  | SecondaryFirmTradeID     |       | SecondaryFirmTradeID from inbound TCR.                                                                                                                                                                                                                                                              |
| 22011 | ControlDate              | F     | ControlDate assigned by FINRA on accepted trade report. Format: YYYYMMDD.                                                                                                                                                                                                                           |
| 1003  | TradeID                  | F     | Control Number assigned by FINRA on accepted trade report. 10 digits, starting with the value "6".                                                                                                                                                                                                  |
| 487   | TradeReportTransType     | F     | Valid values:<br>0 = New                                                                                                                                                                                                                                                                            |
| 856   | TradeReportType          | F     | Valid values:<br>1 = Allege                                                                                                                                                                                                                                                                         |
| 570   | PreviouslyReported       | Y     | Will always be set to:<br>N = No                                                                                                                                                                                                                                                                    |
| 1015  | AsOfIndicator            |       | AsOfIndicator from inbound TCR.                                                                                                                                                                                                                                                                     |
| 55    | Symbol                   | F     | Symbol from inbound TCR.                                                                                                                                                                                                                                                                            |
| 65    | SymbolSfx                |       | SymbolSfx from inbound TCR.                                                                                                                                                                                                                                                                         |
| 32    | LastQty                  | Y     | LastQty from inbound TCR.                                                                                                                                                                                                                                                                           |
| 31    | LastPx                   | Y     | LastPx from inbound TCR.                                                                                                                                                                                                                                                                            |
| 423   | PriceType                | F     | PriceType from inbound TCR.                                                                                                                                                                                                                                                                         |
| 9822  | ClearingPrice            |       | ClearingPrice from inbound TCR.                                                                                                                                                                                                                                                                     |
| 75    | TradeDate                | Y     | TradeDate from inbound TCR.                                                                                                                                                                                                                                                                         |
| 60    | TransactTime             | Y     | Time the transaction represented by this Trade Capture Report occurred (in <b>UTC/GMT</b> ). Format: YYYYMMDD-HH:MM:SS.sss                                                                                                                                                                          |
| 64    | SettlDate                |       | SettlDate from inbound TCR.                                                                                                                                                                                                                                                                         |
| 22030 | ReportingObligation      | F     | ReportingObligation from inbound TCR.                                                                                                                                                                                                                                                               |
| 552   | TrdCapRptSideGrp/NoSides | Y     | TrdCapRptSideGrp/NoSides from inbound TCR.                                                                                                                                                                                                                                                          |
| →     | 54Side                   | Y     | Side from inbound TCR.                                                                                                                                                                                                                                                                              |
| →     | 37OrderID                | Y     | Required in FIX, set to NONE.                                                                                                                                                                                                                                                                       |
| →     | 453Parties/NoPartyIDs    | F     | Parties/NoPartyIDs from inbound TCR.                                                                                                                                                                                                                                                                |
| →     | → 448PartyID             | F     | PartyID from inbound TCR.                                                                                                                                                                                                                                                                           |
| →     | → 447PartyIDSource       | F     | Will always be set to :<br>C = Generally accepted market participant identifier (e.g. FINRA mnemonic)                                                                                                                                                                                               |
| →     | → 452PartyRole           | F     | PartyRoles from inbound TCR.                                                                                                                                                                                                                                                                        |
| →     | → 802NoPartySubIDs       |       | NoPartySubIDs from inbound TCR.                                                                                                                                                                                                                                                                     |

|       |     |   |     |                       |   |                                                                                                                                                                                                                                                                                                                                       |
|-------|-----|---|-----|-----------------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| →     | →   | → | 523 | PartySubID            |   | PartySubID from inbound TCR.                                                                                                                                                                                                                                                                                                          |
| →     | →   | → | 803 | PartySubIDType        |   | PartySubIDType from inbound TCR.                                                                                                                                                                                                                                                                                                      |
| →     | 528 |   |     | OrderCapacity         | F | OrderCapacity from inbound TCR.                                                                                                                                                                                                                                                                                                       |
| →     | 376 |   |     | ComplianceID          | F | ComplianceID from inbound TCR.                                                                                                                                                                                                                                                                                                        |
| 9854  |     |   |     | OverrideFlag          |   | OverrideFlag from inbound TCR.                                                                                                                                                                                                                                                                                                        |
| 22013 |     |   |     | LockedInIndicator     |   | LockedInIndicator from inbound TCR.                                                                                                                                                                                                                                                                                                   |
| 22005 |     |   |     | SpecialProcessingFlag |   | SpecialProcessingFlag from inbound TCR.                                                                                                                                                                                                                                                                                               |
| 22001 |     |   |     | TradeModifier1        |   | TradeModifier1 from inbound TCR.                                                                                                                                                                                                                                                                                                      |
| 855   |     |   |     | SecondaryTrdType      |   | SecondaryTrdType from inbound TCR.                                                                                                                                                                                                                                                                                                    |
| 22002 |     |   |     | TradeModifier2        |   | TradeModifier2 from inbound TCR.                                                                                                                                                                                                                                                                                                      |
| 829   |     |   |     | TrdSubType            | Y | TrdSubType from inbound TCR.                                                                                                                                                                                                                                                                                                          |
| 22033 |     |   |     | TradeModifier2Time    |   | TradeModifier2Time from inbound TCR.                                                                                                                                                                                                                                                                                                  |
| 22032 |     |   |     | FINRATradeModifier2   |   | Trade Modifier 3 determined by FINRA if applicable.                                                                                                                                                                                                                                                                                   |
| 22003 |     |   |     | TradeModifier3        |   | TradeModifier3 from inbound TCR.                                                                                                                                                                                                                                                                                                      |
| 22020 |     |   |     | FINRATradeModifier3   |   | Single character Time Modifier determined by FINRA based on comparing Execution Time (22007) against the time FINRA receives the inbound TCR.<br>Valid values:<br>T = Executed outside normal market hours<br>Z = Executed during normal market hours and reported late<br>U = Executed outside normal market hours and reported late |
| 22004 |     |   |     | TradeModifier4        |   | TradeModifier4 from inbound TCR.                                                                                                                                                                                                                                                                                                      |
| 22018 |     |   |     | TradeModifier4Time    |   | TradeModifier4Time from inbound TCR.                                                                                                                                                                                                                                                                                                  |
| 22031 |     |   |     | FINRATradeModifier4   |   | Trade Modifier 4 determined by FINRA if applicable.                                                                                                                                                                                                                                                                                   |
| 22007 |     |   |     | ExecutionTime         | F | ExecutionTime from inbound TCR.                                                                                                                                                                                                                                                                                                       |
| 22009 |     |   |     | PreparationTime       |   | PreparationTime from inbound TCR.                                                                                                                                                                                                                                                                                                     |
| 22022 |     |   |     | ServiceBureauPrepTime |   | ServiceBureauPrepTime from inbound TCR.                                                                                                                                                                                                                                                                                               |
| 81    |     |   |     | ProcessCode           |   | ProcessCode from inbound TCR.                                                                                                                                                                                                                                                                                                         |
| 527   |     |   |     | SecondaryExecID       |   | SecondaryExecID from inbound TCR.                                                                                                                                                                                                                                                                                                     |
| 577   |     |   |     | ClearingInstruction   | F | ClearingInstruction from inbound TCR.                                                                                                                                                                                                                                                                                                 |
| 852   |     |   |     | PublishTrdIndicator   | F | PublishTrdIndicator from inbound TCR.                                                                                                                                                                                                                                                                                                 |
| 9277  |     |   |     | RelatedMarketCenter   |   | RelatedMarketCenter from inbound TCR.                                                                                                                                                                                                                                                                                                 |
| 797   |     |   |     | CopyMsgIndicator      |   | Indicates whether or not this message is a drop copy of another message.<br>Valid values:<br>Y = Yes<br>N = No (default value)                                                                                                                                                                                                        |
|       |     |   |     | Standard Trailer      | Y |                                                                                                                                                                                                                                                                                                                                       |

### 5.2.3 Trade Capture Report – Confirmed Cancel: ARCX / ACCX (out)

| Tag   | FIX tag name             | Req'd | Comment                                                                                                                                                                                                                                                         |
|-------|--------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header          | Y     | MsgType = AE                                                                                                                                                                                                                                                    |
| 1011  | MessageEventSource       | F     | Used to identify the type of acknowledgment.<br>Value "ARCX" identifies a Trade cancel accepted by FINRA, sent to both parties of the trade.<br><br>Value "ACCX" identifies the version forwarded to the specified clearing firms of both parties of the trade. |
| 571   | TradeReportID            | Y     | Identifier assigned by FINRA (not Control Number).                                                                                                                                                                                                              |
| 572   | TradeReportRefID         | F     | To the reporting party, this field is set to the reporter's previous TradeReportID. To the contra party, this field is set to the TradeReportID from the previous allege message (ARAL).                                                                        |
| 1041  | FirmTradeID              |       | Client Trade Identifier from inbound Trade Cancel.                                                                                                                                                                                                              |
| 22011 | ControlDate              | F     | ControlDate from inbound Trade Cancel.                                                                                                                                                                                                                          |
| 1003  | TradeID                  | F     | TradeID from inbound Trade Cancel. (FINRA Control Number).                                                                                                                                                                                                      |
| 487   | TradeReportTransType     | F     | Valid values:<br>1 = Cancel                                                                                                                                                                                                                                     |
| 856   | TradeReportType          | F     | Valid values:<br>6 = Cancel<br>7 = Break (on CP cancel of accepted trades)                                                                                                                                                                                      |
| 570   | PreviouslyReported       | Y     | Will always be set to:<br>N = No                                                                                                                                                                                                                                |
| 32    | LastQty                  | Y     | LastQty from inbound Trade Cancel.<br><br><b>NOTE: on a Cancel of a trade report submitted on a prior day (up to T-3), the value "0" will always be returned.</b>                                                                                               |
| 31    | LastPx                   | Y     | LastPx from inbound Trade Cancel.<br><br><b>NOTE: on a Cancel of a trade report submitted on a prior day (up to T-3), the value "0" will always be returned.</b>                                                                                                |
| 75    | TradeDate                | Y     | TradeDate from inbound Trade Cancel.<br><br><b>NOTE: on a Cancel of a trade report submitted on a prior day (up to T-3), the current date will always be returned.</b>                                                                                          |
| 60    | TransactTime             | Y     | Time the transaction represented by this Trade Capture Report was cancelled (in <b>UTC/GMT</b> ).<br>Format: YYYYMMDD-HH:MM:SS.sss                                                                                                                              |
| 552   | TrdCapRptSideGrp/NoSides | Y     | For Trade Cancels this is always set to 1.                                                                                                                                                                                                                      |
| →     | 54Side                   | Y     | Side of trade. Valid values:<br>1 = Buy<br>2 = Sell<br>8 = Cross<br><br><b>NOTE: on a Cancel of a trade report submitted</b>                                                                                                                                    |

|       |    |                  |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------|----|------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |    |                  |   | <b>on a prior day (up to T-3), the value “1” will always be returned regardless of the value submitted in Tag 54 on the inbound Trade Cancel request.</b>                                                                                                                                                                                                                                                                                                                           |
| →     | 37 | OrderID          | Y | Required in FIX, set to NONE.                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 9847  |    | LockedInStatus   |   | Will only be included on Cancels (Breaks) of match/locked trades. Contains the current status of the matched/locked trade. Valid values:<br>A = Trade still locked-in (by trade acceptance) because both parties' Cancel requests have not been received.<br>M = Trade still locked-in (by trade matching) because both parties' Cancel requests have not been received.<br>B = The locked-in trade is effectively broken because both parties' Cancel requests have been received. |
| 9856  |    | BreakIndicator   |   | Will only be included on Cancels (Breaks) of match/locked trades. Indicates initiator on the first Break confirm, or if both parties have submitted Breaks (on the second confirm). Valid values:<br>B = only buyer has broken<br>S = only seller has broken<br>X = both buyer and seller have broken<br>L = broken through market center (used only in the event FINRA breaks the trade).                                                                                          |
| 22027 |    | MatchControlDate |   | If the trade was matched against the contra party's trade report, then this tag will contain the Control Date of the contra party's trade report.<br><br>If the contra party accepted the executing reporting party's trade report, then this tag will be omitted. This tag will be omitted on non-matched trade reports.                                                                                                                                                           |
| 22028 |    | MatchTradeID     |   | If the trade was matched against the contra party's trade report, then this tag will contain the Control Number of the contra party's trade report.<br><br>If the contra party accepted the executing reporting party's trade report, then this tag will be omitted. This tag will be omitted on non-matched trade reports.                                                                                                                                                         |
| 797   |    | CopyMsgIndicator |   | Indicates whether or not this message is a drop copy of another message.<br>Valid values:<br>Y = Yes<br>N = No (default value)                                                                                                                                                                                                                                                                                                                                                      |
|       |    | Standard Trailer | Y |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

