

# FIX Specifications for the Trade Reporting and Compliance Engine system (TRACE®) Trade Reporting for OTC Corporate Bonds and

Agency Debt

(Corporates & Agencies)

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## 1 Overview

#### 1.1 Introduction

The TRACE System (TRACE) is a service of FINRA that performs two major functions: on-line trade reporting and dissemination. FINRA members (or their designated third parties) are provided with the capability of submitting trade report information on over the counter corporate bond and agency debt securities. As part of this implementation, TRACE will support interactive messaging via FIX protocol. This document describes the formats of the FIX inbound and outbound messages for over-the-counter (OTC) Corporate Bonds and Agency Debt, defined hereafter as Corporates & Agencies (C&A), trade reporting to TRACE.

Participants will be able to enter and correct TRACE trades through their FIX interfaces during the TRACE Corporates & Agencies reconciliation cycle that consists of T-Day through T-20 (business days) entries. Trades that were submitted greater than T-20 are not retained in the TRACE system for trade management purposes. Such trades may be reversed using Reversals or corrected using a combination of a Reversal and new As-of Trade Capture Report.

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

Market/System open: 8:00 A.M. Market Close: 5:15 P.M. System Close: 6:30 P.M.

When a trade is entered into TRACE, a control date and number will be assigned to identify the trade throughout its TRACE processing and a status will be assigned to reflect its processing state. As trades are entered into the system, TRACE will validate trade information, forward proper acknowledgment messages to the Reporting Parties (RP) and Allege messages to the Contra Parties (CP) of the trades. Acknowledgment and Allege messages will contain the terms of the trade, the TRACE assigned status, control date and control number which uniquely identifies each trade. Participants will utilize the combination of TRACE assigned control date and control number to communicate with the TRACE system for subsequent trade report correction processing. Participants may also modify trades using their own assigned reference numbers (Client Trade Identifier) in combination with the TRACE Control Date. Trade reports of Corporates & Agencies will be retained in the TRACE system on a rolling 20 business day period, inclusive of the day the trade was submitted (T-20) and available for subsequent trade management processing (Cancel or Correction). A Cancel or Correction of a previously reported trade submitted prior to the T-20 period is allowed via submission of a Reversal or a combination Reversal/new As-of trade report.

TRACE will forward proper Notification messages to the trading parties as trades are corrected. Each Notification message will contain the control date, control number and the updated status of the corrected trade.

The TRACE C&A FIX specifications are applicable to both the T-day and As-of (T+n) trade reporting process. Any trade executed during or off market hours, which has not been reported during T-day, may be reported to TRACE on T+1 or later on an As-of basis.

For questions concerning FIX connectivity, please contact NASDAQ Technical Support at (212) 231-5180 or via email to: <a href="mailto:tradingservices@nasdaq.com">tradingservices@nasdaq.com</a>. For questions concerning C&A trade reporting and TRACE, please contact FINRA Product Management at (866) 899-2107 or via email to: FINRAProductManagement@finra.org.

# 2 FIX Protocol

The messaging described in this specification adheres to the standard FIX 4.4 protocol. Please refer to <a href="http://fixprotocol.org/specifications/FIX.4.4">http://fixprotocol.org/specifications/FIX.4.4</a> 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 ComplDs

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* transactrions:

- The TargetSubID (57) must be set to "CA".
- 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 "CA".

## 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: "FNRA"
57	TargetSubID	F	Valid values: "CA"
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"))
122	OrigSendingTime		Required when PossDupFlag is set to Yes (43=Y)

#### 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 "CA"
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		
			Time of message transmission (always expressed in UTC
52	SendingTime	Y	(Universal Time Coordinated, also known as "GMT"))
122	OrigSendingTime		Required when PossDupFlag is set to Yes (43=Y)

## 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.
			Valid values:
			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. Valid values: 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
			Indicates that the Sequence Reset message is replacing
123	GapFillFlag		administrative or application messages which will not be resent.
			New sequence number. The next Sequence Number to be
36	NewSeqNo	Y	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 backend system.

Tag	FIX Field name	Req'd	Comment
	Standard Header	Y	MsgType = 3
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:  0 = Invalid Tag Number  1 = Required Tag Missing  2 = Tag Not Defined For This Message Type  3 = Undefined Tag  4 = Tag Specified Without a Value  5 = Value Is Incorrect Out Of Range For This Tag  6 = Incorrect Data Format For Value  9 = CompID Problem  10 = Sending Time Accuracy Problem  11 = Invalid Msg Type  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
			Required when the heartbeat is the result of a Test
112	TestReqID		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		
			Identifier included in Test Request message to be returned		
112	TestReqID	Y	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. (*Not supported in this solution*)

## 4.2 Trade Capture Report Processing

For exchanges, Trade Capture Reports (TCR) have two related purposes; to confirm trades and reporting of privately negotiated trades. Usage of tags differs 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.
- The counterparty uses TradeReportRefID in Accept/Decline messages to reference TradeReportIDs set by the marketplace in Alleged transactions.

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.

#### 4.4 Reversals

A deletion of a previously reported trade submitted on a prior day is allowed via submission of a *Reversal*. This message is used to cancel a TRACE trade entry which was originally reported prior to the rolling T-20 day period. A Reversal must contain all the values submitted in the original Trade. The exception is the original trade identifier (in field TradeReportRefID), which is not required, and will not be used as a basis to look up the original trade. See section 5.1.3 for message details. Firms wishing to correct a TRACE trade entry which was originally reported prior to the rolling T-20 day period are required to submit a Reversal, followed by an As-Of Trade with the correct trade details.

## 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 must be set on all reported trades (TCR) inbound to the marketplace. If a client wants to cancel a previous Trade Report, he can use the TradeReportRefID to refer to the original TraderReportID. There is one

important exception to the analogy of ClOrdIDs. The marketplace sets its own TradeReportIDs on outbound TCRs (like confirmed trades).

This is the equivalent of the CTCI Client Trade Identifier.

#### 4.5.2 Trade Report Reference ID

The TradeReportRefID (572) is used to refer to a previous TCR. A submitter of a reported trade can use TradeReportRefID in subsequent cancellations (with the exception of Reversals) to the reported trade. 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

*TradeID* (1003) is a FINRA extension to FIX 4.4. TradeID carries the ten digit Control Number which the TRACE System had assigned to the TRACE trade when it was accepted by the TRACE System.

## 4.5.4 Original Trade ID

*OrigTradeID* (1126) is a FINRA extension to FIX 4.4. OrigTradeID carries the ten digit control number which the TRACE System had assigned to the TRACE trade when it was originally accepted by the TRACE System.

This is the equivalent of the CTCI Original Control Number.

## 4.5.5 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 trades.

## 4.5.6 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:

	Гад	FIX Field name	Comment					
4	153	NoPartyIDs	Number of parties included in the message					
			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". On Affiliate trades, the contra party must be submitted with the					
4	148	PartyID	value "A".					
			Defines the type of the identifier used as PartyID. In this solution always $C = Generally$ accepted market participant					
4	147	PartyIDSource	identifier (e.g. FINRA mnemonic)					
4	152	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					
		MPID of the Giveup Firm, when applicable. A TRACE Service			
		Bureau/Executing Broker Supplement (Attachment B of the TRACE			
	Giveup Firm	Participation Agreement) must be in place in order for firms to submit			

<sup>&</sup>lt;sup>1</sup> An affiliate is a non-member entity that controls, is controlled by or is under common control with a FINRA member, as further defined under FINRA Rule 6710.

	trade reports on behalf of their give ups. Can be set for the Contra party				
	only if the reporting firm submits the trade as a Locked-in trade.				
Executing Firm	MPID of Reporting party (owner of the trade).				
	MPID of the party (Service Bureau) sending the trade on behalf of a				
	client. A TRACE Service Bureau/Executing Broker Supplement				
	(Attachment B of the TRACE Participation Agreement) must be in place				
	in order for firms to submit trade reports on behalf of their				
Entering Firm	correspondents.				
Clearing Firm	Clearing Firm Number. Not really a party but treated as such in FIX.				
	MPID of Contra party or "C" to denote the contra is a non-FINRA				
	member (Customer trade) or "A" to denote the contra is a non-member				
Contra Firm	affiliate (Affiliate trade).				

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).
- **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).

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.

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

See chapter 8 for examples on how to populate the Party identifier fields.

## 4.5.7 Trades reported by a Service Bureau

A Service Bureau entering a trade on behalf of a client must add an extra party to the reporting side of a Trade Capture Report. The extra party must contain the following values:

PartyID must be set to the MPID of the Service Bureau

PartyRole must be set to 7, Entering Firm.

PartyIDSource must be set to C, FINRA mnemonic.

Transactions returned to the Service Bureau will have TargetCompID set to the bureau's CompID and DeliverToCompID (128) set to the bureau's clients CompID.

See section 8.7 for an example on how to populate the Service Bureau Party identifier fields.

#### 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
	YYYYMMDD-	The most common data type in FIX. Used in standard FIX tags
	HH:MM:SS	such as TransactTime (60), SendingTime (52) etc.
		NOTE 1: times are given in UTC (GMT).
		<b>NOTE 2:</b> FIX allows milliseconds as well, but that is not used in
UTCTimestamp		the solution.

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

\_

	YYYYMMDD	Standard date. Notice that it is <b>NOT</b> in UTC. Used in standard
LocalMktDate tags such as Tradel		tags such as TradeDate (75).
	HH:MM:SS	Basically the time part of a UTCTimestamp.
UTCTimeOnly		<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. On Trade Entry, Trade Cancel, Trade Correction and Trade Reversal messages, TransactTime must be used to indicate the Execution Time of the trade.

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 (aka Execution Date). The information submitted should reflect the date in the Eastern Time zone.

Note: 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.

On As-Of trades, the Trade Date can be changed only to a date prior to the original trade date. The Trade Date cannot be changed to a date that is subsequent to the original trade 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.

Format: LocalMktDate

#### 4.6.4 ExecutionTime

ExecutionTime (22007) is a field-no longer used by FINRA. It can be removed from all inbound messages. If it is sent to FINRA, we will ignore the tag and will not return it on an acknowledgement. Going forward, Tag 60 will be used as the official Execution Time 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. It is a standard FIX UTCTimestamp formatted field containing both date and time in UTC formatted as described above.

Format: UTCTimeOnly

#### 4.6.6 ControlDate

ControlDate (22011) is a field defined by FINRA. When a trade is submitted to TRACE and accepted, the system will return a ControlDate with the trade acknowledgement. The ControlDate reflects the date when the system received and processed the trade entry. The ControlDate together with the Control Number (FIX TradeID) uniquely identifies a trade. Control Date is required in conjunction with Control Number (TradeID) or Trade Report ID (Client Trade Identifier) to subsequently cancel or correct a trade.

Format: LocalMktDate

## 4.6.7 OrigControlDate

OrigControlDate (22012) is a field defined by FINRA. When a trade is submitted to TRACE and accepted,

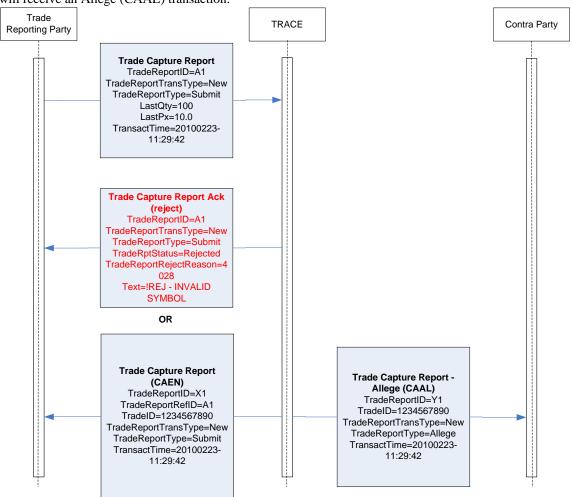
the system will return a ControlDate with the trade acknowledgement. The OrigControlDate reflects the date when the system received and processed the *original* trade entry. It is found on trade correction acknowledgements.

