Financial Industry Regulatory Authority

FIX Specifications for the
Trade Reporting and Compliance Engine system
(TRACE®)
Trade Reporting for OTC Corporate Bonds and Agency Debt
(Corporates & Agencies)

Version 1.0

September 30, 2011

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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: tradingservices@nasdaqomx.com. For questions concerning C&A trade reporting and TRACE, please contact FINRA Product Management at (866) 899-2107 or via email to: ProdMgmtTransparencySvcs@finra.org.

2 FIX Protocol

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

The interface follows the FIX specifications as far as possible. In the majority of cases the structure and semantics of the messages are identical to the standard.
In some cases, the protocol has been extended to cover functions not considered by the standard. These extensions are clearly detailed in the document. In other cases, the standard is ambiguous or indicates that the details should be bilaterally agreed between the parties. In these cases this manual provides a detailed description to avoid any possible ambiguity.

2.1 Supported Messages

2.1.1 Administrative messages

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

2.1.2 Application Messages

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

3 The FIX Session

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

3.1 CompIDs

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

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

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

3.2 SubIDs

For *inbound* 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".

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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		

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		
52	SendingTime	Y	Time of message transmission (always expressed in UTC (Universal Time Coordinated, also known as "GMT"))
122	OrigSendingTime		

3.14 The Standard Trailer

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

Tag	FIX Field name	Req'd	Comment
10	CheckSum	Y	

3.15 Message Details

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

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

3.15.2 Default values

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

3.15.3 Logon – inbound to FINRA

The response to a logon is either a Logon, which denotes a successful logon, or a Logout.
A client must be prepared to handle failure scenarios including (but not limited to):
A Logon attempt may fail or be rejected for several reasons. The FIX gateway will react differently depending on the kind of failure. The two different actions it may take are:
Silently ignore the Logon.
- If the wrong Sender or Target CompID is specified.
- For other reasons specified in the standard FIX specifications.

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

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

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

3.15.7 Resend Request (in/out)

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

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

3.15.8 Reject (out)

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

Tag	FIX Field name	Req'd	Comment
	Standard Header	Y	MsgType = 3
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
112	TestReqID		Required when the heartbeat is the result of a Test Request message.
	Standard Trailer	Y	

3.15.10 Test Request (in/out)

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

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

4 General Trade Reporting in FIX

4.1 Introduction

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

Tag	FIX Field name	Comment
453	NoPartyIDs	Number of parties included in the message
448	PartyID	The actual identifier of the party. In this case always the 4 character MPID on interdealer trades. On Customer trades, the contra party must be submitted with the value C.

447	PartyIDSource	Defines the type of the identifier used as PartyID. In this solution always C = Generally accepted market participant identifier (e.g. FINRA mnemonic)
452	PartyRole	Defines the role of the current party.

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

The following party roles are supported:

Party Role	Comment
Giveup Firm	MPID of the Giveup Firm, when applicable. A 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 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).
Entering Firm	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 correspondents.
Clearing Account	Clearing Number. Not really a party but treated as such in FIX.
Contra Firm	MPID of Contra party or "C" to denote the contra is a non-FINRA member (Customer 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[1]. 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.

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[1] The exception is Trade Cancels, which only contains one side (the reporting side).

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 was in FIX. The data types used in this solution are:

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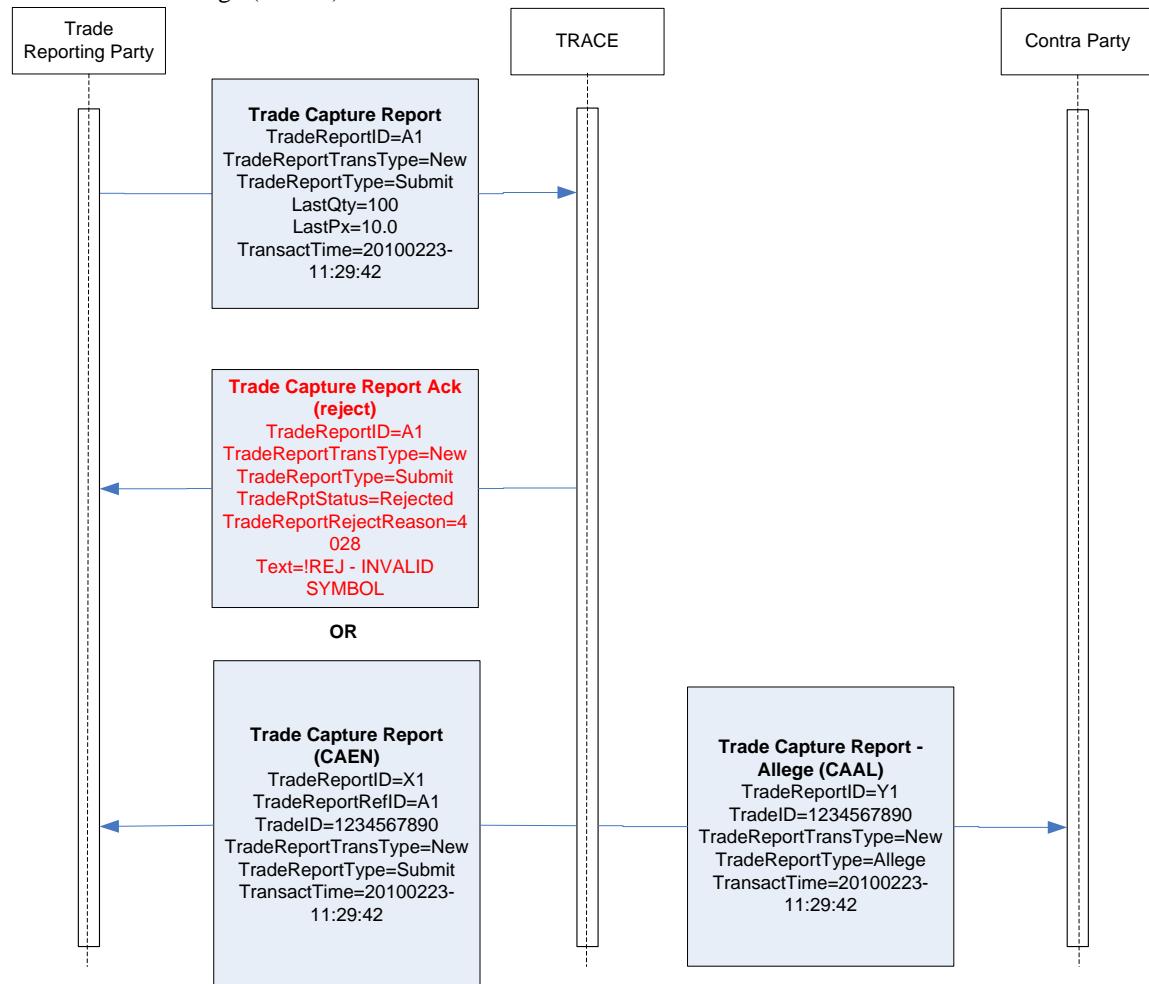
4.7.2 Cancelling a Trade