#### 5.2.4 Trade Capture Report – Confirmed Reversal: ARHX / ACHX (out)

Unless otherwise specified, the fields returned on the acknowledgement will echo back the values submitted on the Trade Reversal.

| Tag   | FIX tag name               | Req'd | Comment                                                                                                                                                                                                                                                     |
|-------|----------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header            | Y     | MsgType = AE                                                                                                                                                                                                                                                |
| 1011  | MessageEventSource         | F     | Used to identify the type of acknowledgment.<br>Value "ARHX" identifies a Reversal accepted by FINRA, sent to both parties of the trade.<br><br>Value "ACHX" identifies the version forwarded to the specified clearing firms of both parties of the trade. |
| 571   | TradeReportID              | Y     | Identifier assigned by FINRA (not Control Number).                                                                                                                                                                                                          |
| 572   | TradeReportRefID           | F     | TradeReportID from inbound Trade Reversal.                                                                                                                                                                                                                  |
| 1041  | FirmTradeID                |       | FirmTradeID from inbound Trade Reversal.                                                                                                                                                                                                                    |
| 1042  | SecondaryFirmTradeID       |       | SecondaryFirmTradeID from inbound Trade Reversal.                                                                                                                                                                                                           |
| 22012 | OrigControlDate            | F     | OrigControlDate from inbound Trade Reversal.                                                                                                                                                                                                                |
| 1126  | OrigTradeID                | F     | OrigTradeID from inbound Trade Reversal.                                                                                                                                                                                                                    |
| 22011 | ControlDate                | F     | ControlDate generated by FINRA on the accepted Trade Reversal.                                                                                                                                                                                              |
| 1003  | TradeID                    | F     | TradeID generated by FINRA on the accepted Trade Reversal.                                                                                                                                                                                                  |
| 22029 | ReferenceReportingFacility |       | ReferenceReportingFacility from inbound Trade Reversal.                                                                                                                                                                                                     |
| 487   | TradeReportTransType       | F     | Valid values:<br>4 = Reverse                                                                                                                                                                                                                                |
| 856   | TradeReportType            | F     | Valid values:<br>0 = Submit                                                                                                                                                                                                                                 |
| 570   | PreviouslyReported         | Y     | Will always be set to:<br>N = No                                                                                                                                                                                                                            |
| 1015  | AsOfIndicator              | F     | Must be set to 1 on Reversals.<br>1 = true                                                                                                                                                                                                                  |
| 55    | Symbol                     | F     | Symbol from inbound Trade Reversal                                                                                                                                                                                                                          |
| 65    | SymbolSfx                  |       | SymbolSfx from inbound Trade Reversal                                                                                                                                                                                                                       |
| 32    | LastQty                    | Y     | LastQty from inbound Trade Reversal.                                                                                                                                                                                                                        |
| 31    | LastPx                     | Y     | LastPx from inbound Trade Reversal                                                                                                                                                                                                                          |
| 423   | PriceType                  | F     | PriceType from inbound Trade Reversal.                                                                                                                                                                                                                      |
| 9822  | ClearingPrice              |       | ClearingPrice from inbound Trade Reversal.                                                                                                                                                                                                                  |
| 75    | TradeDate                  | Y     | TradeDate from inbound Trade Reversal                                                                                                                                                                                                                       |
| 60    | TransactTime               | Y     | Time the transaction represented by this Reversal occurred (in <b>UTC/GMT</b> ). Format: YYYYMMDD-HH:MM:SS.sss                                                                                                                                              |
| 64    | SettlDate                  |       | SettlDate from inbound Trade Reversal                                                                                                                                                                                                                       |
| 22030 | ReportingObligation        | F     | ReportingObligation from inbound Trade Reversal.                                                                                                                                                                                                            |
| 552   | TrdCapRptSideGrp/NoSides   | Y     | TrdCapRptSideGrp/NoSides from inbound Trade Reversal.                                                                                                                                                                                                       |
| →     | 54Side                     | Y     | Side from inbound Trade Reversal                                                                                                                                                                                                                            |

|       |                       |                    |               |                |                                                                                                                                |
|-------|-----------------------|--------------------|---------------|----------------|--------------------------------------------------------------------------------------------------------------------------------|
| →     | 37                    | OrderID            |               | Y              | Required in FIX, set to NONE.                                                                                                  |
| →     | 453                   | Parties/NoPartyIDs |               | F              | Parties/NoPartyIDs from inbound Trade Reversal                                                                                 |
| →     | →                     | 448                | PartyID       | F              | PartyID from inbound Trade Reversal.                                                                                           |
| →     | →                     | 447                | PartyIDSource | F              | Will always be set to :<br>C = Generally accepted market participant identifier (e.g. FINRA mnemonic)                          |
| →     | →                     | 452                | PartyRole     | F              | PartyRoles from inbound Trade Reversal.                                                                                        |
| →     | →                     | 802                | NoPartySubIDs |                | NoPartySubIDs from inbound Trade Reversal.                                                                                     |
| →     | →                     | →                  | 523           | PartySubID     | PartySubID from inbound Trade Reversal.                                                                                        |
| →     | →                     | →                  | 803           | PartySubIDType | PartySubIDType from inbound Trade Reversal                                                                                     |
| →     | 528                   | OrderCapacity      |               | F              | OrderCapacity from inbound Trade Reversal                                                                                      |
| →     | 58                    | Text               |               |                | Text from inbound Trade Reversal. Will not be provided to contra party.                                                        |
| →     | 376                   | ComplianceID       |               | F              | ComplianceID from inbound Trade Reversal.                                                                                      |
| 9854  | OverrideFlag          |                    |               |                | OverrideFlag from inbound Trade Reversal                                                                                       |
| 22013 | LockedInIndicator     |                    |               |                | LockedInIndicator from inbound Trade Reversal                                                                                  |
| 22005 | SpecialProcessingFlag |                    |               |                | SpecialProcessingFlag from inbound Trade Reversal                                                                              |
| 22001 | TradeModifier1        |                    |               |                | TradeModifier1 from inbound Trade Reversal                                                                                     |
| 855   | SecondaryTrdType      |                    |               |                | SecondaryTrdType from inbound Trade Reversal.                                                                                  |
| 22002 | TradeModifier2        |                    |               |                | TradeModifier2 from inbound Trade Reversal                                                                                     |
| 829   | TrdSubType            |                    |               | Y              | TrdSubType from inbound Trade Reversal.                                                                                        |
| 22033 | TradeModifier2Time    |                    |               |                | TradeModifier2Time from inbound Trade Reversal.                                                                                |
| 22032 | FINRATradeModifier2   |                    |               |                | Trade Modifier 2 determined by FINRA.                                                                                          |
| 22003 | TradeModifier3        |                    |               |                | TradeModifier3 from inbound Trade Reversal                                                                                     |
| 22004 | TradeModifier4        |                    |               |                | TradeModifier4 from inbound Trade Reversal                                                                                     |
| 22018 | TradeModifier4Time    |                    |               |                | TradeModifier4Time from inbound Trade Reversal.                                                                                |
| 22031 | FINRATradeModifier4   |                    |               |                | Trade Modifier 4 determined by FINRA.                                                                                          |
| 22007 | ExecutionTime         |                    |               | F              | ExecutionTime from inbound Trade Reversal                                                                                      |
| 22009 | PreparationTime       |                    |               |                | PreparationTime from inbound Trade Reversal                                                                                    |
| 22022 | ServiceBureauPrepTime |                    |               |                | ServiceBureauPrepTime from inbound Trade Reversal.                                                                             |
| 81    | ProcessCode           |                    |               |                | ProcessCode from inbound Trade Reversal                                                                                        |
| 527   | SecondaryExecID       |                    |               |                | SecondaryExecID from inbound Trade Reversal.                                                                                   |
| 577   | ClearingInstruction   |                    |               | F              | ClearingInstruction from inbound Trade Reversal                                                                                |
| 852   | PublishTrdIndicator   |                    |               | F              | PublishIndicator from inbound Trade Reversal                                                                                   |
| 22024 | ShortSaleIndicator    |                    |               |                | ShortSaleIndicator from inbound Trade Reversal                                                                                 |
| 9277  | RelatedMarketCenter   |                    |               |                | RelatedMarketCenter from inbound Trade Reversal                                                                                |
| 797   | CopyMsgIndicator      |                    |               |                | Indicates whether or not this message is a drop copy of another message.<br>Valid values:<br>Y = Yes<br>N = No (default value) |
|       | Standard Trailer      |                    |               | Y              |                                                                                                                                |

### 5.2.5 Trade Capture Report – Confirmed Correction: ARCR / ACCR (out)

Unless otherwise specified, the fields returned on the acknowledgement will echo back the values submitted on the Trade Correction.

| Tag   | FIX tag name         | Req'd | Comment                                                                                                                                                                                                                                                             |
|-------|----------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header      | Y     | MsgType = AE                                                                                                                                                                                                                                                        |
| 1011  | MessageEventSource   | F     | Used to identify the type of acknowledgment.<br>Value "ARCR" identifies a Trade Correction accepted by FINRA, sent to both parties of the trade.<br><br>Value "ACCR" identifies the version forwarded to the specified clearing firms of both parties of the trade. |
| 571   | TradeReportID        | Y     | Identifier assigned by FINRA (not Control Number).                                                                                                                                                                                                                  |
| 572   | TradeReportRefID     | F     | To the reporting party, this field is set to the reporter's previous TradeReportID. To the contra party, this field is set to the TradeReportID from the previous allege message (ARAL).                                                                            |
| 1041  | FirmTradeID          |       | FirmTradeID from inbound Trade Correction.                                                                                                                                                                                                                          |
| 1042  | SecondaryFirmTradeID |       | SecondaryFirmTradeID from inbound Trade Correction.                                                                                                                                                                                                                 |
| 22011 | ControlDate          | F     | New ControlDate assigned to the accepted Trade Correction.                                                                                                                                                                                                          |
| 1003  | TradeID              | F     | New TradeID assigned to the accepted Trade Correction.                                                                                                                                                                                                              |
| 22012 | OrigControlDate      | F     | ControlDate (tag 22011) from inbound Trade Correction.                                                                                                                                                                                                              |
| 1126  | OrigTradeID          | F     | TradeID (tag 1003) from inbound Trade Correction.                                                                                                                                                                                                                   |
| 487   | TradeReportTransType | F     | Valid values:<br>2 = Replace                                                                                                                                                                                                                                        |
| 856   | TradeReportType      | F     | Valid values:<br>5 = Correction                                                                                                                                                                                                                                     |
| 570   | PreviouslyReported   | Y     | Will always be set to:<br>N = No                                                                                                                                                                                                                                    |
| 1015  | AsOfIndicator        |       | AsOfIndicator from inbound Trade Correction.                                                                                                                                                                                                                        |
| 55    | Symbol               | F     | Symbol from inbound Trade Correction.                                                                                                                                                                                                                               |
| 65    | SymbolSfx            |       | SymbolSfx from inbound Trade Correction.                                                                                                                                                                                                                            |
| 32    | LastQty              | Y     | LastQty from inbound Trade Correction.                                                                                                                                                                                                                              |
| 31    | LastPx               | Y     | LastPx from inbound Trade Correction.                                                                                                                                                                                                                               |
| 423   | PriceType            | F     | PriceType from inbound Trade Correction.                                                                                                                                                                                                                            |
| 9822  | ClearingPrice        |       | ClearingPrice from inbound Trade Correction.                                                                                                                                                                                                                        |
| 75    | TradeDate            | Y     | TradeDate from inbound Trade Correction.                                                                                                                                                                                                                            |
| 60    | TransactTime         | Y     | Time the transaction represented by this Trade Capture Report occurred (in <b>UTC/GMT</b> ). Format: YYYYMMDD-HH:MM:SS.sss                                                                                                                                          |
| 64    | SettlDate            |       | SettlDate from inbound Trade Correction.                                                                                                                                                                                                                            |
| 22030 | ReportingObligation  | F     | ReportingObligation from inbound Trade Correction.                                                                                                                                                                                                                  |