Format: LocalMktDate

#### 4.7 Workflows

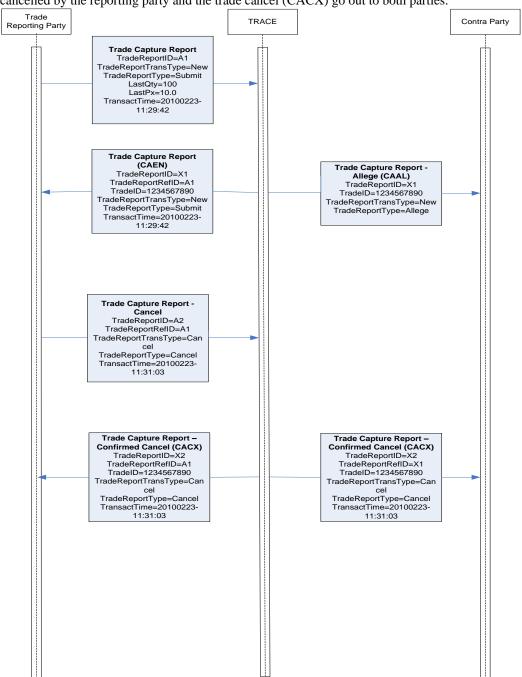
## 4.7.1 Reporting a Trade

In this example the reporting party reports that the trade was executed at 5:29 PM (11:29 UTC), so it is marked as an After Market Hours Trade by TRACE. If the Trade is accepted by TRACE, the contra party will receive an Allege (CAAL) transaction.



## 4.7.2 Cancelling a Trade

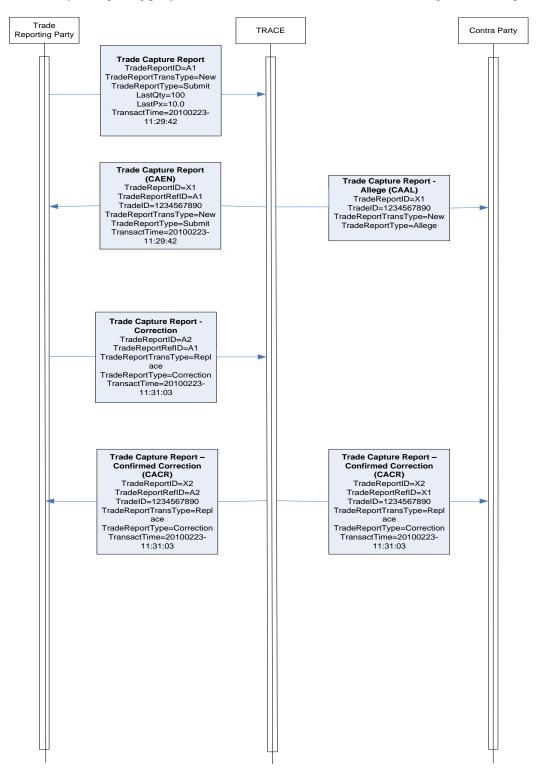
In this example a trade is reported and confirmation messages go out to both parties. The trade is then cancelled by the reporting party and the trade cancel (CACX) go out to both parties.



Please note: Reversal inbound messages and their related outbound confirmations (CAHX) will follow the same flow as Trade Cancels.

## 4.7.3 Correcting a Trade

In this example a trade is reported and confirmation messages go out to both parties. The trade is then corrected by the reporting party and the trade correction confirmations (CACR) go out to both parties.



# **5 Message Formats**

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

Tag     FIX tag name     Req'd     Comment       Standard Header     Y     MsgType = AE       Client-generated identifier, not to exceed characters.       FINRA Extension to FIX 4.4: The Contracters.	20
Client-generated identifier, not to exceed characters.	20
571 TradeReportID Y characters.	20
I IFINKA Extension to FIX 4.4: The Contra	Client
Identifier assigned to a trade by the contra	
1042 SecondaryFirmTradeID Only used for Locked-in Trade Reports.	
Valid values:	
487 TradeReportTransType F 0 = New	
Valid values:	
856 TradeReportType F 0 = Submit	
Indicates if the trade capture report was p	reviously
reported to the counterparty	
Valid values:	
570 PreviouslyReported Y N = No	1 " 6"
Used to indicate that a trade was submitted	ed "as of"
a specific trade date. Valid values: $0 = \text{false} - \text{trade is not an AsOf trade (def}$	ioult)
1015 AsOfIndicator 1 = true – trade is not an AsOf trade (def	auit)
Either transaction must contain either CU	ISID or
Symbol to identify the security. If CUSIP i	
set SecurityIDSource to 1. If Symbol is given	
48 Instrument/SecurityID Y to 8.	
Type of identifier given in SecurityID.	
Valid values:	
1 = CUSIP	
22 Instrument/SecurityIDSource 8 = Exchange Symbol	
32 LastQty Y Trade Volume. Format: nnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnnn	
31 LastPx Y Trade Price. Format: nnnn.nnnnnn	
Interpreted as an As-Of trade if not curre	nt date.
75 TradeDate Y Format: YYYYMMDD	
Time the transaction represented by this	
Capture Report occurred, i.e. Execution 7	
60 TransactTime Y UTC/GMT). Format: YYYYMMDD-HH:MN	
Specific date of trade settlement (Settlem	entDate)
in YYYYMMDD format. Required for all 64 SettIDate F transaction.	
64 SettlDate F transaction.  Always set value to 2. One side for the Re	oporting
552 TrdCapRptSideGrp/NoSides Y party and one side for the Contra party.	eporting
Side of trade.	
Valid values:	
1 = Buy	
$\rightarrow$ 54Side $\rightarrow$ Y 2 = Sell	
→ 37OrderID Y Required in FIX, but ignored	
Number of parties on the reporting/contra	side of
→ 453Parties/NoPartyIDs F the trade	

	1				1	,
						Identifier for the type of party defined in PartyRole.
						Either an MPID or a Clearing Firm number or "C"
$\rightarrow$	$\rightarrow$	448	Party	yID	F	for customer or "A" for affiliate on the contra side.
					Valid values :	
						C = Generally accepted market participant
$\rightarrow$	$\rightarrow$	447	Party	yIDSource	F	identifier (e.g. FINRA mnemonic)
						Valid values:
						1 = Executing Firm
						7 = Entering Firm
						14 = Giveup Firm
					_	17 = Contra Firm
$\rightarrow$	$\rightarrow$	452	Party	yRole	F	83 = Clearing Account
						PartySubID is only allowed for PartyRole = 1 or 17.
						Only 1 is allowed (branch office of executing/contra
$\rightarrow$	$\rightarrow$	802	NoP	artySubIDs		firm)
						Sub-identifier. Branch office of executing/contra
						firm (Branch Sequence/Contra Branch Sequence)
						Contra PartySubID may only be entered on
$\rightarrow$	$\rightarrow$	$\rightarrow$	523	PartySubID		Locked-In trades.
						Type of PartySubID (523) value
						Valid values:
$\rightarrow$	$\rightarrow$	$\rightarrow$	803	PartySubIDType		24 = Department
						Designates the capacity of the reporting/contra
						party. Valid values:
						A = Agency
						P = Principal
	500	OI			_	Required on the reporting side. Contra side is
$\rightarrow$	528	Orae	erCap	pacity	F	required on all Locked-In trades.
						Buyer's/Seller's Commission (in dollars). Required
						when Commission has been charged on an
						Agency capacity. Format: nnnnn.nn
,	12	Com	micc	ion		Both commissions may only be submitted on Locked-In trades.
	12	COIII	111155	1011		
						Buyer's/Seller's Commission type. Valid values:
	12	Com	mTv	ne		3 = Absolute
<del>-</del>	13	50111	у	PC		User Memo Only on the Reporting Party side. Will
						not be displayed to Contra party. Not to exceed 10
	5.2	Text				characters.
	50	1.071				FINRA Extension to FIX 4.4. Special Price
						Reason. A fifty character alphanumeric subscriber
						MEMO field. Required when the field Special
						Price Indicator = Y.
						To describe the reason why the trade was
						executed at a special price. This field may be
5149	Men	no				displayed to the Contra party.
						FINRA Extension to FIX 4.4.
[						Valid values:
[						Y = Yes
						N = No (default value)
						Price override may only be submitted after the
						initial trade report is rejected due to price out of
9854	Ove	<u>rrid</u> el	-lag			range.

	FINRA Extension to FIX 4.4.
	Indicates that the firm entering the trade is
	reporting for both sides of the trade. This occurs
	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).
	Valid values:
	Y = Yes
	N = No (default value)
	All Locked-In trades MUST be reported from the
	seller's perspective, i.e., the reporting party must
	be the sell side and the contra party must be the
	buy side.
	A TRACE Service Bureau/Executing Broker
	Supplement (Attachment B of the TRACE
	Participation Agreement) must be in place in order
	for firms to submit trade reports on behalf of their
22013 LockedInIndicator	give ups and as Locked-In trades.
	This field allows a trade to be marked for special
	processing. Under certain conditions, use of this
	field for special processing purposes MUST be
	authorized by FINRA Operations prior to
	submission of trades. Authorization will be granted
	on a trade by trade basis.
	Valid values:
	N = No Special Processing (default)
	Y = Position Transfer (authorization required)
	A = Affiliate – principal transaction indication
	Note: As defined in FINRA Rule 6730 (d)(4)(E), the
	affiliate principal transaction indication should be
	used where a member purchases or sells a
	security and, within the same trading day, engages
	in a back-to-back trade with its non-member
	affiliate in the same security at the same price
00005000000000000005	(without a mark-up or commission assessed). This
22005 SpecialProcessingFlag	will suppress the trade from dissemination.
	FINRA Extension to FIX 4.4. Reserved for future
22001 TradeModifier1	use.
	FINRA Extension to FIX 4.4. Reserved for future
22002 TradeModifier2	use.
	FINRA Extension to FIX 4.4. Required indicator if a
	trade falls under one of the following transaction
	types (otherwise the field must not be set):
22004 TradeModifier4	W = Weighted Average Price
	FINRA Extension to FIX 4.4. Indicates whether the
	trade was executed in the primary or secondary
	market
	Valid values are:
	P1 = Primary market trade subject to T+1
	reporting.
00040 Too Poo Mark 18 18 18	S1 = Secondary market or primary market trade
22016 TradingMarketIndicator	F subject to 15-minute reporting.
	• • •
22006 Special Price Indicator	Special Price Indicator. Valid values: Y = Special price

			N = No special price (default)
22007	ExecutionTime	F	Execution time (in UTC/GMT). Format: HH:MM:SS-
22009	PreparationTime		Time of trade submission (in <b>UTC/GMT</b> ). Format: HH:MM:SS
			FINRA Extension to FIX 4.4. As outlined in FINRA Rule Filing SR-FINRA-2015-026, this field indicates whether compensation in the form of mark-up, mark-down or commission is included in the price.  N = The transaction does not include remuneration (mark-up/down or commission).  Omission of this tag indicates the transaction does include remuneration (a mark-up/down or commission).
22034	NoRemunerationIndicator		Note: Use/entry of this tag is only supported for Customer and Affiliate trades (Contra party = "C" or "A") and is not allowed on Inter-dealer trades. In addition, Primary market trades, (TradingMarketIndicator = "P1") cannot be submitted with the use/entry of this tag.
22036	ATSExecutionMPID		FINRA Extension to FIX 4.4. Used to identify the Alternative Trading System (ATS) on which an exempted transaction, as defined in SR-FINRA-2015-055, was executed. In such cases, enter the 4-character MPID of the ATS, otherwise omit this tag.
	Standard Trailer	Υ	

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

To be used only for T Date through T-20 cancels. Unless otherwise noted, all fields follow rules/definitions as outlined in the Comments column of the Trade Capture Report inbound message (5.1.1).