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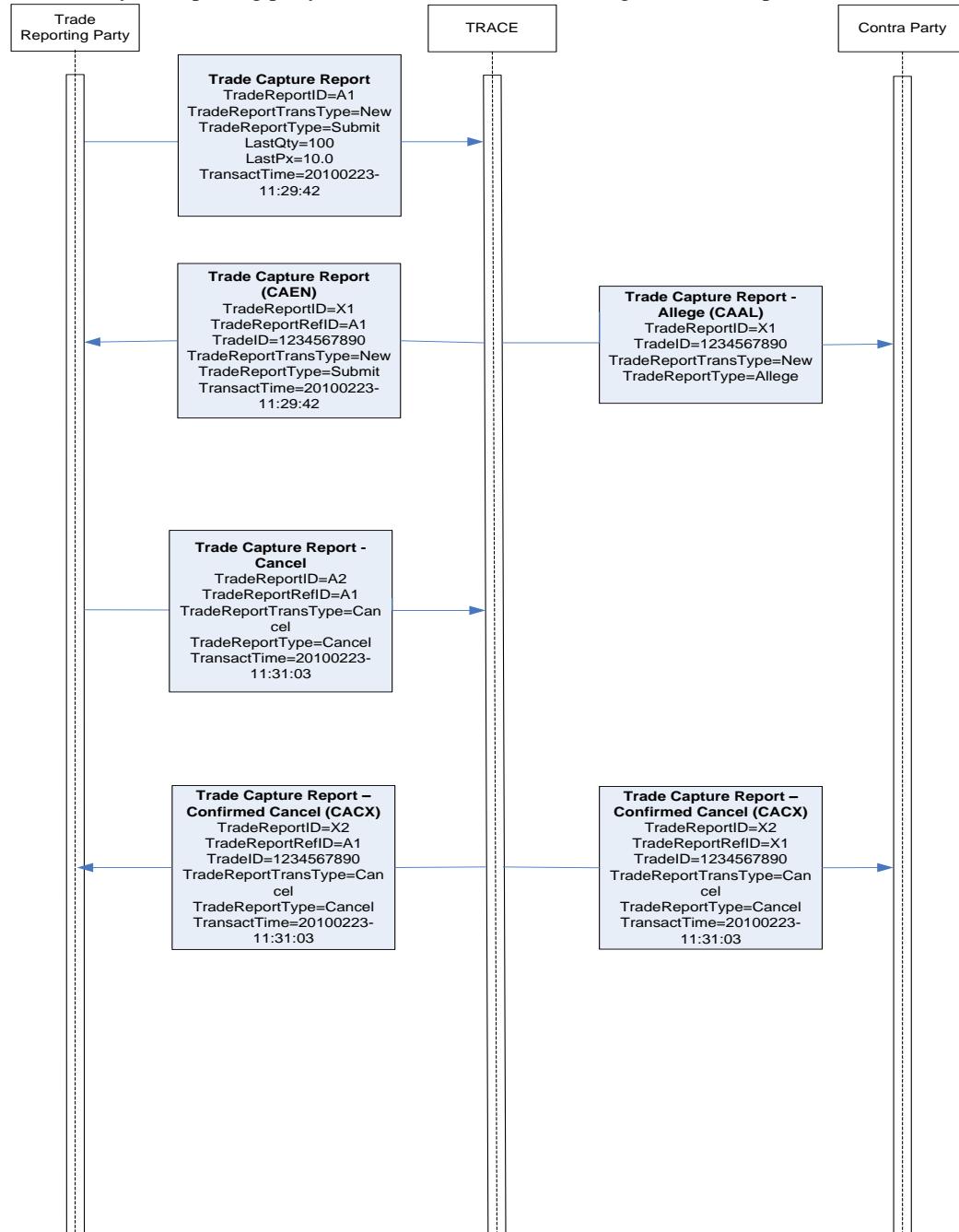
Please note: Reversal inbound messages and their related outbound confirmations (CAHX) will follow the same flow as Trade Cancels.

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.
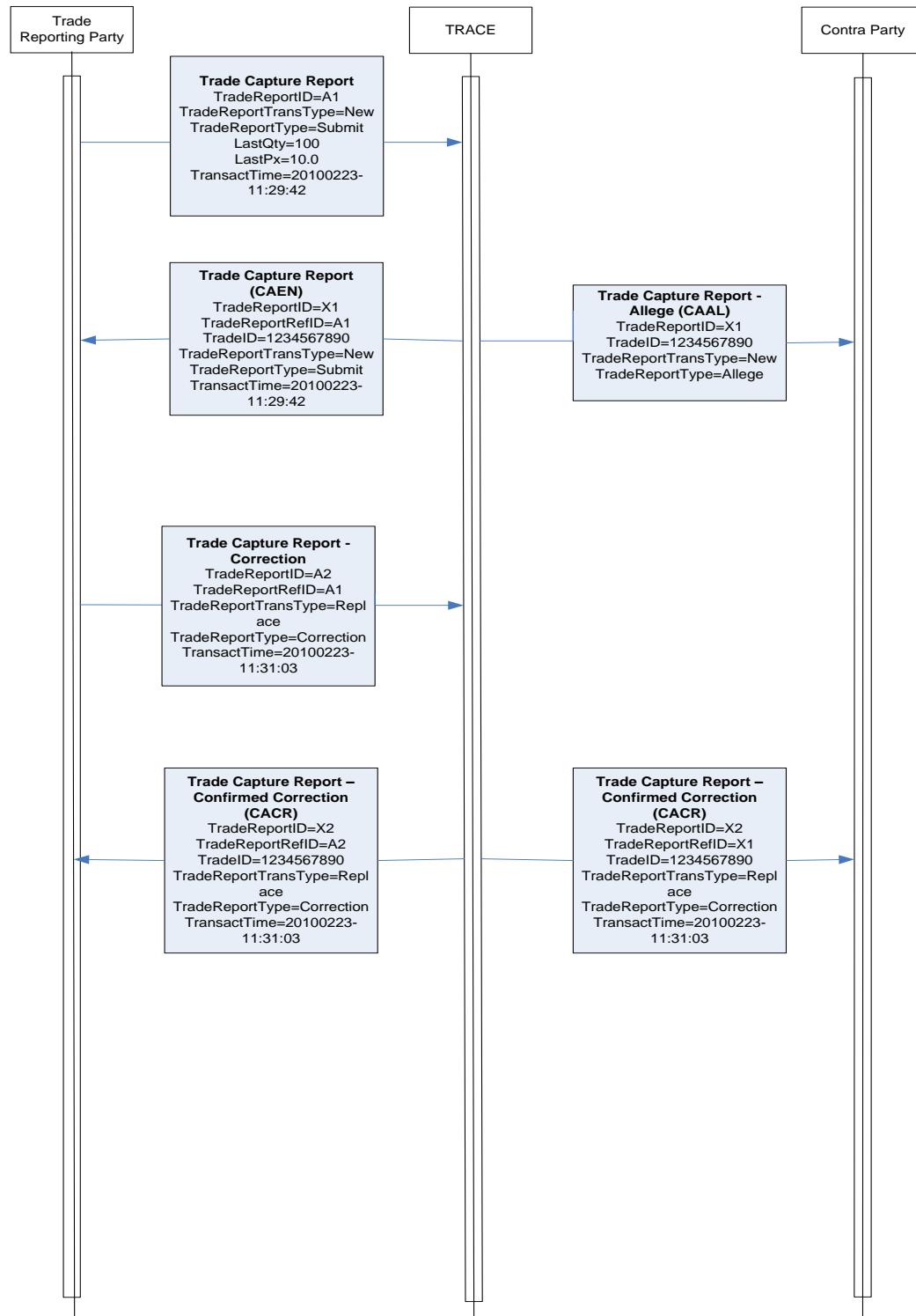
5 Message Formats