|       |                          |   |                                                                                                                                                                                                                                                                                                                               |
|-------|--------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 552   | TrdCapRptSideGrp/NoSides | Y | TrdCapRptSideGrp/NoSides from inbound Trade Correction.                                                                                                                                                                                                                                                                       |
| →     | 54Side                   | Y | Side from inbound Trade Correction.                                                                                                                                                                                                                                                                                           |
| →     | 37OrderID                | Y | Required in FIX, set to NONE.                                                                                                                                                                                                                                                                                                 |
| →     | 453Parties/NoPartyIDs    | F | Parties/NoPartyIDs from inbound Trade Correction.                                                                                                                                                                                                                                                                             |
| →     | →448PartyID              | F | PartyID from inbound Trade Correction.                                                                                                                                                                                                                                                                                        |
| →     | →447PartyIDSource        | F | Will always be set to :<br>C = Generally accepted market participant identifier (e.g. FINRA mnemonic)                                                                                                                                                                                                                         |
| →     | →452PartyRole            | F | PartyRoles from inbound Trade Correction.                                                                                                                                                                                                                                                                                     |
| →     | →802NoPartySubIDs        |   | NoPartySubIDs from inbound Trade Correction.                                                                                                                                                                                                                                                                                  |
| →     | →→523PartySubID          |   | PartySubID from inbound Trade Correction.                                                                                                                                                                                                                                                                                     |
| →     | →→803PartySubIDType      |   | LastQty from inbound Trade Correction.                                                                                                                                                                                                                                                                                        |
| →     | 528OrderCapacity         | F | OrderCapacity from inbound Trade Correction.                                                                                                                                                                                                                                                                                  |
| →     | 58Text                   |   | Text from inbound Trade Correction. Will not be provided to contra party.                                                                                                                                                                                                                                                     |
| →     | 376ComplianceID          | F | ComplianceID from inbound Trade Correction.                                                                                                                                                                                                                                                                                   |
| 9854  | OverrideFlag             |   | OverrideFlag from inbound Trade Correction.                                                                                                                                                                                                                                                                                   |
| 22013 | LockedInIndicator        |   | LockedInIndicator from inbound Trade Correction.                                                                                                                                                                                                                                                                              |
| 22005 | SpecialProcessingFlag    |   | SpecialProcessingFlag from inbound Trade Correction.                                                                                                                                                                                                                                                                          |
| 22001 | TradeModifier1           |   | TradeModifier1 from inbound Trade Correction.                                                                                                                                                                                                                                                                                 |
| 855   | SecondaryTrdType         |   | SecondaryTrdType from inbound Trade Correction.                                                                                                                                                                                                                                                                               |
| 22002 | TradeModifier2           |   | TradeModifier2 from inbound Trade Correction.                                                                                                                                                                                                                                                                                 |
| 829   | TrdSubType               | Y | TrdSubType from inbound Trade Correction.                                                                                                                                                                                                                                                                                     |
| 22033 | TradeModifier2Time       |   | TradeModifier2Time from inbound Trade Correction.                                                                                                                                                                                                                                                                             |
| 22032 | FINRATradeModifier2      |   | Trade Modifier 2 determined by FINRA.                                                                                                                                                                                                                                                                                         |
| 22003 | TradeModifier3           |   | TradeModifier3 from inbound Trade Correction.                                                                                                                                                                                                                                                                                 |
| 22020 | FINRATradeModifier3      |   | Single character Time Modifier determined by FINRA based on comparing Execution Time (22007) against time FINRA receives the correction. Valid values:<br>T = Executed outside normal market hours<br>Z = Executed during normal market hours and reported late<br>U = Executed outside normal market hours and reported late |
| 22004 | TradeModifier4           |   | TradeModifier4 from inbound Trade Correction.                                                                                                                                                                                                                                                                                 |
| 22018 | TradeModifier4Time       |   | TradeModifier4Time from inbound Trade Correction.                                                                                                                                                                                                                                                                             |
| 22031 | FINRATradeModifier4      |   | Trade Modifier 4 determined by FINRA.                                                                                                                                                                                                                                                                                         |
| 22007 | ExecutionTime            | F | ExecutionTime from inbound Trade Correction.                                                                                                                                                                                                                                                                                  |
| 22009 | PreparationTime          |   | PreparationTime from inbound Trade Correction.                                                                                                                                                                                                                                                                                |
| 22022 | ServiceBureauPrepTime    |   | ServiceBureauPrepTime from inbound Trade Correction.                                                                                                                                                                                                                                                                          |
| 81    | ProcessCode              |   | ProcessCode from inbound Trade Correction.                                                                                                                                                                                                                                                                                    |
| 527   | SecondaryExecID          |   | SecondaryExecID from inbound Trade Correction.                                                                                                                                                                                                                                                                                |
| 852   | PublishTrdIndicator      | F | PublishTrdIndicator from inbound Trade Correction.                                                                                                                                                                                                                                                                            |
| 22024 | ShortSaleIndicator       |   | ShortSaleIndicator from inbound Trade Correction.                                                                                                                                                                                                                                                                             |

|      |                     |   |                                                                                                                                |
|------|---------------------|---|--------------------------------------------------------------------------------------------------------------------------------|
| 9277 | RelatedMarketCenter |   | RelatedMarketCenter from inbound Trade Correction.                                                                             |
| 797  | CopyMsgIndicator    |   | Indicates whether or not this message is a drop copy of another message.<br>Valid values:<br>Y = Yes<br>N = No (default value) |
|      | Standard Trailer    | Y |                                                                                                                                |

### 5.2.6 Trade Capture Report – Confirmed Accept: ARAC / ACAC (out)

Unless otherwise specified, the fields returned on the acknowledgement will echo back the values submitted on the Trade Accept.

| Tag   | FIX tag name             |                    |                   | Req'd | Comment                                                                                                                             |
|-------|--------------------------|--------------------|-------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header          |                    |                   | Y     | MsgType = AE                                                                                                                        |
|       |                          |                    |                   |       | Used to identify the type of acknowledgment. Value "ARAC" identifies a Trade Accept confirmation sent to both parties of the trade. |
| 1011  | MessageEventSource       |                    |                   | F     | Value "ACAC" identifies the version forwarded to the specified clearing firms of both parties of the trade.                         |
| 571   | TradeReportID            |                    |                   | Y     | Identifier assigned by FINRA (not Control Number).                                                                                  |
| 572   | TradeReportRefID         |                    |                   |       | TradeReportID from inbound Trade Accept.                                                                                            |
| 1042  | SecondaryFirmTradeID     |                    |                   |       | SecondaryFirmTradeID from inbound Trade Accept.                                                                                     |
| 22011 | ControlDate              |                    |                   | F     | ControlDate from inbound Trade Accept.                                                                                              |
| 1003  | TradeID                  |                    |                   | F     | TradeID from inbound Trade Accept.                                                                                                  |
| 487   | TradeReportTransType     |                    |                   | F     | Valid values:<br>0 = New                                                                                                            |
| 856   | TradeReportType          |                    |                   | F     | Valid values:<br>2 = Accept                                                                                                         |
| 570   | PreviouslyReported       |                    |                   | Y     | Will always be set to:<br>N = No                                                                                                    |
| 55    | Symbol                   |                    |                   | F     | Symbol from inbound Trade Accept.                                                                                                   |
| 65    | SymbolSfx                |                    |                   |       | SymbolSfx from inbound Trade Accept.                                                                                                |
| 32    | LastQty                  |                    |                   | Y     | LastQty from inbound Trade Accept.                                                                                                  |
| 31    | LastPx                   |                    |                   | Y     | LastPx from inbound Trade Accept.                                                                                                   |
| 75    | TradeDate                |                    |                   | Y     | TradeDate from inbound Trade Accept.                                                                                                |
| 60    | TransactTime             |                    |                   | Y     | Time the transaction represented by this Trade Capture Report occurred (in <b>UTC/GMT</b> ). Format: YYYYMMDD-HH:MM:SS.sss          |
| 552   | TrdCapRptSideGrp/NoSides |                    |                   | Y     | TrdCapRptSideGrp/NoSides from inbound Trade Accept. Will reflect the value "1".                                                     |
| →     | 54                       | Side               |                   | Y     | Side from inbound Trade Accept.                                                                                                     |
| →     | 37                       | OrderID            |                   | Y     | Required in FIX, set to NONE.                                                                                                       |
| →     | 453                      | Parties/NoPartyIDs |                   | F     | Parties/NoPartyIDs from inbound Trade Accept.                                                                                       |
| →     | →                        | 448                | PartyID           | F     | PartyID from inbound Trade Accept.                                                                                                  |
| →     | →                        | 447                | PartyIDSource     | F     | Will always be set to:<br>C = Generally accepted market participant identifier (e.g. FINRA mnemonic)                                |
| →     | →                        | 452                | PartyRole         | F     | PartyRoles from inbound Trade Accept.                                                                                               |
| →     | →                        | 802                | NoPartySubIDs     |       | NoPartySubIDs from inbound Trade Accept.                                                                                            |
| →     | →                        | →                  | 523PartySubID     |       | PartySubID from inbound Trade Accept.                                                                                               |
| →     | →                        | →                  | 803PartySubIDType |       | LastQty from inbound Trade Accept.                                                                                                  |
| →     | 528                      | OrderCapacity      |                   | F     | OrderCapacity from inbound Trade Accept.                                                                                            |
| →     | 376                      | ComplianceID       |                   | F     | ComplianceID from inbound Trade Accept.                                                                                             |
| 22024 | ShortSaleIndicator       |                    |                   |       | ShortSaleIndicator from inbound Trade Accept.                                                                                       |
| 797   | CopyMsgIndicator         |                    |                   |       | Indicates whether or not this message is a drop                                                                                     |

|  |                  |   |                                                                                |
|--|------------------|---|--------------------------------------------------------------------------------|
|  |                  |   | copy of another message.<br>Valid values:<br>Y = Yes<br>N = No (default value) |
|  | Standard Trailer | Y |                                                                                |

### 5.2.7 Trade Capture Report – Confirmed Decline (DK): ARDK / ACDK (out)

Unless otherwise specified, the fields returned on the acknowledgement will echo back the values submitted on the Trade Decline.