Tag	message (5.1.1).  FIX tag name	Rea'd	Comment
	Standard Header	Y	MsgType = AE
571	TradeReportID	Υ	Unique client-generated identifier
	TradeReportRefID		TradeReportID of report to cancel. TradeID can be used instead. If this field is used, The reporting party id must also be set.
	TradelD		TradeID of report to cancel (contains TRACE control number). Alternative to TradeReportRefID to identify the original trade.
487	TradeReportTransType	F	Valid values: 1 = Cancel
856	TradeReportType	F	Valid values: 6 = Cancel
570	PreviouslyReported	Y	Indicates if the trade capture report was previously reported to the counterparty. Required in FIX, but ignored in cancels.  Valid values:  N = No
1015	AsOfIndicator		Used to indicate that a trade was submitted "as of" a specific trade date. Valid values:  0 = false - trade is not an AsOf trade (default)  1 = true - trade is an AsOf trade.
48	Instrument/SecurityID	Y	Either transaction must contain either CUSIP or Symbol to identify the security. If CUSIP is given, set SecurityIDSource to 1. If Symbol is given, set it to 8.
	Instrument/SecurityIDSource		Type of identifier given in SecurityID. Valid values: 1 = CUSIP 8 = Exchange Symbol
	LastQty	Y	Required in FIX, but ignored in cancels. Can be set to zero.
	LastPx	Υ	Required in FIX, but ignored in cancels. Can be set to zero.
	TradeDate	Y	Required in FIX but ignored. <u>Execution Time submitted on original trade report</u> <u>Time the transaction represented by this Trade-Capture Report occurred</u> (in <b>UTC/GMT</b> ). Format:
	TransactTime	Y	YYYYMMDD-HH:MM:SS
<u>552</u>	TrdCapRptSideGrp/NoSides  54Side	Y	For Trade Cancels this is always set to 1.  Side of trade. Valid values:  1 = Buy  2 = Sell  NOTE: on a Cancel of a trade submitted on a prior day (T-1 through T-20) the value "1" will always be returned in Tag 54 on the CACX confirmation regardless of the value submitted.

$\rightarrow$	37	OrderID		Υ	Required in FIX, but ignored
$\rightarrow$	453	Parties/NoParty	IDs	F	Number of parties. Here either 1 (reporting party), or 2 in the case of a Service Bureau on-behalf-of transaction (reporting party + entering party).
$\rightarrow$	$\rightarrow$	448PartyID		F	Identifier (MPID) for the reporting party/entering party of the original trade to be cancelled.
$\rightarrow$	$\rightarrow$	447PartyID	Source	F	Valid values : C = Generally accepted market participant identifier (e.g. FINRA mnemonic)
$\rightarrow$	$\rightarrow$	452PartyRo	ile	F	Valid values: 1 = Executing Firm 7 = Entering Firm
22011	1 ControlDate			F	Control Date of the original trade. Used together with TradeID or Trade Report RefID to identify a trade. Format: YYYYMMDD
	Standard Trailer				

## 5.1.3 Trade Capture Report – Reversal (in)

To be used only for trades submitted prior to the T-20 period. Unless otherwise noted, all fields follow rules/definitions as outlined in the Comments column of the Trade Capture Report inbound message (5.1.1).

	message (5.1.1).		
Tag	FIX tag name	Req'd	Comment
	Standard Header	Υ	MsgType = AE
571	TradeReportID	Υ	Unique client-generated identifier
572	TradeReportRefID		TradeReportID of report to cancel.
			TradeID of report to cancel (contains
			TRACE control number). Required for
1003	TradeID	F	Reversals.
			FINRA Extension to FIX 4.4: The
1010	Cooperators / Firms Trodo ID		Contra Client Identifier assigned to a
1042	SecondaryFirmTradeID		trade by the contra side. Valid values:
187	 TradeReportTransType	F	1 = Cancel
407	Traderreportrians rype	'	Valid values:
856	TradeReportType	F	6 = Cancel
333	- Taddi topo.tt.) po		Indicates if the trade capture report
			was previously reported to the
			counterparty. Required in FIX, but
			ignored in Reversals.
			Valid values:
570	PreviouslyReported	Υ	N = No
			Used to indicate that a trade was
			submitted "as of" a specific trade date. Must be set for Reversals. Valid
			values:
1015	AsOfIndicator	F	1 = true – trade is an AsOf trade
1010	recommende	·	Either transaction must contain either
			CUSIP or Symbol to identify the
			security. If CUSIP is given, set
			SecurityIDSource to 1. If Symbol is
48	Instrument/SecurityID	Υ	given, set it to 8.
			Type of identifier given in SecurityID.
			Valid values:
22	Instrument/SecurityIDSource	F	1 = CUSIP 8 = Exchange Symbol
	instrument/security/bsource	Г	Trade Volume. Format:
32	LastQty	Υ	nnnnnnnnnnnnn
	LastPx	Y	Trade Price. Format: nnnn.nnnnnn
		<del>-                                    </del>	The Trade Date of the original trade.
75	TradeDate	Υ	Format: YYYYMMDD
			Execution Time submitted on original
			trade report Time the transaction
			represented by this Trade Capture
			Report occurred (in UTC/GMT).
60	TransactTime	Υ	Format: YYYYMMDD-HH:MM:SS
			Specific date of trade settlement (SettlementDate) in YYYYMMDD
64	SettlDate	F	format. Required for all transaction.
04	Compare	<del>'</del>	Set to 2. One side for the Reporting
552	TrdCapRptSideGrp/NoSides	Υ	party and one side for the Contra party.
	1	<u> </u>	ii ii y amia ziii ziaz ioi iiio zoiiiia paityi

	1	1		1	1
					Reporting party side of trade.
					Valid values:
				Y	1 = Buy
$\rightarrow$	54 Side				2 = Sell
$\rightarrow$	37	OrderID	)	Y	Required in FIX, but ignored
	452	Dortico/	NoBortylDo	F	Number of parties on the reporting/contra side of the trade
	455	railles/	NoPartyIDs I	Г	-
					Identifier for the type of party defined in PartyRole. Either an MPID, "C"
					(customer), "A" (affiliate) or a Clearing
$\rightarrow$	$\rightarrow$	448	PartyID	F	Firm number.
				<u> </u>	Valid values :
					C = Generally accepted market
					participant identifier (e.g. FINRA
$\rightarrow$	$\rightarrow$	447	PartyIDSource	F	mnemonic)
					Valid values:
					1 = Executing Firm
					7 = Entering Firm
					14 = Giveup Firm
					17 = Contra Firm
$\rightarrow$	$\rightarrow$	452	PartyRole	F	83 = Clearing Account
					PartySubID is only allowed for
					PartyRole = 1 or 17. Only 1 is allowed
$\rightarrow$	$\rightarrow$	802	NoPartySubIDs		(branch office of executing/contra firm)
					Sub-identifier. Branch office of
					executing/contra firm (Branch
$\rightarrow$	$\rightarrow$	$\rightarrow$	523PartySubID		Sequence/Contra Branch Sequence)
					Type of PartySubID (523) value
					Valid values:
$\rightarrow$	$\rightarrow$	$\rightarrow$	803 Party SubIDType		24 = Department
					Designates the capacity of the
					reporting/contra party. Valid values:
	520	OrderC	anacity.	F	A = Agency P = Principal
$\rightarrow$	320	Ordero	араспу		
					Buyer's/Seller's Commission (in dollars) if applicable. Format:
	12	Commis	ssion		nnnnn.nn
	12	30.1111110	50.0.1		Buyer's/Seller's Commission type.
					Valid values:
$\rightarrow$	13	CommT	- vpe		3 = Absolute
			<b>*</b> 1		User Memo. Only allowed on the
					Reporting Party side. Will not be
$\rightarrow$	58	Text			displayed to Contra party.
					FINRA Extension to FIX 4.4. Special
					Price Reason. A fifty character
					alphanumeric subscriber MEMO field.
					Required when the field Special Price
					Indicator = Y.
					To describe the reason why the trade
					was executed at a special price. This
F.4.40					field may be displayed to the Contra
5149	Memo				party.
0051		- <b>-</b> 1			FINRA Extension to FIX 4.4.
9854	Overrid	e⊦ıag			Valid values:

		V Vaa
		Y = Yes
		N = No (default value)
		FINRA Extension to FIX 4.4.
		Indicates that the firm entering the
		trade is reporting for both sides of the
		trade. Must be set to the original
		submitted value (or omitted to indicate
		No). Valid values:
		Y = Yes
22013 LockedInIndicator		N = No (default value)
		Valid values:
		N = No Special Processing (default)
		Y = Position Transfer (auth required)
		A = Affiliate – principal transaction
22005 Special Processing Flag		indication
		FINRA Extension to FIX 4.4. Reserved
22001 TradeModifier1	<u>L</u>	for future use.
		FINRA Extension to FIX 4.4. Reserved
22002 TradeModifier2		for future use.
		FINRA Extension to FIX 4.4. Required
		indicator if a trade falls under one of
		the following transaction types
		(otherwise the field must not be set):
22004 TradeModifier4		W = Weighted Average Price
2200 I Tradoviodinoi I		FINRA Extension to FIX 4.4. Indicates
		whether the trade was executed in the
		primary or secondary market.
		Valid values are:
		P1 = Primary market trade subject to
		T+1 reporting.
		S1 = Secondary market or primary
		market trade subject to 15-minute
22016 TradingMarketIndicator	F	reporting.
22010 Hadingiviarketifidicator		Special Price Indicator. Required if
		original submission reflected a special price. Valid values:
		Į!
22006 Special Price Indicator		Y = Special price
22000 Special Filder indicator		N = No special price (default)
		Execution time of the original
22007 Eve cution Time	_	submission (in UTC/GMT). Format:
22007 ExecutionTime	F	HH:MM:SS
		Time of cancel trade submission (in
22009 PreparationTime	1	UTC/GMT). Format: HH:MM:SS
		Control Date of the original trade. Used
		together with TradeID to identify a
		trade.
22011 ControlDate	F	Format: YYYYMMDD
		If submitted on the original trade
		report, must be provided on the
		Reversal.
		N = The transaction does not include
		remuneration (mark-up/down or
22034 NoRemunerationIndicator		commission).
22036 ATSExecutionMPID		If a 4-character MPID of an ATS was
	<u> </u>	

		submitted on the original trade report, it must be provided on the Reversal.
Standard Trailer	Υ	

Please note: in order to correct a trade report submitted prior to the T-20 period, firms must submit a Reversal, followed by a new As-Of Trade Capture Report (as outlined in section 5.1.1) containing the correct trade data. Separate confirmations (CAHX and CAEN) will be returned for each submission.

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

To be used only for T Date through T-20 corrections. Unless otherwise noted, all fields follow rules/definitions as outlined in the Comments column of the Trade Capture Report inbound message (5.1.1).

**NOTE:** A successful Correction transaction will result in a new TradeID being generated. The acknowledgement (CACR) will contain the original TRACE control number in OrigTradeID.