5.1.1 Trade Capture Report – Reporting a trade (in)

Tag			FIX tag name	Req'd	Comment
			Standard Header	Y	MsgType = AE
571			TradeReportID	Y	Client-generated identifier, not to exceed 20 characters.
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.
487			TradeReportTransType	F	Valid values: 0 = New
856			TradeReportType	F	Valid values: 0 = Submit
570			PreviouslyReported	Y	Indicates if the trade capture report was previously reported to the counterparty 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.
22			Instrument/SecurityIDSource		Type of identifier given in SecurityID. Valid values: 1 = CUSIP 8 = Exchange Symbol
32			LastQty	Y	Trade Volume. Format: nnnnnnnnnnn.nn
31			LastPx	Y	Trade Price. Format: nnnn.nnnnnn
75			TradeDate	Y	Interpreted as an As-Of trade if not current date. Format: YYYYMMDD
60			TransactTime	Y	Time the transaction represented by this Trade Capture Report occurred (in **UTC/GMT**). Format: YYYYMMDD-HH:MM:SS
64			SettlDate	F	Specific date of trade settlement (SettlementDate) in YYYYMMDD format. Required for all transaction.
552			TrdCapRptSideGrp/NoSides	Y	Always set value to 2. One side for the Reporting party and one side for the Contra party.
→	54		Side	Y	Side of trade. Valid values: 1 = Buy 2 = Sell
→	37		OrderID	Y	Required in FIX, but ignored
→	453		Parties/NoPartyIDs	F	Number of parties on the reporting/contra side of the trade
→	→	448	PartyID	F	Identifier for the type of party defined in PartyRole. Either an MPID or a Clearing Account number or

					"C" for customer on the contra side.
→	→	447	PartyIDSource	F	Valid values : C = Generally accepted market participant identifier (e.g. FINRA mnemonic)
→	→	452	PartyRole	F	Valid values: 1 = Executing Firm 7 = Entering Firm 14 = Giveup Firm 17 = Contra Firm 83 = Clearing Account
→	→	802	NoPartySubIDs		PartySubID is only allowed for PartyRole = 1 or 17. Only 1 is allowed (branch office of executing/contra firm)
→	→	→	523	PartySubID	Sub-identifier. Branch office of executing/contra firm (Branch Sequence/Contra Branch Sequence) Contra PartySubID may only be entered on Locked-In trades.
→	→	→	803	PartySubIDType	Type of PartySubID (523) value Valid values: 24 = Department
→	528	OrderCapacity		F	Designates the capacity of the reporting/contra party. Valid values: A = Agency P = Principal Required on the reporting side. Contra side is required on all Locked-In trades.
→	12	Commission			Buyer's/Seller's Commission (in dollars). Required when Commission has been charged on an Agency capacity. Format: nnnnnn.nn Both commissions may only be submitted on Locked-In trades.
→	13	CommType			Buyer's/Seller's Commission type. Valid values: 3 = Absolute
→	58	Text			User Memo Only on the Reporting Party side. Will not be displayed to Contra party. Not to exceed 10 characters.
5149	Memo				*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 to the Contra party.
9854	OverrideFlag				*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 range.
22013	LockedInIndicator				*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 give ups and as Locked-In trades.
22005	SpecialProcessingFlag		This field allows a trade to be marked for special processing (e.g., position transfers). MUST be authorized by FINRA Operations prior to submission of trades. Valid values: N = No Special Processing (default) Y = Position Transfer
22001	TradeModifier1		*FINRA Extension to FIX 4.4. Reserved for future use.*
22002	TradeModifier2		*FINRA Extension to FIX 4.4. Reserved for future use.*
22004	TradeModifier4		*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): W = Weighted Average Price
22016	TradingMarketIndicator	F	*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 reporting..
22006	SpecialPriceIndicator		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 **UTC/GMT**). Format: HH:MM:SS
	Standard Trailer	Y	

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	FIX tag name		Req'd	Comment
	Standard Header		Y	MsgType = AE
571	TradeReportID		Y	Unique client-generated identifier
572	TradeReportRefID			TradeReportID of report to cancel. TradeID can be used instead. If this field is used, The reporting party id must also be set.
1003	TradeID			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.
22	Instrument/SecurityIDSource			Type of identifier given in SecurityID. Valid values: 1 = CUSIP 8 = Exchange Symbol
32	LastQty		Y	Required in FIX, but ignored in cancels. Can be set to zero.
31	LastPx		Y	Required in FIX, but ignored in cancels. Can be set to zero.
75	TradeDate		Y	Required in FIX but ignored.
60	TransactTime		Y	Time the transaction represented by this Trade Capture Report occurred (in **UTC/GMT**). Format: YYYYMMDD-HH:MM:SS
552	TrdCapRptSideGrp/NoSides		Y	For Trade Cancels this is always set to 1.
→	54	Side	Y	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.**
→	37	OrderID	Y	Required in FIX, but ignored

Tag	FIX tag name	Req'd	Comment
→	453 Parties/NoPartyIDs	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).
→ →	448 PartyID	F	Identifier (MPID) for the reporting party/entering party of the original trade to be cancelled.
→ →	447 PartyIDSource	F	Valid values : C = Generally accepted market participant identifier (e.g. FINRA mnemonic)
→ →	452 PartyRole	F	Valid values: 1 = Executing Firm 7 = Entering Firm
22011 ControlDate		F	Control Date of the original trade. Used together with TradeID or Trade Report RefID to identify a trade. Format: YYYYMMDD
	Standard Trailer	Y	

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).

Tag	FIX tag name	Req'd	Comment
	Standard Header	Y	MsgType = AE
571	TradeReportID	Y	Unique client-generated identifier
572	TradeReportRefID		TradeReportID of report to cancel.
1003	TradeID	F	TradeID of report to cancel (contains TRACE control number). Required for Reversals.
1042	SecondaryFirmTradeID		*FINRA Extension to FIX 4.4:* The Contra Client Identifier assigned to a trade by the contra side.
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 Reversals. Valid values: N = No
1015	AsOfIndicator	F	Used to indicate that a trade was submitted "as of" a specific trade date. Must be set for Reversals. Valid values: 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.
	22	Instrument/SecurityIDSource	F	Type of identifier given in SecurityID. Valid values: 1 = CUSIP 8 = Exchange Symbol
	32	LastQty	Y	Trade Volume. Format: nnnnnnnnnnn.nn
	31	LastPx	Y	Trade Price. Format: nnnn.nnnnnn
	75	TradeDate	Y	The Trade Date of the original trade. Format: YYYYMMDD
	60	TransactTime	Y	Time the transaction represented by this Trade Capture Report occurred (in **UTC/GMT**). Format: YYYYMMDD-HH:MM:SS
	64	SettlDate	F	Specific date of trade settlement (SettlementDate) in YYYYMMDD format. Required for all transaction.
	552	TrdCapRptSideGrp/NoSides	Y	Set to 2. One side for the Reporting party and one side for the Contra party.
→	54	Side	Y	Reporting party side of trade. Valid values: 1 = Buy 2 = Sell
→	37	OrderID	Y	Required in FIX, but ignored
→	453	Parties/NoPartyIDs	F	Number of parties on the reporting/contra side of the trade
→ →	448	PartyID	F	Identifier for the type of party defined in PartyRole. Either an MPID or a Clearing Account number.
→ →	447	PartyIDSource	F	Valid values : C = Generally accepted market participant identifier (e.g. FINRA mnemonic)
→ →	452	PartyRole	F	Valid values: 1 = Executing Firm 7 = Entering Firm 14 = Giveup Firm 17 = Contra Firm 83 = Clearing Account
→ →	802	NoPartySubIDs		PartySubID is only allowed for PartyRole = 1 or 17. Only 1 is allowed (branch office of executing/contra firm)
→ → →	523	PartySubID		Sub-identifier. Branch office of executing/contra firm (Branch Sequence/Contra Branch Sequence)
→ → →	803	PartySubIDType		Type of PartySubID (523) value Valid values: 24 = Department
→	528	OrderCapacity	F	Designates the capacity of the reporting/contra party. Valid values: A = Agency P = Principal
→	12	Commission		Buyer's/Seller's Commission (in

				dollars) if applicable. Format: nnnnnn.nn
→	13	CommType		Buyer's/Seller's Commission type. Valid values: 3 = Absolute
→	58	Text		User Memo. Only allowed on the Reporting Party side. Will not be displayed to Contra party.
	5149	Memo		*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 to the Contra party.
	9854	OverrideFlag		*FINRA Extension to FIX 4.4.* Valid values: Y = Yes N = No (default value)
	22013	LockedInIndicator		*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 N = No (default value)
	22005	SpecialProcessingFlag		This field allows a trade to be marked for special processing (e.g., position transfers). MUST be authorized by FINRA Operations prior to submission of trades. Valid values: N = No Special Processing (default) Y = Position Transfer
	22001	TradeModifier1		*FINRA Extension to FIX 4.4. Reserved for future use.*
	22002	TradeModifier2		*FINRA Extension to FIX 4.4. Reserved for future use.*
	22004	TradeModifier4		*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): W = Weighted Average Price
	22016	TradingMarketIndicator	F	*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 reporting.