| Tag   | FIX tag name             | Req'd | Comment                                                                                                                                                                                                                                                 |
|-------|--------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header          | Y     | MsgType = AE                                                                                                                                                                                                                                            |
| 1011  | MessageEventSource       | F     | Used to identify the type of acknowledgment. Value "ARDK" identifies a Trade Decline confirmation sent to both parties of the trade.<br><br>Value "ACDK" identifies the version forwarded to the specified clearing firms of both parties of the trade. |
| 571   | TradeReportID            | Y     | Identifier assigned by FINRA (not Control Number).                                                                                                                                                                                                      |
| 572   | TradeReportRefID         |       | TradeReportID from inbound Trade Decline.                                                                                                                                                                                                               |
| 22011 | ControlDate              | F     | ControlDate from inbound Trade Decline.                                                                                                                                                                                                                 |
| 1003  | TradeID                  | F     | TradeID from inbound Trade Decline.                                                                                                                                                                                                                     |
| 487   | TradeReportTransType     | F     | Valid values:<br>0 = New                                                                                                                                                                                                                                |
| 856   | TradeReportType          | F     | Valid values:<br>3 = Decline                                                                                                                                                                                                                            |
| 570   | PreviouslyReported       | Y     | Will always be set to:<br>N = No                                                                                                                                                                                                                        |
| 55    | Symbol                   | F     | Symbol from inbound Trade Decline.                                                                                                                                                                                                                      |
| 65    | SymbolSfx                |       | SymbolSfx from inbound Trade Decline.                                                                                                                                                                                                                   |
| 32    | LastQty                  | Y     | LastQty from inbound Trade Decline.                                                                                                                                                                                                                     |
| 31    | LastPx                   | Y     | LastPx from inbound Trade Decline.                                                                                                                                                                                                                      |
| 75    | TradeDate                | Y     | TradeDate from inbound Trade Decline.                                                                                                                                                                                                                   |
| 60    | TransactTime             | Y     | Time the transaction represented by this Trade Capture Report occurred (in <b>UTC/GMT</b> ). Format: YYYYMMDD-HH:MM:SS.sss                                                                                                                              |
| 552   | TrdCapRptSideGrp/NoSides | Y     | TrdCapRptSideGrp/NoSides from inbound Trade Decline. Will reflect the value "1".                                                                                                                                                                        |
| →     | 54Side                   | Y     | Side from inbound Trade Decline.                                                                                                                                                                                                                        |
| →     | 37OrderID                | Y     | Required in FIX, set to NONE.                                                                                                                                                                                                                           |
| 127   | DKReason                 | F     | DKReason from inbound Trade Decline.                                                                                                                                                                                                                    |
| 58    | Text                     |       | Text from inbound Trade Decline.                                                                                                                                                                                                                        |
| 797   | CopyMsgIndicator         |       | Indicates whether or not this message is a drop copy of another message.<br>Valid values:<br>Y = Yes<br>N = No (default value)                                                                                                                          |
|       | Standard Trailer         | Y     |                                                                                                                                                                                                                                                         |

### 5.2.8 Trade Capture Report – Confirmed Match: ARMA / ACMA (out)

Match/locked-in trades (by trade report comparison, trade acceptance or auto-lock) will generate a Match confirmation. Trades submitted as AGU or QSR trades (LockedInIndicator = A or Q) will not generate a Match confirmation.

| Tag   | FIX tag name         | Req'd | Comment                                                                                                                                                                                                                                                                                                                                                                                            |
|-------|----------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header      | Y     | MsgType = AE                                                                                                                                                                                                                                                                                                                                                                                       |
| 1011  | MessageEventSource   | F     | Used to identify the type of acknowledgment.<br>Value "ARMA" identifies a Match processed by FINRA sent to both parties of the trade.<br><br>Value "ACMA" identifies the version forwarded to the specified clearing firms of both parties of the trade.                                                                                                                                           |
| 571   | TradeReportID        | Y     | Identifier assigned by FINRA (not Control Number).                                                                                                                                                                                                                                                                                                                                                 |
| 22011 | ControlDate          | F     | ControlDate of the trade submitted by the executing reporting party (i.e., the firm with the Reporting Obligation).                                                                                                                                                                                                                                                                                |
| 1003  | TradeID              | F     | TradeID (Control Number) of the trade submitted by the executing reporting party (i.e., the firm with the Reporting Obligation).                                                                                                                                                                                                                                                                   |
| 22027 | MatchControlDate     |       | If the trade was matched against the contra party's trade report (where ReportingObligation = N), then this tag will contain the Control Date of the contra party's trade report (Tag 9857 will be set to "C").<br><br>If the contra party accepted the executing reporting party's trade report, or if the trade was auto-locked, then this tag will be omitted (Tag 9857 will be set to "M").    |
| 22028 | MatchTradeID         |       | If the trade was matched against the contra party's trade report (where ReportingObligation = N), then this tag will contain the Control Number of the contra party's trade report (Tag 9857 will be set to "C").<br><br>If the contra party accepted the executing reporting party's trade report, or if the trade was auto-locked, then this tag will be omitted. (Tag 9857 will be set to "M"). |
| 487   | TradeReportTransType | F     | Valid values:<br>3 = Release                                                                                                                                                                                                                                                                                                                                                                       |
| 856   | TradeReportType      | F     | Valid values:<br>2 = Accept                                                                                                                                                                                                                                                                                                                                                                        |
| 573   | MatchStatus          | F     | Valid values:<br>0 = Matched                                                                                                                                                                                                                                                                                                                                                                       |
| 570   | PreviouslyReported   | Y     | Will always be set to:<br>N = No                                                                                                                                                                                                                                                                                                                                                                   |
| 55    | Symbol               | F     | Symbol from matched trade reports.                                                                                                                                                                                                                                                                                                                                                                 |
| 65    | SymbolSfx            |       | SymbolSfx from matched trade reports.                                                                                                                                                                                                                                                                                                                                                              |
| 32    | LastQty              | Y     | LastQty from matched trade reports.                                                                                                                                                                                                                                                                                                                                                                |

|      |                          |                    |               |                                                                                                                                                                                           |                                                                                                                                    |
|------|--------------------------|--------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 31   | LastPx                   |                    | Y             | LastPx from matched trade reports.                                                                                                                                                        |                                                                                                                                    |
| 75   | TradeDate                |                    | Y             | TradeDate from matched trade reports.                                                                                                                                                     |                                                                                                                                    |
| 60   | TransactTime             |                    | Y             | Time the transaction represented by this Trade Capture Report occurred (in <b>UTC/GMT</b> ). Format: YYYYMMDD-HH:MM:SS.sss                                                                |                                                                                                                                    |
| 552  | TrdCapRptSideGrp/NoSides |                    | Y             | Will always reflect the value “2” for both sides to the trade (executing party and contra party).                                                                                         |                                                                                                                                    |
| →    | 54                       | Side               | Y             | Side of trade for each party.<br>Valid values:<br>1 = Buy<br>2 = Sell                                                                                                                     |                                                                                                                                    |
| →    | 37                       | OrderID            | Y             | Required in FIX, set to NONE.                                                                                                                                                             |                                                                                                                                    |
| →    | 453                      | Parties/NoPartyIDs | F             | Will always reflect the value “1” for each side of the trade.                                                                                                                             |                                                                                                                                    |
| →    | →                        | 448                | PartyID       | F                                                                                                                                                                                         | Identifier (MPID) for the party defined in PartyRole.                                                                              |
| →    | →                        | 447                | PartyIDSource | F                                                                                                                                                                                         | Will always be set to:<br>C = Generally accepted market participant identifier (e.g. FINRA mnemonic)                               |
| →    | →                        | 452                | PartyRole     | F                                                                                                                                                                                         | PartyRoles from matched trade reports.<br>Valid values:<br>1 = Executing Firm (firm with Reporting Obligation)<br>17 = Contra Firm |
| 9857 | LockedInMethod           |                    | F             | Indicates the method of locking in the trade. Valid values:<br>M = Trade locked in by trade acceptance.<br>C = Trade locked in by trade matching.<br>L = Trade auto-locked T+1 2:30pm ET. |                                                                                                                                    |
| 797  | CopyMsgIndicator         |                    |               | Indicates whether or not this message is a drop copy of another message.<br>Valid values:<br>Y = Yes<br>N = No (default value)                                                            |                                                                                                                                    |
|      | Standard Trailer         |                    | Y             |                                                                                                                                                                                           |                                                                                                                                    |

### 5.2.9 Trade Capture Report Ack – Reject (out)

| Tag   | FIX tag name                   | Req'd | Comment                                                                                                                                                                                                           |
|-------|--------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Standard Header                | Y     | MsgType = AR                                                                                                                                                                                                      |
| 571   | TradeReportID                  | Y     | Identifier assigned by FINRA.                                                                                                                                                                                     |
| 572   | TradeReportRefID               | Y     | TradeReportID (Tag 571) from the inbound message.                                                                                                                                                                 |
| 487   | TradeReportTransType           | F     | Valid values:<br>0 = New<br>1 = Cancel<br>2 = Replace<br>4 = Reverse                                                                                                                                              |
| 856   | TradeReportType                | F     | Type of Trade Report. Shows the type of the incoming trade report.<br>Valid values:<br>0 = Submit<br>2 = <i>Accept</i><br>3 = <i>Decline</i><br>5 = Trade Correction<br>6 = Trade Report Cancel / <i>CP Break</i> |
| 150   | ExecType                       | Y     | This field signals whether the TCR was accepted or rejected.<br>Valid values:<br>8 = Rejected                                                                                                                     |
| 939   | TradeRptStatus                 | F     | Valid values:<br>1 = Rejected                                                                                                                                                                                     |
| 55    | Symbol                         | F     | Ticker symbol submitted.                                                                                                                                                                                          |
| 65    | SymbolSfx                      |       | Symbol suffix, if submitted.                                                                                                                                                                                      |
| 751   | TradeReportRejectReason        | Y     | Reason code Trade Capture Report was rejected by FINRA. See section 6.3.                                                                                                                                          |
| 58    | Text                           | Y     | Contains the actual error message describing the TradeReportRejectReason. See section 6.3.                                                                                                                        |
| 22015 | BranchOfficeCodeSequenceNumber |       | This field contains the one to eight alphabetic Code and Sequence character Branch Office Code Sequence Number of the input message, if one was submitted.                                                        |
|       | Standard Trailer               | Y     |                                                                                                                                                                                                                   |

## 6 Custom values and user defined fields

This chapter details how this solution deviates from standard FIX 4.4. While great care has been taken to conform to the standard, a number of deviations are unavoidable to support all mechanisms provided by the host. Wherever later versions of FIX (up to version 5.0 SP2) provide the missing functionality, we have chosen to use that.

The deviations come in two forms, added fields and added values to existing fields. In addition, a list of the reject codes and associated reasons returned in the Trade Capture Report ACK – Reject (section 5.2.9) has been added and will be maintained going forward if more reject codes/reasons are instituted.

### 6.1 Fields added

A number of fields had to be added to standard FIX 4.4 to cover all the requirements in this solution. Wherever possible, fields from later versions of FIX (5.0 SP2) has been used. Custom fields have been added in two ranges:

- In the 22XXX-range custom fields with no representation in standard FIX has been added.
- Certain fields need to appear twice; once with the original values, and once with the new values. Since the same FIX tag can't appear twice in the same message outside a repeating group, copies of the original FIX tags had to be added. They have the same data type as the "real" FIX tags, the names are prefixed with "Orig", and in some cases, the tag number prefixed with 20.