Tag	FIX tag name	Req'd	Comment
	Standard Header	Υ	MsgType = AE
571	TradeReportID	Υ	Client-generated identifier
572	TradeReportRefID		TradeReportID of report to amend.
1042	SecondaryFirmTradeID		FINRA Extension to FIX 4.4: The Contra Client Identifier assigned to a trade by the contra side. Only used for Locked-in Trade Reports.
	TradelD		TradeID of report to amend (contains TRACE control number).
487	TradeReportTransType	F	Valid values: 2 = Replace
856	TradeReportType	F	Valid values: 5 = Correction
570	PreviouslyReported	Y	Indicates if the trade capture report was previously reported to the counterparty. Required in FIX, but ignored in Corrections. Valid values:  N = No
	AsOfIndicator	-	Used to indicate that a trade was submitted "as of" a specific trade date.  Note: Trades submitted during the T-1 through T-20 period must be submitted with As-Of Indicator "1" on the correction, regardless if the original trade was submitted as a T-Date entry. "0" or absent Blank As-Of Indicator only applies to same day corrections.  Valid values:  0 = false - trade is not an AsOf trade (default)  1 = true - trade is an AsOf trade
	Instrument/SecurityID	Y	Either transaction must contain either CUSIP or Symbol to identify the security. If CUSIP is given, set SecurityIDSource to 1. If Symbol is given, set it to 8. PLEASE NOTE: TRACE will not support the modification of CUSIP/Symbol. In order to change the CUSIP or Symbol

						on a trade report, the original trade MUST be canceled and a new trade report with the
						intended SecurityID must be submitted.
						Type of identifier given in
						SecurityID. Valid values:
						1 = CUSIP
22	Instrume	ent/Secu	ırityIDSource			8 = Exchange Symbol
			,			Trade Volume. Format:
32	LastQty				Υ	nnnnnnnnnnnn
						Trade Price. Format:
31	LastPx				Υ	nnnn.nnnnnn
						Interpreted as an As-Of trade if
						not current date. Format:
75	TradeDa	ate			Y	YYYYMMDD
						Execution Time. Original value or
						amended value. May only be
						amended to an earlier time than what was originally submitted.
						Time the transaction represented
						by this Trade Capture Report
						occurred (in UTC/GMT). Format:
60	Transac	tTime			Υ	YYYYMMDD-HH:MM:ŚS
						Specific date of trade settlement (SettlementDate) in YYYYMMDD
						format. Required for all
64	SettlDat	е			F	transactions.
						Set to 2. One side for the
550					V	Reporting party and one side for
552	TraCapi	RptSide	Grp/NoSides		Y	the Contra party.
						Reporting party side of trade. Valid values:
						1 = Buy
$\rightarrow$	54	Side			Υ	2 = Sell
$\rightarrow$		OrderID			<u>.</u> Ү	Required in FIX, but ignored
	57	2.40110			•	Number of parties on the
$\rightarrow$	453	Parties/l	NoPartyIDs		F	reporting/contra side of the trade
			,			Identifier for the type of party
						defined in PartyRole. Either an
						MPID, "C" (customer), "A"
						(affiliate) or a Clearing Firm
$\rightarrow$	$\rightarrow$	448	PartyID		F	number.
						Valid values :
						C = Generally accepted market
		<i>4</i> 4	Down IDC		_	participant identifier (e.g. FINRA
$\rightarrow$	$\rightarrow$	447	PartyIDSource		F	mnemonic)
						Valid values:
						1 = Executing Firm 7 = Entering Firm
						14 = Giveup Firm
						17 = Contra Firm
$\rightarrow$	$\rightarrow$	452	PartyRole		F	83 = Clearing Account

		1				
						PartySubID is only allowed for
						PartyRole = 1 or 17. Only 1 is
						allowed (branch office of
$\rightarrow$	$\rightarrow$	802	NoParty:	SubIDs		executing/contra firm)
						Sub-identifier. Branch office of
						executing/contra firm (Branch
						Sequence/Contra Branch
$\rightarrow$	$\rightarrow$	$\rightarrow$	523	PartySubID		Sequence)
,	•	,	0201	artycasib		Type of PartySubID (523). Valid
						values:
			903	PartyIDQubTypa		24 = Department
<b>→</b>	$\rightarrow$	$\rightarrow$	003	PartyIDSubType		•
						Designates the capacity of the
						reporting/contra party. Valid
						values:
					_	A = Agency
$\rightarrow$	528	OrderCa	apacity		F	P = Principal
						Buyer's/Seller's Commission (in
						dollars) if applicable. Format:
$\rightarrow$	12	Commis	<u>sio</u> n			nnnnn.nn
						Buyer's/Seller's Commission
						type.
						Valid values:
$\rightarrow$	13	CommT	vpe			3 = Absolute
			7			User Memo Only on the
						Reporting Party side. Will not be
	50	Text				
<b>→</b>	56	lı eyr				displayed to Contra party.
						FINRA Extension to FIX 4.4.
						Special Price Reason. A fifty
						character alphanumeric
						subscriber MEMO field. Required
						when the field Special Price
						Indicator = Y.
						To describe the reason why the
						trade was executed at a special
						price. This field may be displayed
5149	Memo					to the Contra party.
						FINRA Extension to FIX 4.4.
						Valid values:
						Y = Yes
9854	Overrid	eFlag				N = No (default value)
						FINRA Extension to FIX 4.4.
						Indicates that the firm entering
						the trade is reporting for both
						sides of the trade. This occurs
						when two of its give-ups trade
						with each other or the firm trades
						with one of its own give-ups. Valid
						values:
						Y = Yes
22042	المطادميا	lnindi+	or			
22013	Locked	InIndicat	UI			N = No (default value)
6665						FINRA Extension to FIX 4.4.
22001	TradeM	odifier1				Reserved for future use.
						FINRA Extension to FIX 4.4.
22002	TradeM	odifier2				Reserved for future use.

			<b>.</b>	
				FINRA Extension to FIX 4.4.
				Required indicator if a trade falls
				under one of the following
				transaction types (otherwise the
				field must not be set):
22004	TradeM	lodifier4		W = Weighted Average Price
				FINRA Extension to FIX 4.4.
				Indicates whether the trade was
				executed in the primary or
				secondary market
				Valid values are:
				P1 = Primary market trade
				subject to T+1 reporting.
				S1 = Secondary market or
				primary market trade subject to
22016	Tradino	MarketIndicator	F	15-minute reporting.
22010	Trading	jiviai ketii idicatoi	1	
				Valid values:
				N = No Special Processing
				(default)
	1			Y = Position Transfer (auth
				required)
				A = Affiliate – principal
22005	Cnasial	Dragoning Class		transaction indication
22003	Special	ProcessingFlag		Consid Dries Indicator Valid
				Special Price Indicator. Valid
				values:
22006	Cnasial	Drigoladicator		Y = Special price
22000	Special	PriceIndicator		N = No special price (default)
				Control Date of the original trade.
				Used together with TradeID to
22011	Control	Doto	F	identify a trade. Format: YYYYMMDD
22011	Control	Date	Г	
				Number of original Party IDs. The
				OriginalParties group is required
				when TradeReportRefID is used
004-0				to identify the original transaction.
		INoPartyIDs		Will be set to 1 in this case.
$\rightarrow$	20448	OriginalPartyID		Original Reporting Party MPID.
	1			Valid values :
				C = Generally accepted market
	[			participant identifier (e.g. FINRA
$\rightarrow$	20447	OriginalPartyIDSource		mnemonic)
				Valid values:
$\rightarrow$	20452	OriginalPartyRole		1 = Executing Firm
				Execution time (in UTC/GMT).
22007	Executi	<del>onTime</del>	F	Format: HH:MM:SS
	]			Time of trade correction
	1			submission (in UTC/GMT).
22009	Prepara	ationTime		Format: HH:MM:SS
				N = The transaction does not
	1			include remuneration (mark-
				up/down or commission),
22034	NoRem	nunerationIndicator		otherwise omit the tag.
22036	ATSEx	ecutionMPID		4-character MPID of an ATS if

		applicable otherwise omit the tag.
Standard Trailer	Υ	

# 5.1.5 Trade Capture Report Ack – Reject (out)

Tag	FIX tag name	Req'd	Comment
ray	Standard Header	Y	MsgType = AR
F74		Y	<del> </del>
571	TradeReportID	Y	The client-generated identifier
			Valid values:
			0 = New
407	Trada Danast Trans Tuna	_	1 = Cancel
487	TradeReportTransType	F	2 = Replace
			Type of Trade Report. Shows the type of
			the incoming trade report.  Valid values:
			0 = Submit
			5 = Trade Correction
856	TradeReportType	F	6 = Trade Correction 6 = Trade Report Cancel
650	Пацекероптуре	Г	This field signals whether the TCR was
			accepted or rejected.
			Valid values:
150	ExecType	Υ	8 = Rejected
130	Lxectype	ı	Valid values:
939	TradeRptStatus	F	1 = Rejected
333	Traderipidiatus	'	Main Security Identifier (CUSIP) or
48	Instrument/SecurityID	Υ	Exchange Symbol.
70	matrament/occurryib	ı	Type of identifier given in SecurityID.
			Valid values:
			1 = CUSIP
22	Instrument/SecurityIDSource	F	8 = Exchange Symbol
	monanie Geodniy i Deodree	'	Reason Trade Capture Report was
			rejected.
			Valid values:
			4001 = FUNCTION NOT ALLOWED
			4002 = INVALID ENTRY
			4003 = INVALID RPID
			4004 = INVALID DATE
			4005 = INVALID PRICE
			4006 = INVALID PRICE OVERRIDE
			4007 = INVALID TIME
			4008 = RPID REQUIRED
			4009 = TRACE ENTRY SUSPENDED
			4010 = INVALID REASON CODE
			4011 = INVALID SIDE
			4012 = NOT WITHIN ALLOWABLE
			TIME
			4013 = PRICE OUT OF RANGE
			4014 = PRICE OUT OF OVERRIDE
			RANGE
			4015 = TERMINAL NOT AUTHORIZED
			4016 = INVALID MMID
			4017 = UPDATE OF FIELD REQUIRED
			4019 = THIS BOND HAS BEEN
			DELETED
			4021 = INVALID TRADE DATE
754	Tue de Dan aut Dais at Dans a		4023 = PRICE REQUIRED
751	TradeReportRejectReason		4026 = INVALID BUYER COMMISSION

4027 = INVALID CUSIP NUMBER 4028 = INVALID SYMBOL 4029 = BOND NOT FOUND 4030 = INVALID VOLUME ENTERED 4031 = INVALID AS-OF 4032 = RPID NOT AUTHORIZED 4033 = CPID NOT AUTHORIZED 4034 = CANNOT CHANGE CUSIP4035 = INVALID RP EXECUTING PARTY 4036 = INVALID CP EXECUTING **PARTY** 4037 = RPID EXECUTING PARTY NOT **AUTHORIZED** 4038 = CPID EXECUTING PARTY NOT **AUTHORIZED** 4039 = MUST ENTER BOND SYMBOL OR CUSIP 4040 = INVALID SELLER COMMISSION 4041 = INVALID TRADE MODIFIER 4042 = INVALID P/A 4043 = CPID REQUIRED 4044 = INVALID REPORT FLAG 4045 = INVALID SPECIAL TRADE **INDICATOR** 4046 = INVALID SPECIAL TRADE INDICATOR/SPECIAL MEMO 4047 = BOND NOT TRACE **AUTHORIZED** 4048 = NO CONTROL NUMBER 4049 = TRADE ALREADY CANCELED 4050 = CANNOT CANCEL 'NO TRADE' TRADE 4051 = INVALID BRANCH SEQUENCE **NUMBER** 4052 = INVALID CONTRA BRANCH SEQUENCE NUMBER 4053 = INVALID AS-OF DATE 4056 = INVALID CPID 4057 = CORRECTION MAY NOT **CHANGE BOND** 4060 = RPID INTRODUCING BROKER SUSPENDED 4061 = CPID INTRODUCING BROKER SUSPENDED 4062 = EXECUTION TIME GREATER THAN TRADE REPORT TIME 4063 = NOT TRADE SUBMITTER 4064 = CORRECTION MAY NOT CHANGE AS-OF FLAG 4068 = INVALID TRACE ENTRY -YOUR EXECUTING PARTY IS **RESPONSIBLE** 4069 = TRACE TEMPORARILY NOT AVAILABLE 4070 = INVALID TRADING MARKET

			INDICATOR
			*Please note this list is not complete and will be subject to updates
58	Text		Contains the actual error message describing the TradeReportRejectReason. Example: If TradeReportRejectReason = 4028, Text will contain: "!REJ – INVALID SYMBOL"
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	Υ	