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Tag	FIX tag name	Req'd	Comment
22006	SpecialPriceIndicator		Special Price Indicator. Required if original submission reflected a special price. Valid values: Y = Special price N = No special price (default)
22007	ExecutionTime	F	Execution time of the original submission (in **UTC/GMT**). Format: HH:MM:SS
22009	PreparationTime		Time of cancel trade submission (in **UTC/GMT**). Format: HH:MM:SS
22011	ControlDate	F	Control Date of the original trade. Used together with TradeID to identify a trade. Format: YYYYMMDD
	Standard Trailer	Y	

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	Y	MsgType = AE
571	TradeReportID	Y	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.
1003	TradeID		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
1015	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..
	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. **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**.
	22	Instrument/SecurityIDSource		Type of identifier given in SecurityID. Valid values: 1 = CUSIP 8 = Exchange Symbol
	32	LastQty	Y	Trade Volume. Format: nnnnnnnnnnn.nn
	31	LastPx	Y	Trade Price. Format: nnnn.nnnnnn
	75	TradeDate	Y	Interpreted as an As-Of trade if not current date. Format: YYYYMMDD
	60	TransactTime	Y	Time the transaction represented by this Trade Capture Report occurred (in **UTC/GMT**). Format: YYYYMMDD-HH:MM:SS
	64	SettlDate	F	Specific date of trade settlement (SettlementDate) in YYYYMMDD format. Required for all transactions.
	552	TrdCapRptSideGrp/NoSides	Y	Set to 2. One side for the Reporting party and one side for the Contra party.
→	54	Side	Y	Reporting party side of trade. Valid values: 1 = Buy 2 = Sell
→	37	OrderID	Y	Required in FIX, but ignored

→		453	Parties/NoPartyIDs	F	Number of parties on the reporting/contra side of the trade
→	→	448	PartyID	F	Identifier for the type of party defined in PartyRole. Either an MPID or a Clearing Account number.
→	→	447	PartyIDSource	F	Valid values : C = Generally accepted market participant identifier (e.g. FINRA mnemonic)
→	→	452	PartyRole	F	Valid values: 1 = Executing Firm 7 = Entering Firm 14 = Giveup Firm 17 = Contra Firm 83 = Clearing Account
→	→	802	NoPartySubIDs		PartySubID is only allowed for PartyRole = 1 or 17. Only 1 is allowed (branch office of executing/contra firm)
→	→	→	523	PartySubID		Sub-identifier. Branch office of executing/contra firm (Branch Sequence/Contra Branch Sequence)
→	→	→	803	PartyIDSubType		Type of PartySubID (523). Valid values: 24 = Department
→		528	OrderCapacity	F	Designates the capacity of the reporting/contra party. Valid values: A = Agency P = Principal
→		12	Commission		Buyer's/Seller's Commission (in dollars) if applicable. Format: nnnnnn.nn
→		13	CommType		Buyer's/Seller's Commission type. Valid values: 3 = Absolute
→		58	Text		User Memo Only on the Reporting Party side. Will not be displayed to Contra party.
		5149	Memo		*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 to the Contra party.
		9854	OverrideFlag		*FINRA Extension to FIX 4.4.* Valid values:

			Y = Yes N = No (default value)
22013	LockedInIndicator		*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 N = No (default value)
22001	TradeModifier1		*FINRA Extension to FIX 4.4. Reserved for future use.*
22002	TradeModifier2		*FINRA Extension to FIX 4.4. Reserved for future use.*
22004	TradeModifier4		*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): W = Weighted Average Price
22016	TradingMarketIndicator	F	*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 reporting.
22005	SpecialProcessingFlag		This field allows a trade to be marked for special processing (e.g., position transfers). MUST be authorized by FINRA Operations prior to submission of trades. Valid values: N = No Special Processing (default) Y = Position Transfer
22006	SpecialPriceIndicator		Special Price Indicator. Valid values: Y = Special price N = No special price (default)
22011	ControlDate	F	Control Date of the original trade. Used together with TradeID to identify a trade. Format: YYYYMMDD
20453	OriginalNoPartyIDs		Number of original Party IDs. The OriginalParties group is required when TradeReportRefID is used to identify the original transaction. Will be set to 1 in this case.

Tag	FIX tag name	Req'd	Comment
→	20448 OriginalPartyID		Original Reporting Party MPID.
→	20447 OriginalPartyIDSource		Valid values : C = Generally accepted market participant identifier (e.g. FINRA mnemonic)
→	20452 OriginalPartyRole		Valid values: 1 = Executing Firm
22007	ExecutionTime	F	Execution time (in **UTC/GMT**). Format: HH:MM:SS
22009	PreparationTime		Time of trade correction submission (in **UTC/GMT**). Format: HH:MM:SS
	Standard Trailer	Y	

5.1.5 Trade Capture Report Ack – Reject (out)

Tag	FIX tag name	Req'd	Comment
	Standard Header	Y	MsgType = AR
571	TradeReportID	Y	The client-generated identifier
487	TradeReportTransType	F	Valid values: 0 = New 1 = Cancel 2 = Replace
856	TradeReportType	F	Type of Trade Report. Shows the type of the incoming trade report. Valid values: 0 = Submit 5 = Trade Correction 6 = Trade Report Cancel
150	ExecType	Y	This field signals whether the TCR was accepted or rejected. Valid values: 8 = Rejected
939	TradeRptStatus	F	Valid values: 1 = Rejected
48	Instrument/SecurityID	Y	Main Security Identifier (CUSIP) or Exchange Symbol.
22	Instrument/SecurityIDSource	F	Type of identifier given in SecurityID. Valid values: 1 = CUSIP 8 = Exchange Symbol
751	TradeReportRejectReason		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
			4023 = PRICE REQUIRED
			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	Y	

5.1.6 Trade Capture Report – Acknowledgement/CAEN (out)

Tag	FIX tag name	Req'd	Comment
	Standard Header	Y	MsgType = AE
1011	MessageEventSource	F	Used to identify the type of acknowledgment. Value "CAEN" identifies a Trade Capture Report accepted by FINRA.
571	TradeReportID	Y	Identifier assigned by marketplace NOTE: NOT the identifier set by reporting party.
572	TradeReportRefID	F	TradeReportID from inbound TCR
1003	TradeID	F	The ten digit control number which the TRACE System had assigned to the TRACE trade when it was accepted by the TRACE System. The control number is required to uniquely identify the record in the TRACE File for subsequent processing.
1042	SecondaryFirmTradeID		*FINRA Extension to FIX 4.4:* The Contra Client Identifier, set if applicable.
487	TradeReportTransType	F	Valid values: 0 = New
856	TradeReportType	F	Valid values: 0 = Submit
64	SettlDate	F	Specific date of trade settlement (SettlementDate) in YYYYMMDD format. Required for all transactions.
570	PreviouslyReported	Y	Indicates if the trade capture report was previously reported to the counterparty 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	Main Security Identifier (CUSIP).
22	Instrument/SecurityIDSource	F	Type of identifier given in SecurityID. Valid values: 1 = CUSIP
454	Instrument/NoSecurityAltID	F	Always set to 1
455	Instrument/SecurityAltID		Alternative Security identifier (Symbol).
456	Instrument/SecurityAltIDSource	F	Valid values: 8 = Exchange Symbol
32	LastQty	Y	Trade Volume. Format: nnnnnnnnnnn.nn
31	LastPx	Y	Trade Price. Format: nnnn.nnnnnn

				Tag	Field Name	Req	Description
				75	TradeDate	Y	Reflects user input of Trade Date. Format: YYYYMMDD
				60	TransactTime	Y	Time the transaction represented by this Trade Capture Report occurred (in **UTC/GMT**). Format: YYYYMMDD-HH:MM:SS
				552	TrdCapRptSideGrp/NoSides	Y	Set to 2. One side for the Reporting party and one side for the Contra party.
→				54	Side	Y	Valid values: 1 = Buy 2 = Sell
→				37	OrderID	Y	Required in FIX, but not used. Will be set to "NONE".
→				453	Parties/NoPartyIDs	F	Number of parties on the reporting/contra side of the trade
→	→			448	PartyID	F	Identifier for the type of party defined in PartyRole. Either an MPID or a Clearing Account number.
→	→			447	PartyIDSource	F	Valid values : C = Generally accepted market participant identifier (e.g. FINRA mnemonic)
→	→			452	PartyRole	F	Valid values: 1 = Executing Firm 7 = Entering Firm 14 = Giveup Firm 17 = Contra Firm 83 = Clearing Account
→	→			802	NoPartySubIDs		PartySubID is only allowed for PartyRole = 1 or 17. Only 1 is allowed (branch office of executing/contra firm)
→	→	→		523	PartySubID		Sub-identifier. Branch office of executing/contra firm (Branch Sequence/Contra Branch Sequence)
→	→	→		803	PartyIDSubType		Type of PartySubID (523) value Valid values: 24 = Department
→				528	OrderCapacity		Designates the capacity of the reporting/contra party. Valid values: A = Agency P = Principal
→				12	Commission		Buyer's/Seller's Commission (in dollars). Format: nnnnnn.nn
→				13	CommType		Buyer's/Seller's Commission type. Valid values: 3 = Absolute
→				58	Text		User Memo Only on the Reporting Party side. Will not be displayed to Contra party.
				5149	Memo		*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 to the Contra party.
9854	OverrideFlag		*FINRA Extension to FIX 4.4.* Valid values: Y = Yes N = No (default value)
22013	LockedInIndicator		*FINRA Extension to FIX 4.4.* Indicates that the firm entering the trade is reporting for both sides of the trade. Value taken from the trade submission. Valid values: Y = Yes N = No (default value)
22005	SpecialProcessingFlag		This field allows a trade to be marked for special processing (e.g., position transfers). MUST be authorized by FINRA Operations prior to submission of trades. Valid values: N = No Special Processing (default) Y = Position Transfer
22001	TradeModifier1		*FINRA Extension to FIX 4.4.* *Reserved for future use. Will not be present in any current message.*
22002	TradeModifier2		*FINRA Extension to FIX 4.4.* *Reserved for future use. Will not be present in any current message.*
22003	TradeModifier3		*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 hours and reported late
22004	TradeModifier4		*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): W = Weighted Average Priceb
22016	TradingMarketIndicator	F	*FINRA Extension to FIX 4.4.* Indicates whether the trade was executed in the primary or secondary market. Reflects user input. Valid values are: P1 = Primary market trade subject to T+1 reporting.

Tag	FIX tag name	Req'd	Comment
			S1 = Secondary market or primary market trade subject to 15-minute reporting.
22006	SpecialPriceIndicator		Special Price Indicator. Valid values: Y = Special price N = No special price (default)
22007	ExecutionTime	F	Execution time of the trade submission (in **UTC/GMT**). Format: HH:MM:SS
22009	PreparationTime		Time of trade submission (in **UTC/GMT**). Format: HH:MM:SS
22011	ControlDate	F	Control Date referencing when the system processed the request. Used together with TradeID to identify a trade. Format: YYYYMMDD
797	CopyMsgIndicator		Indicates whether or not this message is a drop copy of another message. Valid values: Y = Yes N = No (default value)
	Standard Trailer	Y	

5.1.7   Trade Capture Report – Allege/CAAL (out)

Tag	FIX tag name	Req'd	Comment
	Standard Header	Y	MsgType = AE
1011	MessageEventSource	F	Used to identify the type of acknowledgment. Value "CAAL" identifies a Trade Capture Report accepted by FINRA alleging the recipient of this message as the contra party on the trade.
571	TradeReportID	Y	Identifier assigned by marketplace
1003	TradeID	F	*FINRA Extension to FIX 4.4.* The ten digit control number which the TRACE System had assigned to the TRACE trade when it was accepted by the TRACE System. The control number is required to uniquely identify the record in the TRACE File for subsequent processing.
1042	SecondaryFirmTradeID		*FINRA Extension to FIX 4.4:* The Contra Client Identifier, set if applicable.
487	TradeReportTransType	F	Valid values: 0 = New
856	TradeReportType	F	Valid values: 1 = Allege

64	SettlDate			F	Specific date of trade settlement (SettlementDate) in YYYYMMDD format. Required for all transactions.
570	PreviouslyReported			Y	Indicates if the trade capture report was previously reported to the counterparty 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	Main Security Identifier (CUSIP).
22	Instrument/SecurityIDSource			F	Type of identifier given in SecurityID. Valid values: 1 = CUSIP
454	Instrument/NoSecurityAltID			F	Always set to 1
455	Instrument/SecurityAltID			F	Alternative Security identifier (Symbol).
456	Instrument/SecurityAltIDSource			F	Valid values: 8 = Exchange Symbol
32	LastQty			Y	Trade Volume. Format: nnnnnnnnnn.nn
31	LastPx			Y	Trade Price. Format: nnnn.nnnnnn
75	TradeDate			Y	Reflects user input of Trade Date.Format: YYYYMMDD
60	TransactTime			Y	Time the transaction represented by this Trade Capture Report occurred (in **UTC/GMT**). Format: YYYYMMDD-HH:MM:SS.
552	NoSides			Y	Set to 2
→	54	Side		Y	Valid values: 1 = Buy 2 = Sell
→	37	OrderID		Y	Required in FIX but not used. Set to "NONE".
→	453	NoPartyIDs		F	Number of parties on the reporting/contra side of the trade
→	→	448	PartyID	F	Identifier for the type of party defined in PartyRole. Either an MPID or a Clearing Account number.
→	→	447	PartyIDSource	F	Valid values : C = Generally accepted market participant identifier (e.g. FINRA mnemonic)
→	→	452	PartyRole	F	Valid values: 1 = Executing Firm 7 = Entering Firm 14 = Giveup Firm 17 = Contra Firm

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						83 = Clearing Account
→	→	802	NoPartySubIDs			PartySubID is only allowed for PartyRole = 1 or 17. Only 1 is allowed (branch office of executing/contra firm)
→	→	→	523	PartySubID		Sub-identifier. Branch office of executing/contra firm (Branch Sequence/Contra Branch Sequence)
→	→	→	803	PartyIDSubType		Type of PartySubID (523) value Valid values: 24 = Department
→	528	OrderCapacity				Designates the capacity of the reporting/contra party. Valid values: A = Agency P = Principal
→	12	Commission				Buyer's/Seller's Commission (in dollars). Format: nnnnnn.nn
→	13	CommType				Buyer's/Seller's Commission type. Valid values: 3 = Absolute
5149	Memo					*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 to the Contra party.
9854	OverrideFlag					*FINRA Extension to FIX 4.4.* Valid values: Y = Yes N = No (default value)
22013	LockedInIndicator					*FINRA Extension to FIX 4.4.* Indicates that the firm entering the trade is reporting for both sides of the trade. Value taken from the trade submission. Valid values: Y = Yes N = No (default value)
22005	SpecialProcessingFlag					This field allows a trade to be marked for special processing (e.g., position transfers). MUST be authorized by FINRA Operations prior to submission of trades. Valid values: N = No Special Processing (default) Y = Position Transfer
22001	TradeModifier1					*FINRA Extension to FIX 4.4. Reserved for future use. Will not be present in any current message.*

22002	TradeModifier2			*FINRA Extension to FIX 4.4. Reserved for future use. Will not be present in any current message.*
22003	TradeModifier3			*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 reported late
22004	TradeModifier4			*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): W = Weighted Average Price
22016	TradingMarketIndicator		F	*FINRA Extension to FIX 4.4.* Indicates whether the trade was executed in the primary or secondary market. Reflects user input. Valid values are: P1 = Primary market trade subject to T+1 reporting. S1 = Secondary market or primary market trade subject to 15-minute reporting.
22006	SpecialPriceIndicator			Special Price Indicator. Valid values: Y = Special price N = No special price (default)
22007	ExecutionTime		F	Execution time of the trade submission (in **UTC/GMT**). Format: HH:MM:SS
22009	PreparationTime			Time of the trade submission (in **UTC/GMT**). Format: HH:MM:SS
22011	ControlDate		F	Control Date referencing when the system processed the request. Used together with TradeID to identify a trade. Format: YYYYMMDD
797	CopyMsgIndicator			Indicates whether or not this message is a drop copy of another message. Valid values: Y = Yes N = No (default value)
	Standard Trailer		Y	

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

Tag	FIX tag name	Req'd	Comment
	Standard Header	Y	MsgType = AE
1011	MessageEventSource	F	Used to identify the type of acknowledgment. Value "CACX" identifies a Trade Cancel accepted by FINRA.
571	TradeReportID	Y	Marketplace-generated identifier
572	TradeReportRefID		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 transaction (CAAL).
1003	TradeID	F	*FINRA Extension to FIX 4.4.* The control number which the TRACE System had assigned to the TRACE trade when it was originally accepted by the TRACE System.
487	TradeReportTransType	F	Valid values: 1 = Cancel
856	TradeReportType	F	Type of Trade Report. Shows the type of the incoming trade report. Valid values: 6 = Cancel
570	PreviouslyReported	Y	Indicates if the trade capture report was previously reported to the counterparty Valid values: N=No
32	LastQty	Y	Trade Volume. Format: nnnnnnnnnnn.nn **Please note: on a Cancel of a trade report submitted on a prior day (T-1 through T-20), the value "0" will always be returned.**
31	LastPx	Y	Trade Price. Format: nnnn.nnnnnn **Please note: on a Cancel of a trade report submitted on a prior day (T-1 through T-20), the value "0" will always be returned.**
75	TradeDate	Y	Reflect user input of Trade Date. 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 always be returned.**
552	TrdCapRptSideGrp/NoSides	Y	Will always be set to "1" on all CACX messages.
→	54	Side	Y	Reporting party side of trade. Valid

Tag	FIX tag name		Req'd	Comment
				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.**
→	37	OrderID	Y	Will always be set to "NONE".
60	TransactTime		Y	Time the transaction represented by this Trade Capture Report occurred (in UTC/GMT). Format: YYYYMMDD-HH:MM:SS
22011	ControlDate		F	Control Date referencing when the system processed the trade. Used together with TradeID to identify a trade. Format: YYYYMMDD
797	CopyMsgIndicator			Indicates whether or not this message is a drop copy of another message. Valid values: Y = Yes N = No (default value)
	Standard Trailer		Y	

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

Tag	FIX tag name	Req'd	Comment
	Standard Header	Y	MsgType = AE
1011	MessageEventSource	F	Used to identify the type of acknowledgment. Value "CAHX" identifies a Reversal accepted by FINRA.
571	TradeReportID	Y	Identifier assigned by marketplace NOTE: NOT the identifier set by reporting party.
572	TradeReportRefID	F	TradeReportID from inbound TCR
1003	TradeID	F	*FINRA Extension to FIX 4.4.* The control number which the TRACE System had assigned to the TRACE trade when it was originally accepted by the TRACE System.
1042	SecondaryFirmTradeID		FINRA Extension to FIX 4.4: The Contra Client Identifier, set if applicable.
487	TradeReportTransType	F	Valid values: 1 = Cancel
856	TradeReportType	F	Valid values: 6 = Cancel
64	SettlDate	F	Specific date of trade settlement (SettlementDate) in YYYYMMDD format. Required for all transactions.
570	PreviouslyReported	Y	Indicates if the trade capture report was previously reported to the counterparty

						Valid values: N = No
1015	AsOfIndicator						Used to indicate that a trade was submitted "as of" a specific trade date. Must be set to 1 on Reversals. Valid values: 1 = true – trade is an AsOf trade..
48	Instrument/SecurityID					Y	Main Security Identifier (CUSIP).
22	Instrument/SecurityIDSource					F	Type of identifier given in SecurityID. Valid values: 1 = CUSIP
454	Instrument/NoSecurityAltID					F	Always set to 1
455	Instrument/SecurityAltID						Alternative Security identifier (Symbol).
456	Instrument/SecurityAltIDSource					F	Valid values: 8 = Exchange Symbol
32	LastQty					Y	Trade Volume. Format: nnnnnnnnnnn.nn
31	LastPx					Y	Trade Price. Format: nnnn.nnnnnn
75	TradeDate					Y	Reflects user input of Trade Date. Format: YYYYMMDD
60	TransactTime					Y	Time the transaction represented by this Trade Capture Report occurred (in UTC/GMT). Format: YYYYMMDD-HH:MM:SS
552	TrdCapRptSideGrp/NoSides					Y	Set to 2. One side for the Reporting party and one side for the Contra party.
→	54	Side				Y	Reporting party side of trade. Valid values: 1 = Buy 2 = Sell
→	37	OrderID				Y	Required in FIX, but not used. Will be set to "NONE".
→	453	Parties/NoPartyIDs				F	Number of parties on the reporting/contra side of the trade
→	→	448	PartyID			F	Identifier for the type of party defined in PartyRole. Either an MPID or a Clearing Account number.
→	→	447	PartyIDSource			F	Valid values : C = Generally accepted market participant identifier (e.g. FINRA mnemonic)
→	→	452	PartyRole			F	Valid values: 1 = Executing Firm 7 = Entering Firm 14 = Giveup Firm 17 = Contra Firm 83 = Clearing Account
→	→	802	NoPartySubIDs				PartySubID is only allowed for PartyRole = 1 or 17. Only 1 is allowed (branch office of executing/contra firm)
→	→	→	523	PartySubID			Sub-identifier. Branch office of executing/contra firm (Branch Sequence/Contra Branch Sequence)
→	→	→	803	PartyIDSubType			Type of PartySubID (523) value Valid values: 24 = Department
→	528	OrderCapacity					Designates the capacity of the

					reporting/contra party. Valid values: A = Agency P = Principal
→	12	Commission			Buyer's/Seller's Commission (in dollars). Format: nnnnnn.nn
→	13	CommType			Buyer's/Seller's Commission type. Valid values: 3 = Absolute
→	58	Text			User Memo Only on the Reporting Party side. Will not be displayed to Contra party.
	5149	Memo			*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 to the Contra party.
	9854	OverrideFlag			*FINRA Extension to FIX 4.4.* Valid values: Y = Yes N = No (default value)
	22013	LockedInIndicator			*FINRA Extension to FIX 4.4.* Indicates that the firm entering the trade is reporting for both sides of the trade. Value taken from the original trade submission. Valid values: Y = Yes N = No (default value)
	22005	SpecialProcessingFlag			This field allows a trade to be marked for special processing (e.g., position transfers). MUST be authorized by FINRA Operations prior to submission of trades. Valid values: N = No Special Processing (default) Y = Position Transfer
	22001	TradeModifier1			*FINRA Extension to FIX 4.4. Reserved for future use. Will not be present in any current message.*
	22002	TradeModifier2			*FINRA Extension to FIX 4.4. Reserved for future use. Will not be present in any current message.*
	22003	TradeModifier3			*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 reported late
	22004	TradeModifier4			*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):

Tag	FIX tag name		Req'd	Comment
				W = Weighted Average Price
22016	TradingMarketIndicator		F	*FINRA Extension to FIX 4.4.* Indicates whether the trade was executed in the primary or secondary market. Reflects user input. Valid values are: P1 = Primary market trade subject to T+1 reporting. S1 = Secondary market or primary market trade subject to 15-minute reporting.
22006	SpecialPriceIndicator			Special Price Indicator. Valid values: Y = Special price N = No special price (default)
22007	ExecutionTime		F	Execution time of the original submission (in **UTC/GMT**). Format: HH:MM:SS
22009	PreparationTime			Time of cancel trade submission (in **UTC/GMT**). Format: HH:MM:SS
22011	ControlDate		F	Control Date referencing when the system processed the trade. Used together with TradeID to identify a trade. Format: YYYYMMDD
797	CopyMsgIndicator			Indicates whether or not this message is a drop copy of another message. Valid values: Y = Yes N = No (default value)
	Standard Trailer		Y	

5.1.10 Trade Capture Report – Confirmed Correction/CACR (out)

Tag	FIX tag name	Req'd	Comment
	Standard Header	Y	MsgType = AE
1011	MessageEventSource	F	Used to identify the type of acknowledgment. Value "CACR" identifies a Trade Correction accepted by FINRA.
571	TradeReportID	Y	Identifier assigned by marketplace **NOTE:** NOT the identifier set by reporting party.
572	TradeReportRefID	F	To the reporting party this field is set to the reporter's previous TradeReportID. To the contra party this field is set to the TradeReportID from the previous allege transaction (CAAL).
1003	TradeID	F	*FINRA Extension to FIX 4.4.* A **new** ten digit control number generated by the TRACE System. The control number is required to uniquely identify the record in the TRACE File for subsequent processing.
1126	OrigTradeID	F	*FINRA Extension to FIX 4.4.* The **original** ten digit control number which the TRACE System had assigned

						to the TRACE trade when it was accepted by the TRACE System.
1042	SecondaryFirmTradeID					*FINRA Extension to FIX 4.4:* The Contra Client Identifier, set if applicable.
487	TradeReportTransType				F	Valid values: 2 = Replace
856	TradeReportType				F	Valid values: 5 = Correction
64	SettlDate				F	Specific date of trade settlement (SettlementDate) in YYYYMMDD format. Required for all transactions.
570	PreviouslyReported				Y	Indicates if the trade capture report was previously reported to the counterparty 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	Main Security Identifier (CUSIP).
22	Instrument/SecurityIDSource				F	Type of identifier given in SecurityID. Valid values: 1 = CUSIP
454	Instrument/NoSecurityAltID				F	Always set to 1
455	Instrument/SecurityAltID				F	Alternative Security identifier (Symbol).
456	Instrument/SecurityAltIDSource				F	Valid values: 8 = Exchange Symbol
32	LastQty				Y	Trade Volume. Format: nnnnnnnnnnn.nn
31	LastPx				Y	Trade Price. Format: nnnn.nnnnnn
75	TradeDate				Y	Trade Date. Format: YYYYMMDD
60	TransactTime				Y	Time the transaction represented by this Trade Capture Report occurred (in **UTC/GMT**). Format: YYYYMMDD-HH:MM:SS
552	TrdCapRptSideGrp/NoSides				Y	Set to 2. One side for the Reporting party and one side for the Contra party.
→		54	Side		Y	Reporting party side of trade. Valid values: 1 = Buy 2 = Sell
→		37	OrderID		Y	Required in FIX, but not used. Will be set to "NONE".
	453		Parties/NoPartyIDs		F	Number of parties on the reporting/contra side of the trade
→	→	448		PartyID	F	Identifier for the type of party defined in PartyRole. Either an MPID or a Clearing Account number.
→	→	447		PartyIDSource	F	Valid values : C = Generally accepted market participant identifier (e.g. FINRA mnemonic)

→	→	452	PartyRole		F	Valid values: 1 = Executing Firm 7 = Entering Firm 14 = Giveup Firm 17 = Contra Firm 83 = Clearing Account
→	→	802	NoPartySubIDs			PartySubID is only allowed for PartyRole = 1 or 17. Only 1 is allowed (branch office of executing/contra firm)
→	→	→	523	PartySubID		Sub-identifier. Branch office of executing/contra firm (Branch Sequence/Contra Branch Sequence)
→	→	→	803	PartyIDSubType		Type of PartySubID (523) value Valid values: 24 = Department
→	528	OrderCapacity				Designates the capacity of the reporting/contra party. Valid values: A = Agency P = Principal
→	12	Commission				Buyer's/Seller's Commission (in dollars). Format: nnnnnn.nn
→	13	CommType				Buyer's/Seller's Commission type. Valid values: 3 = Absolute
→	58	Text				User Memo Only on the Reporting Party side. Will not be displayed to Contra party.
5149	Memo					*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 to the Contra party.
9854	OverrideFlag					*FINRA Extension to FIX 4.4.* Valid values: Y = Yes N = No (default value)
22013	LockedInIndicator					*FINRA Extension to FIX 4.4.* Indicates that the firm entering the trade is reporting for both sides of the trade. Value taken from the trade submission. Valid values: Y = Yes N = No (default value)
22005	SpecialProcessingFlag					This field allows a trade to be marked for special processing (e.g., position transfers). MUST be authorized by FINRA Operations prior to submission of trades. Valid values: N = No Special Processing (default) Y = Position Transfer

22001	TradeModifier1		*FINRA Extension to FIX 4.4. Reserved for future use. Will not be present in any current message.*
22002	TradeModifier2		*FINRA Extension to FIX 4.4. Reserved for future use. Will not be present in any current message.*
22003	TradeModifier3		*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 reported late
22004	TradeModifier4		*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): W = Weighted Average Price
22016	TradingMarketIndicator	F	*FINRA Extension to FIX 4.4.* Indicates whether the trade was executed in the primary or secondary market. Reflects user input. Valid values are: P1 = Primary market trade subject to T+1 reporting. S1 = Secondary market or primary market trade subject to 15-minute reporting.
22006	SpecialPriceIndicator		Special Price Indicator. Valid values: Y = Special price N = No special price (default)
22007	ExecutionTime	F	Execution time of the submission (in **UTC/GMT**). Format: HH:MM:SS
22009	PreparationTime		Time of correction submission (in **UTC/GMT**). Format: HH:MM:SS
22011	ControlDate	F	Control Date referencing when the system processed the trade correction. Used together with TradeID to identify a trade. Format: YYYYMMDD
22012	OrigControlDate	F	Control Date referencing when the system *originally* processed the trade. Used together with TradeID to identify a trade. Format: YYYYMMDD
797	CopyMsgIndicator		Indicates whether or not this message is a drop copy of another message. Valid values: Y = Yes

			N = No (default value)
	Standard Trailer	Y	

6 Custom values and user defined fields

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

The deviations come in two forms, added fields and added values to existing fields.

6.1 Fields added

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

- In the 22XXX-range custom fields with no representation in standard FIX has been added.
- 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	
20453	OriginalNoPartyIDs	No	
20448	OriginalPartyID	No	
20447	OriginalPartyIDSource	No	
20452	OriginalPartyRole	No	

6.2 Enumerations added

Enum	Enum description	Tag	Comment
83	Clearing Account	452	PartyRole

Tag		Comment	
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
http://fixprotocol.org/specifications/FIX.4.4 for details.

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

Tag	FIX tag name	Comment
448	PartyID	PartyID. Max valid 4 character MPIDs.
571	TradeReportID	Limited to 20 characters
572	TradeReportRefID	Limited to 20 characters
1042	SecondaryFirmTradeID	Limited to 20 characters
32	LastQty	Format: nnnnnnnnnnn.nn
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.
→	54		Side	2	Indicates the following repeating group represents the sell side of the trade.
→	453		Number of parties on the Reporting side	2	Reporting party (who is the executing firm) and his clearing firm.
→	→	448	Party ID	ABCD	Broker Dealer A's MPID.
→	→	452	Party Role	1	Executing firm (reporting on his own behalf).
→	→	448	Party ID	0123	Clearing firm number.
→	→	452	Party Role	83	Clearing firm of the Executing firm.
→	528		Order Capacity	P	Principal.
→	54		Side	1	Indicates the following repeating group represents the buy side of the trade.
→	453		Number of parties on the Contra side	1	Only the Contra firm.
	→	448	Party ID	EFGH	Broker Dealer B's MPID.
	→	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.
→	54		Side	1	Indicates the following repeating group represents the buy side of the trade.
→	453		Number of parties on the Reporting side	2	Reporting party (who is the executing firm) and his clearing firm.
→	→	448	Party ID	ABCD	Broker Dealer A's MPID.
→	→	452	Party Role	1	Executing firm (reporting on his own behalf).
→	→	448	Party ID	0123	Clearing firm number.
→	→	452	Party Role	83	Clearing firm of the Executing firm.
→	528		Order Capacity	A	Agent.
→	12		Commission	500.00	Determined to be Buyer's commission based on Tag 54 value of 1.
→	54		Side	2	Indicates the following repeating group represents the sell side of the trade.
→	453		Number of parties on the Contra side	1	Only the Contra firm.
→	→	448	Party ID	C	Customer MPID.
→	→	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.

8.3 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.
→	54		Side	1	Indicates the following repeating group represents the buy side of the trade.
→	453		Number of parties on the Reporting side	3	Reporting party, the Give-up firm and his clearing firm.
→	→	448	Party ID	ABCD	Broker Dealer A MPID.
→	→	452	Party Role	1	Executing Firm.
→	→	448	Party ID	MNOP	Broker Dealer C MPID.
→	→	452	Party Role	14	Giveup Firm.
→	→	448	Party ID	0123	Clearing firm number.
→	→	452	Party Role	83	Clearing firm of the Giveup firm.
→	528		Order Capacity	A	Agent.
→	12		Commission	500.00	Determined to be Buyer's commission based on Tag 54 value of 1.
→	54		Side	2	Indicates the following repeating group represents the sell side of the trade.
→	453		Number of parties on the Contra side	1	Only the Contra firm.
→	→	448	Party ID	EFGH	Broker Dealer B MPID.
→	→	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.
→	54		Side	2	Indicates the following repeating group represents the sell side of the trade.
→	453		Number of parties on the Reporting side	3	Reporting party, the Give-up firm and his clearing firm.
→	→	448	Party ID	ABCD	Broker Dealer A MPID.
→	→	452	Party Role	1	Executing Firm.
→	→	448	Party ID	MNOP	Broker Dealer C MPID.
→	→	452	Party Role	14	Giveup Firm.
→	→	448	Party ID	0123	Clearing firm number.
→	→	452	Party Role	83	Clearing firm of the Giveup firm.
→	528		Order Capacity	P	MNOP acting as Principal.
→	54		Side	1	Indicates the following repeating group represents the buy side of the trade.
→	453		Number of parties on the Contra side	2	Contra firm and his clearing firm.
→	→	448	Party ID	ABCD	Broker Dealer A MPID.
→	→	452	Party Role	17	Contra Firm.
→	→	448	Party ID	0456	Clearing firm number.
→	→	452	Party Role	83	Clearing firm of the Contra firm.
→	528		Order Capacity	A	ABCD acting as Agent.
→	12		Commission	500.00	Determined to be Buyer's commission based on Tag 54 value of 1.
22013			Locked-In Indicator	Y	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.
→	54		Side	2	Indicates the following repeating group represents the sell side of the trade.
→	453		Number of parties on the Reporting side	2	Reporting/executing party and his clearing firm.
→	→	448	Party ID	ABCD	Broker Dealer A MPID.
→	→	452	Party Role	1	Executing Firm.
→	→	448	Party ID	0123	Clearing firm number.
→	→	452	Party Role	83	Clearing firm of the Executing firm.
→	528		Order Capacity	A	ABCD acting as Agent.
→	12		Commission	500.00	Determined to be Seller's commission based on Tag 54 value of 2.
→	54		Side	1	Indicates the following repeating group represents the buy side of the trade.
→	453		Number of parties on the Contra side	3	Reporting party, the Give-up firm and his clearing firm.
→	→	448	Party ID	ABCD	Broker Dealer A MPID.
→	→	452	Party Role	17	Contra Firm.
→	→	448	Party ID	MNOP	Broker Dealer C MPID.
→	→	452	Party Role	14	Giveup Firm.
→	→	448	Party ID	0456	Clearing firm number.
→	→	452	Party Role	83	Clearing firm of the Contra firm.
→	528		Order Capacity	P	MNOP acting as Principal.
22013			Locked-In Indicator	Y	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			TAG Name	Value	Comment
552			Number of Sides	2	Report contains information on both sides of the trade.
→	54		Side	2	Indicates the following repeating group represents the sell side of the trade.
→	453		Number of parties on the Reporting side	3	Reporting party, the Give up firm (on the reporting side) and his clearing firm.
→	→	448	Party ID	ABCD	Broker Dealer A MPID.
→	→	452	Party Role	1	Executing Firm.
→	→	448	Party ID	MNOP	Broker Dealer C MPID.
→	→	452	Party Role	14	Giveup Firm.
→	→	448	Party ID	0123	Clearing firm number.
→	→	452	Party Role	83	Clearing firm of the Reporting Giveup firm.
→	528		Order Capacity	A	MNOP acting as Agent.
→	12		Commission	500.00	Determined to be Seller's commission based on Tag 54 value of 2.
→	54		Side	1	Indicates the following repeating group represents the buy side of the trade.
→	453		Number of parties on the Contra side	3	Reporting party, the Give-up firm (on the contra side) and his clearing firm.
→	→	448	Party ID	ABCD	Broker Dealer A MPID.
→	→	452	Party Role	17	Contra Firm.
→	→	448	Party ID	EFGH	Broker Dealer B MPID.
→	→	452	Party Role	14	Giveup Firm.
→	→	448	Party ID	0456	Clearing firm number.
→	→	452	Party Role	83	Clearing firm of the Contra Giveup firm.
→	528		Order Capacity	A	EFGH acting as Agent.
→	12		Commission	500.00	Determined to be Buyer's commission based on Tag 54 value of 1.
22013			Locked-In Indicator	Y	Locked-In trade.

- 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.
→	54		Side	2	Indicates the following repeating group represents the sell side of the trade.
→	453		Number of parties on the Reporting side	3	Entering Party (Service Bureau), Reporting party (who is the executing firm) and his clearing firm.
→	→	448	Party ID	SB01	Service Bureau MPID.
→	→	452	Party Role	7	Entering firm
→	→	448	Party ID	ABCD	Broker Dealer A MPID.
→	→	452	Party Role	1	Executing firm
→	→	448	Party ID	0123	Clearing firm number.
→	→	452	Party Role	83	Clearing firm of the Executing firm.
→	528		Order Capacity	P	Principal.
→	54		Side	1	Indicates the following repeating group represents the buy side of the trade.
→	453		Number of parties on the Contra side	1	Only the Contra firm.
	→	448	Party ID	EFGH	Broker Dealer B MPID.
	→	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.

Revision History

Revision	Comment
1.0	• Initial version.