The following fields have been added to FIX 4.4:

| Tag   | FIX tag name                   | FIX 5.0 | Comment |
|-------|--------------------------------|---------|---------|
| 1003  | TradeID                        | Yes     |         |
| 1015  | AsOfIndicator                  | Yes     |         |
| 1042  | SecondaryFirmTradeID           | Yes     |         |
| 9854  | OverrideFlag                   | No      |         |
| 1126  | OrigTradeID                    | Yes     |         |
| 22001 | TradeModifier1                 | No      |         |
| 22002 | TradeModifier2                 | No      |         |
| 22003 | TradeModifier3                 | No      |         |
| 22004 | TradeModifier4                 | No      |         |
| 22005 | SpecialProcessingFlag          | No      |         |
| 22007 | ExecutionTime                  | No      |         |
| 22009 | PreparationTime                | No      |         |
| 22011 | ControlDate                    | No      |         |
| 22012 | OrigControlDate                | No      |         |
| 22013 | LockedInIndicator              | No      |         |
| 22015 | BranchOfficeCodeSequenceNumber | No      |         |
| 22018 | TradeModifier4Time             | No      |         |
| 22020 | FINRATradeModifier3            | No      |         |
| 22022 | ServiceBureauPrepTime          | No      |         |
| 22024 | ShortSaleIndicator             | No      |         |
| 22027 | MatchControlDate               | No      |         |
| 22028 | MatchTradeID                   | No      |         |
| 22029 | ReferenceReportingFacility     | No      |         |
| 22030 | ReportingObligation            | No      |         |
| 22031 | FINRATradeModifier4            | No      |         |

|       |                     |    |  |
|-------|---------------------|----|--|
| 22032 | FINRATradeModifier2 | No |  |
| 22033 | TradeModifier2Time  | No |  |

## 6.2 Enumerations added

| Enum | Enum description                     | Tag | Comment                                                                                            |
|------|--------------------------------------|-----|----------------------------------------------------------------------------------------------------|
| 83   | Clearing Firm Number                 | 452 | PartyRole                                                                                          |
| 9    | Special and Step In trade            | 81  | Additional values to support Step In reporting as well as reporting Step Outs with Section 3 fees. |
| A    | Step Out trade with Fees             |     |                                                                                                    |
| B    | Special and Step Out trade with Fees |     |                                                                                                    |

## 6.3 Reject Reason Table

This table contains the Reject Reason Code (Tag 751) and associated Reject Reason (Tag 58) returned on rejected entries. This list will be subject to updates as necessary.

| Tag 751 | Tag 58                        |
|---------|-------------------------------|
| 2       | SYMBOL IS MISSING             |
| 3       | SYMBOLSFX IS MISSING          |
| 4       | SECURITY NOT FOUND            |
| 5       | INVALID CONTROL DATE          |
| 6       | INVALID CONTROL ID            |
| 7       | INVALID FORMAT                |
| 8       | UNKNOWN FUNCTION              |
| 9       | TYPE IS MISSING               |
| 10      | INVALID TYPE                  |
| 17      | INVALID RPID                  |
| 18      | INVALID DATE                  |
| 19      | INVALID PRICE                 |
| 20      | INVALID PRICE OVERRIDE        |
| 22      | INVALID STATUS                |
| 23      | INVALID SIDE                  |
| 24      | NOT WITHIN ALLOWABLE TIME     |
| 25      | PRICE OUT OF RANGE            |
| 26      | PRICE OUT OF OVERRIDE RANGE   |
| 27      | TERMINAL NOT AUTHORIZED       |
| 29      | INVALID TIME                  |
| 31      | RPID REQUIRED                 |
| 32      | INVALID PREP TIME             |
| 33      | INVALID SVC BUREAU PREP TIME  |
| 34      | INVALID TRADE MODIFIER 2 TIME |
| 36      | INVALID PRICE TYPE            |
| 37      | INVALID REVERSAL DATE         |
| 38      | INVALID CLEARING PRICE        |
| 39      | INVALID REVERSAL ID           |
| 40      | DUPLICATE CONTROL DATE/ID     |

|     |                                            |
|-----|--------------------------------------------|
| 42  | INVALID FUNCTION CODE                      |
| 43  | INVALID ORIGINAL CONTROL DATE              |
| 44  | INVALID EXECUTION DATE                     |
| 45  | ONLY SAME-DAY CORRECTION PERMITTED         |
| 46  | ONLY SAME-DAY CANCEL PERMITTED             |
| 48  | PRICE REQUIRED                             |
| 50  | INVALID PUBLISH INDICATOR                  |
| 55  | INVALID SLD TIME                           |
| 59  | INVALID PUBLISH INDICATOR FOR PROCESS CODE |
| 62  | INVALID SYMBOL                             |
| 63  | INVALID SYMBOL SUFFIX                      |
| 67  | INVALID CLEARING NUMBER                    |
| 68  | SECURITY NOT FOUND                         |
| 70  | NO RECORDS FOUND                           |
| 71  | RPID MISMATCH                              |
| 72  | TRADE NOT FOUND                            |
| 73  | TRADE NOT MATCH ELIGIBLE                   |
| 74  | INVALID DK REASON                          |
| 75  | DK NOT ALLOWED AFTER AUTO LOCK TIME        |
| 76  | AFFIRM NOT ALLOWED AFTER AUTO LOCK TIME    |
| 77  | INVALID MATCH CONTROL DATE                 |
| 78  | INVALID VOLUME ENTERED                     |
| 79  | CONTRA TRADE NOT FOUND                     |
| 80  | INVALID MATCH CONTROL ID                   |
| 81  | INVALID AS-OF                              |
| 82  | RPID NOT AUTHORIZED                        |
| 83  | CPID NOT AUTHORIZED                        |
| 85  | INVALID RPID GIVE-UP                       |
| 86  | INVALID CP GIVE-UP                         |
| 87  | INVALID ORIGINAL CONTROL NUMBER            |
| 88  | RPID GIVE-UP NOT AUTHORIZED                |
| 89  | CPID GIVE-UP NOT AUTHORIZED                |
| 90  | MUST ENTER SECURITY SYMBOL OR CUSIP        |
| 91  | NOT A CROSS TRADE                          |
| 92  | INVALID SECURITY                           |
| 93  | INVALID CONTRA SIDE                        |
| 96  | INVALID TRADE MODIFIER 4 TIME              |
| 97  | INVALID P/A                                |
| 98  | CPID REQUIRED                              |
| 99  | INVALID CLEARING FLAG                      |
| 103 | SECURITY NOT ADF AUTHORIZED                |
| 104 | NO CONTROL NUMBER                          |
| 105 | TRADE ALREADY CANCELED                     |
| 106 | INVALID CONTRA CLIENT REFNUM               |
| 107 | MM DID NOT ENTER TRADE                     |
| 108 | INVALID BRANCH SEQUENCE NUMBER             |
| 109 | INVALID CONTRA BRANCH SEQUENCE NUMBER      |
| 110 | INVALID AS-OF DATE                         |

|     |                                                           |
|-----|-----------------------------------------------------------|
| 111 | INVALID REVERSAL FLAG                                     |
| 112 | NOT AN OPEN TRADE                                         |
| 113 | INVALID CPID                                              |
| 118 | INVALID TRADE DATE FOR CHANGED CUSIP                      |
| 120 | INVALID BREAK INDICATOR                                   |
| 124 | INVALID AGU                                               |
| 125 | CORRECTION MAY NOT CHANGE REVERSAL FLAG                   |
| 126 | INVALID RP/CP USA                                         |
| 127 | INVALID CP/CPGU USA                                       |
| 128 | INVALID RP/RPGU USA                                       |
| 129 | TRADE SUB TYPE MUST BE TRADETHROUGH                       |
| 130 | TTE REASON REQUIRED                                       |
| 131 | INVALID PUBLISH INDICATOR FOR ODD LOT                     |
| 134 | INVALID PROCESS CODE                                      |
| 135 | INVALID SHORT SALE INDICATOR                              |
| 136 | INVALID CLEARING RELATIONSHIP                             |
| 137 | FINRA CALCULATES DIFFERENT TRADEMOD3                      |
| 138 | EXECUTION TIME GREATER THAN TRADE REPORT TIME             |
| 139 | NOT TRADE SUBMITTER                                       |
| 140 | FINRA CALCULATES DIFFERENT PUBLISH INDICATOR              |
| 141 | INVALID REPORTING FACILITY                                |
| 143 | CORRECTION MAY NOT CHANGE AS-OF FLAG                      |
| 144 | CORRECTION MAY NOT CHANGE CONTRA MPID                     |
| 145 | CORRECTION MAY NOT CHANGE CONTRA GIVEUP                   |
| 146 | CORRECTION MAY NOT CHANGE CONTRA CLEARING NUMBER          |
| 147 | INVALID MATCH STATUS                                      |
| 148 | INVALID ROLE                                              |
| 150 | GIVE UP REQUIRED                                          |
| 151 | EXPLICIT FEE MUST BE SUBMITTED FOR CLEARING               |
| 152 | EXPLICIT FEE NOT ALLOWED                                  |
| 153 | INVALID REJECT CONTROL NUMBER                             |
| 154 | ALREADY CLOSED OR REPAIRED                                |
| 155 | FUNCTION NOT SUBJECT TO REPAIR                            |
| 158 | INVALID EXECUTION DATE / SCRTY EFFECTIVE DATE COMBINATION |
| 159 | EXPLICIT FEE AGREEMENT NOT FOUND                          |
| 160 | ISSUE NOT ACTIVE                                          |
| 161 | INVALID LOCKED-IN STATUS                                  |
| 162 | COMPLIANCE ID REQUIRED                                    |
| 163 | CONTRA COMPLIANCE ID REQUIRED                             |
| 164 | CONTRA COMPLIANCE ID NOT ALLOWED                          |
| 165 | CANNOT LINK TO ORIGINAL TRADE                             |
| 166 | SPECIAL PROCESSING INDICATOR                              |
| 167 | MPID NOT ACTIVE                                           |
| 168 | SELLER DAYS REQUIRED                                      |
| 169 | INVALID SELLER DAYS                                       |
| 170 | TRADING NOT ALLOWED                                       |
| 171 | NSDQ SUBPRODUCT ENTRY SUSPENDED                           |
| 172 | AMEX SUBPRODUCT ENTRY SUSPENDED                           |

|     |                                                 |
|-----|-------------------------------------------------|
| 173 | ARCA SUBPRODUCT ENTRY SUSPENDED                 |
| 174 | BATS SUBPRODUCT ENTRY SUSPENDED                 |
| 175 | NYSE SUBPRODUCT ENTRY SUSPENDED                 |
| 176 | FIX PROTOCOL ENTRY SUSPENDED                    |
| 177 | TRADE ENTRY SUSPENDED, EMC HALT                 |
| 178 | INVALID EXECUTION TIME                          |
| 179 | MPID NOT AUTHORIZED                             |
| 180 | QUANTITY REQUIRED                               |
| 181 | INVALID TRADE MODIFIER 1                        |
| 182 | INVALID TRADE MODIFIER 2                        |
| 183 | INVALID TRADE MODIFIER 3                        |
| 184 | INVALID TRADE MODIFIER 4                        |
| 185 | CONTRA P/A REQUIRED                             |
| 187 | INVALID SETTLEMENT DATE                         |
| 188 | INVALID PREPARATION DATE                        |
| 189 | INVALID CONTRA CLIENT TRADE IDENTIFIER          |
| 190 | INVALID SPECIAL PROCESSING FLAG                 |
| 191 | INVALID LOCKED-IN INDICATOR                     |
| 192 | INVALID REPORTING OBLIGATION                    |
| 193 | INVALID CANCEL-BREAK INDICATOR                  |
| 195 | WEB PROTOCOL ENTRY SUSPENDED                    |
| 196 | INVALID RPID/CPID COMBINATION                   |
| 197 | ENTERING MPID IS HALTED                         |
| 198 | RPID IS HALTED                                  |
| 199 | REPORTING PARTY GIVEUP IS HALTED                |
| 200 | ISSUE NOT ACTIVE OR INACTIVE                    |
| 201 | EXECUTING PARTY NOT AUTHORIZED                  |
| 202 | INVALID TRADE OBLIGATION FOR AFFIRM             |
| 203 | INVALID LOCKED-IN STATUS FOR SPECIFIED TRADE(S) |
| 997 | INVALID CONTRA CLIENT REFERENCE NUMBER          |
| 998 | INVALID CLIENT REFERENCE NUMBER                 |
| 999 | CAN NOT BE PROCESSED AS SUBMITTED               |

## 7 Limitations

### 7.1 Field lengths and data types

All fields in this specification adhere to the standard FIX 4.4 field definitions. Please refer to <http://fixprotocol.org/specifications/FIX.4.4> for details.