## 5.1.6 Trade Capture Report – Acknowledgement/CAEN (out)

Tag	FIX tag na	me	Req'd	Comment
	Standard F		Y	MsgType = AE
	Ctaridara	100001		Used to identify the type of
				acknowledgment.
				Value "CAEN" identifies a Trade
1011	MessageF	ventSource	F	Capture Report accepted by FINRA.
1011	WessageL	venicouroc	'	Identifier assigned by marketplace
				NOTE: NOT the identifier set by
571	TradeRepo	ortID	Υ	reporting party.
572	TradeRepo		F	TradeReportID from inbound TCR
512	Tradertept	nikelib	I	SecondaryFirmTradeID from inbound
1042	Secondary	FirmTradeID		TCR.
1042	Secondary	IlliliadelD		ControlDate assigned by FINRA on
				accepted trade report. Format:
22011	ControlDat	0	F	YYYYMMDD.
22011	ControlDat	е	F	Control Number assigned by FINRA
				on accepted trade report. 10 digits,
1003	TradeID		F	starting with the value "1".
1003	TraueiD		Ţ.	Valid values:
107	TradaBana	ortTransType	F	0 = New
487	пацекерс	лттануре	Г	Valid values:
050	TradeDane			
856	TradeRepo	оттуре	F	0 = Submit
570	Draviavalul	Donostod	V	Will always be set to:
570	,	керопеа	Y	N = No
64			F	SettlDate from inbound TCR.
1015	AsOfIndica	itor		AsOfIndicator from inbound TCR.
48	Instrument	/SecurityID	Y	Main Security Identifier (CUSIP).
				Type of identifier given in SecurityID.
				Valid values:
22	Instrument	/SecurityIDSource	F	1 = CUSIP
454	Instrument	/NoSecurityAltID	F	Always set to 1
				Alternative Security identifier
455	Instrument	/SecurityAltID	F	(Symbol).
		· · · · · · · · · · · · · · · · ·	_	Valid values:
456	Instrument	/SecurityAltIDSource	F	8 = Exchange Symbol
32			Y	LastQty from inbound TCR.
31	LastPx		Y	LastPx from inbound TCR.
			Y	
75	TradeDate		Y	TradeDate from inbound TCR.
				TransactTime (Execution Time) from
				inbound TCR (Time the transaction
				represented by this Trade Capture
	TroppostT:	ma	V	Report occurred (in UTC/GMT).
60	TransactTi	IIIE	Y	Format: YYYYMMDD-HH:MM:SS
	JT10 5 - 12	Olala Ona /Na Ol Lee		TrdCapRptSideGrp/NoSides from
552		SideGrp/NoSides	Y	inbound TCR.
$\rightarrow$	54 Side		Y	Side from inbound TCR.
$\rightarrow$	37 Orde	erID	Υ	Required in FIX, set to "NONE".
				Parties/NoPartyIDs from inbound
$\rightarrow$	453 Par	rties/NoPartyIDs	F	TCR.
$\rightarrow$		48 PartyID	F	PartyID from inbound TCR.
	<del>                                     </del>			Will always be set to:
$\rightarrow$	$\rightarrow$ 4	47 PartyIDSource	F	C = Generally accepted market
L	<u> </u>	1, 0 0 0 0 0		

	1		1			norticinant identification (e.g. FINDA
						participant identifier (e.g. FINRA mnemonic)
$\rightarrow$	$\rightarrow$	452	PartyR	tole	F	PartyRoles from inbound TCR.
$\rightarrow$	$\rightarrow$	802	NoPar	tySubIDs		NoPartySubIDs from inbound TCR.
$\rightarrow$	$\rightarrow$	$\rightarrow$	523	PartySubID		PartySubID from inbound TCR.
$\rightarrow$	$\rightarrow$	$\rightarrow$	803	PartyIDSubType		PartySubIDType from inbound TCR.
$\rightarrow$	528	Order	Capacity			OrderCapacity from inbound TCR.
$\rightarrow$	12	Comm				Commission from inbound TCR.
$\rightarrow$	13	Comm				CommType from inbound TCR.
	13	Commi	туре			Text from inbound TCR. Will not be
$\rightarrow$	58	Text				displayed to Contra party on SPAL.
5149	Memo					Memo from inbound TCR.
9854		deFlag				OverrideFlag from inbound TCR.
3034	Oveill	uei iag				LockedInIndicator from inbound
22013	Locke	dInIndic	ator			TCR.
22005	Specia	alProces	singFla	g		SpecialProcessingFlag from inbound TCR.
						FINRA Extension to FIX 4.4.
						Reserved for future use. Will not be
22001	Tradel	Modifier	1			present in any current message.
						FINRA Extension to FIX 4.4.
00000	T	Mar III	_			Reserved for future use. Will not be
22002	Tradel	Modifier:	2			present in any current message.
						FINRA Extension to FIX 4.4.
						Extended hours/Late sale condition modifier generated by TRACE and
						returned on the outbound
						acknowledgement of the trade report.
						Valid values:
						T = Trades reported after market
						hours
						U = Trades reported after market
						hours and reported late
						Z = Trades reported during market
22003	Tradel	Modifier	3			hours and reported late
22004	Tradel	Modifier-	4			TradeModifier4 from inbound TCR.
						TradingMarketIndicator from inbound
22016	Tradin	gMarke	tIndicato	or	F	TCR.
22006	Specia	alPriceIn	dicator			SpecialPriceIndicator from inbound TCR.
<del>22007</del>	Execu	tionTime	9		F	ExecutionTime from inbound TCR.
22009	Prepa	rationTir	me			PreparationTime from inbound TCR.
						NoRemunerationIndicator from
22034	NoRer	munerat	ionIndic	ator		inbound TCR.
22036	ATSE	xecution	MPID			ATSExecutionMPID from inbound TCR.
						Indicates whether or not this
						message is a drop copy of another
						message.
						Valid values:
						Y = Yes
797		/IsgIndic				N = No (default value)
	Standa	ard Trail	er		Υ	

## 5.1.7 Trade Capture Report – Allege/CAAL (out)

Please note that the CAAL layout below is representative of an allege based on the submitting party using FIX as their method of entry. Some tags that are FIX-centric may not be present if the submitting party used CTCI or TRAQS Web to enter their trade.

Tag	FIX tag n	ame	Req'd	Comment
	Standard		Y	MsgType = AE
	Otariaara	· roador	<u> </u>	Used to identify the type of
				acknowledgment.
				Value "CAĂL" identifies a Trade
				Capture Report accepted by FINRA
				alleging the recipient of this message as
1011	Messagel	EventSource	F	the contra party on the trade.
,				Identifier assigned by FINRA (not Control
571	TradeRep	oortiD	Y	Number).
1042	Casandar	v Firm Trodol D		SecondaryFirmTradeID from inbound
1042	Secondar	yFirmTradeID		TCR. ControlDate assigned by FINRA on
				accepted trade report. Format:
22011	ControlDa	ate	F	YYYYMMDD.
22011	CONTROLLE		<u>'</u>	Control Number assigned by FINRA on
				accepted trade report. 10 digits, starting
1003	TradeID		F	with the value "2".
				Valid values:
487	TradeRep	ortTransType	F	0 = New
				Valid values:
856	TradeRep	ortType	F	1 = Allege
				Will always be set to:
570		yReported	Y	N = No
64	SettlDate		F	SettlDate from inbound TCR.
1015	AsOfIndic			AsOfIndicator from inbound TCR.
48	Instrumer	nt/SecurityID	Y	Main Security Identifier (CUSIP).
				Type of identifier given in SecurityID.
		./O :/ IDO	_	Valid values:
22		at/SecurityIDSource	<u> </u>	1 = CUSIP
454		nt/NoSecurityAltID	F	Always set to 1
455	Instrumer	nt/SecurityAltID	F	Alternative Security identifier (Symbol).
450	1	1/0 '1 A141D0	_	Valid values:
456		nt/SecurityAltIDSource	F	8 = Exchange Symbol
32	LastQty		Y	LastQty from inbound TCR.
31	LastPx		Y	LastPx from inbound TCR.
75	TradeDate	e	Y	TradeDate from inbound TCR.
				Time the transaction represented by this
				Trade Capture Report occurred Format: YYYYMMDD-HH:MM:SS (in
60	TransactT	ime	Y	UTC/GMT).
552	NoSides	IIIIO	Y	Set to 2
→	54	Side	Y	Side from inbound TCR.
$\rightarrow$	37	OrderID	Y	Required in FIX, set to NONE.
	453	NoPartyIDs	F	Parties/NoPartyIDs from inbound TCR.
<u>→</u>	400	†	F	,
$\rightarrow$	$\rightarrow$	448   PartyID		PartyID from inbound TCR.

		1	T		1	T
						Will always be set to:
						C = Generally accepted market
		447	D = = + 1D	0	_	participant identifier (e.g. FINRA
$\rightarrow$	$\rightarrow$	447	PartyID		F	mnemonic)
$\rightarrow$	$\rightarrow$	452	PartyRo		F	PartyRoles from inbound TCR.
$\rightarrow$	$\rightarrow$	802	NoParty			NoPartySubIDs from inbound TCR.
$\rightarrow$	$\rightarrow$	$\rightarrow$	523	,		PartySubID from inbound TCR.
$\rightarrow$	$\rightarrow$	$\rightarrow$	803	PartyIDSubType		PartySubIDType from inbound TCR.
$\rightarrow$	528		Capacity			OrderCapacity from inbound TCR.
$\rightarrow$	12	Comm				Commission from inbound TCR.
$\rightarrow$	13	Comm	Туре			CommType from inbound TCR.
5149	Memo					Memo from inbound TCR.
9854	OverrideF	lag				OverrideFlag from inbound TCR.
22013	LockedInI	ndicator				LockedInIndicator from inbound TCR.
						SpecialProcessingFlag from inbound
22005	SpecialPr	ocessing	gFlag			TCR.
						FINRA Extension to FIX 4.4. Reserved
00004						for future use. Will not be present in any
22001	TradeMod	difier1				current message.
						FINRA Extension to FIX 4.4. Reserved
22002	TradeMod	lifiar2				for future use. Will not be present in any current message.
22002	Tradeivioc	ille12				FINRA Extension to FIX 4.4.
						Extended hours/Late sale condition
						modifier generated by TRACE and
						returned on the outbound
						acknowledgement of the original trade
						report. Valid values:
						T = Trades reported after market hours
						U = Trades reported after market hours
						and reported late Z = Trades reported during market
22003	TradeMod	lifior3				hours and reported late
22004	TradeMod					TradeModifier4 from inbound TCR.
22004	TIAGENIOC	4111C17				Trademodifier from fibound Text.  TradingMarketIndicator from inbound
22016	TradingMa	arketIndi	icator		F	TCR.
			·		· · ·	SpecialPriceIndicator from inbound
22006	SpecialPr	iceIndica	ator			TCR.
22007	ExecutionTime				F	ExecutionTime from inbound TCR.
22009	Preparation					PreparationTime from inbound TCR.
						NoRemunerationIndicator from inbound
22034	NoRemun	erationl	ndicator			TCR.
22036	ATSExect	utionMP	ID			ATSExecutionMPID from inbound TCR.
						Indicates whether or not this message is
						a drop copy of another message.
						Valid values:
707	Consilla	Indicata:				Y = Yes
797	CopyMsgl		-			N = No (default value)
	Standard	ıraıler			Υ	

## 5.1.8 Trade Capture Report – Confirmed Cancel/CACX (out)

			· ,
Tag	FIX tag name	Req'd	Comment
	Standard Header	Y	MsgType = AE
			Used to identify the type of
			acknowledgment.
			Value "CACX" identifies a Trade Cancel
1011	MessageEventSource	F	accepted by FINRA.
			Identifier assigned by FINRA (not Control
571	TradeReportID	Υ	Number).
	•		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
572	TradeReportRefID		transaction (CAAL).
22011	ControlDate	F	ControlDate from inbound Trade Cancel.
			TradeID from inbound Trade Cancel.
1003	TradeID	F	(FINRA Control Number).
			Valid values:
487	TradeReportTransType	F	1 = Cancel
	,		Type of Trade Report. Shows the type of
			the incoming trade report.
			Valid values:
856	TradeReportType	F	6 = Cancel
	, ,,		Will always be set to:
570	PreviouslyReported	Υ	N = No
			LastQty from inbound Trade Cancel.
			nnnnnnnnnnnnn
			Please note: on a Cancel of a trade
			report submitted on a prior day (T-1
			through T-20), the value "0" will always
32	LastQty	Y	be returned.
			LastPx from inbound Trade Cancel.
			Please note: on a Cancel of a trade
			report submitted on a prior day (T-1
			through T-20), the value "0" will always
31	LastPx	Υ	be returned.
			TradeDate from inbound Trade Cancel.
			Format: YYYYMMDD
			Please note: on a Cancel of a trade
			report submitted on a prior day (T-1
			through T-20), the current date will
75	TradeDate	Y	always be returned.
			TransactTime from inbound Trade Cancel
			Format: YYYYMMDD-HH:MM:SS (in
60	TransactTime	Y	UTC/GMT).
			Will always be set to "1" on all CACX
552	TrdCapRptSideGrp/NoSides	Y	messages.
			Reporting party side of trade.
$\rightarrow$	54 Side	Y	Valid values:

				1 = Buy 2 = Sell
				Please note: on a Cancel of a trade report submitted on a prior day (T-1 through T-20), the value "1" will always be returned regardless of the value submitted in Tag 54 on the inbound Trade Cancel request.
$\rightarrow$	37	OrderID	Υ	Will always be set to "NONE".
797	CopyMs	gIndicator		Indicates whether or not this message is a drop copy of another message.  Valid values:  Y = Yes  N = No (default value)
	Standard		Υ	

## 5.1.9 Trade Capture Report – Confirmed Reversal /CAHX (out)

Tag	EIY +	ag naı	ma	Req'd	Comment
ıay		dard H		Y	MsgType = AE
	Stant	Jaiu n	eauei	T	Used to identify the type of acknowledgment.
					Value "CAHX" identifies a Reversal accepted
1011	Mess	ageF\	ventSource	F	by FINRA.
1011	IVICOC	ager	rentegarge	-   '	Identifier assigned by FINRA (not Control
571	Trade	eRepo	rtID	Υ	Number).
572			rtRefID	F	TradeReportID from inbound Trade Reversal.
					SecondaryFirmTradeID from inbound Trade
1042	Seco	ndaryl	FirmTradeID		Reversal.
					ControlDate generated by FINRA on the
22011	Cont	rolDate	e	F	accepted Trade Reversal.
					Tradeld generated by FINRA on the accepted
1003	Trade	elD		F	Trade Reversal.
					Valid values:
487	Trade	eRepo	rtTransType	F	1 = Cancel
		_	_		Valid values:
856	Trade	eRepo	rtType	F	6 = Cancel
570					Will always be set to:
570			Reported	Y	N = No
64	Settll	Date		F	SettlDate from inbound Trade Reversal.
4045	۸ - ۵	L. P			Always set to 1 on Reversals.
1015		Indica			1 = true
48	Instru	ıment/	SecurityID	Y	Main Security Identifier (CUSIP).
					Type of identifier given in SecurityID.
20	الم مقاد		Constitut DCostran	_	Valid values:
22			SecurityIDSource	F F	1 = CUSIP
454			NoSecurityAltID	F	Always set to 1
455	instru	ıment/	SecurityAltID	<u> </u>	Alternative Security identifier (Symbol).  Valid values:
456	Inetri	ımant/	SecurityAltIDSource	F	8 = Exchange Symbol
32	Last		SecurityAlliDSource	Y	LastQty from inbound Trade Reversal.
<del> </del>				Y	,
31	LastF				LastPx from inbound Trade Reversal.
75	rrade	<u>eDate</u>		Y	TradeDate from inbound Trade Reversal.  TransactTime from inbound Trade Reversal
					Time the transaction represented by this
					reversal occurred (in UTC/GMT).
60	Trans	sactTir	ne	Υ	Format: YYYYMMDD-HH:MM:SS
			-		TrdCapRptSideGrp/NoSides from inbound
552	TrdC	apRpt:	SideGrp/NoSides	Υ	Trade Reversal.
$\rightarrow$		Side	•	Υ	Side from inbound Trade Reversal
$\rightarrow$		Orderl	D	Y	Required in FIX, set to NONE.
<u> </u>	- 01	J. 4011	_	<u>'</u>	Parties/NoPartyIDs from inbound Trade
$\rightarrow$	453	Partie	es/NoPartyIDs	F	Reversal
$\rightarrow$	<i>→</i>	448	PartyID	F	PartyID from inbound Trade Reversal.
					Will always be set to:
$\rightarrow$	$\rightarrow$	447	PartyIDSource	F	
$\rightarrow$	$\rightarrow$	452	PartyRole	F	PartyRoles from inbound Trade Reversal.
			•		C = Generally accepted market participant identifier (e.g. FINRA mnemonic)

$\rightarrow$	$\rightarrow$	802	NoPa	artySubIDs		NoPartySubIDs from inbound Trade Reversal.
	$\rightarrow$	$\rightarrow$	523	PartySubID		PartySubID from inbound Trade Reversal.
$\rightarrow$	$\rightarrow$	$\xrightarrow{\prime}$	803	PartyIDSubType		PartySubIDType from inbound Trade Reversal
	528					
<u>→</u>			nissio:			OrderCapacity from inbound Trade Reversal  Commission from inbound Trade Reversal
$\rightarrow$	12					
$\rightarrow$	13	Comi	mType	!		CommType from inbound Trade Reversal  Text from inbound Trade Reversal. Will not be
$\rightarrow$	58	Text				provided to contra party.
5149	Mem					Memo from inbound Trade Reversal.
9854		rideFla	\a			OverrideFlag from inbound Trade Reversal
9004	Ovei	nueria	ıy			LockedInIndicator from inbound Trade
22013	Lock	edInIn	dicator			Reversal.
22010	LOOK	<u> </u>	aloutoi			SpecialProcessingFlag from inbound Trade
22005	Spec	ialProd	cessino	gFlag		Reversal
			,	, ,		FINRA Extension to FIX 4.4. Reserved for
						future use. Will not be present in any current
22001	Trade	eModif	ier1			message.
						FINRA Extension to FIX 4.4. Reserved for
						future use. Will not be present in any current
22002	Trade	eModif	ier2			message.
						FINRA Extension to FIX 4.4.
						Extended hours/Late sale condition modifier
						generated by TRACE and returned on the outbound acknowledgement of the original
						trade report. Valid values:
						T = Trades reported after market hours
						U = Trades reported after market hours and
						reported late
						Z = Trades reported during market hours and
22003	Trade	eModif	ier3			reported late
22004	Trade	eModif	ier4			TradeModifier4 from inbound Trade Reversal
						TradingMarketIndicator from inbound Trade
22016	Tradi	ngMar	<u>ketIn</u> d	icator	F	Reversal
						SpecialPriceIndicator from inbound Trade
22006		ialPric		ator		Reversal
<del>22007</del>		utionT			F	ExecutionTime from inbound Trade Reversal
22009	Prepa	aration	Time			PreparationTime from inbound Trade Reversal
						NoRemunerationIndicator from inbound Trade
22034	NoRe	emune	rationl	ndicator	1	Reversal.
		_			1	ATSExecutionMPID from inbound Trade
22036	ATSI	ecut	ionMP	ID	1	Reversal.
					1	Indicates whether or not this message is a
					1	drop copy of another message.
					1	Valid values: Y = Yes
797	Conv	MsgIn	dicato	•		Y = Yes N = No (default value)
131		dard T		<u> </u>	Y	14 - 140 (deladit value)
	Siano	uaiù I	ialiel		ľ	

## 5.1.10 Trade Capture Report - Confirmed Correction/CACR (out)

Tag	FIX tag name	Req'd	Comment
	Standard Header	Y	MsgType = AE
			Used to identify the type of
			acknowledgment.
			Value "CACR" identifies a Trade
1011	MessageEventSource	F	Correction accepted by FINRA.
	•		Identifier assigned by FINRA (not Control
571	TradeReportID	Υ	Number).
			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
572	TradeReportRefID	F	transaction (CAAL).
			SecondaryFirmTradeID from inbound
1042	SecondaryFirmTradeID		Trade Correction.
	-		New ControlDate assigned to the
22011	ControlDate	F	accepted Trade Correction.
			New TradeID assigned to the accepted
1003	TradeID	F	Trade Correction.
			ControlDate (tag 22011) from inbound
22012	OrigControlDate	F	Trade Correction.
		_	Tradeld (tag 1003) from inbound Trade
1126	OrigTradeID	F	Correction.
40-		_	Valid values:
487	TradeReportTransType	F	2 = Replace
		_	Valid values:
856	TradeReportType	F	5 = Correction
570	Dec to al December		Will always be set to:
570	PreviouslyReported	Y	N = No
64	SettlDate	F	SettlDate from inbound Trade Correction.
			AsOfIndicator from inbound Trade
1015	AsOfIndicator		Correction.
48	Instrument/SecurityID	Y	Main Security Identifier (CUSIP).
			Type of identifier given in SecurityID.
		_	Valid values:
22	Instrument/SecurityIDSource	F	1 = CUSIP
454	Instrument/NoSecurityAltID	F	Always set to 1
455	Instrument/SecurityAltID	F	Alternative Security identifier (Symbol).
			Valid values:
456	Instrument/SecurityAltIDSource	F	8 = Exchange Symbol
32	LastQty	Υ	LastQty from inbound Trade Correction.
31	LastPx	Υ	LastPx from inbound Trade Correction.
		1	TradeDate from inbound Trade
75	TradeDate	Υ	Correction.
		]	TransactTime from inbound Trade
			Correction Time the transaction
		1	represented by this Trade Capture
		1	Report occurred (in UTC/GMT). Format:
60	TransactTime	Υ	YYYYMMDD-HH:MM:SS
		1	TrdCapRptSideGrp/NoSides from
552	TrdCapRptSideGrp/NoSides	Y	inbound Trade Correction.
$\rightarrow$	54 Side	Υ	Side from inbound Trade Correction.

$\rightarrow$	37 OrderID				Υ	Required in FIX, set to NONE.
	453	Parties/N	NoPartyID:	9	F	Parties/NoPartyIDs from inbound Trade Correction.
$\rightarrow$		448	PartyID	3	<u>'</u> F	PartyID from inbound Trade Correction.
	$\rightarrow$	440	FaityiD		<u>'</u>	Will always be set to:
						C = Generally accepted market
						participant identifier (e.g. FINRA
$\rightarrow$	$\rightarrow$	447	PartyIDS	Source	F	mnemonic)
						PartyRoles from inbound Trade
$\rightarrow$	$\rightarrow$	452	PartyRol	e	F	Correction.
						NoPartySubIDs from inbound Trade
$\rightarrow$	$\rightarrow$	802	NoParty S	SubIDs		Correction.
						PartySubID from inbound Trade
$\rightarrow$	$\rightarrow$	$\rightarrow$	523	PartySubID		Correction.
$\rightarrow$	$\rightarrow$	$\rightarrow$	803	PartyIDSubType		LastQty from inbound Trade Correction.
						OrderCapacity from inbound Trade
$\rightarrow$	528	OrderCa	pacity			Correction.
			_			Commission from inbound Trade
$\rightarrow$	12	Commis	sion			Correction.
	40	<u> О</u>				CommType from inbound Trade
$\rightarrow$	13	CommT	уре			Correction.  Text from inbound Trade Correction, Will
		Tava				
→ 	58	Text				not be provided to contra party.
5149	Memo					Memo from inbound Trade Correction.
0054	Oversid	o Elo a				OverrideFlag from inbound Trade Correction.
9854	Overrid	eriag				LockedInIndicator from inbound Trade
22013	Lockodi	nIndicato	•			Correction.
22013	LOCKCO	midicato				SpecialProcessingFlag from inbound
22005	Special	Processin	αFlaα			Trade Correction.
22000	Opedian	100000111	griag			FINRA Extension to FIX 4.4. Reserved
						for future use. Will not be present in any
22001	TradeM	odifier1				current message.
						FINRA Extension to FIX 4.4. Reserved
						for future use. Will not be present in any
22002	TradeM	odifier2				current message.
						FINRA Extension to FIX 4.4.
						Extended hours/Late sale condition
						modifier generated by TRACE and
						returned on the outbound
						acknowledgement of the original trade report. Valid values:
						T = Trades reported after market hours
						U = Trades reported after market hours
						and reported late
						Z = Trades reported during market hours
22003	TradeM	odifier3				and reported late
						TradeModifier4 from inbound Trade
22004	TradeM	odifier4				Correction.
						TradingMarketIndicator from inbound
22016	Trading	MarketInd	licator		F	Trade Correction.
00000		D.:	-1			SpecialPriceIndicator from inbound
22006		PriceIndic	ator			Trade Correction.
<del>22007</del>	ExecutionTime				F	ExecutionTime from inbound Trade

			Correction.
			PreparationTime from inbound Trade
22009	PreparationTime		Correction.
			NoRemunerationIndicator from inbound
22034	NoRemunerationIndicator		Trade Correction.
			ATSExecutionMPID from inbound Trade
22036	ATSExecutionMPID		Correction.
			Indicates whether or not this message is
			a drop copy of another message.
			Valid values:
			Y = Yes
797	CopyMsgIndicator		N = No (default value)
	Standard Trailer	Υ	