In addition, this solution imposes the following restrictions on fields:

| Tag   | FIX tag name                   | Comment                                                                               |
|-------|--------------------------------|---------------------------------------------------------------------------------------|
| 448   | PartyID                        | PartyID. Max valid 4 character MPIDs.                                                 |
| 571   | TradeReportID                  | Limited to 20 characters                                                              |
| 572   | TradeReportRefID               | Limited to 20 characters                                                              |
| 1042  | SecondaryFirmTradeID           | Limited to 20 characters                                                              |
| 32    | LastQty                        | Format: Max eight digits.                                                             |
| 31    | LastPx                         | Format: nnnnnn.nnnnnn (for decimal unit price)<br>nnnnnnnnnn.nn (for contract amount) |
| 1003  | TradeID                        | Max ten digits.                                                                       |
| 1126  | OrigTradeID                    | Max ten digits.                                                                       |
| 523   | PartySubID                     | Max 8 characters                                                                      |
| 22013 | LockedInIndicator              | FIX Data type: Boolean                                                                |
| 22015 | BranchOfficeCodeSequenceNumber | FIX Data type: String                                                                 |
| 376   | ComplianceID                   | Max 20 characters.                                                                    |

## 8 Field Definitions

### 8.1 Field Descriptions and Values

The following contains the general definitions for all fields that are contained within the ADF message text. Some field definitions are also covered in sections 4.5 and 4.6 of this document. Any specific information that is relevant to a particular transaction type can be found in the description of the transaction. In addition, these definitions apply to both ADF Input and Output messages.

| Tag   | Field                 | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 22005 | SpecialProcessingFlag | <p>This field allows a trade to be marked for special processing. Where noted, use of this field for special processing purposes <b>MUST</b> be authorized by FINRA Operations prior to submission of trades. Authorization will be granted on a trade by trade basis. Valid values are:</p> <p>N = No special processing (<i>or this tag may be omitted</i>)<br/> Y = Position Transfer (<i>AUTHORIZATION REQUIRED</i>)<br/> O = Clearing Only/ Non Regulatory</p> <p><u>Note: the Clearing-Only, Non-Regulatory Report is used by firms for a previously executed trade for which a tape report has been submitted to ADF, or for the offsetting portion of a riskless principal or agency transaction for which a non-tape, non-clearing report already has been submitted to ADF satisfying FINRA regulatory requirements. Trades submitted with this indicator may not be submitted with Publish Indicator = Y. Please refer to FINRA Rule Filing 2015-035 for more information on the use of this value.</u></p> <p><del>C</del>—Clearing Copy</p> |
| 54    | Side                  | <p>Required. Identifies the side of the trade under the corresponding party role. Valid values are:</p> <p>1 = Buy<br/> 2 = Sell<br/> 8 = Cross (internalized trade)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 22024 | ShortSaleIndicator    | <p>Indicates whether the trade is a short sale or short sale exempt trade. Valid values are:</p> <p>S = Short Sale<br/> E = Short Sale Exempt</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 32    | LastQty               | <p>8 digit numeric field representing the actual number of shares traded (<b>please note the ADF system will only allow a maximum quantity of 99,999,999 shares to be reported. Trades involving a quantity greater than this amount must be broken into multiple trade reports</b>). Required field.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 55    | Symbol                | <p>A required field. Up to fourteen alphanumeric character security identifier. <b>Please note: Symbol CANNOT be changed on a correction. In order to change the security on a previously submitted trade report, firms must cancel the original trade and submit a new trade with the correct Symbol.</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 65    | SymbolSfx             | <p>An optional field. Up to seven alphanumeric character suffix assigned to the security that provides additional information regarding that security (e.g., preferred, warrants, etc.)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 31    | LastPx                | <p>A required maximum 13 character field which indicates the price at which the security traded. Can be entered as a decimal unit price or a contract amount, based on Price Type. Formats (‘v’ = <i>decimal point</i>) :</p> <p>Decimal Unit (PriceType = 98): 999999v999999<br/> Contract Amount (PriceType = 99): 9999999999v99</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 423   | PriceType             | <p>Required field. Type of price submitted. Valid values are:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

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| Tag   | Field                                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                                                | 98 = Decimal Unit Amount<br>99 = Contract Amount                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 9854  | OverrideFlag                                   | Used to indicate that the entered price is valid although it may fall outside the reasonability check made by the system. The override should not be used on initial submission; used only after a trade report has been rejected for having a price that is considered out of range.                                                                                                                                                                                                        |
| 9822  | ClearingPrice                                  | Price inclusive of Explicit Fee. Cannot equal the trade price. Can be entered as a maximum 13 character decimal unit price or contract amount, based on Price Type used. Formats ('v' = <i>decimal point</i> ):<br>Decimal Unit (PriceType = 98): 999999v999999<br>Contract Amount (PriceType = 99): 9999999999v99                                                                                                                                                                           |
| 22001 | TradeModifier1                                 | Settlement modifiers. Valid values are:<br>C = Cash (same day) settlement<br>N = Next Day settlement<br>R = Seller's Option<br>0 = regular (T+3) settlement ( <i>or tag may be omitted</i> )                                                                                                                                                                                                                                                                                                 |
| 855   | SecondaryTrdType<br>(aka Seller's Option Days) | Required days to settlement when Trade Modifier 1 = R. Valid values are 02, 04 – 60, otherwise this tag must be omitted.                                                                                                                                                                                                                                                                                                                                                                     |
| 22002 | TradeModifier2                                 | Rule 611 Trade Thru Exempt detail sale condition. Valid values:<br>2 = FINRA Self Help Indicator<br>3 = Intermarket Sweep Outbound (ISO)<br>4 = Derivatively Priced<br>6 = Intermarket Sweep Inbound<br>7 = Qualified Contingent Trade Indicator<br>8 = FINRA Subpenny Indicator<br>E = Error Correction<br>P = Print Protection                                                                                                                                                             |
| 22033 | TradeModifier2Time                             | The time associated with an Intermarket Sweep Outbound trade. Can only be submitted if Trade Modifier 2 = 3.<br>Format: HHMMSSsss.                                                                                                                                                                                                                                                                                                                                                           |
| 22003 | TradeModifier3                                 | Time modifiers to be submitted by the reporting party identifying Extended hours/Late sale conditions, when applicable, otherwise the tag may be omitted. Valid values are:<br>T = Trade executed outside normal market hours<br>Z = Trade executed during normal market hours and reported late<br>U = Trade executed outside normal market hours and reported late<br>Note: FINRA will also determine and generate time modifiers and append accordingly on the outbound acknowledgement.  |
| 22004 | TradeModifier4                                 | SRO detail sale condition. Required modifier if a trade falls under one of the following transaction types, otherwise omit the tag:<br>W = Weighted Average Price<br>S = Stopped Stock<br>P = Prior Reference Price<br>X = Trade related to option exercises<br>R = Trade price unrelated to the current market<br>Note: Values S and P may only be submitted if the associated SS or PRP time is more than 10 seconds prior to both the execution time and the time the trade is reported.. |
| 22018 | TradeModifier4Time                             | The time associated with a Prior Reference Price or Stopped Stock trade (May only be submitted when Tag 22004 TradeModifier4 = S (Stopped Stock) or P (Prior Reference Price) and the Modifier 4 Time field is more than 10 seconds prior to both the execution time of the trade and the time                                                                                                                                                                                               |

| Tag   | Field               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                     | the trade is reported, otherwise the field must be left blank..<br>Format: HHMMSSsss.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 528   | OrderCapacity       | A one character Capacity Indicator field denoting whether the firm is acting as “P” for principal, “A” for agency or “R” for riskless principal on this trade. Required for the Executing Firm side. Required for the Contra Firm side on Locked In (AGU/QSR) trades. Required for the Contra Firm side on non-clearing (ClearingInstruction = 97) trades (where the contra firm does not submit their version of the trade or Accept the trade alleged against them). Allowed on the Contra Firm side on Cross trades and on Customer trades.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 22030 | ReportingObligation | Required field. Indicates whether or not this trade report represents the submission from the member firm with the trade reporting obligation, as defined under FINRA Rule 6282(b). Valid values are:<br>Y = Trade reported by firm with the reporting obligation<br>N = Trade reported by firm that does not have the obligation<br><b>Note1: All Cross, Customer and AGU trades MUST be reported with ReportingObligation set to “Y”.</b><br><b>Note2: Step Out trades MUST be reported with ReportingObligation set to “Y” and Step In trades MUST be reported with ReportingObligation set to “N”.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 1015  | AsOfIndicator       | This field is used to denote whether the trade is an As-Of trade entry (i.e., executed on a prior day), or a cancel or correction of an As-Of trade. Valid values are:<br>0 = Current day trade<br>1 = As-Of (T+n) trade<br>Note: “1” is required on all Reversals. “1” is required on Corrections of prior day submissions and T-day submissions originally submitted as an As-Of trade. For Corrections of non-As-Of T-day submissions, this field must be “0” or omitted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 75    | TradeDate           | The date that the transaction was executed ( <i>aka Execution Date</i> ). For an As-of trade (As-Of Indicator = 1), the date must be T+1 or older. The format is YYYYMMDD.<br><b>Note 1: On non-As-Of trades, the Trade Date cannot be changed on a Correction submission to a different date than what was originally submitted. Firms would be required to Cancel the original trade and resubmit a new Trade Report with the intended Trade Date.</b><br><b>On As-Of trades, the Trade Date can be changed only to a date prior to the original execution date. The Trade Date cannot be changed to a date that is subsequent to the original execution date. In the case of the latter, firms would be required to Cancel the original trade and resubmit a new As-Of Trade Report with the intended Trade Date.</b><br><br><b>Note 2: Trades executed on non-business days (i.e., weekends and holidays) and trades executed greater than 365 days prior to a current day are reportable to ADF with the exact date of execution. Non-business day trades and T+365 trades cannot be marked for clearing on the submission to ADF. Non-business day trades must be reported as As-Of by 8:15am ET the next business day with the appropriate outside normal market hours modifier.</b> |
| 22007 | Execution Time      | This is a required field. A field denoting the time of execution in military time (HHMMSSsss) format where HH represents hours, MM represents minutes, SS represents seconds and sss represents milliseconds. Must represent the execution based on Eastern Time, but entered in UTC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

| Tag   | Field                                 | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                                       | <p>(GMT) under FIX protocol.</p> <p><b>Note 1: If a firm's system does not capture milliseconds, firms must submit zeros ("000") in the milliseconds portion of this timestamp.</b></p> <p><b>Note 2: On Corrections, Execution Time can be changed only to a time prior to the originally submitted execution time. Execution time cannot be changed to a time that is subsequent to the originally submitted time. In the case of the latter, firms would be required to Cancel the original trade and resubmit a new Trade Report with the intended Execution Time.</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 58    | Text                                  | An optional ten character alphanumeric Memo field.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 22013 | LockedInIndicator                     | <p>Indicates that the reporting party entering the trade report is reporting for both sides of the trade in a single trade report, as an AGU (Automatic Give Up) trade or as a QSR (Qualified Service Representative) trade. Valid values are:</p> <p style="padding-left: 40px;">A = AGU trade report<br/>Q = QSR trade report</p> <p>Firms may use the Locked-In Indicator to identify an AGU trade report when a firm trades with one of its correspondents (one-sided AGU trade), or when a firm reports a trade executed between two of its correspondents (two-sided AGU trade). A correspondent must be a FINRA member and is entered under one or both Give Up fields (on two-sided Locked-In trades). The reporting party's MPID must be the same on the RPID and CPID fields.</p> <p>Firms may use the Locked-In Indicator to identify a QSR trade report when a firm has an agreement to report on behalf of their contra party for an execution they entered into. For QSR trade reports, the RPID and CPID cannot be the same and only the Contra Party Give Up field can be used.</p> <p>A Uniform Service Agreement must be in place in order for firms to submit Locked In trade reports.</p> |
| 376   | ComplianceID<br>(aka OATS Identifier) | Required by FINRA on all trade reports where either the reporting or contra party was also required to submit an OATS Execution Report to FINRA pursuant to FINRA Rule 7450. The OATS Identifier shall be reported in Tag 376 ComplianceID. This field allows up to 20 alphanumeric characters. Allowed on Locked-In (AGU/QSR), Cross (Side = 8), and Customer (Contra Firm MPID = C) trade entries. Allowed on Trade Accepts. Allowed on trades where the contra party will not submit a matching trade or trade accept.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 64    | SettlDate                             | Optional field, for informational purposes only. Trade Modifier 1 still required for settlement other than Regular Way. Date when the trade settles. YYYYMMDD format.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 577   | ClearingInstruction                   | <p>Indicates if the trade should be forwarded to NSCC for clearing. Required. Valid values are:</p> <p style="padding-left: 40px;">0 = send to clearing<br/>97 = do not send to clearing</p> <p>Note: on AGU trades (Tag 22013 = A), this field MUST be set to "0" (send to clearing).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 852   | PublishTrdIndicator                   | Indicates that the trade should be published to the tape (disseminated). Required. Valid values are:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| Tag   | Field                                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       |                                                    | Y = report to the tape<br>N = do not report to the tape                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 81    | ProcessCode<br>(aka Special Instruction Indicator) | This field indicates if the trade falls under any of the following conditions:<br>7 = Special trade<br>3 = Step Out trade<br>8 = Special and Step Out trade<br>2 = Step In trade<br>9 = Special and Step In trade<br>A = Step Out trade with Fees (for Section 3)<br>B = Special and Step Out trade with Fees (for Section3)<br>0 = regular trade (none of the above) or tag may be omitted<br>A special trade (7), special/step out trade (8), special/step in trade (9) and special/step out trade with fees (B) instructs the NSCC not to include the trade in the CNS settlement process.                                                         |
| 9277  | Related Market Center                              | Available on transaction reports submitted through ADF such as step outs, non-tape, and riskless principal transactions, the market where the underlying transaction was reported, as applicable, otherwise omit the tag. Valid values are:<br>O = Unknown Market Center<br>U = Unspecified Multiple Market trades<br>0 = ADF<br>F = Foreign Market                                                                                                                                                                                                                                                                                                   |
| 527   | SecondaryExecID<br>(aka Trade Reference Number)    | Used to discretely tie a Media eligible trade to one or more non-Media eligible trades, e.g., same ref number used on a Media trade and on a riskless principal trade. Up to 20 characters allowed.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 22011 | ControlDate                                        | When a trade is submitted to ADF and accepted, the system will return a Control Date with the trade acknowledgement. The Control Date reflects the date when the system received and processed the trade entry. Control Date, in combination with Control Number, is required in subsequent trade cancel and correction messages to modify a trade report. Firms that elect to use their Client Trade Identifier (FirmID) to Cancel or Correct a trade (within the T through T-3 period) must still submit the Control Date assigned to the original trade report. Trade corrections will receive a new Control Date/Control Number trade identifier. |
| 1003  | TradeID<br>(aka Control Number)                    | When a trade is submitted to ADF and accepted, the system will assign a Control Number which will be returned on the trade acknowledgement. The Control Number is a 10 digit identifier of the trade, which will be unique throughout the day. Control Date, in combination with Control Number, is required in subsequent trade cancel and correction messages to modify a trade report. Trade corrections will receive a new Control Date/Control Number trade identifier. In ADF, all control numbers will start with the value "6" followed by nine sequential numeric integers.                                                                  |
| 22029 | ReferenceReporting Facility                        | Used if a participant transitions from one FINRA Reporting Facility to another and the participant needs to reverse a trade on the new reporting facility that was originally entered on the old reporting facility. This field is only available on Trade Reversals.<br>Valid values:<br>O = ORF<br>Q = FINRA/NASDAQ TRF<br>N = FINRA/NYSE TRF                                                                                                                                                                                                                                                                                                       |



## 9 Sample FIX Submissions

This section contains basic examples of various trade report types and submissions to ADF. For simplicity, only the pertinent tags are used in these examples. Firms must still refer to the input layouts specified in section 5 of this document.

### 9.1 Interdealer Trade Report – with Reporting responsibility

Where contra party is another FINRA member.

- Firm ABCD is submitting the trade and is the party with the reporting obligation.
- Firm WXYZ is ABCD's counter party.
- ABCD is the seller, WXYZ is the buyer.
- ABCD is acting in a Principal capacity.
- The trade is tape reportable and to be sent to clearing.
- The only other party identified is the reporting party's clearing firm.

| Field                | Tag=Value | Description                                                           |
|----------------------|-----------|-----------------------------------------------------------------------|
| Reporting Obligation | 22030=Y   | Firm ABCD indicates it is the firm with the responsibility to report. |
| Number of Sides      | 552=2     | Must always be set to "2" to identify the buy and sell sides.         |
| Side                 | 54=2      | Sell side group.                                                      |
| Number of Parties    | 453=2     | Indicates there are 2 parties reported on the sell side.              |
| Party ID             | 448=ABCD  | First party on the sell side identified as ABCD.                      |
| Party Role           | 452=1     | ABCD is the Executing (reporting) firm.                               |
| Party ID             | 448=1234  | Second party identified as 1234.                                      |
| Party Role           | 452=83    | 1234 is the clearing firm for ABCD.                                   |
| Order Capacity       | 528=P     | ABCD is acting in a Principal capacity.                               |
| Side                 | 54=1      | Buy side group.                                                       |
| Number of Parties    | 453=1     | Indicates there is 1 party reported on the buy side.                  |
| Party ID             | 448=WXYZ  | First party on the buy side identified as WXYZ.                       |
| Party Role           | 452=17    | WXYZ is the Contra firm.                                              |
| Clearing Instruction | 577=0     | Send trade to clearing.                                               |
| Publish Indicator    | 852=Y     | Send trade to the tape.                                               |

## 9.2 Interdealer Trade Report – with no Reporting responsibility

Where contra party is another FINRA member.

- Firm WXYZ is submitting the trade and is NOT the party with the reporting obligation.
- Firm ABCD is WXYZ's counter party.
- WXYZ is the buyer, ABCD is the seller.
- WXYZ is acting in an Agent capacity.
- The trade is not tape reportable but is to be sent to clearing.
- The only other party identified is the reporting party's clearing firm.

| Field                | Tag=Value | Description                                                               |
|----------------------|-----------|---------------------------------------------------------------------------|
| Reporting Obligation | 22030=N   | Firm WXYZ indicates it is not the firm with the responsibility to report. |
| Number of Sides      | 552=2     | Must always be set to "2" to identify the buy and sell sides.             |
| Side                 | 54=1      | Buy side group.                                                           |
| Number of Parties    | 453=2     | Indicates there are 2 parties reported on the buy side.                   |
| Party ID             | 448=WXYZ  | First party on the buy side identified as WXYZ.                           |
| Party Role           | 452=1     | WXYZ is the Executing (reporting) firm.                                   |
| Party ID             | 448=5678  | Second party identified as 5678.                                          |
| Party Role           | 452=83    | 5678 is the clearing firm for WXYZ.                                       |
| Order Capacity       | 528=A     | WXYZ is acting in an Agent capacity.                                      |
| Side                 | 54=2      | Sell side group.                                                          |
| Number of Parties    | 453=1     | Indicates there is 1 party reported on the sell side.                     |
| Party ID             | 448=ABCD  | First party on the sell side identified as ABCD.                          |
| Party Role           | 452=17    | ABCD is the Contra firm.                                                  |
| Clearing Instruction | 577=0     | Send trade to clearing.                                                   |
| Publish Indicator    | 852=N     | Do not send trade to the tape.                                            |

Example 9.2 would be the matching submission to example 9.1. This would be the trade report submitted from the buyer's perspective.

### 9.3 Customer Trade Report

Where contra party is not a FINRA member.

- Firm ABCD is submitting the trade.
- A non FINRA member is ABCD's counter party.
- ABCD is the buyer, non-member is the seller.
- ABCD is acting in a Principal capacity and knows the contra party is also acting as Principal.
- The trade is tape reportable but is not sent to clearing.

| Field                | Tag=Value | Description                                                                                               |
|----------------------|-----------|-----------------------------------------------------------------------------------------------------------|
| Reporting Obligation | 22030=Y   | On trade reports against a non-FINRA member, the reporting party always has the responsibility to report. |
| Number of Sides      | 552=2     | Must always be set to "2" to identify the buy and sell sides.                                             |
| Side                 | 54=1      | Buy side group.                                                                                           |
| Number of Parties    | 453=1     | Indicates there is 1 party reported on the buy side.                                                      |
| Party ID             | 448=ABCD  | First party on the buy side identified as ABCD.                                                           |
| Party Role           | 452=1     | ABCD is the Executing (reporting) firm.                                                                   |
| Order Capacity       | 528=P     | ABCD is acting in a Principal capacity.                                                                   |
| Side                 | 54=2      | Sell side group.                                                                                          |
| Number of Parties    | 453=1     | Indicates there is 1 party reported on the sell side.                                                     |
| Party ID             | 448=C     | First party on the sell side identified as "C", the standard mnemonic for a non-FINRA member (Customer).  |
| Party Role           | 452=17    | C is the Contra firm.                                                                                     |
| Order Capacity       | 528=P     | C is acting in a Principal capacity.                                                                      |
| Clearing Instruction | 577=97    | Do not send trade to clearing.                                                                            |
| Publish Indicator    | 852=Y     | Send trade to the tape.                                                                                   |

All Customer trades must be reported as Reporting Obligation = Y, and not for Clearing. On Customer trades, the reporting party is allowed to submit the contra Capacity, and Compliance ID (OATS Identifier) if applicable.

## 9.4 Cross Trade Report

Where a trade is internalized or crossed between a FINRA members two customers.

- Firm ABCD is submitting the trade.
- ABCD is acting in an Agent capacity on both sides of the cross.
- The trade is tape reportable but is not sent to clearing.

| Field                | Tag=Value | Description                                                                      |
|----------------------|-----------|----------------------------------------------------------------------------------|
| Reporting Obligation | 22030=Y   | On all Cross trade reports, the reporting obligation must always be set to "Y".  |
| Number of Sides      | 552=2     | Must always be set to "2" on all Cross trades to report both sides' information. |
| Side                 | 54=8      | First cross group.                                                               |
| Number of Parties    | 453=1     | Indicates there is 1 party reported on the first cross side.                     |
| Party ID             | 448=ABCD  | First party identified as ABCD.                                                  |
| Party Role           | 452=1     | ABCD is the Executing (reporting) firm.                                          |
| Order Capacity       | 528=A     | ABCD is acting in an Agent capacity.                                             |
| Side                 | 54=8      | Second cross group.                                                              |
| Number of Parties    | 453=1     | Indicates there is 1 party reported on the second cross side.                    |
| Party ID             | 448=ABCD  | On cross trades, the reporting party and contra firm must be the same.           |
| Party Role           | 452=17    | ABCD is the Contra firm.                                                         |
| Order Capacity       | 528=A     | ABCD is acting in an Agent capacity.                                             |
| Clearing Instruction | 577=97    | Do not send trade to clearing.                                                   |
| Publish Indicator    | 852=Y     | Send trade to the tape.                                                          |

All Cross trades must be reported as Reporting Obligation = Y, and not for Clearing. Publish Indicator may be set to Y or N. On Cross trades, the reporting party must submit the contra Capacity, and is allowed to submit the Compliance ID (OATS Identifier) if applicable.

## 9.5 AGU Trades

Where reporting party is executing against and submitting for another FINRA member.