### 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.

#### 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 (please note that submission of tags not included in this document may cause the Trade Capture Report to not be processed). Custom fields have been added in two ranges:

- In the 22XXX-range custom fields with no representation in standard FIX has been added.
- The 20001-21XXX range is primarily used for the historical transactions (trades submitted prior to the T-20 period), where 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 "Original", and 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	
5149	Memo	No	
9854	OverrideFlag	No	
1126	OrigTradeID	Yes	
22001	TradeModifier1	No	
22002	TradeModifier2	No	
22003	TradeModifier3	No	
22004	TradeModifier4	No	
22005	SpecialProcessingFlag	No	
22006	SpecialPriceIndicator	No	
22007	ExecutionTime	No	
22009	PreparationTime	No	
22011	ControlDate	No	
22012	OrigControlDate	No	
22013	LockedInIndicator	No	
22015	BranchOfficeCodeSequenceNumber	No	
22016	TradingMarketIndicator	No	
22034	NoRemunerationIndicator	No	
22036	ATSExecutionMPID	No	
20453	OriginalNoPartyIDs	No	
20448	OriginalPartyID	No	
20447	OriginalPartyIDSource	No	
20452	OriginalPartyRole	No	

### 6.2 Enumerations added

Enum	Enum description	Tag	Comment
83	Clearing Firm	452	PartyRole
4001-			
4071	Different reject reasons	751	TradeReportRejectReason

## 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  $\frac{\text{http://fixprotocol.org/specifications/FIX.4.4}}{\text{for details.}}$ 

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: nnnnnnnnnnnnn	
31	LastPx	Format: nnnn.nnnnnn	
12	Commission	Format: nnnnnn.nn	
1003	TradeID	Max ten digits.	
1126	OrigTradeID	Max ten digits.	
455	SecurityAltID	Max 14 characters.	
48	SecurityID	9 character CUSIP code.	
5149	Memo	Max 50 characters.	
523	PartySubID	Max 8 characters	
22013	LockedInIndicator	FIX Data type: Boolean	
22015	BranchOfficeCodeSequenceNumber	FIX Data type: String	

## 8 Trade Report Examples

**NOTE:** The following examples are meant to highlight how important fields (in particular the party identifier fields) are intended to be populated in different scenarios. *To improve clarity, only the most important fields have been included in the listings.* 

### 8.1 Example 1: Simple trade between 2 parties (Interdealer trade)

Broker Dealer A (ABCD) is the Reporting Party selling to Broker Dealer B (EFGH) as the Contra Party

	TAG		TAG Name	Value	Comment
552			Number of Sides	2	Report contains information on both sides of the trade.
$\rightarrow$	54		Side	2	Indicates the following repeating group represents the sell side of the trade.
$\rightarrow$	453		Number of parties on the Reporting side	2	Reporting party (who is the executing firm) and his clearing firm.
$\rightarrow$	$\rightarrow$	448	Party ID	ABCD	Broker Dealer A's MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	1	Executing firm (reporting on his own behalf).
$\rightarrow$	$\rightarrow$	448	Party ID	0123	Clearing firm number.
$\rightarrow$	$\rightarrow$	452	Party Role	83	Clearing firm of the Executing firm.
$\rightarrow$	528		Order Capacity	Р	Principal.
$\rightarrow$	54		Side	1	Indicates the following repeating group represents the buy side of the trade.
$\rightarrow$	453		Number of parties on the Contra side	1	Only the Contra firm.
	$\rightarrow$	448	Party ID	EFGH	Broker Dealer B's MPID.
	$\rightarrow$	452	Party Role	17	Contra Firm.

- Number of sides (Tag 552) must always be submitted as "2" to allow identification of the Contra Party.
- The Locked-In Indicator (Tag 22013) is not submitted therefore only Contra Party ID/role can be submitted for the contra portion of the report.
- Order Capacity (Tag 528), Commission (Tag 12), Party Sub ID aka Contra Branch Sequence (Tag 523), Secondary Firm Trade ID aka Contra Client Trade Identifier (Tag 1042) and any other related contra Tags cannot be repeated or submitted since the trade was not submitted as a Locked-In trade (Tag 22013). If any of these Tags are repeated/submitted, the trade will be rejected.

# 8.2 Example 2: Simple trade between a broker-dealer and its customer (Customer trade)

Broker Dealer A (ABCD) is the Reporting Party buying from a customer (C) as the Contra Party

	TAG		TAG Name	Value	Comment
552			Number of Sides	2	Report contains information on both sides of the trade.
$\rightarrow$	54		Side	1	Indicates the following repeating group represents the buy side of the trade.
$\rightarrow$	453		Number of parties on the Reporting side	2	Reporting party (who is the executing firm) and his clearing firm.
$\rightarrow$	$\rightarrow$	448	Party ID	ABCD	Broker Dealer A's MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	1	Executing firm (reporting on his own behalf).
$\rightarrow$	$\rightarrow$	448	Party ID	0123	Clearing firm number.
$\rightarrow$	$\rightarrow$	452	Party Role	83	Clearing firm of the Executing firm.
$\rightarrow$	528		Order Capacity	Α	Agent.
$\rightarrow$	12		Commission	500.00	Determined to be Buyer's commission based on Tag 54 value of 1.
$\rightarrow$	54		Side	2	Indicates the following repeating group represents the sell side of the trade.
$\rightarrow$	453		Number of parties on the Contra side	1	Only the Contra firm.
$\rightarrow$	$\rightarrow$	448	Party ID	С	Customer MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	17	Contra Firm.

- Number of sides (Tag 552) must always be submitted as "2" to allow identification of the Contra Party.
- The Locked-In Indicator (Tag 22013) is not submitted therefore only Contra Party ID/role can be submitted for the contra portion of the report.
- Order Capacity (Tag 528), Commission (Tag 12), Party Sub ID *aka* Contra Branch Sequence (Tag 523), Secondary Firm Trade ID *aka* Contra Client Trade Identifier (Tag 1042) and any other related contra Tags cannot be repeated or submitted since the trade was not submitted as a Locked-In trade (Tag 22013). If any of these Tags are repeated/submitted, the trade will be rejected.

Note: A trade between a broker-dealer and its non-member affiliate would be reported in the same manner above, however the PartyID of the contra firm would be submitted as "A".

#### 8.3 Example 3: Simple Give-Up trade between 2 parties

Broker Dealer A (ABCD) is the Reporting Party Giving Up Broker Dealer C (MNOP) who is buying from Broker Dealer B (EFGH)

	TAG		TAG Name	Value	Comment
552			Number of Sides	2	Report contains information on both
					sides of the trade.
$\rightarrow$	54		Side	1	Indicates the following repeating
					group represents the buy side of the
					trade.
$\rightarrow$	453		Number of parties on	3	Reporting party, the Give-up firm and
			the Reporting side		his clearing firm.
$\rightarrow$	$\rightarrow$	448	Party ID	ABCD	Broker Dealer A MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	1	Executing Firm.
$\rightarrow$	$\rightarrow$	448	Party ID	MNOP	Broker Dealer C MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	14	Giveup Firm.
$\rightarrow$	$\rightarrow$	448	Party ID	0123	Clearing firm number.
$\rightarrow$	$\rightarrow$	452	Party Role	83	Clearing firm of the Giveup firm.
$\rightarrow$	528		Order Capacity	Α	Agent.
$\rightarrow$	12		Commission	500.00	Determined to be Buyer's
					commission based on Tag 54 value
					of 1.
$\rightarrow$	54		Side	2	Indicates the following repeating
					group represents the sell side of the
					trade.
$\rightarrow$	453		Number of parties on	1	Only the Contra firm.
			the Contra side		
$\rightarrow$	$\rightarrow$	448	Party ID	EFGH	Broker Dealer B MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	17	Contra Firm.

- Number of sides (Tag 552) must always be submitted as "2" to allow identification of the Contra Party.
- The Locked-In Indicator (Tag 22013) is not submitted therefore only Contra Party ID/role can be submitted for the contra portion of the report.
- Order Capacity (Tag 528), Commission (Tag 12), , Party Sub ID *aka Contra Branch Sequence* (Tag 523), Secondary Firm Trade ID *aka Contra Client Trade Identifier* (Tag 1042) and any other related contra Tags cannot be repeated or submitted since the trade was not submitted as a Locked-In trade (Tag 22013). If any of these Tags are repeated/submitted, the trade will be rejected.

#### 8.4 Example 4: One-Sided Locked-In Trade

Broker Dealer A (ABCD) is the Reporting Party Giving Up Broker Dealer C (MNOP), who he traded with. ABCD bought from MNOP.

	TAG		TAG Name	Value	Comment
552			Number of Sides	2	Report contains information on both
					sides of the trade.
$\rightarrow$	54		Side	2	Indicates the following repeating
					group represents the sell side of the
					trade.
$\rightarrow$	453		Number of parties on	3	Reporting party, the Give-up firm and
			the Reporting side		his clearing firm.
$\rightarrow$	$\rightarrow$	448	Party ID	ABCD	Broker Dealer A MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	1	Executing Firm.
$\rightarrow$	$\rightarrow$	448	Party ID	MNOP	Broker Dealer C MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	14	Giveup Firm.
$\rightarrow$	$\rightarrow$	448	Party ID	0123	Clearing firm number.
$\rightarrow$	$\rightarrow$	452	Party Role	83	Clearing firm of the Giveup firm.
$\rightarrow$	528		Order Capacity	Р	MNOP acting as Principal.
$\rightarrow$	54		Side	1	Indicates the following repeating
					group represents the buy side of the
					trade.
$\rightarrow$	453		Number of parties on	2	Contra firm and his clearing firm.
			the Contra side		
$\rightarrow$	$\rightarrow$	448	Party ID	ABCD	Broker Dealer A MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	17	Contra Firm.
$\rightarrow$	$\rightarrow$	448	Party ID	0456	Clearing firm number.
$\rightarrow$	$\rightarrow$	452	Party Role	83	Clearing firm of the Contra firm.
$\rightarrow$	528		Order Capacity	Α	ABCD acting as Agent.
$\rightarrow$	12		Commission	500.00	Determined to be Buyer's
					commission based on Tag 54 value
					of 1.
22013			Locked-In Indicator	Υ	Locked-In trade.

- TRACE rules require that all Locked-In trades must be submitted from the sell-side perspective. Since ABCD reports for MNOP, and ABCD bought from MNOP, ABCD reports the trade from MNOP's perspective (as the sell-side), therefore the Giveup role is contained within the Sell group of the message and ABCD is listed as the Contra under the Buy group.
- Number of sides (Tag 552) must always be submitted as "2" to allow identification of the Contra Party.
- The Locked-In Indicator (Tag 22013) is submitted therefore any Contra Party related tags can be submitted for the contra portion of the report.
- Order Capacity (Tag 528) must be repeated on Locked-In trades.
- Clearing Firm (83) must be repeated in Party Role (Tag 452) under both sides on Locked-in trades.
- Commission (Tag 12) may be omitted, submitted for one of the sides, or repeated under each side on Locked-In trades.

- Trade Report ID *aka Client Trade Identifier* (Tag 571) corresponds to the Reporting Party side and may be submitted. Secondary Firm Trade ID *aka Contra Client Trade Identifier* (Tag 1042) corresponds to the Contra Party side and may be submitted on a Locked-In trade.
- Party Sub ID *aka Branch Sequence* (Tag 523) may be omitted, submitted for one of the sides, or repeated under each side on Locked-In trades.
- All other Tags correspond to the reporting side of the trade.

#### 8.5 Example 5: One-Sided Locked-In Trade

Broker Dealer A (ABCD) is the Reporting Party Giving Up Broker Dealer C (MNOP), who he traded with. ABCD sold to MNOP.

	TAG		TAG Name	Value	Comment
552			Number of Sides	2	Report contains information on both sides of the trade.
$\rightarrow$	54		Side	2	Indicates the following repeating group represents the sell side of the trade.
$\rightarrow$	453		Number of parties on the Reporting side	2	Reporting/executing party and his clearing firm.
$\rightarrow$	$\rightarrow$	448	Party ID	ABCD	Broker Dealer A MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	1	Executing Firm.
$\rightarrow$	$\rightarrow$	448	Party ID	0123	Clearing firm number.
$\rightarrow$	$\rightarrow$	452	Party Role	83	Clearing firm of the Executing firm.
$\rightarrow$	528		Order Capacity	Α	ABCD acting as Agent.
$\rightarrow$	12		Commission	500.00	Determined to be Seller's commission based on Tag 54 value of 2.
$\rightarrow$	54		Side	1	Indicates the following repeating group represents the buy side of the trade.
$\rightarrow$	453		Number of parties on the Contra side	3	Reporting party, the Give-up firm and his clearing firm.
$\rightarrow$	$\rightarrow$	448	Party ID	ABCD	Broker Dealer A MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	17	Contra Firm.
$\rightarrow$	$\rightarrow$	448	Party ID	MNOP	Broker Dealer C MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	14	Giveup Firm.
$\rightarrow$	$\rightarrow$	448	Party ID	0456	Clearing firm number.
$\rightarrow$	$\rightarrow$	452	Party Role	83	Clearing firm of the Contra firm.
$\rightarrow$	528		Order Capacity	Р	MNOP acting as Principal.
22013			Locked-In Indicator	Υ	Locked-In trade.

- TRACE rules require that all Locked-In trades must be submitted from the sell-side perspective.
   Since ABCD reports for MNOP, and ABCD sold to MNOP, ABCD reports the trade from ABCD's perspective (as the sell-side), therefore the Giveup role is contained within the Buy (Contra) group of the message and ABCD is listed as the Executing firm under the Sell group.
- Number of sides (Tag 552) must always be submitted as "2" to allow identification of the Contra Party.
- The Locked-In Indicator (Tag 22013) is submitted therefore any Contra Party related tags can be submitted for the contra portion of the report.
- Order Capacity (Tag 528) must be repeated on Locked-In trades.
- Clearing Firm (83) must be repeated in Party Role (Tag 452) under both sides on Locked-in trades.
- Commission (Tag 12) may be omitted, submitted for one of the sides, or repeated under each side on Locked-In trades.

- Trade Report ID *aka Client Trade Identifier* (Tag 571) corresponds to the Reporting Party side and may be submitted. Secondary Firm Trade ID *aka Contra Client Trade Identifier* (Tag 1042) corresponds to the Contra Party side and may be submitted on a Locked-In trade.
- Party Sub ID *aka Branch Sequence* (Tag 523) may be omitted, submitted for one of the sides, or repeated under each side on Locked-In trades.
- All other Tags correspond to the reporting side of the trade.

#### 8.6 Example 6: Two-Sided Locked-In Trade

Broker Dealer A (ABCD) is the Reporting Party Giving Up both Broker Dealer C (MNOP) and Broker Dealer B (EFGH), who traded with one another. MNOP sold to EFGH. ABCD is not a part of the trade, merely entering the trade on behalf of both of its correspondents (MNOP and EFGH).

TAG		- J	TAG Name	Value	Comment
552			Number of Sides	2	Report contains information on both sides of the trade.
$\rightarrow$	54		Side	2	Indicates the following repeating group represents the sell side of the trade.
$\rightarrow$	453		Number of parties on the Reporting side	3	Reporting party, the Give up firm (on the reporting side) and his clearing firm.
$\rightarrow$	$\rightarrow$	448	Party ID	ABCD	Broker Dealer A MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	1	Executing Firm.
$\rightarrow$	$\rightarrow$	448	Party ID	MNOP	Broker Dealer C MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	14	Giveup Firm.
$\rightarrow$	$\rightarrow$	448	Party ID	0123	Clearing firm number.
$\rightarrow$	$\rightarrow$	452	Party Role	83	Clearing firm of the Reporting Giveup firm.
$\rightarrow$	528		Order Capacity	Α	MNOP acting as Agent.
$\rightarrow$	12		Commission	500.00	Determined to be Seller's commission based on Tag 54 value of 2.
$\rightarrow$	54		Side	1	Indicates the following repeating group represents the buy side of the trade.
$\rightarrow$	453		Number of parties on the Contra side	3	Reporting party, the Give-up firm (on the contra side) and his clearing firm.
$\rightarrow$	$\rightarrow$	448	Party ID	ABCD	Broker Dealer A MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	17	Contra Firm.
$\rightarrow$	$\rightarrow$	448	Party ID	EFGH	Broker Dealer B MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	14	Giveup Firm.
$\rightarrow$	$\rightarrow$	448	Party ID	0456	Clearing firm number.
$\rightarrow$	$\rightarrow$	452	Party Role	83	Clearing firm of the Contra Giveup firm.
$\rightarrow$	528		Order Capacity	Α	EFGH acting as Agent.
→ 22013	12		Commission  Locked-In Indicator	500.00 Y	Determined to be Buyer's commission based on Tag 54 value of 1.  Locked-In trade.
22013		l	LUCKEU-III IIIUICAIUI		LUCKEU-III II AUE.

- TRACE rules require that all Locked-In trades must be submitted from the sell-side perspective. Since ABCD reports for both MNOP and EFGH, and MNOP sold to EFGH, ABCD reports the trade from MNOP's perspective (as the sell-side Giveup Firm), and EFGH is the contra Giveup Firm within the Buy group of the message. ABCD is listed as the Executing Firm under the reporting side and as the Contra Firm on the contra side.
- Number of sides (Tag 552) must always be submitted as "2" to allow identification of the Contra Party.

- The Locked-In Indicator (Tag 22013) is submitted therefore any Contra Party related tags can be submitted for the contra portion of the report.
- Order Capacity (Tag 528) must be repeated on Locked-In trades.
- Clearing Firm (83) must be repeated in Party Role (Tag 452) under both sides on Locked-in trades.
- Commission (Tag 12) may be omitted, submitted for one of the sides, or repeated under each side on Locked-In trades.
- Trade Report ID *aka Client Trade Identifier* (Tag 571) corresponds to the Reporting Party side and may be submitted. Secondary Firm Trade ID *aka Contra Client Trade Identifier* (Tag 1042) corresponds to the Contra Party side and may be submitted on a Locked-In trade.
- Party Sub ID *aka Branch Sequence* (Tag 523) may be omitted, submitted for one of the sides, or repeated under each side on Locked-In trades.
- All other Tags correspond to the reporting side of the trade.

# 8.7 Example 7: Trade between 2 parties reported by a Service Bureau on behalf of the reporting party

Service Bureau SB01 reports the trade on behalf of Broker Dealer A (ABCD), who is selling to Broker Dealer B (EFGH), the Contra Party.

	TAG		TAG Name	Value	Comment
552			Number of Sides	2	Report contains information on both sides of the trade.
$\rightarrow$	54		Side	2	Indicates the following repeating group represents the sell side of the trade.
$\rightarrow$	453		Number of parties on the Reporting side	3	Entering Party (Service Bureau), Reporting party (who is the executing firm) and his clearing firm.
$\rightarrow$	$\rightarrow$	448	Party ID	SB01	Service Bureau MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	7	Entering firm
$\rightarrow$	$\rightarrow$	448	Party ID	ABCD	Broker Dealer A MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	1	Executing firm
$\rightarrow$	$\rightarrow$	448	Party ID	0123	Clearing firm number.
$\rightarrow$	$\rightarrow$	452	Party Role	83	Clearing firm of the Executing firm.
$\rightarrow$	528		Order Capacity	Р	Principal.
$\rightarrow$	54		Side	1	Indicates the following repeating group represents the buy side of the trade.
$\rightarrow$	453		Number of parties on the Contra side	1	Only the Contra firm.
	$\rightarrow$	448	Party ID	EFGH	Broker Dealer B MPID.
	$\rightarrow$	452	Party Role	17	Contra Firm.

- Number of sides (Tag 552) must always be submitted as "2" to allow identification of the Contra Party.
- The Locked-In Indicator (Tag 22013) is not submitted therefore only Contra Party ID/role can be submitted for the contra portion of the report.
- Order Capacity (Tag 528), Commission (Tag 12), Party Sub ID *aka* Contra Branch Sequence (Tag 523), Secondary Firm Trade ID *aka* Contra Client Trade Identifier (Tag 1042) and any other related contra Tags cannot be repeated or submitted since the trade was not submitted as a Locked-In trade (Tag 22013). If any of these Tags are repeated/submitted, the trade will be rejected.
- The Service Bureau adds it's MPID on the reporting side, with the Party Role set to Entering Firm.

# 8.8 Example 8: Trade executed between 2 broker-dealers on an Alternative Trading System (ATS) platform

Broker Dealer A (ABCD) is the Reporting Party selling to Broker Dealer B (EFGH) as the Contra

Party, identifying the trade was executed on ATS ZZZZ's system.

* /	TAG	_	TAG Name	Value	Comment
552			Number of Sides	2	Report contains information on both sides of the trade.
$\rightarrow$	54		Side	2	Indicates the following repeating group represents the sell side of the trade.
$\rightarrow$	453		Number of parties on the Reporting side	2	Reporting party (who is the executing firm) and his clearing firm.
$\rightarrow$	$\rightarrow$	448	Party ID	ABCD	Broker Dealer A's MPID.
$\rightarrow$	$\rightarrow$	452	Party Role	1	Executing firm (reporting on his own behalf).
$\rightarrow$	$\rightarrow$	448	Party ID	0123	Clearing firm number.
$\rightarrow$	$\rightarrow$	452	Party Role	83	Clearing firm of the Executing firm.
$\rightarrow$	528		Order Capacity	Р	Principal.
$\rightarrow$	54		Side	1	Indicates the following repeating group represents the buy side of the trade.
$\rightarrow$	453		Number of parties on the Contra side	1	Only the Contra firm.
	$\rightarrow$	448	Party ID	EFGH	Broker Dealer B's MPID.
	$\rightarrow$	452	Party Role	17	Contra Firm.
22036			ATSExecutionMPID	ZZZZ	ZZZZ is the MPID of the ATS.

- Number of sides (Tag 552) must always be submitted as "2" to allow identification of the Contra Party.
- The Locked-In Indicator (Tag 22013) is not submitted therefore only Contra Party ID/role can be submitted for the contra portion of the report.
- Order Capacity (Tag 528), Commission (Tag 12), Party Sub ID aka Contra Branch Sequence (Tag 523), Secondary Firm Trade ID aka Contra Client Trade Identifier (Tag 1042) and any other related contra Tags cannot be repeated or submitted since the trade was not submitted as a Locked-In trade (Tag 22013). If any of these Tags are repeated/submitted, the trade will be rejected.
- ZZZZ /Tag 22036 is not counted as a party under the Number of Parties (Tag 453) on either side, therefore tag 22036 if applicable should not be included in either nested group.

## **Revision History**

Revision	Comment
1.0	Initial version.
1.1	<ul> <li>Introduced new value "A" for identification of Affiliates of member firms that can be reported as a Contra Firm to a trade.</li> <li>Introduced new value "A" to SpecialProcessingFlag (Tag 22005) valid values for non-dissemination of an Affiliate trade.</li> <li>Introduction of new NoRemunerationIndicator field (Tag 22034).</li> </ul>
1.1a	Removed all references to Affiliates, No Remuneration Indicator and "A" for Special Processing. Production rollout will be determined for a future point in time.
1.2	<ul> <li>Introduced new value "A" for identification of Affiliates of member firms that can be reported as a Contra Firm to a trade.</li> <li>Introduced new value "A" to SpecialProcessingFlag (Tag 22005) valid values for non-dissemination of an Affiliate trade.</li> </ul>
1.3	Re-introduced Tag 22034 (NoRemunerationIndicator) and introduced new Tag 22036 (ATSExecutionMPID).
1.3a	• Updated Tag 22005 (SpecialProcessingFlag) to indicate the field can be modified on a Trade Correction. This change will take effect with the No Remuneration and ATS Execution MPID changes outlined in version 1.3 therefore those edits remain visible in this version.
1.4	<ul> <li>Removed Tag 22007 from the Spec. Will use Tag 60 for Execution Time instead.</li> <li>In CAEN and CAHX, updated Tag 455 (Instrument/SecurityAltID) to be a FIX required tag.</li> </ul>