- Firm EFGH is submitting the trade.
- Firm IJKL is EFGH's counter party and EFGH is also authorized to submit for IJKL.
- EFGH is the buyer, IJKL is the seller and the party with the reporting obligation.
- EFGH is acting in an Agent capacity, IJKL is acting in a Principal capacity.
- The trade is tape reportable and is to be sent to clearing.
- The other parties identified are both firms' clearing firms.

| Field                | Tag=Value | Description                                                                   |
|----------------------|-----------|-------------------------------------------------------------------------------|
| Reporting Obligation | 22030=Y   | On all AGU trade reports, the reporting obligation must always be set to "Y". |
| Number of Sides      | 552=2     | Must always be set to "2" to identify the buy and sell sides.                 |
| Side                 | 54=1      | Buy side group.                                                               |
| Number of Parties    | 453=2     | Indicates there are 2 parties reported on the buy side.                       |
| Party ID             | 448=EFGH  | First party identified as EFGH.                                               |
| Party Role           | 452=17    | EFGH is the Contra firm.                                                      |
| Party ID             | 448=5678  | Second party identified as 5678.                                              |
| Party Role           | 452=83    | 5678 is the clearing firm for EFGH.                                           |
| Order Capacity       | 528=A     | EFGH is acting in an Agent capacity.                                          |
| Side                 | 54=2      | Sell side group.                                                              |
| Number of Parties    | 453=3     | Indicates there are 3 parties reported on the sell side.                      |
| Party ID             | 448=EFGH  | First party on the sell side identified as EFGH.                              |
| Party Role           | 452=1     | EFGH is the Executing (reporting) firm.                                       |
| Party ID             | 448=IJKL  | Second party identified as IJKL.                                              |
| Party Role           | 452=14    | IJKL is the Giveup Firm, i.e., EFGH is giving up IJKL.                        |
| Party ID             | 448=1234  | Third party identified as 1234.                                               |
| Party Role           | 452=83    | 1234 is the clearing firm for IJKL.                                           |
| Order Capacity       | 528=P     | IJKL is acting in a Principal capacity.                                       |
| Locked In Indicator  | 22013=A   | Indicates the trade report is an AGU trade.                                   |
| Clearing Instruction | 577=0     | Send trade to clearing.                                                       |
| Publish Indicator    | 852=Y     | Send trade to the tape.                                                       |

All AGU trades must be reported as Reporting Obligation = Y, and must be set for Clearing. Publish Indicator may be set to Y or N. On AGU trades, the reporting party MPID must be the same as the contra party MPID, and the Give up party can be on either side. In the above case, since the Give up Firm has the reporting responsibility, it is included in the nested group of the executing party role. On all AGU trades, the contra Capacity must be submitted, and the reporting firm is allowed to submit the Compliance ID (OATS Identifier) if applicable.

Note: A Uniform Service Agreement (USA) is required in order to submit AGU trades on behalf of reported parties.

## 9.6 Give Up Trades

Where reporting party is submitting for a FINRA member who executed against another FINRA member.

- Firm EFGH is submitting the trade.
- EFGH is authorized to submit for IJKL, who executed a trade against WXYZ.
- IJKL is the buyer, WXYZ is the seller and the party with the reporting obligation.
- IJKL is acting in a Principal capacity.
- The trade is not tape reportable but is to be sent to clearing.

| Field                | Tag=Value | Description                                                                                  |
|----------------------|-----------|----------------------------------------------------------------------------------------------|
| Reporting Obligation | 22030=N   | Firm EFGH, giving up IJKL, indicates IJKL is not the firm with the responsibility to report. |
| Number of Sides      | 552=2     | Must always be set to "2" to identify the buy and sell sides.                                |
| Side                 | 54=1      | Buy side group.                                                                              |
| Number of Parties    | 453=2     | Indicates there are 2 parties reported on the buy side.                                      |
| Party ID             | 448=EFGH  | First party identified as EFGH.                                                              |
| Party Role           | 452=1     | EFGH is the Executing/reporting firm.                                                        |
| Party ID             | 448=IJKL  | Second party identified as IJKL.                                                             |
| Party Role           | 452=14    | IJKL is the Giveup firm.                                                                     |
| Order Capacity       | 528=P     | IJKL is acting in a Principal capacity.                                                      |
| Side                 | 54=2      | Sell side group.                                                                             |
| Number of Parties    | 453=1     | Indicates there is 1 party reported on the sell side.                                        |
| Party ID             | 448=WXYZ  | First party on the sell side identified as WXYZ.                                             |
| Party Role           | 452=17    | WXYZ is the Contra firm.                                                                     |
| Clearing Instruction | 577=0     | Send trade to clearing.                                                                      |
| Publish Indicator    | 852=N     | Do not send trade to the tape.                                                               |

Give up trades may be reported as Reporting Obligation = Y or N depending on the reporting responsibility of the Giveup firm. Giveup trades can be set to Clear or not, can be set to Publish or not. The Giveup firm's Capacity must be submitted, and the reporting firm is allowed to submit the Giveup firm's Compliance ID (OATS Identifier) if applicable.

Note: A Uniform Service Agreement (USA) is required in order to giveup firms on a trade report.

## 9.7 QSR Trades

Where reporting party is executing against and submitting for another FINRA member using the NSCC QSR agreement.

- Firm EFGH is submitting the trade.
- Firm IJKL is EFGH's counter party and EFGH is also authorized to submit for IJKL.
- EFGH is the seller and the party with the reporting obligation, IJKL is the buyer.
- EFGH is acting in an Agent capacity, IJKL is acting in a Principal capacity.
- The trade is tape reportable and is to be sent to clearing.
- The other parties identified are both firms' clearing firms.

| Field                | Tag=Value | Description                                                           |
|----------------------|-----------|-----------------------------------------------------------------------|
| Reporting Obligation | 22030=Y   | Firm EFGH indicates it is the firm with the responsibility to report. |
| Number of Sides      | 552=2     | Must always be set to "2" to identify the buy and sell sides.         |
| Side                 | 54=2      | Sell side group.                                                      |
| Number of Parties    | 453=2     | Indicates there are 2 parties reported on the sell side.              |
| Party ID             | 448=EFGH  | First party identified as EFGH.                                       |
| Party Role           | 452=1     | EFGH is the Executing/reporting firm.                                 |
| Party ID             | 448=1234  | Second party identified as 1234.                                      |
| Party Role           | 452=83    | 1234 is the Clearing firm for EFGH.                                   |
| Order Capacity       | 528=A     | EFGH is acting in an Agent capacity.                                  |
| Side                 | 54=1      | Buy side group.                                                       |
| Number of Parties    | 453=2     | Indicates there are 2 parties reported on the buy side.               |
| Party ID             | 448=IJKL  | First party on the sell side identified as IJKL.                      |
| Party Role           | 452=17    | IJKL is the Contra firm.                                              |
| Party ID             | 448=5678  | Second party on the sell side identified as 5678.                     |
| Party Role           | 452=83    | 5678 is the Clearing firm for IJKL.                                   |
| Locked In Indicator  | 22013=Q   | Indicates the trade report is a QSR trade.                            |
| Clearing Instruction | 577=0     | Send trade to clearing.                                               |
| Publish Indicator    | 852=Y     | Send trade to the tape.                                               |

QSR trades may be reported as Reporting Obligation = Y or N depending on the role of the reporting party. QSR trades may be set to Clear or not. Publish Indicator may be set to Y or N. On QSR trades, a give up on the contra side group is allowed, if applicable. On all QSR trades, the contra Capacity must be submitted, and the reporting firm is allowed to submit the Compliance ID (OATS Identifier) if applicable.

Note: A Uniform Service Agreement (USA) is required in order to submit QSR trades on behalf of reported parties.

## 9.8 Step In / Step Out Trades

When two FINRA members are reporting a step out trade.

- Firm MNOP is submitting the trade.
- Firm QRST is MNOP's counter party.
- MNOP is stepping out to QRST and is the the seller, QRST is the buyer (and stepping in).
- MNOP is acting in a Principal capacity,
- The trade is to be sent to clearing.

| Field                | Tag=Value | Description                                                                                    |
|----------------------|-----------|------------------------------------------------------------------------------------------------|
| Reporting Obligation | 22030=Y   | Firm MNOP as the part stepping out indicates it is the firm with the responsibility to report. |
| Number of Sides      | 552=2     | Must always be set to "2" to identify the buy and sell sides.                                  |
| Side                 | 54=2      | Sell side group.                                                                               |
| Number of Parties    | 453=2     | Indicates there are 2 parties reported on the sell side.                                       |
| Party ID             | 448=MNOP  | First party identified as MNOP.                                                                |
| Party Role           | 452=1     | MNOP is the Executing/reporting firm.                                                          |
| Party ID             | 448=1234  | Second party identified as 1234.                                                               |
| Party Role           | 452=83    | 1234 is the Clearing firm for MNOP.                                                            |
| Order Capacity       | 528=P     | MNOP is acting in a Principal capacity.                                                        |
| Side                 | 54=1      | Buy side group.                                                                                |
| Number of Parties    | 453=1     | Indicates there is 1 party reported on the buy side.                                           |
| Party ID             | 448=QRST  | First party on the sell side identified as QRST.                                               |
| Party Role           | 452=17    | QRST is the Contra firm.                                                                       |
| Process Code         | 81=3      | Indicates the trade report is a Step Out trade.                                                |
| Clearing Instruction | 577=0     | Send trade to clearing.                                                                        |
| Publish Indicator    | 852=N     | Do not send trade to the tape.                                                                 |

The firm stepping out must always set Reporting Obligation = Y. Step Out trades are clearing transactions and must be set to Clear. Step Out trades are non-tape reportable and Publish Indicator must be set to N.

For the firm stepping in, the above tags would be used with the following exceptions:

- Tag 22030=N (firm stepping in must always set this field to N).
- Firm stepping in would identify itself as the executing firm (Tag 452=1) and the other side as the contra firm (Tag 452=17), and report under the proper Side group.
- Tag 81=2 (indicates the submission is a Step In trade).

Step in and Step Out trades are matched against each other and sent to clearing by ADF.

## Revision History

| Revision | Date       | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.0      | 8/26/2013  | <ul style="list-style-type: none"> <li>Baseline version.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1.1      | 10/30/2013 | <ul style="list-style-type: none"> <li>Amended the amount of trade data history ADF will maintain online from 5 rolling business days to 4 rolling business days.</li> <li>Removed Tag 577 ClearingInstruction from Cancel and Correction messages.</li> <li>Removed Tag 22026 PriorDayClearingInstruction from Cancel and Correction messages.</li> <li>Added section 6.3 to list all possible Reject Reasons.</li> </ul>                                                                                                                                                                                                              |
| 1.2      | 4/30/2015  | <ul style="list-style-type: none"> <li>Updated document to conform to Rule changes introduced with FINRA Rule Filing 2013-50.</li> <li>Expanded definition and reporting of As-Of trades (section 4.3).</li> <li>Added FirmTradeID (Tag 1041) to various message layouts.</li> <li>Introduced On Behalf Of (OBO) methodology for Service Bureau reporting (section 4.5.9).</li> <li>Redefined OATS Identifier (section 4.5.10).</li> <li>Introduced additional Step In and Step Out values to Tag 81 (ProcessCode).</li> <li>Added new section 8 (Field Definitions).</li> <li>Added new section 9 (Sample FIX Submissions).</li> </ul> |
| 1.3      | 3/18/2016  | <ul style="list-style-type: none"> <li>Introduced values “C” and “O” to Tag 22005 SpecialProcessingFlag.</li> <li>Section 5.2.8 ARMA/ACMA message – updated values for Tag 9857 LockedInMethod.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 1.4      | 9/19/2016  | <ul style="list-style-type: none"> <li>Added system operating hours (section 1.1).</li> <li>Added tags 115 and 116 to inbound header and tags 128 and 129 to outbound header (section 3.13).</li> <li>Removed Entering Firm as a Party Role (section 4.5.8).</li> <li>Added Match Control Date to section 4.6.11.</li> <li>Expanded descriptions to Trade Cancel (section 5.1.2).</li> <li>Expanded definition of Trade Decline (section 5.1.6).</li> <li>Removed Clearing Copy value “C” from Tag 22005.</li> </ul>                                                                                                                    |
| 1.4a     | 10/3/2016  | <ul style="list-style-type: none"> <li>Added notification regarding the indefinite disabling of auto-locking functionality (cover page).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |