Johannesburg Stock Exchange

Trading and Information Solution

JSE Specification Document Volume 03 – Post Trade Gateway (FIX 5.0 SP2)

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1.2 Document Information

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1.3 Revision History

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08 July 2011	1.00	Initial Draft
30 November 2011	1.01	JSE Specification Updates
20 June 2012	1.02	Updated specifications and added clarity where required.
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11 July 2013	2.01	Corrected a typing error in section 8.6.2.6
15 July 2013	2.02	Corrected hyperlink to reject codes section in message layouts
04 November 2013	2.03	Minor document corrections
22 April 2015	2.04	Updated section 8.6.1.2 and section 8.6.2.5.
29 February 2016	3.00	Integrated Trading and Clearing Project changes. Equity Market Enhancements: Hidden Order functionality enhanced Introduction of On Book Cross Order Trade Introduction of EOD Volume Auction Addition of SecondaryClientOrderID
26 April 2016	3.01	Updated section 8.6.1.2 detailing Transact Time (60) is only mandatory on acceptance of the trade. Updated section 8.6.2.5 Transact Time (60) Field name and description of Tag 27107 updated Strategy Type field updated to Tag 27110
4 August 2016	3.02	Removed 1115 Order Catergory from client initiated TCR and TCR Acks Updated missing Tag 423 to PriceType
3 October 2016	3.03	Description for TradePublishIndicator (1390) updated. SecondaryClOrdID (526) removed from the side block and added as a separate field to the On Book Trade Capture Report message.
3 November 2016	3.04	SecondartClOrdID (526) included in the repeating box of the On Book Trade Capture Message

31 January 2017	3.05	Introduced SecondaryTradeReportID (818) to the Server and Client initiated messages for Off Book trades Account (1) field description updated in Client initiated application messages for Off Book trades Meaning for enum value 2 of Strategy Type (27110) field updated TradeReportID (571) field removed from client initiated off book TCR messages Applicable dealing capacities, trading models and markets for derivatives off book trade types updated.
6 March 2017	3.06	Scenario A:9 step 6 updated. Submitter of the off book trade will receive a TCR with Trade Report Type (3) - Decline
29 December 2017	3.07	3.8.1.1 A point has been added to indicate that the length of the FirmTradeID field will be restricted to 11 characters. 3.8.1.3 and 3.8.1.4: Sections added to indicate the maximum length restrictions for the SecondaryTradeReportID (818) and StrategyLinkID (27100) fields to be 10 characters. The document has been corrected to remove all references to the SecuritySubType (762) field from sections 8.6.1.1, 8.6.1.2, 8.6.2.1, 8.6.2.2, 8.6.2.3, 8.6.2.4 and 8.6.2.5. This field is not disseminated for OnBook Trades on the Post Trade Gateway 12.4 Scenario A7 step 6 the accepted values for TradeReportType (856) has been changed from Decline to Alleged New. 8.6.1.1, 8.6.2.1, 8.6.2.2 SecondaryFirmTradeID (1042) field introduced to Trade Report Submission Request TCR and resulting Ack and notification TCRs to executing firm and contra firm respectively.

1.4 References

FIXT 1.1 Specification FIX 5.0 (Service Pack 2) Specification

1.5 Contact Details

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1.6 Definitions, Acronyms and Abbreviations

Client A member Firm Interface User connected to the Post Trade gateway.

FIX Version 5.0 (Service Pack 2) of the Financial Information Exchange Protocol.

FIX Connection

A bi-directional stream of ordered messages between the client and server within a particular login. A FIX connection ends when the client logs out or if the TCP/IP

connection is terminated.

FIX Session A bi-directional stream of ordered messages between the client and server within a

continuous sequence number series. A single FIX session can exist across

multiple FIX connections.

FIXT Version 1.1 of the Financial Information Exchange Session Protocol.

Order Executable interest which may be an order.

Server The Post Trade gateway at the System for the JSE Markets.

Y* Specifies conditional requirements in message layouts

JSE Markets JSE & NSX Markets

JSE Johannesburg Stock Exchange

NSX Namibian Stock Exchange

Trader Each order request must be submitted under a particular trader.

Trader Trader group

Group

Trader group within a Firm which the Trader belongs to.

Repeating Group

A set of related attributes which occur more than once within a field of a message

Client This is the Client Account for whom the Trade Report is submitted by the Firm as

Account reflected in the JSE back office system.

Market Operations Users

Defines the Exchange Managers, Market Managers and Service Desk users created in the System. They are specified collectively as Market Operations Users. Market Operations Users will be explicitly defined where relevant.

Post Trade Interface Users

Interface Users specified under a Firm with privileges enabled to perform the following actions.

- Log into the Post Trade gateway on Login privileges
- Trade Reports for Own Firm on General privileges

The Exchange product will be designed only to check the above mentioned login and general privilege for Interface Users. Submit/cancel off book trade privilege will be validates only against the Trader.

Cross Order Trade

A trade resulting from the submission of a Cross Order by market participants that results only in a trade and has no impact to orders.

EOD Volume Auction Call

A dark auction call which is triggered at end of the day after the CPX session. The uncrossing will happen at the closing price.

TCR (AE)

Trade Capture Report (Message Type = AE).

Refer to the Standard FIX protocol - FIX 5.0 SP2 (http://www.fixprotocol.org/specifications/FIX.5.0SP2) for further details of Trade Capture Report (AE) message.

Trade Capture Report (AE) will be used in the following scenarios

On Book Trades;

- a) Trade Capture Report generated for On Book trade confirmation
- Trade Capture Report generated for On Book trade correction (by JSE Market Operations)
- Trade Capture Report used to request the same day cancellation of an On Book trade
- d) Trade Capture Report generated for On Book trade cancellation confirmation

Off Book Trades:

- a) Trade Report Submission Request, Trade Report Cancellation Request and Trade Report Withdrawal Request.
- b) System Notification to the counterparty Firm in Trade Submission, Cancellation and Withdrawal of a request
- c) Counterparty Firm response for the System Notification in trade Submission and Cancellation
- d) Confirmation report sent to the initiating Firm and counterparty Firm on confirmation of a trade or a trade cancellation
- Notification generated to the Initiating Firm in trade Submission or Cancellation, on a decline by the counterparty Firm.

Any TCR (AE) sent from the System will be sent to all privileged Post Trade Interface Users of the intended Firm. A TCR (AE) will not be able to be sent to a designated particular Post Trade Interface User of a Firm.

TCR Ack Trade Capture Report Acknowledgment (Message Type = AR) (AR) Refer to the Standard FIX protocol -

Refer to the Standard FIX protocol - FIX 5.0 SP2 (http://www.fixprotocol.org/specifications/FIX.5.0SP2) for further details of Trade Capture Report Acknowledgement (AR) message.

Trade Capture Report Acknowledgement (AR) will be used in the following scenarios

On Book trades:

 a) System acknowledgement generated for same day cancellation request of an On Book trade

Off Book trades:

- a) System acknowledgement to the initiating Firm regarding the validity of the TCR (AE) submitted by the initiating Firm in a trade Submission, Cancellation and Withdrawal of a request
- b) System acknowledgement to the counterparty Firm regarding the validity of the TCR (AE) submitted by the counterparty Firm in trade Submission and Cancellation

Any TCR Ack (AR) sent from the System will be sent to the Post Trade Interface User who submitted the relevant TCR (AE) to the System

Off Book Trade

A trade negotiated outside the System yet reported to the System, in accordance with the JSE rules and directives.

On Book Trade

An Automatic Trade which is a trade automatically executed in the System which can either be an Automated Trade or an Uncrossing Trade.

CPP Session

Closing Price Publication is the session where the Closing Price is calculated and published to the Market

CPX Session

Closing Price Cross is the session where automated trading can occur at the Closing Price calculated during the CPP session

2 OVERVIEW

The System includes a Post Trade Gateway that will enable member Firms to submit and manage trade reports and receive real-time information on executed trades. This interface cannot be used to submit orders or receive market data and enables clients to perform the activities outlined below.

- (i) Receive real-time updates on executed trades
- (ii) Receive information on executed trades via a query-based service. This service is available for participants that do not require a real-time trade feed and to facilitate a recovery after a failure.
- (iii) Submit Off Book Trades
- (iv) Cancel On Book and Off Book trades

The interface is a point-to-point service based on the technology and industry standards TCP/IP, FIXT and FIX. The session and application event models and messages are based on versions 1.1 and 5.0 (Service Pack 2) of the FIXT and FIX protocols respectively.

3 SERVICE DESCRIPTION

Clients will receive real-time information on the trades executed on the current trading day on the JSE Markets along with notifications of any trade cancellations. The details of trades executed on previous trading days are not available via this service.

3.1 Connection Configuration

A client will be configured by the JSE to receive all of the Firm's trades through a set up defined privileges. If required the Post Trade Interface User could be configured to only receive trades for selected users and instruments.

For the purpose of redundancy, the service supports the configuration of multiple post trade connections to send the same information on the activity of the selected member Firms/Interface Users.

3.1.1 Real-Time Connections

A client will receive the details of each of its own Trades (On and Off Book) immediately after they are executed. Please refer to Section 6 for a description of how the trades executed during the time a real-time client is disconnected from the server may be recovered.

3.1.2 Query-Based Service

A query-based client will not receive any real-time notifications of its trades. Such clients are expected to request the server for the details of trades as and when they are needed as outlined below.

3.1.2.1 Trade Capture Report Requests

A client may use the Trade Capture Report Request message to request the details of all its trades or those that meet certain criteria. The server will respond with a Trade Capture Report Request Ack to indicate, via the TradeRequestStatus (750) and Trade RequestResult (749) fields, whether the request is successful or not.

The total number of Trade Capture Report Requests that a client may submit is limited to PTG MAX TCR REQ COUNT <1000> each day

If a request is accepted, the number of Trade Capture Reports that will be sent in response to the request will be indicated in the TotNumTradeReports (748) field of the Trade Capture Report Request Ack. The server will transmit the requested Trade Capture Reports immediately after the Trade Capture Report Request Ack. Each Trade Capture Report will include the TradeRequestID (568) of the request it is sent in response to. The last Trade Capture Report will include a LastRptRequested (912) of Last Message (Y).

If a request is rejected, the reason will be specified in the field TradeRequestResult (749) of the Trade Capture Report Request Ack. If a user submits a TradeRequestType (569) outside the System supported range, but supported by FIX (i.e. 2,3,4. 0 and 1 are supported by the System), the System will reject the request with a Trade Capture Report Request Ack with TradeRequestResult (749) set to 8 (TradeRequestType not supported). If a user submits a TradeRequestType (569) outside FIX supported range (i.e. outside 0,1,2,3,4), the System will send a Reject message (session-level) with a SessionRejectReason (373) of 5 (Value is incorrect (out of range) for this tag).

The Trade Capture Report Request message can only be used to request a snapshot of the current trades. It cannot be used to subscribe to Trade Capture Reports.

3.1.2.1.1 Request for All Trades

The Trade Capture Report Request should include a TradeRequestType (569) of All Trades (0) if the client wishes to request the details of all trades.

3.1.2.1.2 Request for Selected Trades

The Trade Capture Report Request should include a TradeRequestType (569) of Trades Matching Specified Criteria (1) if the client wishes to request the details of trades for a selected set of instruments or for a specified party, trade type or order.

The SecurityID (48) field of the Trade Capture Report Request may be used if the request relates to a single instrument.

The ExecType (150) field of the message may be used if the request is limited to confirmed, corrected or cancelled trades.

The MatchType (574) field of the Trade Capture Report Request may be used if the request relates to particular types of trades (e.g. those executed during continuous trading or an auction, Off Book trades, etc.). The TrdSubType (829) field may be used if the request is restricted to a particular type of Off Book trade.

The client may also use the PartyID block of the message to indicate the parties (i.e. executing Firm or Trader Group and Trader ID etc.), if any, the request relates to. A Trade Capture Report Request may include multiple PartyIDs.

In addition, the Side (54) field of the Trade Capture Report Request may be used if the client only wants to receive trades for a particular side (i.e. buy or sell).

The client may also use the ClOrdID (11) or OrderID (37) field if the request is for trades related to a specific order.

If a particular Trade Capture Report Request contains multiple criteria (e.g. SecurityID and Trade Sub Type), the server will treat it as a request for trades that match <u>all</u> of the specified criteria. If no trades match the specified criteria, the server will reject the request with a TradeRequest Result (749) of Cannot Match Selection Criteria (100).

If a user submits TradeRequestType(569) outside the above specified criteria but within the FIX supported range (i.e. 2,3,4) it will be rejected with a Trade Capture Report Request Ack with TradeRequestResult(749) set to 8 (TradeRequestType not supported).

If a user submits TradeRequestType(569) outside the FIX supported range (i.e. 0,1,2,3,4) it will be rejected with a session reject where SessionRejectReason (373) is 5 (Value out of range for this tag).

3.2 Trade Information

The FIX Trade Capture Report message is utilised by the server to transmit the details of each trade. A separate Trade Capture Report will be sent for each side of a trade. In the case of a trade, TradeHandlingInstr (1123) will be Trade Confirmation (0), TradeReportType (856) of Submit (0), ExecType (150) will be Trade (F), MatchStatus (573) will be Matched (0), TradeReportTransType (487) will be New (0) and TradeReportType (856) will be Submit (0) (In certain cases of Off Book trade reports, TradeReportTransType(487) may be set to Replace(2)).

For example, if an Off Book trade is submitted in a Single Party Reporting model which is published immediately, the submitting Firm first receives a Trade Capture Report Request Ack followed by a Trade Capture Report (where TradeReportTransType(487) set to Replace (2)). Each message will contain both basic and value added information on the trade (e.g. price quantity etc.), the security (e.g. Security ID) and the parties (e.g. Member Firm, Trader Group, Trader ID).

The MatchStatus (573) in the TCR Ack that is generated for any client submitted Trade Capture Report (Off Book Dual or single sided and Trade Cancellations) messages that is rejected at the gateway level will be stamped as zero.

Note: It is possible to identify TCR Acks generated at the gateway level, as they do not contain ApplSeqNum (1181) and ApplLastSeqNum (1350).

3.2.1 Party Identifiers

ID	Description	PartyRole (452)
Executing Firm	The Firm the executed order or trade was submitted under.	1
Trader Group	The Trader Group of the trader the trade was executed under in the initiating member Firm.	76
Trader	Trader ID of the trader who executed the trade in the initiating Firm.	53
Counterparty Firm	Counterparty Firm of the trade	17
Counterparty Trader	Trader ID of the trader who executed the trade in the counterparty Firm	37
Counterparty Trader Group	The Trader Group of the Trader the order was submitted under in the counterparty Firm.	100

3.2.2 Trade, Execution and Order Identifiers

3.2.2.1 Trade Report ID

The TradeReportID (571) of each Trade Capture Report is unique across trading days. The Trade Capture Reports published to report the two sides of a trade will contain different TradeReportIDs. A Trade Capture Report published to notify a client of a trade cancellation or correction includes the TradeReportID of the message that was published to report the trade in the TradeReportRefID (572) field.

3.2.2.2 Trade ID

The Trade Capture Reports published to report the two sides of a particular trade will contain the same TradeID (1003). Trade IDs are unique across trading days. A Trade Capture Report published to notify a client of a trade cancellation or correction includes the TradeID (1003) of the relevant trade.

3.2.2.3 Execution ID

A Trade Capture Report will contain the Execution ID of the Execution Report message sent by the Trading Gateway to report the execution of an order to the firm that submitted it. This Execution ID will be specified in the SideExecID (1427) field of the Trade Capture Report.

The Execution Reports published to report the two sides of an execution will contain different Execution IDs which are unique across trading days.

3.2.2.4 Trade Link ID

The Trade Capture Reports published for a single transaction (e.g. an auction, the execution of an incoming order against multiple passive orders, etc.) will contain the same TradeLinkID (820). Trade Link IDs are unique across trading days. A Trade Capture Report published to notify a client of a trade cancellation or correction includes the TradeLinkID (820) of the trade.

3.2.2.5 Order IDs

The matching system's order identification number for the executed order will be included in the OrderID (37) field of the Trade Capture Report.

Order IDs are unique across trading days. In terms of the FIX protocol, unlike ClOrdID (11) which requires a chaining through Cancel/Replace Requests and Cancel Requests, the OrderID (37) of an order will remain constant throughout its life.

3.2.2.6 Client Order IDs

In the case of orders, the ClOrdID (11) included in the Trade Capture Report will be that specified when the order was submitted or last updated. An order's ClOrdID (11) will be updated each time an Order Cancel/Replace Request or an Order Cancel Request is accepted.

3.2.2.7 **Trade Type**

An indication of whether the trade was executed On or Off Book will be specified in the TrdType (828) field of a Trade Capture Report. In the case of an Off Book trade, the message will also include the type of Off Book trade in the field TrdSubType (829). Please refer to Section 9 for a list of valid Off Book trade types for the JSE and NSX.

3.2.2.8 Cross ID

Identifier of the client submitted cross order. This will be unique across the trading day for a given Comp ID and will be required for cross orders. However, the uniqueness will not be validated by the system. Only Alpha numeric values will be allowed in this field. No special characters will be allowed.

3.2.3 Additional Information

Each Trade Capture Report will specify the methodology under which a trade was executed (e.g. continuous trading, auction, etc.) and the type of interest (e.g. order) and via the MatchType (574) and OrderCategory (1115) fields respectively.

In the case of trades executed during an auction, both sides of the trade will be flagged as passive.

3.3 Trade Cancellations and Corrections

JSE Market Operations/Surveillance departments may cancel or correct an On Book trade or cancel an Off Book trade. After obtaining the relevant permission, a member Firm may also submit a request to cancel an On Book or confirmed Off Book trade. The server will transmit Trade Capture Reports to the relevant clients to notify them of a trade cancellation or correction. The affected trade will be identified in the TradeID (1003), TradeReportRefID (572) and, in the case of an Off Book trade, FirmTradeID (1041) fields. The TradeHandlingInstr (1123) of the message will be Trade Confirmation (0).

In the case of a trade cancellation, ExecType (150) will be Trade Cancel (H) and MatchStatus (573) will be Unmatched (1). The TradeReportType (856) will be Trade Break (7) if the trade is cancelled by JSE Market Operations/ Surveillance departments or Trade Report Cancel (6) if it is cancelled by a member Firm. The TradeReportTransType (487) will be Cancel (1) or, in the case of certain Off Book trades, Replace (2).

In the case of a trade correction, TradeReportTransType (487) will be Replace (2), ExecType (150) will be Trade Correct (G) and TradeReportType (856) No/Was (5) where a trade price or quantity is corrected.

3.4 Timestamps and Dates

The timestamps SendingTime (52), OrigSendingTime (122) and TransactTime (60) will be in UTC and in the YYYYMMDD-HH:MM:SS.sss format.

All dates (i.e. OrigTradeDate (1125)) will be in the YYYYMMDD format and specified in the local date for the server (i.e. not in UTC).

3.5 Encryption

The encryption of messages between the client and server is not supported.

3.6 Off Book Trade Reporting

Member Firms may submit Off Book trades to the JSE or NSX Equity markets or the Derivative/Bond Markets in terms of the rules for reporting trades in the respective market. Each reported trade is subject to a series of validations and, if accepted, will be confirmed by the server.

A confirmed Off Book trade will be disseminated on the market data feed immediately if the trade type is stipulated as being published to the market, Member Firms may also request the cancellation of confirmed Off Book trades.

3.6.1 Overview

The server supports the following models for the reporting of Off Book trades:

- (i) Single Party Trade Reporting Model The same member Firm is on both sides of the trade and the member Firm reports both sides of the trade in a single Trade Capture Report. A Trade Capture Report Ack will be used by the server to acknowledge the receipt of or reject a trade report. The server will transmit a Trade Capture Report if the trade is confirmed. The event model for the cancellation of an Off Book trade is identical to that used to report it.
- (ii) Dual Party Trade Reporting Model A different member firm is on each side of the trade and the trade is initially reported by one of the parties via a Trade Capture Report which will include the identity of both Firms. A Trade Capture Report Ack will be used by the server to acknowledge the receipt of or reject the Trade Report Submission Request. If the Trade Report Submission Request is accepted, the server will transmit a Trade Capture Report to the counterparty Firm to prompt it to either accept or decline the request to confirm the trade. The counterparty will indicate whether the trade is accepted or declined via a Trade Capture Report. A Trade Capture Report Ack will be used by the server to acknowledge the response of the counterparty Firm. The server will report the trade confirmation to each of the counterparties via separate Trade Capture Reports if the trade is confirmed by the counterparty Firm. If the trade is declined, the server will notify the Firm that initially reported the trade via a Trade Capture Report. An unconfirmed trade report may be cancelled by the party that initially reported it. All unconfirmed trade reports are automatically cancelled at the end of the trading day. A notification will NOT be sent upon the expiry of the unconfirmed trade report. The event model for the cancellation of an Off Book trade is identical to that used to report it.

3.6.2 Single Party Trade Reporting Model

This section outlines the reporting of trades under the Single Party Reporting Model.

3.6.2.1 Reporting an Off Book Trade

3.6.2.1.1 Trade Report Submission Request

The client will report an Off Book trade via a Trade Capture Report containing both sides of the trade (i.e. NoSides (552) = 2). Each of the sides groups will contain a Parties block which contains information of only the party which participated in the particular side of the trade. The Firm which reports the trade to the System will be identified via PartyRole (452)

of Executing Firm (1) and the counterparty (which is the same firm) will be identified via PartyRole (452) of Contra Firm (17).

The Trader Group which participated in the trade is required to be identified via PartyRole (452) of Trader Group (76) for the Executing Firm. The Trader which participated in the trade is required to be identified via PartyRole (452) of Trading Mnemonic (53) for the Executing Firm. It is mandatory to specify the Trader ID and Trader Group for the Executing Firm.

The Trader Group which participated in the trade is required to be identified via PartyRole (452) of Trader Group(100) for the Counterparty Firm. The Trader which participated in the trade is required to be identified via PartyRole (452) of Trader ID (37) for the Counterparty Firm. It is mandatory for the Counterparty Firm to specify the Trader ID and Trader Group for the Counterparty Firm.

The message will include a trade identifier in the field FirmTradeID (1041). The Trade Capture Report will also include a TradeReportTrans Type (487) of New (0), a TradeReportType (856) of Submit (0) and a TradeHandlingInstr (1123) of Two-Party Report (1). The time at which the trade was agreed will be specified in the TransactTime (60) field. It may optionally include a TradeReportID (571).

The Trade Capture Report will, in addition to the instrument, include quantity and price. It will also include a valid Off Book trade type. The dealing capacity and client account will be mandatory for both the sides of the trade.

3.6.2.1.2 Acknowledgement of a Trade

A Trade Capture Report will be acknowledged by the server via a Trade Capture Report Ack. The trade report being acknowledged will be identified in FirmTradeID (1041) field and TradeReportID (571). The trade identifier assigned by the System will be specified as the Trade ID (1003).

The TrdRptStatus (939) field will indicate whether the Trade Capture Report is Accepted (0) or Rejected (1). If a trade report is rejected, the reason for the rejection will be specified in the TradeReportRejectReason (751) field. The MatchStatus (573) of the message will be Unmatched (1).

3.6.2.2 Confirmation of an Off Book Trade

If the trade is confirmed by the System, the server will transmit a Trade Capture Report for both the sides. Each message will include a TradeHandlingInstr (1123) of Trade Confirmation (0).

The Off Book trade being confirmed will be identified via the FirmTradeID (1041) and TradeID (1003) fields. The TradeReportID (571) included in a message is one generated by the server. It is not the TradeReportID (571) of the message sent to report the trade.

The Trade Capture Report transmitted by the server will also include a TradeReportTransType (487) of Replace (2), a MatchStatus (573) of Matched (0), a ExecType (150) of Trade (F), a TradeReportType (856) of Submit (0), a TradeHandlingInstr (1123) of Trade Confirmed (0) and a OrigTradeHandlingInstr (1124) of Two-Party Report (1).

The TradeReportTransType (487) will be Replace (2) in the case of the Firm that reported the trade and New (0) in the case of the counterparty Firm.

E.g.: If 'buy' side is reported as initiating side, the Trade Capture Report generated for the 'buy' side will include Replace (2) in the field TradeReportTransType (487). The Trade Capture Report generated for the 'sell side will include New (0) in the field TradeReportTransType (487).

3.6.2.3 Cancellation of an Off Book Trade

The member Firm who reported the trade can also request the trade to be cancelled.

3.6.2.3.1 Reporting the cancellation request

A client will submit a cancel request via a Trade Capture Report. The message will include two sides. One side will contain a PartyRole (452) of Executing Firm (1) and identify the firm requesting the cancellation. The other side will contain a PartyRole (452) of counterparty Firm (17) and include the identity of the counterparty Firm (in this case it is the same member Firm).

The Trader Group which participated in the trade is required to be identified via PartyRole (452) of Trader Group(76) for the Executing Firm. The Trader which participated in the trade is required to be identified via PartyRole (452) of Trader ID (53) for the Executing Firm.

The Trade Capture Report will include a TradeReportType (856) of Trade Report Cancel (6), a TradeReportTransType (487) of New (0) and a TradeHandlingInstr (1123) of Two-Party Report (1). The message may optionally include a TradeReportID (571).

The message will include the identifier assigned to the trade by the System in the TradeID (1003) field and the identifier of the instrument in SecurityID (48). No additional information on the trade is required.

Off Book trade cancellations can be performed only within the current trading day. Next day Off Book trade cancellations need to be performed as a new trade submission swapping the positions of the Firms. Refer section 3.6.2.1.1 for submission of trade reports.

3.6.2.3.2 Acknowledgement of a Cancellation Request

A cancel request will be acknowledged by the server via a Trade Capture Report Ack. The request being acknowledged will be identified via the TradeID (1003) field and TradeReportID (572) fields. The TrdRptStatus (939) will indicate whether the request is Accepted (0) or Rejected (1). If a cancel request is rejected, the reason for the rejection will be specified in the Trade ReportRejectReason (751) field. The MatchStatus (573) of the message will be Matched (0).

3.6.2.3.3 Confirmation of the Cancellation

If the trade is cancelled, the server will transmit a Trade Capture Report to each side of the Trade (i.e. Buy and Sell). Each message will include a TradeReportType (856) of Trade Report Cancel (6).

The trade being cancelled will be identified via the FirmTradeID (1041), TradeID (1003) and TradeReportRefID (572) fields. The TradeReportRefID (572) of each message is the TradeReportID (571) included in the Trade Capture Report transmitted to confirm the Off Book trade. It is not the TradeReportID (571) of the message sent to request the cancellation.

The Trade Capture Reports will include a TradeHandlingInstr (1123) of Trade Confirmation (0), a MatchStatus (573) of Unmatched (1), an ExecType (150) of Trade Cancel (H) and an OrigTradeHandlingInstr (1124) of Two-Party Report (1). The TradeReportTransType (487) will be Replace (2) in the case of the Firm that requested the cancellations and Cancel (1) in the case of the counterparty Firm.

3.6.3 **Dual Party Trade Reporting Model**

This section outlines the reporting and cancellation of Off Book trades under the Dual party Trade Reporting model.

3.6.3.1 Reporting an Off Book Trade to the System

3.6.3.1.1 Trade Report Submission Request

One of the parties to an Off Book trade will initiate the process of reporting the trade by submitting a Trade Capture Report. The trade report will include two sides. One side will contain a PartyRole (452) of Executing Firm (1) and include information on the side of the trade represented by the reporting Firm (e.g. Firm, Trader Group, Trader, capacity, etc.).

The other side will contain a PartyRole (452) of Contra Firm (17) and include the identity of the counterparty Firm.

The Trader Group which participated in the trade is required to be identified via PartyRole(452) of Trader Group(76) for the Executing Firm. The Trader which participated in the trade is required to be identified via PartyRole (452) of Trader ID (53) for the Executing Firm.

The Trade Capture Report will include the trade identifier agreed by the two Firms in the FirmTradeID (1041) field. The message will also include a TradeReportType (856) of Submit (0), a TradeReportTransType (487) of New (0) and a TradeHandlingInstr (1123) of One-Party Report for Pass Through (3). It may optionally include a TradeReportID (571).

The Trade Capture Report will, in addition to the instrument, quantity and price, include the time the trade was agreed by the Two Firms. It will also include a valid Off Book trade type, dealing capacity and client account of the Firm reporting the trade. Furthermore, based on different instrument types and trade sub-types, it will be required to submit additional fields that will be mandatory. Please refer to section 10 for further details.

Note: the system will not reject fields that are submitted by users, which are not required fields for a particular instrument type or trade sub-type. If a user has specified an irrelevant field the system will not consider the value and will process the request accordingly, echoing the value submitted in that field back to the client in the TCR.

3.6.3.1.2 Acknowledgement of the Submission Request

The initial Trade Capture Report will be acknowledged by the server via a Trade Capture Report Ack. The trade report being acknowledged will be identified in the FirmTradeID (1041) and TradeReportID (571) fields. The identifier assigned to the trade by the System will be specified as the TradeID (1003).

The TrdRptStatus (939) will indicate whether the trade report is Accepted (0) or Rejected (1). If a trade report is rejected, the reason for the rejection will be specified in the Trade ReportRejectReason (751) field. The MatchStatus (573) will be Unmatched (1).

3.6.3.1.3 Notification to the Counterparty Firm

If the initial Trade Capture Report is accepted, the System will transmit a Trade Capture Report to the counterparty Firm to notify it of the request to confirm the trade. It will include two sides. One side will include an identifier of the reporting Firm via a PartyRole (452) of Contra Firm (17). The other side will include the Firm that the notification is sent to via a PartyRole (452) of Executing Firm (1).

The Off Book trade will be identified via the TradeID (1003) and FirmTradeID (1041) fields. The message will include a System generated TradeReportID (571), a TradeReport Type (856) of Alleged New (11), a TradeReportTransType (487) of New (0) and a TradeHandlingInstr (1123) of One-Party Report for Pass Through (3).

The Trade Capture Report will include all of the trade information provided by the reporting party (e.g. instrument, price, quantity, trade type, trade time etc.). Information specific to the side represented by the initiating Firm (e.g. client account) will not be provided.

3.6.3.1.4 Response of Counterparty Firm

The counterparty Firm should either accept or decline the Off Book trade via a Trade Capture Report. The message will include two sides. One side will contain a PartyRole (452) of Executing Firm (1) and, if the trade is accepted, include information on the side of the trade represented by the counterparty Firm (e.g. Firm ID, client account, dealing capacity, etc). The other side will contain a PartyRole (452) of Contra Firm (17) and include the identity of the initiating firm.

Both the TradeID (1003) and FirmTradeID (1041) of the trade will be included in the message. It will also include a TradeReportType (856) of Accept (2) or Decline (3), a TradeReportTransType (487) of Replace (2) and a TradeHandlingInstr (1123) of One-Party

Report for Pass Through (3). The Trade Capture Report may optionally include a TradeReportID (571).

The counterparty Firm must either accept or reject the trade. If the trade is rejected, the reason may be specified in the RejectText (1328) field of the Trade Capture Report.

The response of the counterparty must be submitted on the day the confirmation process is initiated. All unconfirmed trade reports are cancelled at the end of the day. A Notification will NOT be sent to the initiating Firm upon expiry of the unconfirmed trade report.

3.6.3.1.5 Acknowledgement of the Response to the Counterparty Firm

The response of the counterparty Firm will be acknowledged by the System via a Trade Capture Report Ack. The message being acknowledged will be identified via the FirmTradeID (1041), TradeID (1003) and TradeReportID (571) fields.

The TrdRptStatus (939) will indicate whether the response is Accepted (0) or Rejected (1). If the response is rejected, the reason for the rejection will be specified in the TradeReport RejectReason (751) field. The MatchStatus (573) will be Unmatched (1).

The response will be rejected if the trade details (e.g. instrument, price, quantity, trade type, etc.) provided by the counterparty Firm are not identical to those specified by the initiating Firm. The initiating Firm will not be notified if the response of the counterparty Firm is rejected. All unconfirmed trade reports are cancelled at the end of the day. A Notification will NOT be sent to the initiating Firm upon expiry of the unconfirmed trade report.

3.6.3.1.6 Trade Declined: Notification to Initiating Firm

If the Off Book trade is declined by the counterparty Firm, the System will transmit a Trade Capture Report to the initiating Firm. It will include two sides. One side will include an identifier of the initiating Firm via a PartyRole (452) of Executing Firm (1). The other side will include the counterparty Firm via a PartyRole (452) of Contra Firm (17).

The Off Book trade will be identified via the FirmTradeID (1041) and TradeID (1003) fields. The message will include a TradeReportType (856) of Decline (3), a TradeReport TransType (487) of Cancel (1) and a TradeHandlingInstr (1123) of One-Party Report for Pass Through (3).

The Trade Capture Report will include the reject reason specified by the counterparty Firm, if any, in the RejectText (1328) field. The message will also include all of the trade information provided by the initiating Firm (e.g. instrument, price, quantity, trade type, etc.). Information specific to the side represented by the initiating firm (e.g. client account) will also be included but not that of the counterparty Firm.

3.6.3.1.7 Trade Accepted: Confirmation of the Trade

If the Off Book trade is accepted by the counterparty Firm and confirmed by the System, it will transmit a Trade Capture Report to each of the two Firms. Each message will include two sides. One side will include the identifier of the Firm it is sent to via a PartyRole (452) of Executing Firm (1). The other side will include the counterparty Firm via a PartyRole (452) of Contra Firm (17).

The Off Book trade being confirmed will be identified via the FirmTradeID (1041) and TradeID (1003) fields. The TradeReportID (571) included in a message will be one generated by the System. It will not be the TradeReportID (571) of the message sent by the initiating Firm or counterparty Firm to initiate or accept the trade request.

Both Trade Capture Reports will include a Trade HandlingInstr (1123) of Trade Confirmation (0), a TradeReportType (856) of Submit (0), a TradeReportTransType (487) of Replace (2), an ExecType (150) of Trade (F), a MatchStatus (573) of Matched (0) and an OrigTradeHandlingInstr (1124) of One-Party Report for Pass Through (3).

Each message will include the general details of the trade (e.g. instrument, price, quantity, trade type, etc.) as well as the information on the side of the trade represented by the firm it is sent to (e.g. client account, dealing capacity).

3.6.3.1.8 Cancelling an Unconfirmed Trade

The Firm that initiated the process of confirming the trade may cancel the request and terminate the confirmation process if the trade has not been accepted or rejected by the counterparty Firm.

3.6.3.1.8.1 Requesting Cancellation

The initiating Firm will submit a Trade Capture Report to cancel an unconfirmed Trade Report Submission Request. The message will include two sides: One side will include the identity of the initiating Firm (via a PartyRole (452) of Executing Firm (1)) and the other will include the identity of the counterparty Firm (via a PartyRole (452) of Contra Firm (17)). The message will include a TradeReportType (856) of Submit (0), a TradeReportTransType (487) of Cancel (1) and a TradeHandlingInstr (1123) of One-Party Report for Pass Through (3). The Trade Capture Report will include the identifier of the trade for which the Trade Report Submission Request is being cancelled in the TradeID (1003) field and the identifier of the instrument. The message may optionally include a TradeReportID (571).

3.6.3.1.8.2 Acknowledgement of Cancellation Request

The cancellation request will be acknowledged by the System via a Trade Capture Report Ack. The message being acknowledged will be identified via the TradeID (1003) and TradeReportID (571) fields. The TrdRptStatus (939) will indicate whether the request is Accepted (0) or Rejected (1). If the request is rejected, the reason will be specified in the TradeReportRejectReason (751) field. The MatchStatus (573) of the message will be Unmatched (1).

3.6.3.1.8.3 Notification of Cancellation to Counterparty Firm

If the cancellation request is accepted, the System will transmit a Trade Capture Report to the counterparty Firm to notify it that the process of confirming the trade has been terminated. It will include two sides. One side will include an identifier of the initiating Firm via a PartyRole (452) of Contra Firm (17). The other side will include the Counterparty Firm that the notification is sent to via a PartyRole (452) of Executing Firm (1).

The trade will be identified via the TradeID (1003) and FirmTradeID (1041) fields. The Trade Capture Report will also include a System generated TradeReportID (571), a TradeReportType (856) of Alleged New (11), a TradeReportTransType (487) of Cancel (1) and a TradeHandlingInstr (1123) of One-Party Report for Pass Through (3).

The message will include all of the trade information provided by the initiating Firm (e.g. instrument, price, quantity, trade type, etc.). Information specific to the side represented by the initiating Firm (e.g. client account) will not be provided.

3.6.3.2 Cancellation of a Confirmed Off Book Trade

After receiving permission from the relevant market, a confirmed Off Book trade may be cancelled by any of the two counterparties on the same trading day.

3.6.3.2.1 Requesting a Cancellation

One of the parties to an Off Book trade will initiate the process of cancelling the trade by submitting a Trade Capture Report. The message will include two sides. One side should contain a PartyRole (452) of Executing Firm (1) and identify the Firm requesting the cancellation. The other side should contain a PartyRole (452) of Contra Firm (17) and include the identity of the counterparty Firm.

The Trader Group which participated in the trade is required to be identified via PartyRole(452) of Trader Group(76) for the Executing Firm. The Trader which participated in the trade is required to be identified via PartyRole (452) of Trader ID (53) for the Executing Firm.

The message will also include a TradeReportType (856) of Trade Report Cancel (6), a TradeReportTransType (487) of New (0) and a TradeHandlingInstr (1123) of One-Party Report for Pass Through (3).

If an off-book trade cancellation is sent without tag TradeHandlingInstr (1123) then it is treated as an on-book trade cancel. Since an on-book trade cancel should only contain a single side (and an off-book trade cancel contains two sides), a Trade Capture Report Ack is received with Trade Type (828) of Regular Trade (0), MatchStatus (573) of Matched (0) and TradeReportRejectReason (751) = 7815 (Invalid NoSides).

The Trade Capture Report will have the identifier assigned to the trade by the System in the TradeID (1003) field and the identifier of the instrument. It may optionally include a TradeReportID (571).

3.6.3.2.2 Acknowledgement of the Cancellation Request

A cancel request will be acknowledged by the System via a Trade Capture Report Ack. The request being acknowledged will be identified via the TradeID (1003) and TradeReportID (571) fields.

The TrdRptStatus (939) will indicate whether the request is Accepted (0) or Rejected (1). If a cancel request is rejected, the reason will be specified in the Trade ReportRejectReason (751) field. The MatchStatus (573) of the message will be Matched (0).

3.6.3.2.3 Notification to Counterparty Firm

If the initial cancel request is accepted, the System will transmit a Trade Capture Report to the counterparty Firm to notify it of the request to cancel the trade. It will include two sides. One side will include an identifier of the initiating Firm via a PartyRole (452) of Contra Firm (17). The other side will include the counterparty Firm the notification is being sent to via a PartyRole (452) of Executing Firm (1).

The message will include a server generated TradeReportID (571), a TradeReportType (856) of Alleged Trade Report Cancel (14), a TradeReportTransType (487) of New (0) and a TradeHandlingInstr (1123) of One-Party Report for Pass Through (3).

The trade will be identified in the TradeID (1003) and FirmTradeID (1041) fields. The message will also include the instrument, price, quantity and trade type.

3.6.3.2.4 Response of Counterparty Firm

The counterparty Firm should either accept or decline the cancel request via a Trade Capture Report. The message will include two sides. One side will contain a PartyRole (452) of Executing Firm (1) and include the identity of the counterparty. The other side will contain a PartyRole (452) of Contra Firm (17) and include the identity of the Firm that initiated the cancel process.

The trade and instrument will be identified in the TradeID (1003) and SecurityID (48) fields respectively. The message should include a TradeReportType (856) of Accept (2) or Decline (3), a TradeReportTransType (487) of Replace (2) and a TradeHandlingInstr (1123) of One-Party Report for Pass Through (3). If the request is rejected, the reason may be specified in the RejectText (1328) field. The Trade Capture Report may optionally include a TradeReportID (571).

The response of the counterparty Firm must be submitted on the day the cancellation process is initiated. Unconfirmed cancel requests are deleted at the end of the day. A Notification will NOT be sent to the initiating Firm upon expiry of the unconfirmed trade report.

3.6.3.2.5 Acknowledgement of the Response from the Counterparty Firm

The response of the counterparty Firm will be acknowledged by the System via a Trade Capture Report Ack. The message being acknowledged will be identified in the TradeID (1003) and TradeReportID (571) fields.

The TrdRptStatus (939) will indicate whether the response is Accepted (0) or Rejected (1). If the response is rejected, the reason for the rejection will be specified in the TradeReport RejectReason (751) field. The MatchStatus (573) will be Matched (0).

The Firm that initiated the cancellation will not be notified if the response of the counterparty Firm is rejected by the System. All unconfirmed trade reports are cancelled at the end of the day. A Notification will NOT be sent to the initiating Firm upon expiry of the unconfirmed trade report.

3.6.3.2.6 Request Declined by Counterparty Firm: Notification to Initiating Firm

If the cancel request is declined by the counterparty Firm, the server will transmit a Trade Capture Report to the Firm that initiated the cancel process. It will include two sides. One side will include the initiating Firm via a PartyRole (452) of Executing Firm (1). The other side will include the counterparty Firm via a PartyRole (452) of Contra Firm (17).

The Trade Capture Report will include a TradeReportType (856) of Decline (3), a TradeReportTransType (487) of Cancel (1) and a TradeHandlingInstr (1123) of One-Party Report for Pass Through (3). The reject reason specified by the counterparty Firm , if any, will be provided in the RejectText (1328) field.

The trade will be identified in the TradelD (1003) and FirmTradelD (1041) fields. The message will also include the instrument, price, quantity dealing capacity (of the Initiating Firm) and trade type.

3.6.3.2.7 Request Accepted by Counterparty Firm: Confirmation of the Cancellation

Model 1: Market Operations Approval is Not Required

If the cancel request is accepted by the counterparty Firm and validated by the System, the System will transmit a Trade Capture Report to each of the two Firms. Each message will include two sides. One side will include the identifier of the Firm initiated the cancel process via a PartyRole (452) of Executing Firm (1). The other side will include the counterparty Firm via a PartyRole (452) of Contra Firm (17).

Both Trade Capture Reports will include a TradeHandlingInstr (1123) of Trade Confirmation (0), a TradeReportType (856) of Trade Report Cancel (6), a TradeReport TransType (487) of Replace (2), an ExecType (150) of Trade Cancel (H), a MatchStatus (573) of Unmatched (1) and an OrigTradeHandlingInstr (1124) of One-Party Report for Pass Through (3).

The trade being cancelled will be identified in the TradeID (1003), FirmTradeID (1041) and TradeReportRefID (572) fields. The TradeReportRefID (572) of each message will be the TradeReportID (571) included in the Trade Capture Report transmitted to confirm the Off Book trade. It will not be the TradeReportID (571) of the message sent by the initiating Firm or counterparty Firm to initiate or accept the cancellation request.

Each message will include the general details of the trade (e.g. instrument, price, quantity, trade type, etc.) as well as the information on the side of the trade represented by the executing Firm (e.g. client account and dealing capacity).

Model 2: Market Operations Approval is required

The trade cancellation will be queued for approval by Market Operations if the cancel to request the trade is accepted by the counterparty and accepted by the server. Once the Market Operations approves the cancellation, the server will transmit a Trade Capture Report to each of the two counterparties to confirm the trade cancellation. Each message will include two sides. One side will include the identifier of the firm it is sent to via a PartyRole (452) of Executing Firm (17). The other side will include the counterparty via a PartyRole (452) of Contra Firm (1).

Both Trade Capture Reports will include a TradeHandlingInstr (1123) of Trade Confirmation (0), a TradeReportType (856) of Trade Report Cancel (6), a TradeReport TransType (487)

of Replace (2), an ExecType (150) of Trade Cancel (H), a MatchStatus (573) of Unmatched (1) and an OrigTradeHandlingInstr (1124) of One-Party Report for Pass Through (3).

The trade being cancelled will be identified in the TradeID (1003), FirmTradeID (1041) and TradeReportRefID (572) fields. The TradeReportRefID (572) of each message will be the TradeReportID (571) included in the Trade Capture Report transmitted to confirm the offbook trade. It will not be the TradeReportID (571) of the message sent by the requesting party or counterparty to initiate or accept the cancellation request.

Each message will include the general details of the trade (e.g. instrument, price, quantity, trade type, etc.) as well as the information on the side of the trade represented by the firm it is sent to (e.g. investor, order capacity, etc.).

3.6.3.2.8 Withdrawing an Unconfirmed Cancel Request

The Firm that initiated the trade cancel may withdraw the request and terminate the cancellation process if it has not been accepted by the counterparty Firm.

3.6.3.2.8.1 Requesting a Withdrawal

The initiating Firm should submit a Trade Capture Report to withdraw a pending cancel request. The message should include two sides: One side should include the identity of the initiating Firm (via a PartyRole (452) of Executing Firm (1)) and the other should include the identity of the counterparty Firm (via a PartyRole (452) of Contra Firm (17)). The message will include a TradeReportType (856) of Trade Report Cancel (6), a Trade ReportTransType (487) of Cancel (1) and a TradeHandlingInstr (1123) of One-Party Report for Pass Through (3). The Trade Capture Report will include the identifier of the trade for which the cancel request is being withdrawn in the TradeID (1003) field and the identifier of the instrument. No additional information on the trade is required. The message may optionally include a TradeReportID (571).

3.6.3.2.8.2 Acknowledgement of Withdrawal Request

The withdrawal request will be acknowledged by the System via a Trade Capture Report Ack. The message being acknowledged will be identified via the TradeID (1003) and TradeReportID (571) fields. The TrdRptStatus (939) will indicate whether the request is Accepted (0) or Rejected (1). If the request is rejected, the reason will be specified in the Trade ReportRejectReason (751) field. The MatchStatus (573) of the message will be Matched (0).

3.6.3.2.8.3 Notification of Withdrawal to Counterparty Firm

If the withdrawal request is accepted, the System will transmit a Trade Capture Report to the counterparty Firm to notify it that the process of cancelling the trade has been terminated. It will include two sides. One side will include an identifier of the initiating Firm via a PartyRole (452) of Contra Firm (17). The other side will include the counterparty Firm that the notification is sent to via a PartyRole (452) of Executing Firm (1).

The trade will be identified in the TradeID (1003) and FirmTradeID (1041) fields. The Trade Capture Report will also include a System generated TradeReportID (571), a Trade ReportType (856) of Alleged Trade Report Cancel (14), a TradeReportTransType (487) of Cancel (1) and a TradeHandlingInstr (1123) of One-Party Report for Pass Through (3).

The message will include the instrument, price, quantity and trade type.

3.7 Cancellation of On Book Trades

This section outlines event flow for the cancellation of On Book trades by member Firms in the System after obtaining permission from the relevant market.

An On Book trade will only be cancelled if requests to cancel it are received from each side of the trade. Each member Firm is required to submit its cancel request separately via a

Trade Capture Report for each side. The System will use a Trade Capture Report Ack to acknowledge or reject each such request. Once both cancel requests are received, the System will confirm the trade cancellation to each of the Firms via separate Trade Capture Reports. Neither Firm may withdraw a pending trade cancellation request. Unmatched trade cancellation requests are deleted at the end of the day. A Notification will NOT be sent to the initiating Firm upon expiry of the unconfirmed trade report.

3.7.1 Submitting a Cancellation Request

A member Firm will submit a cancel request via a Trade Capture Report. The message will include the identifier assigned to the trade by the System in the TradeID (1003) field. It should also include the side of the trade the member Firm represents. The message will also include a TradeReportType (856) of Trade Report Cancel (6), a TradeReportTransType (487) of New (0) and the identity of the instrument.

3.7.2 Acknowledgement of the Cancellation Request

A cancel request will be acknowledged by the server via a Trade Capture Report Ack. The request being acknowledged will be identified via the TradeID (1003) field. The TrdRptStatus (939) will indicate whether the request is Accepted (0) or Rejected (1). If a cancel request is rejected, the reason for the rejection will be specified in the Trade ReportRejectReason (751) field. The MatchStatus (573) of the message will be Matched (0).

3.7.3 Confirmation of the Cancellation

Market Operations Approval is not Required

The trade will be cancelled by JSE if requests to cancel it are received from both counterparties. The server will transmit a Trade Capture Report to each of the two counterparties to confirm the cancellation.

Each message will include an ExecType (150) of Trade Cancel (H) and a TradeReportType (856) of Trade Report Cancel (6). The trade being cancelled will be identified via the TradeID (1003) and TradeReportRefID (572) fields. The messages will include a Trade HandlingInstr (1123) of Trade Confirmation (0), a TradeReportTransType (487) of Cancel (1) and a MatchStatus (573) of Unmatched (1).

3.8 Trade Identifiers

3.8.1.1 Firm Trade ID

The System does not validate the FirmTradeID (1041) of each trade for uniqueness. However, it is necessary that counterparties assign a unique FirmTradeID to each Off Book trade. The FirmTradeID (1041) field will be used only to identify the Off Book trade up until the trade is confirmed by the System. Once confirmed, the TradeID (1003) assigned to the trade by the System will be used for cancellation requests.

The maximum length of the FirmTradeID (1041) field is restricted to 11 characters. A Trade Capture Report submitted with a FirmTradeID exceeding this length will be rejected with Reject message with reject text "Value is incorrect (out of range) for this tag"

3.8.1.2 Trade ID

The Trade ID (1003) of each trade confirmed by the System is unique across trading days in perpetuity.

3.8.1.3 Secondary Trade Report ID

The maximum length of the SecondaryTradeReportID (818) field is restricted to 10 characters. A Trade Capture Report submitted with a SecondaryTradeReportID exceeding

this length will be rejected with Reject message with reject text "Value is incorrect (out of range) for this tag"

3.8.1.4 Strategy Link ID

The maximum length of the StrategyLinkID (27100) field is restricted to 10 characters. A Trade Capture Report submitted with a StrategyLinkID exceeding this length will be rejected with Reject message with reject text "Value is incorrect (out of range) for this tag"

3.9 Repeating Groups (Components/Component Block)

If a repeating group is used in a message, the No. of party IDs field (for example NoPartyIDs field in the trading party repeating group) will be specified immediately prior to the repeating group. This is applicable for both the messages generated by the client and the System.

The first field inside the repeating block will be used as a delimiter for the next repeating group. Therefore it is required for the first field of the repeating group to be specified.

If the same FIX tag is repeated with different values in the client generated message outside of a repeating group, the server takes the value in the last tag. The server will not reject such messages.

However, if a client initiated Logon message contains repeated tags; the server may not acknowledge the login request and will not send any reply. If client initiated other administrative messages or application messages contain repeated tags outside component blocks, such requests will be rejected by the server.

4 CONNECTIVITY

4.1 Interface User ID (ComplDs)

The Interface User ID (CompID) of each client must be registered with the JSE and NSX markets before FIX communications can begin through the gateway. A single client may have multiple connections to the server (i.e. multiple FIX sessions, each with its own Interface User ID (CompID)).

The CompID of the Server will be JSEPTPGW. The messages sent to the server should contain the Interface User ID (CompID) assigned to the client in the field SenderCompID (49) and CompID of the server in the field TargetCompID (56). The messages sent from the server to the client will contain CompID of the server, JSEPTPGW in the field SenderCompID (49) and the Interface User ID (CompID) assigned to the client in the field TargetCompID (56).

4.1.1 Passwords

If the JSE enables password policies, each new Interface User ID (CompID) will be assigned a password on registration. Clients must change the password to one of their choosing via the Logon message. The status of the new password (i.e. whether it is accepted or rejected) will be specified in the SessionStatus (1409) field of the Logon message sent by the server to confirm the establishment of a FIX connection. The new password will, if accepted, be effective for subsequent logins.

4.2 Production IP Addresses and Ports

The IP address of each client must be registered with JSE before FIX communications can begin.

The IP addresses and ports of the production servers will be detailed in a consolidated JSE Production Market Facing Client document. The JSE will assign each registered client to one of the primary IP addresses and ports and one of the secondary IP addresses and ports. Clients should use the assigned primary IP address and port whenever it is available. The secondary IP address and port should only be used in the unlikely event the primary is unavailable.

4.3 Failover and Recovery

The JSE will have a resilient solution at primary site. For all TCP/IP connections clients will be given two pairs of IP addresses, a pair (Primary and Backup) for the Production Site and a pair (Primary and Backup) for the Secondary / Disaster Recovery Site. Clients should be directed to use the Production Site pair until directed that a site failover has been invoked – following this the Secondary site pair should be used.

If the client is unexpectedly disconnected from the server, it should attempt to re-connect to primary site within a few seconds. The client should only attempt to connect to the secondary IP address and port if so requested by JSE.

On unexpected disconnection from the Production Site primary gateway a client should try to reconnect 3 times to the primary gateway with a time out value of three seconds on each connection before attempting to connect to the Production Site secondary gateway – and this should then be retried a further 3 times. After six failed connection attempts (3 on each gateway) the client should contact JSE for guidance.

4.4 Message Rate Throttling

The JSE may implement a scheme for throttling message traffic where each Interface User ID (CompID) is only permitted to submit up to a specified number of messages per second. The maximum rate is yet to be decided by the JSE and will be confirmed at a later date.

Every message that exceeds the maximum rate of an Interface User ID (CompID) will be rejected via a Business Message Reject. Such a message will include a BusinessRejectReason (380) of Other (0) and an indication that the rejection was due to throttling in the Text (58) field.

An Interface User ID (CompID) will be disconnected by the server if its message rate exceeds its maximum rate more than MAX_THROTTLE_COUNT_PER_PERIOD <5> times in any THROTTLE_DISCONNECT_PERIOD <30> second duration. In such a case, the server will transmit a Logout message and immediately terminate the TCP/IP connection.

5 FIX CONNECTIONS AND SESSIONS

5.1 Establishing a FIX Connection

FIX connections and sessions between the client and server are maintained as specified in the FIX protocol.

Each client will use the assigned IP address and port to establish a TCP/IP session with the server. The client will initiate a FIX session at the start of each trading day by sending the Logon message. The client will identify itself using the SenderCompID (49) field. The server will validate the Interface User ID (CompID), password and IP address of the client.

The server will break the TCP/IP connection if messages are received before the exchange of Logons.

System can be configured in such a way that the test request at logon is either disabled or enabled. A test request will not be sent along with the logon reply if the test request switch is set to its default "Off" mode. Depending on the System Configuration, the client's logon message will be responded in two ways:

If during a logon of a SenderCompID, the server receives a second connection attempt via the same TCP/IP connection while a valid FIX session is already underway for that same SenderCompID, the server will immediately break the TCP/IP connection with the client without sending any messages. If the server receives another connection attempt from the same SenderCompID, while a session is already established, the connection attempt will be rejected via a Reject message without breaking the existing TCP/IP connection with the client. In both cases the server will increment the next inbound message sequence number expected from the client as well as its own outbound message sequence number.

5.1.1 Test Request at logon Enabled (Default Setting)

Once the client is authenticated, the server will respond with a Logon message. The SessionStatus (1409) of this message will be Session Active (0). If the client's Logon message included the field NewPassword (925) and the client is authenticated, the SessionStatus (1409) of the Logon message sent by the server will indicate whether the new password is accepted or rejected.

The client must wait for the server's Logon message before sending additional messages. The server will break the TCP/IP connection if messages are received before the exchange of Logon messages.

Currently it is expected that the client who connects to the server responds to the Test Request message sent by the server by a Heartbeat or Resend Request Message. If the client does not comply with this and sends Application Messages before responding to the Test Request message, the server will not send a Reject message until the client has responded to the Test Request message.

Immediately after the server sends the response to the Logon message, if the logon was successful, the server will send a Test Request with a specific TestRequestID (112), to identify if the client is in sync with the server's outgoing sequence number prior to sending any (i.e. new or missed) Application Messages. If the client replies to the Test Request with a Heartbeat message with the same TestRequestID (112) as in the Test Request, then that would imply that the client recognises the messages sent by the server and that the sequence numbers are in sync. The server would start sending any new or missed Application Messages to the client only after receiving this Heartbeat message. Any Application Messages submitted before responding to the Test Request will be rejected with a Business Message Reject. Such a message will include a BusinessRejectReason (380) of Session not in sync (0) and an indication that the rejection was due to the client session not being in sync with the server in the Text (58) field.

The client must send additional messages to the server only after responding to the Test Request. If the client sends any Application Messages before responding to the Test Request as mentioned above, those messages will be processed by the system but the

client would not receive any responses to them as the server has not established that the client is in sync with the server's outgoing sequence numbers. When the client sends a Logon message, and if the server receives a higher sequence number than expected, the server sends a Resend Request followed immediately by a Test Request. The client should respond to the Resend Request and afterwards respond to the Test Request to get back in sync with the server

5.1.2 Behaviour common to both configurations

If a logon attempt fails because of an invalid SenderCompID, invalid TargetCompID, invalid IP address and invalid password or because the user does not have the appropriate privileges to login to the server gateway, the server will break the TCP/IP connection with the client without sending a Logout or Reject message. As the logon attempt failed, the server will not increment the next inbound message sequence number expected from the client.

If during a logon of a SenderCompID, the server receives a second connection attempt via different TCP/IP connection while a valid FIX session is already underway for that same SenderCompID, the server will break the TCP/IP connection with the second connection without sending a Logout or Reject message. As the logon attempt failed, the server will not increment the next inbound message sequence number expected from the client.

If a logon attempt fails because of an expired password, a locked Interface User ID (CompID) or if logins are not currently permitted, the server will send a Logout message and then break the TCP/IP connection with the client. In these scenarios the next inbound sequence number expected from the client will be incremented but the outbound sequence number will not be incremented. In this scenario the message sequence number 1 will be sent with the Logout message.

If a logon attempt fails because of a session level failure (e.g. due to invalid EncryptMethod or DefaultApplVerID...etc) the inbound sequence number and the outbound sequence number both will not be incremented. In this scenario the message sequence number 1 will be sent with the Logout message.

However if a session level failure occurs due to a message sent by a client which contains a sequence number that is less than what is expected and the PossDupFlag (43) is not set to "Y", then the server will send a Logout message and terminate the FIX connection. In this scenario the inbound sequence number will not be incremented but the outbound sequence number will be incremented.

If during a logon of a SenderCompID, the server receives a second connection attempt via the same TCP/IP connection while a valid FIX session is already underway for that same SenderCompID, the server will send a Reject message and then break the TCP/IP connection with the client. The server will increment the next inbound message sequence number expected from the client as well as its own outbound message sequence number.

The impact of logon failures on sequence numbers is summarized in the table below:

Reason for Logon Failure	Session status (of logout)	Inbound Sequence Number	Outbound Sequence Number
Invalid or expired password	8 (password expired)	Incremented by 1	Does not increase (defaulted to 1)
Locked/suspended/inactiv ated CompID	6 (account locked)	Incremented by 1	Does not increase (defaulted to 1)
Logins are not currently permitted	7 (logins are not allowed)	Incremented by 1	Does not increase (defaulted to 1)
Session level failure (e.g. due to invalid EncryptMethod or DefaultApplVerID etc)	101 (logout session level failure)	Does not increase	Does not increase (defaulted to 1)
Login sequence number is less than the expected sequence number	101 (logout session level failure)	Does not increase	Incremented by 1
Second connection attempt via same TCP/IP connection while a valid FIX session is already underway for that same SenderCompID	No Session logout. Reject message with message type 3	Incremented by 1	Incremented by 1
Second connection attempt via different TCP/IP connection while a valid FIX session is already underway for that same SenderCompID	No logout or reject message	Does not increase	Does not increase

5.2 Maintaining a FIX Session

5.2.1 Message Sequence Numbers

As outlined in the FIX protocol, the client and server will each maintain a separate and independent set of incoming and outgoing message sequence numbers. Sequence numbers should be initialized to 1 (one) at the start of the FIX session and be incremented throughout the session.

Monitoring sequence numbers will enable parties to identify and react to missed messages and to gracefully synchronize applications when reconnecting during a FIX session.

If any message sent by the client contains a sequence number that is less than what is expected and the PossDupFlag (43) is not set to "Y", the server will send a Logout message and terminate the FIX connection. The Logout message will contain the next expected sequence number.

A FIX session may not continue to the next trading day. The server will initialize its sequence numbers at the start of each trading day. The client is expected to employ the same logic.

If the server receives a message that cannot be processed (malformed message) it will not respond to that message and will not increment the sequence number it maintains. In such a scenario, when the next readable message is received by the server it will detect a

sequence gap between the client and server. The server will send a Resend Request to the client requesting for messages from the sequence number the server is maintaining. If the client does not correct the malformed message to a readable one, the above event model will be repeated until there is no sequence gap.

5.2.2 Heartbeats

The client and server will use the Heartbeat message to exercise the communication line during periods of inactivity and to verify that the interfaces at each end are available. The heartbeat interval will be the HeartBtInt (108) specified in the client's Logon message.

The server will send a Heartbeat message anytime it has not transmitted a message for the heartbeat interval. The client is expected to employ the same logic.

If the server detects inactivity for a period longer than the HeartBtInt (108) specified in the client's Logon message, it will send a Test Request message to force a Heartbeat message from the client. If inactivity continues for a second heartbeat interval, the server will send a Logout message and break the TCP/IP connection with the client. The client is expected to employ similar logic if inactivity is detected on the part of the server.

5.2.3 Increasing Expected Sequence Number

The client or server may use the Sequence Reset message in Gap Fill mode if it wishes to increase the expected incoming sequence number of the other party.

The client or server may also use the Sequence Reset message in Sequence Reset mode if it wishes to increase the expected incoming sequence number of the other party. The Sequence Reset mode should only be used recover from an emergency situation. It should not be relied upon as a regular practice.

5.3 Terminating a FIX Connection

The client is expected to terminate each FIX connection at the end of each trading day before the server shuts down. The client will terminate a connection by sending the Logout message. The server will respond with a Logout message to confirm the termination. The client will then break the TCP/IP connection with the server.

All open TCP/IP connections will be terminated by the server when it shuts down (a Logout message will not be sent). Under exceptional circumstances the server may initiate the termination of a connection during the trading day by sending the Logout message. The server will terminate the TCP/IP connection (a Logout will not be sent) if the number of messages that are buffered for a client exceeds a certain amount of messages MAX_BUFFERED_COUNT <500> as defined by the JSE.

If, during the exchange of Logout messages, the client or sever detects a sequence gap, it should send a Resend Request.

5.4 Re-Establishing a FIX Session

If a FIX connection is terminated during the trading day it may be re-established via an exchange of Logon messages.

Once the FIX session is re-established, the FIX Gateway would also send a Test Request to confirm if the sequence numbers are in sync. Ideally the message sequence numbers should continue from the last message successfully transmitted prior to the termination.

5.4.1 Test Request at logon Enabled

Once the client is authenticated, the server will respond with a Logon message, followed by a Test Request. The Logon message will confirm the logon status and the Test Request's purpose is to sync the Sequence numbers before sending any Missed Messages if any. The

SessionStatus (1409) of this message will be Session Active (0). If the client's Logon message included the field NewPassword (925) and the client is authenticated, the SessionStatus (1409) of the Logon sent by the server will be Session Active (0).

If the client responds to the Test Request with a Heartbeat message containing the appropriate Test Request ID and message sequence number, the server can start transmitting the missed messages or new messages in the Gateway. If the client does not respond to the Test Request during the heartbeat interval, the gateway will disconnect the client.

If the client ignores the Test Request because the sequence number in the message is higher than the expected sequence number, the client is expected to send a Resend Request asking for the missed messages. After responding to the Resend Request the FIX Gateway would send another Test Request to make sure both the client and server is in sync before sending out any missed or new application messages.

If the client sends a Resend Request before the FIX Gateway send a Test Request, then the FIX Gateway will serve the Resend Request first. After responding to the Resend Request the FIX Gateway would send a Test Request to make sure both the client and server are in sync before sending out any missed or new application messages.

When the client sends a logon with a sequence number higher than expected by the FIX Gateway, the FIX gateway will send a Resend Request and once the response/s to the Resend Request is processed by the FIX Gateway, the FIX Gateway would send a Test Request to make sure both the client and server is in sync before sending out any missed or new application messages

5.4.2 Resetting Sequence Numbers: Starting a New FIX Session

5.4.2.1 Reset Initiated by the Client

If the client requires both parties to initialize (i.e. reset to 1) sequence numbers, it may use the ResetSeqNumFlag (141) field of the Logon message. The server will respond with a Logon message with the ResetSeqNumFlag (141) field set to "Y" to confirm the initialization of sequence numbers.

A client must inform JSE Market Operations that it would like the server to initialize its sequence numbers prior to the client's next login attempt.

These features are intended to help a client manage an emergency situation. Initializing sequence numbers on a re-login should not be relied upon as a regular practice.

5.4.2.2 Reset Initiated by the Server

The System has been designed with fault tolerance and disaster recovery technology that should ensure that the server retains its incoming and outgoing message sequence numbers for each client in the unlikely event of an outage.

However, in case the sequence numbers needs to be reset, clients are also required to support a request by JSE Market Operations to initialize sequence numbers prior to the next login attempt.

6 RECOVERY

6.1 Recovery

6.1.1 Resend Requests

The client may use the Resend Request message to recover any lost messages. As outlined in the FIX protocol, this message may be used in one of three modes:

- (i) To request a single message. The BeginSeqNo (7) and EndSeqNo (16) should be the same.
- (ii) To request a specific range of messages. The BeginSeqNo (7) should be the first message of the range and the EndSeqNo (16) should be the last of the range.
- (iii) To request all messages after a particular message. The BeginSeqNo (7) should be the sequence number immediately after that of the last processed message and the EndSeqNo (16) should be zero (0).

The server caches the last RESEND_CACHE_SIZE <2,000> messages transmitted to each Interface User (CompID). Clients are unable to use a Resend Request to recover messages not in the server's cache

6.1.2 Possible Duplicates

The server handles possible duplicates according to the FIX protocol. The client and server will use the PossDupFlag (43) field to indicate that a message may have been previously transmitted with the same MsgSeqNum (34).

6.1.3 Possible Resends

The server may, in the circumstances outlined in Sections 6.1.3 and 6.1.4, use the PossResend (97) field to indicate that a Trade Capture Report may have already been sent under a different MsgSeqNum (34). The client should validate the TradeReportID (571) of such a message against that of previous Trade Capture Reports received from the server during the current trading day to determine whether the new message should be ignored or processed.

If a Trade Capture Report with same TradeReportID (571) had been processed, the resent Trade Capture Report should be ignored. If the same TradeReportID (571) had not been processed, the message should be processed.

The server does not handle possible resends for client-initiated messages and ignores the value in the PossResend (97) field of such messages.

6.1.4 Transmission of Missed Messages

The Trade Capture Reports generated during a period when a client is disconnected from the server will be sent to the client when it next reconnects. In the unlikely event the disconnection was due to an outage of the server, all such messages will include a PossResend (97) of "Y".

6.1.5 Application Sequencing and Recovery

The server supports the application sequencing and recovery features introduced in Service Pack 2 for FIX 5.0. A client may use the Application Message Request to recover missed trades in scenarios such as the following:

- (i) Trades are missed due to a late connection or disconnection during the day.
- (ii) Session level recovery via a Resend Request is unavailable due to a sequence number reset initiated by the client or server.

(iii) All or some of the trades transmitted by the server during the current day are lost due to a failure at the client site.

6.1.5.1 Application Sequencing by Server

The matching system consists of a series of parallel partitions each of which provide the matching service for an exclusive set of securities.

Each Trade Capture Report transmitted by the server will include the identity of the matching partition that generated the trade and the partition's internal sequence number for the trade in the fields ApplID (1180) and ApplSeqNum (1181) respectively. As the matching partitions operate in parallel and employ the same application sequencing scheme, an ApplSeqNum (1181) is only unique per ApplID (1180). The ApplSeqNum of each ApplID will be initialized to "1" at the start of each trading day.

As a client will only receive a subset of the trades executed by each matching partition, the field ApplLastSeqNum (1350) is also included in each Trade Capture Report and Trade Capture Report Ack. This field will contain the ApplSeqNum of the last Trade Capture Report generated for client. This will enable clients to distinguish deliberate sequence gaps from application errors by comparing the value of ApplLastSeqNum (1350) to the ApplSeqNum (1181) of the last received Trade Capture Report from the same ApplID (1180). Trade Capture Reports sent as a response to Trade Capture Report Request will not contain ApplLastSeqNum (1350).

ApplID	Instruments in the following Markets	
P1	JSE and NSX Equities	
P2	JSE_EDM, JSE_FXM, , JSE_IRM	

JSE may change the number of partitions and the securities each partition serves and will notify the market participants.

6.1.5.2 Detecting an Application Sequence Gap

A client can detect a dropped message by comparing the ApplLastSeqNum (1350) of each new Trade Capture Report and Trade Capture Report Ack against the ApplSeqNum (1181) of the last trade received from the same ApplID (1180).

In the case of a reconnection, the client can either wait for the next Trade Capture Report to determine whether trades have been missed or issue a request for the most current ApplSeqNum for each ApplID.

6.1.5.2.1 Requesting the Latest ApplSegNum

The client may use the Application Message Request to request the latest ApplSeqNum for one or more ApplIDs. The ApplReqType (1347) of the message should be Request for Last ApplLastSeqNum (2).

6.1.5.2.2 Response to Request for Latest ApplSeqNum

The server will respond to the Application Message Request with an Application Message Request Ack. If the request was unsuccessful for a particular ApplID, the reason will be specified in the field ApplResponseError (1354). In the case of a successful request, the ApplSeqNum of the last trade generated for the client by each ApplID will be specified in the field RefApplLastSeqNum (1357).

6.1.5.3 Requesting Retransmission of Missed Trades

The client may use the Application Message Request to recover any lost trades. The ApplReqType (1347) of the message should be Retransmission of Application Messages (0). The message may be used in one of four modes:

- To request a single trade. The ApplBegSeqNum (1182) and ApplEndSeqNum (1183) should be the same.
- (ii) To request a specific range of trades. The ApplBegSeqNum (1182) should be the first trade of the range and the ApplEndSeqNum (1183) should be the last of the range.
- (iii) To request all trades after a particular trade. The ApplBegSeqNum (1182) should be the application sequence number immediately after that of the last processed trade and the ApplEndSeqNum (1183) should be zero (0).
- (iv) To request all trades for the day. The ApplBegSeqNum (1182) should be one (1) and the ApplEndSeqNum (1183) should be zero (0).

In all cases, the client should identify the matching partition to which the request relates via the field RefAppIID (1355).

6.1.5.4 Response to a Trade Retransmission Request

The server will respond to the Application Message Request with an Application Message Request Ack to indicate whether the retransmission request is successful or not. If the request was unsuccessful for a particular ApplID, the reason will be specified in the field ApplResponseError (1354).

In the case of a successful retransmission request, the server will resend the requested Trade Capture Reports immediately after the Application Message Request Ack. Each Trade Capture Report will include an ApplResendFlag (1352) of "Y" to indicate that it is resent in response to an Application Message Request. The resent messages will not include the field ApplLastSeqNum (1350).

6.1.5.5 Disconnection Prior to Completion of Retransmission

If the FIX connection is terminated prior to the completion of the Trade Capture Report retransmission, the client should submit a new Application Message Request once it reconnects to the server.

7 SUPPORTED MESSAGE TYPES

This section lists all administrative and application message types supported by the server. Any message not included in this section will be ignored by the server.

7.1 Administrative Messages

All administrative messages may be initiated by either the client or the server.

Message	MsgType	Usage
Heartbeat	0	Allows the client and server to exercise the communication line during periods of inactivity and verify that the interfaces at each end are available.
Logon	Α	Allows the client and server to establish a FIX session.
Test Request	1	Allows the client or server to request a response from the other party if inactivity is detected.
Resend Request	2	Allows for the recovery of messages lost during a malfunction of the communications layers.
Reject	3	Used to reject a message that does not comply with FIXT.
Sequence Reset	4	Allows the client or server to increase the expected incoming sequence number of the other party.
Logout	5	Allows the client and server to terminate a FIX session.

7.2 Application Messages Trade Feed

7.3 Client-Initiated

Message	MsgType	Usage
Application Message Request	BW	Allows the client to request one of the following: (i) Retransmission of missed trades (ii) Latest ApplSeqNum of each ApplID
Trade Capture Report Request	AD	Allows the client to query/request for a set of Trade Capture Reports from the server

7.4 Server-Initiated

Message	MsgType	Usage
Trade Capture Report	AE	Indicates one of the following: (i) Trade (ii) Trade cancellation (iii) Trade correction
Application Message Request Ack	ВХ	Indicates whether a request to retransmit trades or for the latest ApplSeqNum is successful or not.
Trade Capture Report Request Ack	AQ	Acknowledges the receipt of a Trade Capture Report Request message from the client.

7.5 Application Messages: Other (Server-Initiated)

Message	MsgType	Usage
Business Message Reject	j	Indicates that an application message sent by the client could not be processed.

7.6 Application Messages: Off Book Trades

7.6.1 **Client-Initiated**

Message	MsgType	Usage
Trade Capture Report	AE	Allows a client to: (i) Submit an Off Book trade for registration (ii) Request the cancellation of a confirmed Off Book trade

7.6.2 Server-Initiated

Message	MsgType	Usage
Trade Capture Report Ack	AR	Indicates that a request to confirm or cancel an Off Book trade is acknowledged or rejected.
Trade Capture	AE	Indicates one of the following:
Report		(i) Off Book trade confirmed
		(ii) Off Book trade cancelled

7.7 Application Messages: Cancellation of On Book Trades

7.7.1 Client-Initiated

Message	MsgType	Usage
Trade Capture Report	AE	Allows a client to request the cancellation of an On Book trade or accept cancellation of an on-book trade.

7.7.2 Server-Initiated

Message	MsgType	Usage
Trade Capture Report Ack	AR	Indicates that a request to cancel an On Book trade is acknowledged or rejected.
Trade Capture Report	AE	Indicates one of the following: (i) On Book trade is cancelled

7.8 Variations from the FIX Protocol

The server conforms to the FIX protocol except as follows:

- (i) The TradeRequestResult (749) field of the Trade Capture Report Request Ack includes custom values.
- (ii) The Trade Capture Report Request includes the field MatchType (574).

- (iii) Trade Capture Report message will include custom field IsMarketOpsRequest (27000).
- (iv) The TrdSubType (829) field of the Trade Capture Report contains custom values.
- (v) Trade Capture Report message will include the following custom fields to support the functionality for derivatives and bonds markets:
 - a. PBBreached (27109)
 - b. LastOptPx (32022)
 - c. StrategyLinkID (27100)
 - d. Attribute (27101)
 - e. CleanPrice (27102)
 - f. EndCleanPrice (27103)
 - g. EndSettlDate (27104)
 - h. EndYield (27105)
 - i. Rate (27106)
- (vi) Trade Capture Report message will include the following fields outside their standard components blocks:
 - a. StartCash (921), EndCash (922) and EndAccruedInterestAmt(920) are outside the TrdCapRptSideGrp component.
 - b. Spread (218) and BenchmarkPrice (662) are outside the SpreadOrBenchmarkCurveData component.
 - c. UnderlyingPx (810) is outside the UnderlyingInstrument component.

8 MESSAGE FORMATS

This section provides details on the header and trailer, the seven administrative messages and seven application messages utilized by the post trade gateway. Any client-initiated message not included in this section will be rejected by the server via a Reject or Business Message Reject.

8.1 Message Header and Trailer

8.1.1 Message Header

Tag	Field Name	Req	Description
8	BeginString	Υ	FIXT.1.1
9	BodyLength	Y	Number of characters after this field up to and including the delimiter immediately preceding the CheckSum.
35	MsgType	Υ	The message type.
			_Value Meaning
			0 Heartbeat
			1 Test Request
			2 Resend Request
			3 Reject
			4 Sequence Reset
			5 Logout
			A Logon
			AD Trade Capture Report Request
			AE Trade Capture Report
			AQ Trade Capture Report Request Ack
			AR Trade Capture Report Ack
			BW Application Message Request
			BX Application Message Request Ack
			J Business Message Reject
49	SenderCompID	Y	Interface User ID of the party sending the message. If a Firm is sending this message, this will be the Interface User ID.
56	TargetCompID	Υ	User ID of the party the message is sent to.
34	MsgSeqNum	Υ	The sequence number of the message.

43	PossDupFlag	N	Whether the message was previously transmitted under the same MsgSeqNum (34). Absence of this field is interpreted as Original Transmission (N).
			Value Meaning
			Y Possible Duplicate
			N Original Transmission
97	PossResend	N	Whether the message was previously transmitted under a different MsgSeqNum (34). Absence of this field is interpreted as Original Transmission (N).
			Value Meaning
			Y Possible Resend
			N Original Transmission
52	SendingTime	N	Time the message was transmitted. This will be the gateway time. Not required for incoming messages sent by the clients (even if sent by a client, no validation will be done). Required for outgoing messages sent by the server.
122	OrigSendingTime	N	Time the message was originally transmitted. If the original time is not available, this should be the same value as SendingTime (52). Required if PossDupFlag (43) is Possible Duplicate (Y).
1128	ApplVerID	N	Version of FIX used in the message. Required if the message is generated by the server.
			Value Meaning
			9 FIX50SP2

8.1.2 **Message Trailer**

Tag	Field Name	Req	Description
10	CheckSum	Υ	

8.2 Administrative Messages

8.2.1 **Logon**

Tag	Field Name	Req	Description
Stand	ard Header		
35	MsgType	Υ	A = Logon
Messa	age Body		
98	EncryptMethod	Υ	The method of encryption.
			Value Meaning
			0 None
108	HeartBtInt	Y	Indicates the heartbeat interval in seconds.
141	ResetSeqNum Flag	N	Indicates whether the client and server should reset sequence numbers. Absence of this field is interpreted as Do Not Reset Sequence Numbers (N).
			Value Meaning
			Y Reset Sequence Numbers
			N Do Not Reset Sequence Numbers
554	Password	N	The password assigned to the Interface User ID (CompID). Required if the message is generated by the client.
925	NewPassword	N	The new password for the Interface User ID (CompID).
1409	SessionStatus	N	Status of the FIX session or the request to change the password. Required if the message is generated by the server.
			Value Meaning
			0 Session Active
			3 New Password Does Not Comply with Policy
1137	DefaultApplVerID	Υ	Default version of FIX messages used in this session.
			Value Meaning
			9 FIX50SP2
Stand	ard Trailer		

8.2.2 **Logout**

Tag	Field Name	Req	Descrip	tion
Stand	ard Header			
35	MsgType	Υ	5 = Logo	out
Messa	age Body			
1409	SessionStatus	N		f the FIX session. Required if the message is ed by the server.
			Value	Meaning
			4	Session logout complete
			5	Invalid password
			6	Account locked
			7	Logons are not allowed at this time
			8	Password expired
			100	Other
			101	Logout due to session level failure
			102	Logout by Market Operations
58	Text	N	number receiving was exp	d will contain the next expected sequence if the server terminated the connection after g a sequence number that was less than what ected. In other cases the field will contain the or the logout.
Stand	lard Trailer			

8.2.3 **Heartbeat**

Tag	Field Name	Req	Description
Stand	ard Header		
35	MsgType	Υ	0 = Heartbeat
Message Body			
112	TestReqID	N	Required if the heartbeat is a response to a Test Request. The value in this field should echo the TestReqID (112) received in the Test Request.
Stand	ard Trailer		

8.2.4 **Test Request**

Tag	Field Name	Req	Description		
Standard Header					
35	MsgType	Υ	1 = Test Request		
Mess	Message Body				
112	TestReqID	Υ	Identifier for the request.		
Stand	Standard Trailer				

8.2.5 Resend Request

Tag	Field Name	Req	Description			
Standard Header						
35	MsgType	Υ	2 = Resend Request			
Messa	Message Body					
7	BeginSeqNo	Υ	Sequence number of first message in range.			
16	EndSeqNo	Υ	Sequence number of last message in range.			
Stand	Standard Trailer					

8.2.6 Reject

Tag	Field Name	Req	Description			
Standard Header						
35	MsgType	Υ	3 = Reject			
Message Body						
45	RefSeqNum	Υ	MsgSeqNum (34) of the rejected message.			
371	RefTagID	N	If a message is rejected due to an issue with a particular field its tag number will be indicated.			
372	RefMsgType	N	MsgType (35) of the rejected message.			
373	SessionReject Reason	N	Code specifying the reason for the reject. Please refer to Section 10 for a list of reject codes.			
58	Text	N	Text specifying the SessionRejectReason(373)			
Stand	Standard Trailer					

8.2.7 **Sequence Reset**

Tag	Field Name	Req	Description			
Stand	lard Header					
35	MsgType	Υ	4 = Sequence Reset			
Mess	Message Body					
36	NewSeqNo	Y	Sequence number of the next message to be transmitted.			
123	GapFillFlag	N	The mode in which the message is being used. Absence of this field is interpreted as Sequence Reset (N).			
			Value Meaning			
			Y Gap Fill			
			N Sequence Reset			
Stand	lard Trailer					

8.3 Application Messages: Trade Feed

8.3.1 Client-Initiated

8.3.1.1 Trade Capture Report Request

Allows the client to query/request for a set of Trade Capture Reports from the server. Client can download all or selected trades based on query criteria.

Tag	Fiel	d Name	Req	Descrip	tion	
Stand	ard He	ader				
35	MsgT	·уре	Υ	AD = Tra	ade Capture Report Request	
Mess	age Bo	dy				
568	Trade	RequestID	Υ	Client sp	pecified unique identifier of the request.	
569		RequestTyp	Υ	Type of	request.	
	е			Value	Meaning	
				0	All Trades	
				1	Trades Matching Specified Criteria	
150	Exec	Гуре	N	Type of	trade report requested.	
				Value	Meaning	
				F	Trade	
				G	Trade Correct	
				Н	Trade Cancel	
574	Match	туре	N	Point in	matching process trade was matched.	
				Value	Meaning	
				1	Off Book Trade (Dual Party)	
				2	Off Book Trade (Single Party)	
				4	Continuous Trading	
				7	Auction	
				22	Privately Negotiated Trade	
829	TrdSt	ıbType	N	Type of Off Book trade. Please refer to Section 9 for the valid trade types.		
48	Secui	rity ID	N	Unique Instrume	identifier of the instrument. This will be the ent ID	
454	NoSecurityAltID		N		nt, value in this field should always be "1". I will identify the ISIN.	
→	455	5 SecurityAltI N		Identification number of the instrument.		
→	456	SecurityAltI DSource	N		Type of instrument identification used. Required if SecurityAltID (455) is specified.	
				Value	Meaning	
				4	ISIN	

54	Side N		N	Side of the	he executed order.
34	Side		IN	Value	Meaning
				-	
				1	Buy
				2	Sell
1227	Produ	uctComplex	N	Indicates	s the segment.
11	ClOrd	diD	N	Identifier entering	of the executed order as specified by the firm.
37	Orde	rID	N		of the executed order as specified by g system.
453	NoPa	ırtylDs	N	Possible	values will be1, 2 or 3
				JSE Mar	kets the values as follows:
				If Value	1 is used;
					will be required
				If Value 2	2 is used;
					D and Trader Group is required
				If Value :	3 is used;
					Trader ID and Trade Group ID is required.
				requests	ote that this field will not be required if the is for all trades where TradeRequestType (All trades).
				This field	is required only if the request is for trades
				by Firm/	TraderGroup/Trader.
→	448	PartyID	N	Identifier	of the party
		PartyIDCou			of the party. d value will be;
7	447	PartyIDSou rce	N	Value	Meaning
				D	Proprietary/Custom Code
→	452	PartyRole	N	Role of t	he specified PartyID (448).
		,	-	Value	Meaning
				1	Executing Firm
				76	Trader Group
				53	Trader (5 digit number)
Stone	ard T-	ailor			Trader (3 digit fluttibet)
Stand	ard Tr	aner			

8.3.1.2 Application Message Request

Tag	Field Name Ro		R	eq Description
Stand	lard He	eader		
35	MsgT	уре	Υ	BW = Application Message Request
Mess	age Bo	ody		
1346	Appli	ReqID	Υ	Client specified unique identifier of the request.
1347	Appli	ReqType	Υ	Type of request.
				Value Meaning
				0 Retransmission of Application Messages
				2 Request for Last ApplLastSeqNum
1351	NoAp	pllDs	Υ	Number of ApplIDs to which the request relates.
•	1355	RefAppIID	Υ	Identifier of the matching partition.
→	1182	ApplBeg SeqNum	N	Application sequence number of first message in range to be resent. Required if ApplReqType (1347) is Retransmission of Application Messages (0).
→	1183	ApplEnd SeqNum	N	Application sequence number of last message in range to be resent. Required if ApplReqType (1347) is Retransmission of Application Messages (0).
Stand	lard Tr	ailer	,	

8.3.2 **Server-Initiated**

8.3.2.1 Trade Capture Report

Tag	Field Nam	е	Req Description
Stand	dard Header		
35	MsgType	Υ	AE = Trade Capture Report
Mess	age Body		
118 0	ApplID	Y	Identifier of the partition.
118 1	ApplSeqNum	Υ	Partition's sequence number for trade.
135 0	ApplLastSeqNum	N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
135 2	ApplResendFlag	N	Whether the message is sent in response to an Application Message Request. Absence of this field is interpreted as Original Transmission (N).
			Value Meaning
			Y Response to Application Message Request
			N Original Transmission
568	TradeRequestID	N	Identifier of the Trade Capture Report Request the message is sent in response to.
912	LastRptRequested	N	Indicates the last message sent in response to a Trade Capture Report Request.
			Value Meaning
			Y Last Message
571	TradeReportID	Υ	Identifier of the message assigned by the server.
100 3	TradeID	Υ	Identifier of the trade assigned by the server.
820	TradeLinkID	Y	Identifier of the transaction in which the trade was executed. The Trade Capture Reports published for a single transaction (e.g. an auction, the execution of an incoming order against multiple passive orders, etc.) will contain the same TradeLinkID
572	TradeReportRefID	N	Reference to trade being cancelled or corrected Required if ExecType (150) is Trade Cancel (H) or Trade Correct (G).

112 3	TradeHandlingInstr	Y	handled, wl Dual Party	ow the Trade C nether it is Sing Reporting mod structions to cl	gle Party Re lel or a trade	porting model,
			Value M	eaning		
			0 T	rade Confirmat	tion	_
				ingle Party odel	Reporting	_
			- 3	ual Party odel	Reporting	-
856	TradeReportType	Υ	report	·	rt action for	the trade capture
			Type of trac	·		
			-	leaning		
				ubmit (Submit port)	ting a new	_
				o/Was (Corre rice or size of t		_
				rade Repor Cancelled by Fi		
				rade Break (Ca SE Market Ope		_
150	ЕхесТуре	N	Type of exe	ecution being re	eported.	
			Value M	eaning		_
			F T	rade		_
			G T	rade Correct		_
			н т	rade Cancel		
			confirmatio trades an messages does not g are genera notification It will be po cancellation	n, correction a d trade cor generated for et populated fe ated in Off E message that pulated on tra n message only	and cancella offirmation and offirmation of the contification of the confirmation of t	erated for trade tions of On Book and cancellation ades. This value on messages that reporting. E.g. counterparty firm. tion, correction or
487	TradeReportTrans	Υ	The transact	ion identifier of t	he action	
	Type		-	leaning		
				ew		
				ancel		
				eplace		
573	MatchStatus	Y	Status of th			
			Value M	eaning		
1						
			0 N	latched		

828	TrdType	N	Type of trade. Absence of this field should be interpreted as Regular Trade (0).
			Value Meaning
			0 Regular Trade
			22 Privately Negotiated Trade
			54 Off Book Trade
829	TrdSubType	N	Type of Off Book trade or On Book trade. Please refer to Section 9 for the valid Off Book trade types. The following values will be applicable for On Book trades;
			Value Meaning
			1014 AT - Automated Trade
			1015 UT - Uncrossing Trade
			1016 XT- Cross Trade
			1017 VT - EOD Volume Auction Call Trade
60	TransactTime	Y	Time trade, cancellation or correction occurred. If an Off Book trade is reported this is the date and time it was agreed between the two Firms
32	LastQty	Υ	Traded quantity.
423	PriceType		Quotation format for instrument. If an instrument is being traded on volatility, this field will be Price Per Unit (2) ¹ . Absence of this field should be interpreted as Price Per Unit (2). Value Meaning
			1 Percent of Par
			2 Price Per Unit
			4 Discount Rate
			9 Yield
31	LastPx	Υ	Traded price.
669	LastParPx	N	Implied price per unit of the trade. Required only when the PriceType (423) is Discount Rate (1) or Yield (9).
236	Yield	N	Implied yield of the trade. Required only for fixed income instruments and only when the PriceType (423) is Percent of Par (1) or Price per Unit (2).
381	GrossTradeAmt	N	Total consideration due from the buyer to the seller (Price * Qty).

¹ This is because FIX protocol does not have an enum to identify when an instrument is traded on volatility.

574	Match	Туре	Υ	Point in r	natching process trade was matched.
				Value	Meaning
				1	Off Book Trade (One Party Report) – Used in Dual Party Trade Reporting
				2	Off Book Trade (Two- Party Report) – Used on Single Party Trade Reporting
				4	Continuous Trading
				7	Auction
				22	Privately Negotiated Trade
48	Secur	rityID	Υ	Identifier	of the instrument (Instrument ID).
122 7	Produ	ıctComplex	N	Segment	the instrument belongs to.
454	NoSecurityAltID		Υ		nt, value in this field will always be "1". for messages published from the system.
→	455	SecurityAltI D	Υ	Identification number of the instrument. This field will identify the ISIN.	
→	456	SecurityAltI D Source	Υ		instrument identification used. Required if AltID (455) is specified.
				Value	Meaning
				4	ISIN
201	PutOr	·Call	Ν	Required	for options instruments.
				Value	Meaning
				0	Put
				1	Call
202	Strike	Price	N		rice of an options instrument. Required for options instruments.
552	NoSic	des	Υ	Number	of sides.
				1 will be trades.	used in messages generated for On Book
				2 will be trades.	used in messages generated for Off Book
→	54	Side	Υ	Side of th	ne executed order.
				Value	Meaning
				1	Buy
				2	Sell
•	142 7	SideExecID	Υ	Identifier	of the execution received by the order.

•	625	Trading SessionSubI		N		auction trade was executed pe (574) is Auction (7)	in. Required if
		D			Value	Meaning	
					2	Opening Auction	
					4	Closing Auction	
					6	Re-Opening Auction	
					21	Volatility Auction	
					22	Intra-Day Auction	
					100	FCO Auction	
					Z	Closing Price Cross	
					101	EOD Volume Auction Call	
→	453	NoPa	artylDs	Υ	Number	of party identifiers.	
•	•	44 8	,		the sam	of the party. If two PartyID's a ne PartyRole(452) the Last ed as the correct PartyID.	
•	→	44 7	Partyl D	Υ	Value	Meaning	
		,	Sourc e	ırc	D	Proprietary/Custom Code	
→	→	45 Party		Υ	Role of the	he specified PartyID (448).	
		2 Role		Value	Meaning		
					1	Executing Firm	
					76	Trader Group	
					53	Trader	
					17	Contra Firm	
					37	Contra Trader	
					100	Contra Trader Group	
→	159	Accr Inter	ued estAmt	N		crued interest for this fill. Requestegular Coupon Bond or TIPS.	uired if the trade
•	118	NetMoney		N	Total consideration due from the buyer to the seller inclusive of accrued interest. Required if the trade is for a Bond or TIPS.		
→	111	OrderCateg		Υ	Type of i	nterest behind trade.	
	5	ory			Value	Meaning	
					1	Order	
					2	Quote	
					3	Off Book Trade	
					8	Implied Order	

→	144	SideLiquidit	N	Whether the order added or removed liquidity.
	4	ylnd	.,	Value Meaning
				Added Liquidity (traded as a passive order)
				2 Removed Liquidity (executed on aggression)
				4 Auction
→	37	OrderID	N	Identifier of the executed order as specified by the matching system.
→	11	ClOrdID	N	Identifier of the executed order as specified by the entering firm.
→	528	OrderCapaci	Υ	Dealing Capacity of the firm that placed the order.
		ty		Value Meaning
				A Agency
				P Principal
→	1 Account		Υ	Client Account
104 1	FirmTradeID		N	Identifier assigned to an Off Book trade by the counterparties. Required if TrdType (828) is Off-Book Trade (54).
112 4	OrigTradeHandling Instr		N	Model under which Off Book trade was confirmed. Required if TrdType (828) is Off-Book Trade (54).
				Value Meaning
				1 Two-Party Report
				One-Party Report for Pass Through
120	SettIC	Currency	N	Required if populated on Off Book trade reporting.
15	Curre	ncy	N	Currency attached to the instrument. This is the trading currency of the instrument. This will be populated for both On book and Off book trades.
270	IsMar	ketOpsReque	N	Specifies whether the action is done by Service Desk
00	st			Value Meaning
				1 Yes
870	NoInstrAttrib		Ν	Value in this field will always be "2".
→	871	InstrAttribTy pe	Ν	Codes to represent the type of instrument attribute.
				Value Meaning
				101 Instrument Category
				102 Instrument Sub Category

•	872	InstrAttribVa lue	N	Attribute value appropriate to the InstrAttribType (871) field. If InstrAttribType = 101, the InstrAttribValue field will contain Instrument Category short code attached to the instrument. If InstrAttribType = 102, the InstrAttribValue field will contain Instrument Sub Category attached to the instrument.			
442	MultiL Type	egReporting	N	The instrument type the report is generated for. Absence should be interpreted as Single Instrument (1).			
				Value Meaning			
				1 Single Instrument			
				Leg of Multi-Leg Instrument			
				3 Multi-Leg Instrument			
921	StartC	Cash	N	The all-in-price (dirty price) of an EFP trade.			
194	LastSpotRate		N	The spot rate used in an EFP trade or reporate used by a responding market maker for a repo trade.			
922	EndC	ash	N	2nd leg dirty price of a repo trade.			
916	Start	Date	N	Starting date of a repo trade			
917	EndD	ate	N	Date of settlement for the 2nd leg of the repo trade.			
810	Unde	rlyingPx	N	Reference Price for the instrument where applicable			
320 22	LastC)ptPx	N	Converted price of the executed volatility of the options instrument.			
118 8	Volati	lity	N	Converted volatility of the executed price of the options instrument.			
548	Cross	s ID	N	The unique ID of the cross order. Only populated for TCR messages generated from Internal cross orders. The value submitted with the New Order Cross Message message will be populated.			
549	Cross	з Туре	N	The type of the cross order. Only populated for TCR messages generated from Internal cross orders. The value submitted with the New Order Cross Message will be populated.			
Stand	dard Tr	ailer					

8.3.2.2 Trade Capture Report Request Ack

Tag	Field Name		Req Description
Stand	lard Header		
35	MsgType	Υ	AQ = Trade Capture Report Request Ack
Mess	age Body		
568	TradeRequestID	Υ	Identifier of the request being acknowledged.
569	TradeRequestType	Υ	Value specified in the request.
750	TradeRequestStatu	Υ	Whether the request is accepted or rejected.
	S		Value Meaning
			0 Accepted
			2 Rejected
749	TradeRequestResu	Υ	Reason the request is rejected.
	lt		Value Meaning
			0 Successful
			8 TradeRequestType not supported
			9 Not Authorized
			100 Cannot Match Selection Criteria
			200 Request Limit for Day Reached
748	TotNumTradeRepo rts	N	Number of Trade Capture Reports that will be sent in response to the request. Required if TradeRequestStatus (750) is Accepted (0).
Stanc	lard Trailer		

8.3.2.3 Application Message Request Ack

Tag	Fie	eld Name	Req	Descript	ion
Stand			<u> </u>	•	
35	35 MsgType		Υ	BX = App	olication Message Request Ack
Messa	age B	ody	•		
1353	Appl	ResponseID	Υ	Server sp	pecified identifier of the acknowledgement.
1346	Appl	ReqID	Υ	Identifier	of the request being acknowledged.
1347	Appl	ReqType	Υ	Value sp	ecified in the request being acknowledged.
1351	NoA	ppIIDs	Υ	Number	of AppIIDs to which the request relates.
•	13 55	RefAppIID	Y	Identifier	of the partition.
→	11 82	ApplBeg SeqNum	N	range to	on sequence number of first message in be resent. Required if ApplReqType (1347) smission of Application Messages (0).
+	11 83	ApplEnd SeqNum	N	range to	on sequence number of last message in be resent. Required if ApplReqType (1347) smission of Application Messages (0).
•	13 57	RefAppl LastSeq Num	N	Required	Num of the last trade generated for the client. if ApplReqType (1347) is Request for Last SeqNum (2) and ApplResponseError (1354) ecified.
→	13	Appl	N	Reason r	equest is rejected.
	54	Response Error		Value	Meaning
		-		0 ApplID Does Not Exist	
				1	Requested Trades are Not Available
				2	Client Not Authorised
58	Text		N	Text spec	cifying the reason for the rejection.
Stand	ard T	railer			

8.4 Application Messages: On Book Trades

8.4.1 **Server Initiated**

8.4.1.1 Message generated for an On Book Trade Confirmation and Trade Correction

Tag	Field Name		Req Description
Stand	dard Header		
35	MsgType	Υ	AE = Trade Capture Report
Mess	age Body		
118 0	ApplID	Y	Identifier of the partition.
118 1	ApplSeqNum	Y	Partition's sequence number for trade.
135 0	ApplLastSeqNum	N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
135 2	ApplResendFlag	N	Whether the message is sent in response to an Application Message Request. Absence of this field is interpreted as Original Transmission (N).
			Value Meaning
			Y Response to Application Message Request
			N Original Transmission
568	TradeRequestID	N	Identifier of the Trade Capture Report Request the message is sent in response to.
912	LastRptRequested	N	Indicates the last message sent in response to a Trade Capture Report Request.
			Value Meaning
			Y Last Message
571	TradeReportID	Υ	Identifier of the message assigned by the server.
100 3	TradeID	Y	Identifier of the trade assigned by the server.
820	TradeLinkID	Y	Identifier of the transaction in which the trade was executed. The Trade Capture Reports published for a single transaction (e.g. an auction, the execution of an incoming order against multiple passive orders, etc.) will contain the same TradeLinkID
572	TradeReportRefID	N	Reference to trade being cancelled or corrected Required if ExecType (150) is Trade Cancel (H) or Trade Correct (G).

112 3	TradeHandlingInstr	Y	handled, Dual Par	d how the Trade Capture Report should be whether it is Single Party Reporting model, ty Reporting model or a trade confirmation
			Handling	instructions to client.
			Value	Meaning
			0	Trade Confirmation
856	TradeReportType	Y		d the Trade Report action for the trade report (submit, cancel, notification, accept,
			Type of	trade report.
			Value	Meaning
			0	Submit (Submitting a new report)
			5	No/Was (Correction of a price or size of the trade)
			6	Trade Report Cancel (Cancelled by Firms)
			7	Trade Break (Cancelled by Market Operations users)
150	ExecType	Υ	Type of	execution being reported.
			Value	Meaning
			F	Trade
			G	Trade Correct
			Н	Trade Cancel
487	TradeReportTrans Type	Y		saction identifier of the action i.e. new ion/withdrawal/response/ cancellation.
			Value	Meaning
			0	New
			1	Cancel
			2	Replace
573	MatchStatus	Υ	Status of	f the trade.
			Value	Meaning
			0	Matched
			1	Unmatched
828	TrdType	N		trade. Absence of this field should be ed as Regular Trade (0).
			Value	Meaning
			0	Regular Trade

000	TadOut T		On Book Trada Type Valid values will be
829	TrdSubType	N	On Book Trade Type. Valid values will be;
			Value Meaning
			1014 AT - Automated Trade
			1015 UT - Uncrossing Trade
			1016 XT- Cross Trade
			1017 VT - EOD Volume Auction Call Trade
60	TransactTime	Υ	Time trade, cancellation or correction occurred.
32	LastQty	Υ	Traded quantity.
31	LastPx	Υ	Traded price.
423	PriceType	N	Quotation format for instrument. If an instrument is being traded on volatility, this field will be Price Per Unit (2) ² . Absence of this field should be interpreted as Price Per Unit (2). Value Meaning
			1 Percent of Par
			2 Price Per Unit
			4 Discount Rate
			9 Yield
15	Currency	N	Currency attached to the instrument
669	LastParPx	N	Implied price per unit of the trade. Required only when the PriceType (423) is Discount Rate (1) or Yield (9).
236	Yield	N	Implied yield of the trade. Required only for fixed income instruments and only when the PriceType (423) is Percent of Par (1) or Price per Unit (2).
381	GrossTradeAmt	N	Total consideration due from the buyer to the seller (Price * Qty).
574	MatchType	Υ	Point in matching process trade was matched.
			Value Meaning
			4 Continuous Trading
			7 Auction
			22 Privately Negotiated Trade
48	SecurityID	N	Identifier of the instrument (Instrument ID).
270	IsMarketOpsReque	N	Specifies whether the action is done by Service Desk
00	st		Value Meaning
			1 Yes
454	NoSecurityAltID	N	If present, value in this field will always be "1".
•	45 SecurityAltID 5	N	Identification number of the instrument. This field identifies the ISIN.

² This is because FIX protocol does not have an enum to identify when an instrument is traded on volatility.

→	45 6	Secu	urityAltID	N	Type of instrument identification used. Required if SecurityAltID (455) is specified.		
					Value Meaning		
					4 ISIN		
122 7	ProductComplex		N	Segment the instrument belongs to.			
201	PutC)rCall		N	Required for options instruments.		
					Value Meaning		
					0 Put		
					1 Call		
202	Strik	ePrice)	N	Strike price of an options instrument. Required for options instruments.		
552	NoS	ides		Υ	Number of sides which will always be "1".		
→	54	Side		Υ	Side of the executed order.		
					Value Meaning		
					1 Buy		
					2 Sell		
→	14 27	SideExecID		N	Identifier of the execution received by the order.		
→	45 3	NoP	artylDs	Υ	Number of party identifiers.		
→	→	44 8	PartyID	Υ	Identifier of the party.		
→	→	44	PartyID	Υ	Value Meaning		
		7	Source		D Proprietary/Custom Code		
→	→	45	Party	Υ	Role of the specified PartyID (448).		
		2	Role		Value Meaning		
					1 Executing Firm		
					76 Trader Group		
					53 Trader		
→	62 5	Sess	Trading N SessionSubI	N	Type of auction trade was executed in. Required if MatchType (574) is Auction (7)		
		D			Value Meaning		
					2 Opening Auction		
					4 Closing Auction		
					6 Re-Opening Auction		
					21 Volatility Auction		
					22 Intra-Day Auction		
					100 FCO Auction		
					z Closing Price Cross		
					101 EOD Volume Auction Call		

→	15 9	Accrued InterestAmt	N		ued interest for this fill. Required if the trade	
→	11 8	NetMoney	N	Total consideration due from the buyer to the seller inclusive of accrued interest. Required if the trade is for a Bond or TIPS.		
→	14	SideLiquidityl	N	Whether th	he order added or removed liquidity.	
	44	nd		Value I	Meaning	
					Added Liquidity (traded as a passive order)	
				,	Removed Liquidity (executed on aggression)	
				4 A	Auction	
→	11 15	OrderCategor	Υ	Type of int	terest behind trade.	
	15	У		Value I	Meaning	
				1 (Order	
				2 (Quote	
				8 I	mplied Order	
→	37	OrderID	N	Identifier of the executed order as specified by the matching system.		
→	11	ClOrdID	N	Identifier of the executed order as specified by the entering firm.		
→	52 6	SecondaryCl OrdID	N		by the party which originates the order. Can or include an additional unique identifier.	
→	52	OrderCapacit	Υ	Dealing Capacity of the firm that placed the order.		
	8	У		Value I	Meaning	
				Α Α	Agency	
				PF	Principal	
→	1	Account	Υ	Client Acc	ount	
442	Multi Type	LegReporting	Ν		t type report is generated for. Absence interpreted as Single Instrument(1).	
				Value I	Meaning	
				1 5	Single Instrument	
				2 L	Leg of Multi-Leg Instrument	
				3 N	Multi-Leg Instrument	
921	StartCash		N	The all-in-	price (dirty price) of an EFP trade.	
194	LastSpotRate		Ν		rate used in an EFP trade or repo rate used onding market maker for a repo trade.	
922	EndCash N		N	2nd leg dir	rty price of a repo trade.	
916	Start	Date	N	Starting da	ate of a repo trade	
917	End[Date	N	Date of se	ettlement for the 2nd leg of the repo trade.	
271 08	Refe	rencePrice	TBD	Reference	Price for the instrument where applicable	

320 22	LastOptPx		N	Converted price of the execute options instrument.	ed volatility of the	
118 8	Volatility		N	Converted volatility of the executed price of the options instrument.		
870	Nolns	strAttrib	N	Value in this field will always be "2	," 	
→	871	InstrAttribTy pe	N	Codes to represent the type of ins	trument attribute.	
				Value Meaning		
				101 Instrument Category		
				102 Instrument Sub Categor	y	
→	872	InstrAttribVal ue	N	Attribute value appropriate to the InstrAttribType (871) field. If InstrAttribType = 101, the InstrAttribValue field will contain Instrument Category short code attached to the instrument. If InstrAttribType = 102, the InstrAttribValue field will contain Instrument Sub Category attached to the instrument.		
548	Cross ID N			The unique ID of the cross order. TCR messages generated from In The value submitted with the Message message will be populat	ternal cross orders. New Order Cross	
549	Cross Type N			The type of the cross order. Only messages generated from Interna The value submitted with the Message will be populated.	l cross orders. New Order Cross	
526	SecondaryClOrdID A		4	Assigned by the party which origir be used to include an additional u		
Stanc	lard Tr	ailer				

8.5 Application Messages: Cancellation of On Book Trades

8.5.1 Client-Initiated

8.5.1.1 Trade Capture Report

Tag	Field Name		Req Description
Stand	ard Header		
35	MsgType	Υ	AE = Trade Capture Report
Messa	age Body		
1003	TradeID	Y	System's trade identifier. This should be the TradeID (1003) of the TCR sent by the system to confirm the trade. Server-assigned identifier of the trade.

856		TradeReportType		Y	Identified the Trade Report action for the trade capture report (submit, cancel, notification, accept, decline) Type of trade report. Value Meaning 6 Trade Report Cancel
487	Trad Type		rtTrans	Y	The transaction identifier of the action i.e. new submission/withdrawal/response/ cancellation. Type of request. Value Meaning 0 New
48	Secu	ırityID		Υ	Identifier of the instrument (Instrument ID).
60	Tran	sactTir	ne	N	Time the message was generated by the client. Not required as this field is not processed internally
552	NoSi	des		Y	No of sides reporting in this message (buy and sell). The value in this field should always be "1".
→	54	Side		Υ	Side of the trade.
					Value Meaning
				1 Buy	
				2 Sell	
→	453	8 NoPartyIDs		Y	Number of party identifiers. '2 or 3' will always be required for JSE Markets. JSE Markets requires 2 blocks to represent: 1. Trader (required) 2. Trader Group (required) 3. Firm (optional) The Trader and Trader Group should be concatenated in the System to uniquely identify the Trader and hence there are 2 blocks required. Firm
					ID will be optional in the message.
•	→	448	Partyl D	Υ	Identifier of the party. Required if NoPartyIDs (453) is specified.
→	→	447	Partyl	Υ	Required if PartyID (448) is specified.
			D Sourc		Value Meaning
			е		D Proprietary/Custom Code
→	•	→ 452 Party Role		Υ	Role of the specified PartyID (448). Required if PartyID (448) is specified.
					Value Meaning
					76 Trader Group
					53 Trader (5 digit number)
L					1 Executing Firm
→	1		Accou nt	N	Client Account

→	528	Order	Capac	Valid val	Valid values are;		
		Capac ity		Value	Meaning		
				Α	Agency		
				Р	Principal		
Stand	Standard Trailer						

8.5.2 **Server-Initiated**

8.5.2.1 Trade Capture Report Ack

Tag		Field N	lame		Req Description
Stand	lard He	eader			
35	MsgType			Υ	AR = Trade Capture Report Ack
Messa	age Bo	ody			
1181	Appl	SeqNu	m	N	Partition's sequence number for trade. Required if TCR Ack is not for a rejection
1350	Appll	ApplLastSeqNum			ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
1003	Trade	eID		N	Value submitted in cancellation request.
939	TrdR	ptStati	sı	Υ	Whether the request is accepted or rejected.
					Value Meaning
					0 Accepted
					1 Rejected
751	751 TradeReportReject Reason		N	Code specifying the reason for rejection. Please refer to Section 11 for a list of reject codes. Required if TrdRptStatus (939) is Rejected (1).	
856	TradeReportType		Υ	Value submitted in cancellation request.	
487	TradeReportTrans Type		Υ	Value submitted in cancellation request.	
573	Matc	hStatu	S	Υ	Status of the trade.
				Value Meaning	
					0 Matched
48	Secu	rityID		Υ	Identifier of the instrument.
60	Trans	sactTir	ne	Υ	Time the message was generated by the server.
552	NoSides		Y	Number of sides. The value in this field will always be "1".	
→	54	54 Side		Υ	Value submitted in cancellation request.
→	453	453 NoPartyIDs		Υ	Number of party identifiers.
•	•	448	Partyl D	Υ	Identifier of the party.
→	•	447	Partyl D	Υ	Value Meaning
			Sourc e		D Proprietary/Custom Code

•	→	452	Party Role	Y		the specified PartyID (448). Required if (448) is specified.	
					Value	Meaning	
					53	Trader (5 digit number)	
					76	Trader Group	
					1	Executing Firm	
→	1	Acco	unt	Ν	Value in	cluded in Cancellation request	
→	528	Orde ty	rCapaci	Υ	Value in	cluded in Cancellation request	
Stand	Standard Trailer						

8.5.2.2 Trade Capture Report - Confirmation for the On Book trade cancellation

Tag	Field Name		Req Description
Stand	dard Header		
35	MsgType	Υ	AE = Trade Capture Report Acknowledgement
Mess	age Body		
118 0	ApplID	Y	Identifier of the partition.
118 1	ApplSeqNum	Y	Partition's sequence number for trade.
135 0	ApplLastSeqNum	N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
135 2	ApplResendFlag	N Whether the message is sent in response to Application Message Request. Absence of this field interpreted as Original Transmission (N).	
			Value Meaning
			Y Response to Application Message Request
			N Original Transmission
568	TradeRequestID	N	Identifier of the Trade Capture Report Request the message is sent in response to.
912	LastRptRequested	N	Indicates the last message sent in response to a Trade Capture Report Request.
			Value Meaning
			Y Last Message
571	TradeReportID	Υ	New Identifier assigned to message by the server
100 3	TradeID	Y	This should be the TradeID (1003) of the TCR sent in the request to cancel the trade.

820	TradeLinkID	Y	Identifier of the transaction in which the trade was
020	ddeliimb	•	executed. The Trade Capture Reports published for a
			single transaction (e.g. an auction, the execution of an
			incoming order against multiple passive orders, etc.) will contain the same TradeLinkID
856	TradeReportType	Y	Identified the Trade Report action for the trade
	Tradertoportrype	•	capture report (submit, cancel, notification, accept,
			decline)
			Value Meaning
			6 Trade Report Cancel
			7 Trade Break
112 3	TradeHandlingInstr	Y	Specified how the Trade Capture Report should be handled.
			Value Meaning
			0 Trade Confirmation
572	TradeReportRefID	Y	(571) field of the original messages received when the trade is occurred.
487	TradeReportTransT ype	Υ	The transaction identifier of the action i.e. new submission/withdrawal/response.
			Value Meaning
			1 Cancel
150	ExecType	Υ	Execution Type of the Trade, whether it is a confirmed trade or cancelled trade
			Value Meaning
			H Trade Cancel
573	MatchStatus	Υ	Status of the Trade, whether it is matched or unmatched
			Value Meaning
			1 Unmatched
828	TrdType	N	Type of trade. Absence of this field should be interpreted as Regular Trade (0).
			Value Meaning
			0 Regular Trade
829	TrdSubType	N	On Book Trade Type. Valid values will be;
			Value Meaning
			1014 AT - Automated Trade
			1015 UT - Uncrossing Trade
			1016 XT- Cross Trade
			1017 VT - EOD Volume Auction Call Trade
			110.00

270	IsMarketOpsReque		N		whether the action is done by Service Desk
00	st			Value	Meaning
				1	Yes
48	SecurityID		Υ	Identifier	of the instrument. (Instrument ID)
32	LastQ	ety	Υ	Traded q	uantity.
31	LastP	х	Υ	Traded p	rice.
423	Price ⁻	Гуре	N	being tra Unit (2) ³ .	n format for instrument. If an instrument is aded on volatility, this field will be Price Per . Absence of this field should be interpreted Per Unit (2).
				Value	Meaning
				1	Percent of Par
				2	Price Per Unit
				4	Discount Rate
				9	Yield
669	LastParPx		Ν		rice per unit of the trade. Required only PriceType(423) is Discount Rate(1) or
236	Yield		N	income in	rield of the trade. Required only for fixed nstruments and only when the PriceType Percent of Par(1) or Price per Unit(2).
381	GrossTradeAmt		N	Total con (Price * C	nsideration due from the buyer to the seller Qty).
574	Match	Туре	Υ	Point in n	natching process trade was matched.
				Value	Meaning
				1	Off Book Trade (One Party Report) – Used in Dual Party Trade Reporting
				2	Off Book Trade (Two- Party Report) – Used on Single Party Trade Reporting
				4	Continuous Trading
				7	Auction
				22	Privately Negotiated Trade
454	NoSecurityAltID		Ν	If present	t, value in this field will always be "1".
•	455	SecurityAltI D	N	Identifica identify th	tion number of the instrument. This field will ne ISIN.
→	456 SecurityAltI		N		instrument identification used. Required if AltID (455) is specified.

³ This is because FIX protocol does not have an enum to identify when an instrument is traded on volatility.

122 Pi	roduc				Value	Meaning
	roduc				4	ISIN
		ProductComplex		N	Segment	the instrument belongs to.
201 P	utOrC	Call		N	Required	for options instruments.
					Value	Meaning
					0	Put
					1	Call
202 St	trikeF	Price		N		ce of an options instrument. Required for nstruments.
552 N	loSide	es		Y		nis confirmation (buy or sell). Since this tion is sent each party, the side will always be
→ 54	4	Side		Υ	Side of th	ne firm the message is sent by
					Value	Meaning
					1	Buy
					2	Sell
→ 62	25	Trading SessionSubI		N		auction trade was executed in. Required if oe (574) is Auction (7),
		D			Value	Meaning
					2	Opening Auction
					4	Closing Auction
					6	Re-Opening Auction
					21	Volatility Auction
					22	Intra-Day Auction
					100	FCO Auction
					Z	Closing Price Cross
	50				101	EOD Volume Auction Call
	59	Accru	ued estAmt	N		crued interest for this fill. Required if the trade egular Coupon Bond or TIPS.
→ 11	18	NetMoney		N	inclusive	nsideration due from the buyer to the seller of accrued interest. Required if the trade is d or TIPS.
→ 14 7	42	SideExecID		N	Identifier	of the execution received by the order.
→ 45	53	NoPartyIDs		Υ	Valid valu	ue is 3
→	•	44 8	PartyID	Y	Firm ID o	of the firm the message is sent to
→ →	•	44 7	PartyID Source	Y	Valid valu	ue is D
→ →	•	45	Party	Υ	Valid valu	ue is 1
		2	Role		Value	Meaning

					1 Executing Firm
→	→	44 8	PartyID	Y	Trader ID of the firm the message is sent to
→	→	44 7	PartyID Source	Y	Valid value is D
→	→	45	Party	Υ	Valid value is 53
		2	Role		Value Meaning
					53 Trader (5 digit number)
•	→	44 8	PartyID	Υ	Trader Group ID of the firm the message is sent to
→	•	44	PartyID	Υ	Valid value is D
		7	Source		Value Meaning
					D Proprietary/Custom code
→	•	45	Party	Υ	Valid value is 76
		2	Role		Value Meaning
					76 Trader Group
→	144	Side	LiquidityIn	N	Whether the order added or removed liquidity.
	4	d			Value Meaning
					Added Liquidity 1 (traded as a passive order)
					Removed Liquidity 2 (executed on aggression)
					4 Auction
→	111		erCategor	Υ	Type of interest behind trade.
	5	У			Value Meaning
					1 Order
•	37	Orde	erID	N	Identifier of the executed order as specified by the matching system.
•	11	ClOr	dID	N	Identifier of the executed order as specified by the entering firm.
→	1	Acco	ount	Υ	Client Account of the party that the message is sent to
•	528	Orde	OrderCapacity		Dealing Capacity of the party that the message is sent to
					Value Meaning
					A Agency
					P Principal
15	Curre	ncy		N	Currency attached to the instrument. This is the trading currency of the instrument. This will be populated for both On Book and Off Book trades.

870	NoInstrAttrib		N	Value in	this field will always be "2".	
•	871	71 InstrAttribType		Codes to represent the type of instrument attribute.		
				Value	Meaning	
				101	Instrument Category	
				102	Instrument Sub Category	
•	872	InstrAttribValu e	N	field. If InstrAte contain the instruction of the instruction of the instruction of the instruction of the instrAte of the instAte of the instAt	tribType = 102, the InstrAttribValue field will nstrument Sub Category attached to the	
548	Cross ID		N	TCR me The val	que ID of the cross order. Only populated for ssages generated from Internal cross orders. ue submitted with the New Order Cross e message will be populated.	
549	Cross Type		N	message The val	e of the cross order. Only populated for TCR es generated from Internal cross orders. ue submitted with the New Order Cross e will be populated.	

8.6 Application Messages: Off Book Trades

8.6.1 Client Initiated

8.6.1.1 Trade Report Submission Request

Tag	Field Name Req		Description
Stanc	lard Header		
35	MsgType Y		AE = Trade Capture Report
Mess	age Body		
818	SecondaryTradeRep ortID	N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.
104 1	FirmTradeID	Y	Trade Identifier assigned to a trade by both Firm as agreed by both the Firms No Validation
<u>104</u> <u>2</u>	SecondaryFirmTradel D	N	Free-text field for traders to communicate the counterparty branch information to the contra firm during a dual sided off book trade for a derivative or fixed income instrument. Values submitted in this field for single sided off book trades and dual sided off book trades for equity instruments will be ignored by the system.

112 3	TradeHandlingInstr	Y	Specifies how the Trade Capture Report should be handled, whether it is Single Party Reporting model, Dual Party Reporting model or a trade confirmation			
			Possible values will be;			
			Value Meaning			
			0 Trade Confirmation			
			1 Two Party Report			
			3 One-Party Report for Pass Through			
			Single Party Reporting			
			Two Party Report (1) – '1' is used in Single Party Trade reporting when submitting a trade with both sides. I.e. The buyer and seller are the same.			
			Dual Party Reporting One-Party Report for Pass Through (3) - '3' is used in Dual Party Trade Reporting when the initiating Firm submits a trade. This means one Firm passes the TCR to the other Firm in dual party reporting to get the confirmation. This is the dual party trade reports with standard FIX fields			
			In dual party trade reporting, there will be only two parties. (1) Initiating Firm (2) Counterparty Firm			
			Trade confirmation			
			Trade Confirmation (0) – '0' is used to notify a confirmation of a trade acceptance or a decline			
856	TradeReportType	Υ	Identified the Trade Report action for the trade capture report (submit, cancel, notification, accept, decline)			
			Valid value for this message will be;			
			Value Meaning			
			0 Submit			
487	TradeReportTransTy pe	Υ	The transaction identifier of the action i.e. new submission/withdrawal/response/ cancellation.			
			The valid value for this message will be ;			
			Value Meaning			
			0 New			
829	TrdSubType	Υ	Valid Off Book trade type. Refer Off Book trade types table.			

0.5			
60	TransactTime	Y*	Date the trade was agreed between the Firms
			(in UTC) YYYYMMDD-HH:MM:SS.sss
			SS.sss will be ignored by the System and they can be
			defaulted to zero.
			Mandatory only if TradeReportType (856) is Accept(2)
32	LastQty	Υ	Traded quantity
31	LastPx	Υ	Trade price
120	SettlCurrency	N	Settlement currency of the Off Book trade, if it is different to the instrument's trading currency.
			Valid values are ISO-4217 currency list
139 0	TradePublishIndicato r	N	Indicates when the trade should be published on the market data feed
			Possible values for this field will be;
			Value Meaning
			0 Do Not Publish
			1 Publish Immediately
			,
			This field will be validated against the Publication Indicator defined in trade types table.
112 5	OrigTradeDate	Y*	This is used when cancelling a trade done on the previous trading day to indicate the date the original trade was reported to the system.
			This field is mandatory when reporting a PC, NC or LC trade type.
112 6	OrigTradeID	Y*	This is used when cancelling a trade done on the previous trading day to indicate the original trade ID of the trade being cancelled.
			This field is mandatory when reporting a PC, NC or LC trade type.
48	Security ID	Υ	Identifier of the instrument (Instrument ID)
762	SecuritySubType	N	Indicates the type of multi-legged instrument. Required for multi-legged instrument executions.
64	SettlDate	N	Date on which the trade will settle. Not required for equity instruments.
271 00	StrategyLinkID	N	Used to link multiple trades together where a strategy trade execution is concerned. Also will denote the 'Implied Chain ID' generated for an implied order execution.

271 10	Strategy Type	Υ*	Indicates the type of multi-legged instrument. Required if a StrategyLinkID(27100) has been specified. 1. Delta Option 2. Inv Cal Spread 3. Splits 4. FwdFwd			
271 01	Attribute	N	Provides detail on the optional attributes of the trade. This will be a multi value field. Value Meaning 1 Free of Value 2 Prime Broking 3 Bond Switches			
271 02	CleanPrice	N	Clean price of the trade. This is assuming that the PriceType (423) of the bond instrument is Yield (9).			
921	StartCash	N	The all-in-price (dirty price) of the trade. This is applicable to bonds, repos, reverse repos and EFP trades.			
922	EndCash	N	The all-in-price (dirty price) of the 2 nd leg of a repo or reverse repo trade.			
920	EndAccruedInterestA mt	N	The accrued interest on termination of a repo or reverse repo trade.			
271 03	EndCleanPrice	N	The clean price of the 2 nd leg of a repo or reverse repo trade.			
271 04	EndSettlDate	N	The settlement date of the 2 nd leg of a repo or reverse repo trade.			
271 05	EndYield	N	The yield of the 2 nd leg of a repo or reverse repo trade.			
271 06	Rate	N	Can be used to denote the carry rate of a repo, reverse repo trade or the spot rate in an EFP trade.			
271 07	Delta	N	System calculated Delta value for Options This field will be blank for other instrument definitions			
218	Spread	N	The interest rate spread on top of the rate type that should be applied for CFD trades.			
662	BenchmarkPrice	N	Specifies the price of the benchmark security. Required if BenchmarkeSecurityID (669) is specified.			
699	BenchmarkSecurityID	N	The identifier of the benchmark security on top of which the spread is quoted.			
810	UnderlyingPx	N	Underlying price associated with a derivative instrument. Required for a naked option trade.			

552	NoS	ides		Υ	No of sides reporting in this message (buy and sell).
					The valid value will be; 2 This is used for both Single and Dual Party Reporting Model; it has to specify the counterparty Firm details. Therefore this will always be '2' for JSE Markets. Even in Single Party Reporting model the counterparty Firm has to be specified.
→	54	Side		Υ	Side of the trade taken by the submitting Firm
					Value Meaning 1 Buy 2 Sell
→	45 3	NoPartyIDs		Y	The Valid value will be; 3 JSE Markets requires 3 blocks to represent: 1. Firm (required) 2. Trader (required) 3. Trader Group (required)
					The Trader and Trader Group should be concatenated in the System to uniquely identify the Trader and hence there are 2 blocks required.
→	→	448 PartyID		Υ	Firm ID (required)
•	→	448 PartyID Y 447 PartyID Y Source		Y	Identifies class or source of the PartyID (448) value. The valid value for this message will be; Value Meaning
					D Proprietary/Custom code System always uses 'D' to indicate that the Source is Exchange System
•	-	452	Party Role	Y	The valid value for this block will be; Value Meaning 1 Executing Firm
→	•	448	PartyID	Y	Trader ID (required) Mandatory field which will be validated. Trader is a NUMERIC 5 digit value for the JSE Markets.

	١.		I		Idontifion	class or source of the PartyID (448) value.
-	-	447	PartyID Source	Υ	identines	class of source of the Fartyib (446) value.
					The valid	I value for this message will be;
					Value	Meaning
					D	Proprietary/Custom code
					Exchang	always uses 'D' to indicate that the Source is e System
→	→	452	Party	Υ		I value for this block will be;
			Role		Value	Meaning
					53	Trader (5 digit number)
•	•	448	PartyID	Υ		roup (required)
→	→	447	PartyID Source	Υ	Identifies	class or source of the PartyID (448) value.
			Course		The valid	I value for this message will be;
					Value	Meaning
						Proprietary/Custom code
						,
						always uses 'D' to indicate that the Source is e System
→	→	452	Party	Υ	The valid	I value for this block will be;
			Role		Value	Meaning
					76	Trader Group
→	1	Account		Y	sends the Trade Re	e Client Account of the initiating Firm who e message, specified on submission for the eport. This will be a mandatory field in Trade g to be captured by the message sending
					System v for Equity	ry 8 Digit value for the JSE Markets. The will validate that it is populated and is numeric y instruments and alphanumeric for es instruments
→	52 8	Order	Capacity	Y	Dealing (Valid val	Capacity ues will be;
					Value	Meaning
					A	Agency
					P	Principal
•	15 9	AccruedInterest N		N		crued interest for this trade. Required if the or a Regular Coupon Bond or TIPS.
→	54	Side		Υ		ne trade taken by the counterparty Firm ues will be;
					Value	Meaning
					1	Buy
					2	Sell
		1			_	

		1						
•	45 3	NoPa	artyIDs	Υ		1 or 3 depending on whether message is being used in Single Party or Dual Party reporting model		
•	•	44 8	PartyID	Υ	Firm ID o	Firm ID of counterparty Firm		
→	→	44	PartyID	Υ	Identifies	class or source of the PartyID (448) value.		
		7	Source		The valid value for this message will be;			
					Value	Meaning		
					D	Proprietary/Custom code		
					System a	llways uses 'D' to indicate that the Source is e System		
→	•	45 2	Party Role	Υ	The valid	value for this block will be;		
		2	Kole		Value	Meaning		
					17	Counterparty Firm		
→	•	448	PartyID	Y*	=	only in Single Party Reporting model		
						of the counterparty side (required).		
						ry field which will be validated. s a NUMERIC 5 digit value for the JSE		
→	•	447	PartyID	Y*	Required of	only in Single Party Reporting model		
			Source		Value	Meaning		
					D	Proprietary/Custom code		
→	→	452	Party Role	Y*	Required of	only in Single Party Reporting model		
					Value	Meaning		
					37	Counterparty Trader		
→	→	448	PartyID	Y*		only in Single Party Reporting model or in Dual		
						el for Derivative and Bond Market Trade Reporting oup ID of the Trader in the counterparty side		
					(required).			
→	→	447	PartyID Source	Y*		only in Single Party Reporting model or in Dual el for Derivative and Bond Market Trade Reporting		
					Value	Meaning		
					D	Proprietary/Custom code		
•	→	452	Party Role	Y*		only in Single Party Reporting model or in Dual el for Derivative and Bond Market Trade Reporting		
					Value	Meaning		
					100	Counterparty Trader Group		

→	52 8	OrderCapacity	Y*	Required only in Single Party Trade Reporting model Dealing Capacity of the counterparty side	
				Valid valu	es will be;
				Value	Meaning
				A	Agency
				Р	Principal
→	1	Account	Y*	Required only in Single Party Trade Reporting model This is the Client Account of the counterparty Firm Mandatory 8 Digit value for the JSE Markets. The System will validate that it is populated and is numeric for Equity instruments and alphanumeric for Derivatives instruments.	

8.6.1.2 Response from counterparty Firm for a trade report submission request

Tag	Field Name	Req	Description			
Standard Header						
35	MsgType	Υ	AE = Trade Capture Report			
Mess	age Body					
818	SecondaryTradeRep ortID	N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.			
100 3	TradeID	Y	Unique trade identifier generated by the system			
104 1	FirmTradeID	Y	Identifier assigned to trade by counterparties			

112 3	TradeHandlingInstr	Y	Specified how the Trade Capture Report should handled, whether it is Single Party Reporting in Dual Party Reporting model or a trade confirmation.	nodel,
			The possible values will be;	
			Value Meaning	
			0 Trade Confirmation	_
			1 Two Party Report	_
			3 One-Party Report for Pass Through	_
			Single Party Reporting	
			Two Party Report (1) – '1' is used in Single Pa Trade reporting when submitting a trade with b sides. i.e. The buyer and seller are the same.	
			This is also used in Dual Party Trade Reporting confirming the trade to the initiating Firm and Counterparty Firm	g when
			Dual Party Reporting	
			One-Party Report for Pass Through (3) - '3' is Dual Party Trade Reporting when the initiating submits a trade. This means one Firm passes TCR to the other Firm in dual party reporting to confirmation. This is the dual party trade report standard FIX fields	Firm the get the
			In dual party trade reporting, there will be oparties. (1) Initiating Firm (2) Counterparty Firm	only two
			Trade confirmation	
			Trade Confirmation (0) $-$ '0' is used to notify a confirmation	trade
856	TradeReportType	Y	Identified the Trade Report action for the trade capture report (submit, cancel, notification, acc decline)	
			Valid value for this message will be; Value Meaning	
			2 Accept	
			3 Decline	
132 8	RejectReason	N*	Reason trade was declined by counterparty Fit be specified by the counterparty if the TradeReportType (856) is Decline (3)	rm. May

487	TradeReportTransTy pe	Y	The transaction identifier of the action i.e. new submission/withdrawal/response/ cancellation. The valid value for this message will be; Value Meaning 2 Replace
829	TrdSubType	Υ	Valid Off Book trade type
60	TransactTime	Υ	Date the trade was agreed between the Firms (in UTC) YYYYMMDD-HH:MM:SS.sss SS.sss will be ignored by the System and they can be defaulted to zero.
32	LastQty	Υ	Traded quantity
31	LastPx	Υ	Trade price
120	SettlCurrency	N	Originally executing currency of the Off Book trade, if it is different to the instrument's trading currency.
			Valid values are ISO-4217 currency list
139	TradePublishIndicato r	N	Indicates whether the trade should be published immediately or delayed This fields will be ignored by the JSE Markets
112 5	OrigTradeDate	Υ*	This is used when cancelling a trade done on the previous trading day to indicate the date the original trade was reported to the system. This field is mandatory when reporting a PC, NC or LC trade type.
112 6	OrigTradeID	Y*	This is used when cancelling a trade done on the previous trading day to indicate the original trade ID of the trade being cancelled. This field is mandatory when reporting a PC, NC or LC trade type.
48	Security ID	Υ	Identifier of the instrument (Instrument ID)
762	SecuritySubType	N	Indicates the type of multi-legged instrument. Required for multi-legged instrument executions.
64	SettlDate	N	Date on which the trade will settle. Not required for equity instruments.
111 5	OrderCategory	N	Type of interest behind trade. Value Meaning 1 Order 2 Quote 3 Off-Book Trade 8 Implied Order
271 00	StrategyLinkID	N	Used to link multiple trades together where a strategy trade execution is concerned.

271 10	Strategy Type	Υ*	Indicates the type of multi-legged instrument. Required if a StrategyLinkID(27100) has been specified. 1. Delta Option 2. Inv Cal Spread 3. Splits 4. FwdFwd		
271 01	Attribute	N	Provides detail on the optional attributes of the trade. This will be a multi value field. Value Meaning 1 Free of Value 2 Prime Broking 3 Bond Switches		
271 02	CleanPrice	N	Clean price of the trade. This is assuming that the PriceType (423) of the bond instrument is Yield (9).		
921	StartCash	Ζ	The all-in-price (dirty price) of the trade. This is applicable to bonds, repos, reverse repos and EFP trades.		
922	EndCash	Ν	The all-in-price (dirty price) of the 2 nd leg of a repo or reverse repo trade.		
920	EndAccruedInterestA mt	Ν	The accrued interest on termination of a repo or reverse repo trade.		
271 03	EndCleanPrice	Z	The clean price of the 2 nd leg of a repo or reverse reportrade.		
271 04	EndSettlDate	Z	The settlement date of the 2 nd leg of a repo or reverse repo trade.		
271 05	EndYield	Z	The yield of the 2 nd leg of a repo or reverse repo trade.		
271 06	Rate	Ν	Can be used to denote the carry rate of a repo, reverse repo trade or the spot rate in an EFP trade.		
271 07	Delta	Ν	Type of benchmark rates used for CFD trades. Note: - JSE to provide detail on the types of rates.		
218	Spread	N	The interest rate spread on top of the rate type that should be applied for CFD trades.		
662	BenchmarkPrice	N	Specifies the price of the benchmark security. Required if BenchmarkeSecurityID (669) is specified.		
699	BenchmarkSecurityID	N	The identifier of the benchmark security on top of which the spread is quoted.		
810	UnderlyingPx	N	Underlying price associated with a derivative instrument. Required for a naked option trade.		
552	NoSides	Y	No of sides reporting in this message (buy and sell). The valid value will be: 2 This is used for both Single and Dual Party Reporting Model; it has to specify the counterparty Firm details. Therefore this will always be '2' for JSE Markets Even in Single Party Reporting model the counterparty Firm has to be specified.		

→	54	Side		Υ	Side of the trad	le taken by the Reporting Firm
					The valid value	
					Value Me	eaning
					1 Bu	у
					2 Se	II
→	45 3	NoPartyIDs		Y	 Firm (r. Trader Trader Trader and in the System 	equires 3 blocks to represent: equired) (required) Group (required) Trader Group should be concatenated to uniquely identify the Trader and re 2 blocks required. Firm ID will be message.
→	→	448	PartyID	Υ	Firm ID that the	e message is sent by (optional)
→	•	447	PartyID Source	Υ		or source of the PartyID (448) value.
						aning
					D Prop	orietary/Custom code
					System always Exchange Syst	uses 'D' to indicate that the Source is em
→	→	452	Party	Υ	The valid value	for this block will be;
			Role		Value Mear	ning
					1 Exec	euting Firm
→	→	448	PartyID	Υ		he message is sent by (required)
					•	Which will be validated.
					Markets.	MERIC 5 digit value for the JSE
→	→	447	PartylD	Υ	Identifies class	or source of the PartyID (448) value.
			Source		Value Mea	aning
					-	prietary/Custom code
					-,	, 3
					System always Exchange Syst	uses 'D' to indicate that the Source is em
→	•	452	Party	Υ	The valid value	
			Role		Value Mear	ning
					53 Trade	er (5 digit number)
→	•	448	PartyID	Υ	Trader Group (required)

		4.47	Dest ID	.,	Identifies class or source of the PartyID (448) value.
-	-	447	PartyID Source	Υ	
					The valid value will be;
					Value Meaning
					D Proprietary/Custom code
					System always uses 'D' to indicate that the Source is Exchange System
→	•	452	Party	Υ	The valid value will be;
			Role		Value Meaning
					76 Trader Group
→	1	Account		Y	This is the Client Account of the initiating Firm who sends the message, specified on submission for the Trade Report. This will be a mandatory field in Trade Reporting to be captured by the message sending party. Mandatory 8 Digit value for the JSE Markets. The System will validate that it is populated and is numeric.
→	52	OrderCapacity		Υ	Dealing capacity
	8				Valid values will be;
					Value Meaning
					A Agency
					P Principal
→	15 9	AccruedInterest Amt		N	Total accrued interest for this trade. Required if the trade is for a Regular Coupon Bond or TIPS.
→	54	Side		Υ	Side of the trade taken by the counterparty Firm
					Valid values will be;
					Value Meaning
					2 Sell
→	45 3	NoPa	rtyIDs	Υ	1
→	•	448	PartyID	Υ	Firm ID of counterparty Firm that the message is sent by (required)
→	•	447	PartyID Source	Y	Identifies class or source of the PartyID (448) value. The valid value will be; Value Meaning
					D Proprietary/Custom code
					System always uses 'D' to indicate that the Source is Exchange System

→	•	452	Party	Υ	The valid	d value will be;
			Role		Value	Meaning
					17	Counterparty Firm

8.6.1.3 Withdrawal of Submission Request by initiating firm

Tag	Field Req D)escr	iption
Stand	lard Header		
35	MsgType	Υ	AE = Trade Capture Report
Mess	age Body		
818	SecondaryTradeRep ortID	N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.
1003	TradeID	Y	Identifier of cancel request being withdrawn. This should be the TradeID (1003) of the TCR sent by the system to confirm the trade
1123	TradeHandlingInstr	Y	Specified how the Trade Capture Report should be handled, whether it is Single Party Reporting model, Dual Party Reporting model or a trade confirmation
			Valid value for the message will be;
			Value Meaning
			3 One-Party Report for Pass Through
856	TradeReportType	Y	Identifies the Trade Report action for the trade capture report (submit, cancel, notification, accept, decline)
			Valid value for this message will be;
			Value Meaning
			0 Submit
487	TradeReportTransType	Υ	The transaction identifier of the action i.e. new submission/withdrawal/response/ cancellation.
			The valid value for this message will be ;
			Value Meaning
			1 Cancel
48	SecurityID	Υ	Identifier of the instrument (Instrument ID)
552	NoSides	Y	No of sides to the trade (buy and sell). The valid value will be; 2

					This is used for both Single and Dual Party Reporting Model; it has to specify the counterparty Firm details Even in Single Party Reporting model the counterparty Firm		
					has to be specified.		
→	54 Side			Υ	Side of firm that requested the cancellation		
→	45 3			Υ	3		
→	→	44 8	PartyID	Υ	ID of Firm that requested the cancellation		
→	→	44	PartyID	Υ	The valid value will be;		
		7	Source		Value Meaning		
					D Proprietary/Custom code		
→	→	45	Party Role	Υ	The valid value will be;		
		2			Value Meaning		
					1 Executing Firm		
•	→	44 8	PartyID	Υ	Trader ID of the Trader the message is sent to		
→	→	44	PartyID	Υ	The valid value will be;		
		7	Source		Value Meaning		
					D Proprietary/Custom code		
•	•	45	Party Role	Υ	The valid value will be;		
		2			Value Meaning		
					53 Trader (5 digit number)		
•	→	44 8	PartyID	Υ	Trader Group ID of the Trader the message is sent to		
→	→	44	PartyID	Υ	The valid value will be;		
		7	Source		Value Meaning		
					D Proprietary/Custom code		
+	•	45	Party Role	Υ	The valid value will be;		
		2			Value Meaning		
					76 Trader Group		
→	1	Acc	ount	N	Client Account of the party that the message is sent to		
•	52 8	Orde	erCapacity	Υ	Dealing Capacity of the party that the message is sent to		
→	54	Side)	Υ	Side of contra firm		
→	45 3	NoP	artyIDs	Y	1		
•	•	44 8	PartyID	Υ	Firm ID of contra firm		
→	→	44 7	PartyID Source	Y	D		
→	→	45	Party Role	Υ	The valid value will be;		

	2		Value	Meaning
			17	Counterparty Firm

8.6.1.4 Cancellation Request by Initiating Firm for a confirmed trade

Tag	Field Name Req Des	scrip	ion
Stand	ard Header		
35	MsgType	Υ	AE = Trade Capture Report
Messa	age Body		
818	SecondaryTradeReportID	N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.
1003	TradeID	Y	System's trade identifier. This should be the TradeID (1003) of the TCR sent by the system to confirm the trade.
1123	TradeHandlingInstr	Y	Specified how the Trade Capture Report should be handled, whether it is Single Party Reporting model, Dual Party Reporting model or a trade confirmation Valid value for this message will be;
			Value Meaning
			1 Two Party Report
			3 One-Party Report for Pass Through
856	TradeReportType	Y	Identified the Trade Report action for the trade capture report (submit, cancel, notification, accept, decline)
			Valid value for this message will be;
			Value Meaning
			6 Trade Report Cancel
487	TradeReportTransType	Y	The transaction identifier of the action i.e. new submission/withdrawal/response/ cancellation. The valid value for this message will be Identifies whether this transaction is a new submission, withdrawal or a response.
			The valid value will be;
			Value Meaning
			0 New

48	Secur	ity ID		Υ	This is the Instrument ID
552	NoSides		Y	No of sides reporting sides in this message (buy and sell). The valid value will be; 2 This is used for both Single and Dual Party Reporting Model; it has to specify the counterparty Firm details Even in Single Party Reporting model the counterparty Firm has to be specified.	
→	54	Side		Υ	Side of firm requesting cancellation
→	453	NoPa	rtyIDs	Υ	3
→	→	448	PartyID	Υ	Firm ID of firm requesting cancellation
→	→	447	PartyID Source	Υ	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Υ	The valid value will be;
					Value Meaning
					1 Executing Firm
→	→	448	PartyID	Υ	Trader ID of firm requesting cancellation
→	→	447 PartyID Source		Υ	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Υ	The valid value will be;
					Value Meaning
					53 Trader (5 digit number)
→	→	448	PartyID	Υ	Trader Group ID of firm requesting cancellation
→	→	447	PartyID Source	Υ	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Υ	The valid value will be;
					Value Meaning
					76 Trader Group
→	1	Account		N	This is the Client Account of the initiating Firm who sends the message, specified on submission for the Trade Report. This will be a optional field in this message Trade Reporting to be captured by the message sending party. Mandatory 8 Digit value for the JSE Markets. The System will validate that it is numeric if populated.
→	528	Order	Capacity	Y	Dealing Capacity Valid values will be;

					Value Meaning
					A Agency
					P Principal
→	54	Side		Υ	Side of contra firm
→	453	NoPa	NoPartyIDs		1 or 3 depending on the reporting model used
→	→	448	PartyID	Υ	Firm ID of contra firm
→	→	447	PartyID Source	Υ	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Υ	The valid value will be;
					Value Meaning
					17 Counterparty Firm
→	→	448	PartyID	Y*	Required only in Single Party Reporting model
					Trader ID of the counterparty side(required) Mandatory field which will be validated.
					Trader is a NUMERIC 5 digit value for the JSE
					Markets.
→	→	447	PartyID Source	Y*	Required only in Single Party Reporting model
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Y*	Required only in Single Party Reporting model
					Value Meaning
					37 Counterparty Trader
→	→	448	PartyID	Y*	Required only in Single Party Reporting model
					Trader Group ID of the Trader in the counterparty side(required)
→	→	447	PartyID Source	Y*	Required only in Single Party Reporting model
			,		Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Y*	Required only in Single Party Reporting model
					Value Meaning
					100 Counterparty Trader Group
→	1	Accou	ınt	N*	Required only in Single Party Reporting model
					This is the Client Account of the counterparty Firm This is an optional field in Trade Reporting Cancel request captured by sending party.
					Optional (on this message) 8 Digit value for the JSE Markets. The System will validate that it is numeric if populated.
→	528	Order	Capacity	Y*	Required only in Single Party Trade Reporting model
L	1	l	*		<u> </u>

	g Capacity of the counterparty side alues will be;
Value	Meaning
A	Agency
Р	Principal

8.6.1.5 Response from the counterparty Firm for the cancellation Request

Tag	Field Name Req	Descr	iption
Stand	lard Header		
35	MsgType	Υ	AE = Trade Capture Report
Mess	age Body		
818	SecondaryTradeReportID	N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.
1003	TradeID	Y	Identifier of notification the message is sent in response to. This should be the TradeID (1003) of the TCR sent to the contra firm to notify it of the request to cancel the trade.
1123	TradeHandlingInstr	Y	Specified how the Trade Capture Report should be handled, whether it is Single Party Reporting model, Dual Party Reporting model or a trade confirmation
			Valid value for the message;
			Value Meaning
			3 One-Party Report for Pass Through
856	TradeReportType	Y	Identified the Trade Report action for the trade capture report (submit, cancel, notification, accept, decline)
			Valid value for this message will be;
			Value Meaning
			2 Accept
			3 Decline
487	TradeReportTransType	Y	The transaction identifier of the action i.e. new submission/withdrawal/response/ cancellation.
			The valid value for this message will be ;
			Value Meaning
			2 Replace
1328	RejectText	N	Reason request was declined by contra firm.
48	SecurityID	Υ	Identifier of the instrument
552	NoSides	Y	No of sides to the trade (buy and sell). The valid value will be 2
			This is used for both Single and Dual Party Reporting

→ 54 Side → 453 NoPartyIDs → + 448 PartyID → + 447 PartyID Source → + 448 PartyID → + 447 PartyID Source → + 448 PartyID → + 447 PartyID Source → 1 Account → 528 OrderCapacity → 453 NoPartyIDs → 448 PartyID → 448 PartyID → 447 PartyID Source		Model; it has to specify the counterparty Firm details
→ 453 NoPartyIDs → 448 PartyID → 447 PartyID Source → + 452 PartyID → + 447 PartyID Source → + 448 PartyID → + 447 PartyID Source → + 452 Party Role → 1 Account → 528 OrderCapacity → 453 NoPartyIDs → 448 PartyID		Even in Single Party Reporting model the counterparty Firm
→ 453 NoPartyIDs → 448 PartyID → 447 PartyID Source → 448 PartyID → 447 PartyID Source → 448 PartyID → 448 PartyID → 447 PartyID Source → 452 Party Role → 452 Party Role → 1 Account → 528 OrderCapacity → 453 NoPartyIDs → 448 PartyID		has to be specified.
→ 448 PartyID → 447 PartyID Source → 452 PartyID → 448 PartyID → 447 PartyID Source → 448 PartyID → 447 PartyID Source → 452 Party Role → 453 OrderCapacity	Y	Side of the firm the message is sent by
→ ↓ 447 PartyID Source → ↓ 452 Party Role → ↓ ↓ 448 PartyID Source → ↓ ↓ ↓ ↓ ↓ → ↓ ↓ ↓ ↓ ↓ ↓ → ↓	Y	3
→ ↓ 452 Party Role → ↓ 448 PartyID → ↓ 447 PartyID Source → ↓ ↓ 448 PartyID → ↓ ↓ ↓ ↓ → ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ <t< th=""><th>Y</th><th>Firm ID of the firm the message is sent by</th></t<>	Y	Firm ID of the firm the message is sent by
→ → 448 PartyID → → 447 PartyID Source → → 448 PartyID → → 447 PartyID Source → → 452 Party Role → 1 Account → 528 OrderCapacity → 54 Side → 453 NoPartyIDs → 448 PartyID	Y	The valid value will be;
→ → 448 PartyID → → 447 PartyID Source → → 448 PartyID → → 447 PartyID Source → → 452 Party Role → 1 Account → 528 OrderCapacity → 54 Side → 453 NoPartyIDs → 448 PartyID		Value Meaning
→ → 448 PartyID → → 447 PartyID Source → → 448 PartyID → → 447 PartyID Source → → 452 Party Role → 1 Account → 528 OrderCapacity → 54 Side → 453 NoPartyIDs → 448 PartyID		D Proprietary/Custom code
→ 447 PartyID Source → 452 Party Role → 448 PartyID → 447 PartyID Source → 452 Party Role → 1 Account → 528 OrderCapacity → 453 NoPartyIDs → 448 PartyID	Y	The valid value will be;
→ 447 PartyID Source → 452 Party Role → 448 PartyID → 447 PartyID Source → 452 Party Role → 1 Account → 528 OrderCapacity → 453 NoPartyIDs → 448 PartyID		Value Meaning
→ 447 PartyID Source → 452 Party Role → 448 PartyID → 447 PartyID Source → 452 Party Role → 1 Account → 528 OrderCapacity → 453 NoPartyIDs → 448 PartyID		1 Executing Firm
→ → 452 Party Role → → 448 PartyID → → 447 PartyID Source → → 452 Party Role → 1 Account → 528 OrderCapacity → 453 NoPartyIDs → → 448 PartyID	Y	Value in cancel response for Trader
→ → 448 PartyID → → 447 PartyID Source → → 452 Party Role → 1 Account → 528 OrderCapacity → 54 Side → 453 NoPartyIDs → 448 PartyID	Y	The valid value will be;
→ → 448 PartyID → → 447 PartyID Source → → 452 Party Role → 1 Account → 528 OrderCapacity → 54 Side → 453 NoPartyIDs → 448 PartyID		Value Meaning
→ → 448 PartyID → → 447 PartyID Source → → 452 Party Role → 1 Account → 528 OrderCapacity → 54 Side → 453 NoPartyIDs → 448 PartyID		D Proprietary/Custom code
→ 447 PartyID Source → 452 Party Role → 1 Account → 528 OrderCapacity → 54 Side → 453 NoPartyIDs → 448 PartyID	Υ	The valid value will be;
→ 447 PartyID Source → 452 Party Role → 1 Account → 528 OrderCapacity → 54 Side → 453 NoPartyIDs → 448 PartyID		Value Meaning
→ 447 PartyID Source → 452 Party Role → 1 Account → 528 OrderCapacity → 54 Side → 453 NoPartyIDs → 448 PartyID		53 Trader (5 digit number)
→ ↓ 452 Party Role → 1 Account → 528 OrderCapacity → 54 Side → 453 NoPartyIDs → 448 PartyID	Y	Value in cancel response for Trader Group
→ 1 Account → 528 OrderCapacity → 54 Side → 453 NoPartyIDs → → 448 PartyID	Υ	The valid value will be;
→ 1 Account → 528 OrderCapacity → 54 Side → 453 NoPartyIDs → → 448 PartyID		Value Meaning
→ 1 Account → 528 OrderCapacity → 54 Side → 453 NoPartyIDs → → 448 PartyID		D Proprietary/Custom code
→ 528 OrderCapacity → 54 Side → 453 NoPartyIDs → → 448 PartyID	Y	The valid value will be;
→ 528 OrderCapacity → 54 Side → 453 NoPartyIDs → → 448 PartyID		Value Meaning
→ 528 OrderCapacity → 54 Side → 453 NoPartyIDs → → 448 PartyID		76 Trader Group
→ 54 Side → 453 NoPartyIDs → → 448 PartyID	N	Client Account
→ 453 NoPartyIDs → → 448 PartyID	Υ	The valid values will be;
→ 453 NoPartyIDs → → 448 PartyID		Value Meaning
→ 453 NoPartyIDs → → 448 PartyID		A Agency
→ 453 NoPartyIDs → → 448 PartyID		P Principal
→ 448 PartyID	Y	Side of the firm that submitted the request
	Y	1
→ 447 PartyID Source	Y	Firm ID of firm that submitted the request
	Y	The valid value will be;
		Value Meaning
		D Proprietary/Custom code
→ 452 Party Role	Y	The valid value will be;
		Value Meaning

	17 Counterparty Firm
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8.6.1.6 Withdrawal of a Cancellation Request by Initiating Firm – TCR (AE)

Tag	Field N	lame		Req	Valid Values
818	SecondaryTradeReportID			N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.
1003	Tradell	D		Y	Identifier of cancel request being withdrawn. This should be the TradeID (1003) of the TCR sent by the system to confirm the trade
1123	TradeHandlingInstr			Y	Specified how the Trade Capture Report should be handled, whether it is Single Party Reporting model, Dual Party Reporting model or a trade confirmation Valid value for this message will be; Value Meaning 3 One-Party Report for Pass Through
856	TradeReportType			Y	Identified the Trade Report action for the trade capture report (submit, cancel, notification, accept, decline) Valid value for this message will be; Value Meaning
					6 Trade Report Cancel
487	TradeF	ReportTr	ransType	Y	The transaction identifier of the action i.e. new submission/withdrawal/response.
					Valid value for this message will be;
					Value Meaning
					1 Cancel
48	Securit	yID		Y	Identifier of the instrument (Instrument ID)
552	NoSide	es		Υ	Valid value is 2
→	54	Side		Y	Side of firm that requested the cancellation
→	453	NoPai	rtyIDs	Y	Valid value is 3
→	→	448	PartyID	Y	ID of firm that requested the cancellation
→	→	447	PartyID Source	Y	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Y	The valid value will be;
					Value Meaning
					1 Executing Firm
→	→	448	PartyID	Y	Trader ID of the firm the message is sent to
→	→	447	PartyID Source	Υ	The valid value will be;

					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Υ	The valid	value will be;
					Value	Meaning
					53	Trader
→	→	448	PartyID	Y	Trader Gr	oup ID of the firm the message is sent to
→	→	447	PartyID Source	Y	The valid	value will be;
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Y	The valid	value will be;
					Value	Meaning
					76	Trader Group
→	1	Accou	int	N	Client Acc	count of the party that the message is sent to
→	528	Order	Capacity	Y	Order Cap	pacity of the party that the message is sent to;
					The valid	values will be;
					Value	Meaning
					A	Meaning Agency
	54	Side		Y	A	Agency Principal
	54	Side		Y	A P	Agency Principal
	54	Side		Y	A P Side of co	Agency Principal ntra firm
	54	Side		Y	A P Side of co	Agency Principal Intra firm Meaning
→	54	Side NoPa	rtyIDs	Y	A P Side of co	Agency Principal Intra firm Meaning Buy Sell
→			rtyIDs PartyID		A P Side of co Value 1 2 Valid value	Agency Principal Intra firm Meaning Buy Sell
+ +	453	NoPa	T	Y	A P Side of co Value 1 2 Valid value Firm ID of	Agency Principal Intra firm Meaning Buy Sell e is 1
→ →	453	NoPa	PartyID	Y	A P Side of co Value 1 2 Valid value Firm ID of	Agency Principal Intra firm Meaning Buy Sell e is 1 contra firm
+ + +	453	NoPa	PartyID	Y	A P Side of co Value 1 2 Valid value Firm ID of	Agency Principal Intra firm Meaning Buy Sell e is 1 contra firm value will be;
→ → →	453	NoPa	PartyID	Y	A P Side of co Value 1 2 Valid value Firm ID of The valid Value D	Agency Principal Intra firm Meaning Buy Sell e is 1 contra firm value will be; Meaning
→	453 →	NoPa 448 447	PartyID Source	Y Y Y	A P Side of co Value 1 2 Valid value Firm ID of The valid Value D	Agency Principal Intra firm Meaning Buy Sell e is 1 contra firm value will be; Meaning Proprietary/Custom code

8.6.2 **Server Initiated**

8.6.2.1 Trade Capture Report Ack to the Initiating Firm for the Trade Report Submission Request

Tag	Field Name	Red	a 1	Description			
Standard Header							
35	MsgType		Υ	AR = Trade Capture Report Acknowledgment			
Mess	Message Body						

1181	ApplSeqNum	N	Partition's sequence number for trade.
1350	ApplCeqNum	N	ApplSeqNum of last trade generated for client.
1350	AppicastSeqivum	IN	Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
571	TradeReportID	N	Value included in trade submission request report
818	SecondaryTradeReportID	N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.
1003	TradeID	Υ	Unique trade identifier generated by the system
1041	FirmTradeID	Υ	Value included in trade submission request report
<u>1042</u>	SecondaryFirmTradeID	<u>N</u>	Value included in trade submission request report
1123	TradeHandlingInstr	Υ	Value included in trade submission request report
939	TrdRptStatus	Υ	Whether the trade report is accepted or rejected by the System
			The valid values will be;
			Value Meaning
			0 Accepted
			1 Rejected
751	TradeReportReject Reason	N	Reject code. Required if the request is rejected.
58	Text	N	Reject reason. Required if request is rejected.
856	TradeReportType	Υ	Value included in trade submission request report
487	TradeReportTransType	Υ	Value included in trade submission request report
573	MatchStatus	Υ	Status of the Trade, whether it is matched or unmatched
			The valid value will be;
			Value Meaning
			1 Unmatched
829	TrdSubType	Υ	Value included in trade submission request report
60	TransactTime	Υ	Value included in trade submission request report
32	LastQty	N	Value included in trade submission request report
31	LastPx	N	Value included in trade submission request report
120	SettlCurrency	N	Value included in trade submission request report
1390	TradePublishIndicator	N	Value included in trade submission request report. If the internal Off Book status has values 1,3,4 or 6, the Trade Publish Indicator will be stamped based on the Publish Indicator specified in the Trade Type table for the TradeSubType (829) mentioned here, regardless of whether the user has submitted a value for the TradePublishIndactor (1390)
1125	OrigTradeDate	N	Value included in trade submission request report
1126	OrigTradeID	N	This is used when cancelling a trade done on the previous trading day to indicate the original trade ID of the trade being cancelled. This is for On and Off Book Trade cancellations.

Required for multi-legged instrumer 64 SettlDate N Value included in trade submission 27100 StrategyLinkID N Value included in trade submission	
27100 StrategyLinkID N Value included in trade submission	
	request report
	request report
27110 Strategy Type N Value included in trade submission	request report
27101 Attribute N Value included in trade submission	request report
27102 CleanPrice N Value included in trade submission	request report
921 StartCash N Value included in trade submission	request report
922 EndCash N Value included in trade submission	request report
920 EndAccruedInterestAmt N Value included in trade submission	request report
27103 EndCleanPrice N Value included in trade submission	request report
27104 EndSettlDate N Value included in trade submission	request report
27105 EndYield N Value included in trade submission	request report
27106 Rate N Value included in trade submission	request report
27107 Delta N Value included in trade submission	request report
218 Spread N Value included in trade submission	request report
662 BenchmarkPrice N Value included in trade submission	request report
699 BenchmarkSecurityID N Value included in trade submission	request report
810 UnderlyingPx N Value included in trade submission	request report
27109 PBBreached N Denotes whether the off book su	ibmission breaches
the Price Bands Value Meaning	
0 No	
1 Yes	
48 Security ID Y Value included in trade submission	request report
552 NoSides Y Value included in trade submission	request report
→ 54 Side Y Value included in trade submission	request report
→ 45 NoPartyIDs Y Value included in trade submission	request report
→ 448 PartyID Y Firm ID of firm submitting request	
→ 447 PartyID Source Y The valid value will be;	_
Value Meaning	
D Proprietary/Custom code	le
→ 452 Party Role Y The valid value will be;	
Value Meaning	
1 Executing Firm	
	st

→	•	447	PartyID Source	Υ	The valid val	lue will be:
		147	T dityib codice	'		Meaning
					-	Proprietary/Custom code
•	→	452	Party Role	Y	The valid val	<u> </u>
	'	.02	i arty rtolo			Meaning
					-	Trader (5 digit number)
→	→	448	PartyID	Y		up ID of firm submitting request
→	→	447	PartyID Source	Y	The valid val	
			,		Value	Meaning
						Proprietary/Custom code
→	→	452	Party Role	Y	The valid val	· · · ·
			,		Value	Meaning
						Trader Group
→	1	Accou	ınt	Υ	Value inclu	ded in trade submission request report
→	52	Order	Capacity	Υ	Value inclu	ded in trade submission request report
	8					
•	15 9	AccruedInterestAmt		N	Value inclu	ded in trade submission request report
→	54	Side		Υ	Value inclu	ded in trade submission request report
→	45 3	NoPa	rtyIDs	Υ	Value included in trade submission request report for contra side	
→	→	448	PartyID	Υ	counterpar	ty Firm ID of the submitting request
→	→	447	PartyID Source	Υ	The valid val	lue will be;
					Value	Meaning
					D	Proprietary/Custom code
→	+	452	Party Role	Υ	The valid val	lue will be;
					Value	Meaning
					17	Counterparty Firm
→	→	448	PartyID	Y*	=	ly in Single Party Reporting model ed in trade submission request report for contra
→	→	447	PartyID Source	Y*	Required on	ly in Single Party Reporting model
					Value	Meaning
					D	Proprietary/Custom code
→	•	452	Party Role	Y*	Required on	ly in Single Party Reporting model
					Value	Meaning
					37	Counterparty Trader
→	•	448	PartyID	Y*	=	ly in Single Party Reporting model p ID of the Trader in the counterparty d)

→	•	447	PartyID Source	Y*	Required on	ly in Single Party Reporting model
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Y*	Required on	ly in Single Party Reporting model
					Value	Meaning
					100	Counterparty Trader Group
→	52 8	Order	Capacity	Y*	-	n Single Party Trade Reporting model ded in trade submission request report
→	1	Accou	unt	Y*	•	n Single Party Trade Reporting model ded in trade submission request report

8.6.2.2 Trade Capture Report Notification to the counterparty Firm of the Trade Report Submission Request

Tag	Field Name	₹eq	Description
Stanc	lard Header		
35	MsgType	Υ	AE = Trade Capture Report
Mess	age Body		
118 0	ApplID	Y	Identifier of the partition.
118 1	ApplSeqNum	Y	Partition's sequence number for trade.
135 0	ApplLastSeqNum	N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
135 2	ApplResendFlag	N	Whether the message is sent in response to an Application Message Request. Absence of this field is interpreted as Original Transmission (N).
			Value Meaning
			Y Response to Application Message Request
			N Original Transmission
571	TradeReportID	N	Message Identifier assigned to message by <u>server</u> .
100 3	TradeID	Y	Unique trade identifier generated by the system
104 1	FirmTradeID	Υ	Value included in trade submission request report
<u>104</u> <u>2</u>	<u>SecondaryFirmTradelD</u>	N	Value included in trade submission request report
112 3	TradeHandlingInstr	Υ	Value included in trade submission request report

487	TradeReportType TradeReportTransType	Y	Identified the Trade Report action for the trade capture report (submit, cancel, notification, accept, decline) Valid value for this message will be; Value Meaning 11 Alleged New The transaction identifier of the action i.e. new submission/withdrawal/response/ cancellation. The valid value for this message will be ; Value Meaning
			0 New
829	TrdSubType	Υ	Value included in trade submission request report
60	TransactTime	Υ	Value included in trade submission request report
32	LastQty	Υ	Value included in trade submission request report
31	LastPx	Υ	Value included in trade submission request report
120	SettlCurrency	N	Value included in trade submission request report
669	LastParPx	N	In the case of fixed income instruments quoted in discount rate or yield, the Trade Capture Report should include the traded price expressed as a percentage of par in the field.
423	PriceType	N	Quotation format for instrument. If an instrument is being traded on volatility, this field will be Price Per Unit (2) ⁴ . Absence of this field should be interpreted as Price Per Unit (2).
			Value Meaning
			1 Percent of Par
			2 Price Per Unit
			4 Discount Rate
			9 Yield
236	Yield	N	In the case of fixed income instruments quoted in percentage of par, the notification should include the implied yield of the trade in the field.
381	GrossTradeAmt	N	Consideration excluding accrued interest is specified.
139	TradePublishIndicator	N	Value included in trade submission request report. If the internal Off Book status has values 1,3,4 or 6, the Trade Publish Indicator will be stamped based on the Publish Indicator specified in the Trade Type table for the TradeSubType (829) mentioned here, regardless of whether the user has submitted a value for the TradePublishIndactor (1390)
112 5	OrigTradeDate	N	Value included in trade submission request report

⁴ This is because FIX protocol does not have an enum to identify when an instrument is traded on volatility.

112 6	OrigT	radeID		N	Value included in trade submission request report		
48	Security ID		Υ	Value included in trade submission request report			
762	Secur	itySub7	ype	N	Value included in trade submission request report		
64	SettID	ate		N	Value included in trade submission request report		
111 5	Order	Catego	ry	N	Value included in trade submission request report		
271 00	Strate	gyLink	D	N	Value included in trade submission request report		
271 10	Strate	gу Тур	e	N	Value included in trade submission request report		
271 01	Attribu	ute		N	Value included in trade submission request report		
271 02	Clean	Price		N	Value included in trade submission request report		
921	StartC	Cash		N	Value included in trade submission request report		
922	EndC	ash		N	Value included in trade submission request report		
920	EndA	ccruedl	nterestAmt	N	Value included in trade submission request report		
271 03	EndCleanPrice			N	Value included in trade submission request report		
271 04	EndSettlDate			N	Value included in trade submission request report		
271 05	EndYield			N	Value included in trade submission request report		
271 06	Rate			N	Value included in trade submission request report		
271 07	Delta			N	Value included in trade submission request report		
218	Sprea	ıd		N	Value included in trade submission request report		
662	Bench	nmarkP	rice	N	Value included in trade submission request report		
699	Bench	nmarkS	ecurityID	N	Value included in trade submission request report		
810	Under	rlyingPx	(N	Value included in trade submission request report		
320 22	LastO	ptPx		N	Converted price of the executed volatility of the options instrument.		
118 8	Volati	lity		N	Converted volatility of the executed price of the options instrument.		
552	NoSid	les		Υ	Value included in trade submission request report		
→	54	Side		Υ	Value included in trade submission request report		
→	453	NoPa	rtylDs	Υ	1		
→	→	448	PartyID	Υ	Firm ID of firm submitting request		
→	→	447	PartyID Source	Υ	The valid value will be;		
					Value Meaning		
					D Proprietary/Custom code		

→	•	452	Party Role	Υ	The valid	value will be;
					Value	Meaning
					17	Counterparty Firm
→	→	448	PartyID	N	Counterp	arty node (i.e. branch)
→	→	447	PartyID Source	N	Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	N	Value	Meaning
					100	Counterparty Trader Group
→	118	NetM	oney	N	inclusive	sideration due from the buyer to the seller of accrued interest. Required if the trade is d or TIPS.
→	159	Accru	edInterestAmt	N	TCR that Value inc	eluded in e submission request will include in sent to Initiating Firm. Eluded in counterparty response will include in sent to the counterparty Firm.
→	54	Side		Y	Value inc	luded in trade submission request report
•	453	NoPa	rtyIDs	Y Value included in trade submission request rep contra side		
→	→	448	PartyID	Υ	Firm ID of	the firm that the notification is sent to
→	→	447	PartyID Source	Υ	The valid	value will be;
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Υ	The valid	value will be;
					Value	Meaning
					1	Executing Firm
870	Nolns	trAttrib		N	Value in t	this field will always be "2".
→	871	InstrA	ttribType	N	Codes to	represent the type of instrument attribute.
					Value	Meaning
					101	Instrument Category
					102	Instrument Sub Category
→	872	InstrA	.ttribValue	N	field. If InstrAtt contain I the instru If InstrAtt	ribType = 102, the InstrAttribValue field will nstrument Sub Category attached to the

8.6.2.3 Trade Capture Report Ack to the counterparty Firm on response of the notification of a trade submission

Stanc	lard Header		
35	MsgType	Υ	AR = Trade Capture Report Acknowledgment
Mess	age Body		
118 1	ApplSeqNum	N	Partition's sequence number for trade.
135 0	ApplLastSeqNum	N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
571	TradeReportID	N	Value, if any, included in response
818	SecondaryTradeReportID	N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.
1003	TradeID	Y	Unique trade identifier generated by the system
1041	FirmTradeID	Υ	The trade identifier specified by the counterparties
1123	TradeHandlingInstr	Υ	Value included in response
939	TrdRptStatus	Y	Whether the trade report is accepted or rejected by the System
			The valid values will be;
			Value Meaning
			0 Accepted
			1 Rejected
751	TradeReportReject Reason	N	Reject code. Required if the request is rejected.
58	Text	N	Reject reason. Required if request is rejected.
856	TradeReportType	Υ	Value included in response
487	TradeReportTransType	Y	Value included in response
573	MatchStatus	Y	The Status of the Trade whether it is matched or unmatched
			The valid value will be;
			Value Meaning
			1 Unmatched
829	TrdSubType	Υ	Value included in response
60	TransactTime	Υ	Value included in response
32	LastQty	Υ	Value included in response
31	LastPx	Υ	Value included in response
120	SettlCurrency	N	Value included in response
1390	TradePublishIndicator	N	Value included in response. If the internal Off Book status has values 1,3,4 or 6, the Trade Publish Indicator will be stamped based on the Publish Indicator specified in the Trade Type table for the TradeSubType (829) mentioned here, regardless of whether the user has submitted a value for the TradePublishIndactor (1390)
112 5	OrigTradeDate	N	Value included in response

112 6	Orig	TradeID)	N	Value included in response		
48	Security ID			Υ	Value included in response		
762	SecuritySubType			N	Value included in response		
64	SettlDate			N	Value included in response		
111 5	OrderCategory			N	Value included in response		
271 00	Strat	egyLinl	ΚID	N	Value included in response		
271 10	Strat	egy Ty	pe	N	Value included in response		
271 01	Attrib	oute		N	Value included in response		
271 02	Clea	nPrice		N	Value included in response		
921	Start	Cash		N	Value included in response		
922	EndC	Cash		N	Value included in response		
920	EndAccruedInterestAmt			N	Value included in response		
271 03	EndCleanPrice			N	Value included in response		
271 04	EndSettlDate			N	Value included in response		
271 05	EndYield			N	Value included in response		
271 06	Rate			N	Value included in response		
271 07	Delta	a		N	Value included in response		
218	Spre	ad		N	Value included in response		
662	Benc	hmark	Price	N	Value included in response		
699	BenchmarkSecurityID		N	Value included in response			
810	UnderlyingPx		N	Value included in response			
552	NoSides			Υ	Value included in response		
2710 9	PBBreached		N	Value included in response			
→	54 Side		Υ	Value included in response			
→	453 NoPartyIDs		Y	Value included in response			
→	→	448	PartyID	Y	Firm ID of firm of the response		
→	→	447	PartyID Source	Y	The valid value will be;		
					Value Meaning		
					D Proprietary/Custom code		

→	→	452	Party Role	Y	The valid v	ralue will be;
					Value	Meaning
					1	Executing Firm
→	→	448	PartyID	Υ	Trader ID	of firm of the response
→	→	447	PartyID Source	Υ	The valid v	ralue will be;
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Y	The valid v	alue will be;
					Value	Meaning
					53	Trader (5 digit number)
→	→	448	PartyID	Υ	Trader Gro	oup ID of firm of the response
•	→	447	PartyID Source	Υ	The valid v	alue will be;
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Y	The valid v	ralue will be;
					Value	Meaning
						•
					76	Trader Group
→	1	Accou	nt	Y	This is the	Trader Group Client Account
→					This is the Value inclu	Trader Group Client Account Ided in response
+	528	Order	Capacity	Y	This is the Value inclu	Trader Group Client Account aded in response aded in response
,		Order			This is the Value inclu	Trader Group Client Account Ided in response
,	528 15	Order	Capacity	Y	This is the Value inclu Value inclu Value inclu	Trader Group Client Account aded in response aded in response
→	528 15 9	Order	Capacity redInterestAmt	Y	This is the Value inclu Value inclu Value inclu Value inclu	Trader Group Client Account aded in response aded in response aded in response
→	528 15 9 54	Ordero Accru	Capacity redInterestAmt	Y N Y	This is the Value inclu Value inclu Value inclu Value inclu Value inclu Value inclu	Trader Group Client Account aded in response
→	528 15 9 54 453	Ordero Accru Side NoPar	Capacity redInterestAmt	Y N Y Y	This is the Value inclu Value inclu Value inclu Value inclu Value inclu counterpar	Trader Group Client Account aded in response for contra side
→	528 15 9 54 453	Ordero Accru Side NoPar 448	Capacity redInterestAmt tylDs PartylD	Y N Y Y Y	This is the Value inclu Value inclu Value inclu Value inclu Value inclu counterpar	Trader Group Client Account aded in response for contra side atty Firm of the response
→	528 15 9 54 453	Ordero Accru Side NoPar 448	Capacity redInterestAmt tylDs PartylD	Y N Y Y Y	This is the Value inclu Value inclu Value inclu Value inclu Value inclu counterpar	Trader Group Client Account aded in response additional additio
→	528 15 9 54 453	Ordero Accru Side NoPar 448	Capacity redInterestAmt tylDs PartylD	Y N Y Y Y	This is the Value inclu Value inclu Value inclu Value inclu Value inclu Value inclu counterpar The valid v Value D	Trader Group Client Account aded in response for contra side at the Firm of the response adule will be; Meaning
→	528 15 9 54 453 →	Orderd Accru Side NoPar 448 447	Capacity redInterestAmt tylDs PartyID PartyID Source	Y N Y Y Y Y	This is the Value inclu Value inclu Value inclu Value inclu Value inclu Value inclu counterpar The valid v Value D	Trader Group Client Account aded in response for contra side at y Firm of the response aralue will be; Meaning Proprietary/Custom code

8.6.2.4 Trade Capture Report for the confirmation of the acceptance of the Trade

Tag	Field Name	Req		Description
Stan	dard Header			
35	MsgType		Υ	AE = Trade Capture Report

Mes	Message Body					
11 80	AppIID	Y	Identifier of the partition.			
11 81	ApplSeqNum	Y	Partition's sequence number for trade.			
13 50	ApplLastSeqNum	N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.			
13 52	ApplResendFlag	N	Whether the message is sent in response to an Application Message Request. Absence of this field is interpreted as Original Transmission (N).			
			Value Meaning			
			Y Response to Application Message Request			
			N Original Transmission			
57 1	TradeReportID	N	Identifier assigned to message by the server. Each TCR should contain a different TradeReportID			
81 8	SecondaryTradeReportID	N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.			
10 03	TradeID	Y	Unique trade identifier generated by the system			
82	TradeLinkID	Υ	Used in a confirmation report.			
0			A transaction identifier generated by the system. Both TCRs should contain the same TradeLinkID			
10 41	FirmTradeID	Y	Same value as in TCR of each party			
11 23	TradeHandlingInstr	Y	Specified how the Trade Capture Report should be handled, whether it is Single Party Reporting model, Dual Party Reporting model or a trade confirmation			
			The valid values will be;			
			Value Meaning			
			0 Trade Confirmation			
11	OrigTrade HandlingInstr	Υ				
24			The valid value will be;			
			Value Meaning			
			One-Party Report for Pass Through (For Dual Party Trade Reporting)			
			Two Party Report (For Single Party Trade Reporting)			

85 6	TradeReportType	Y	Identified the Trade Report action for the trade capture report (submit, cancel, notification, accept, decline)
			The valid value will be;
			Value Meaning
			0 Submit
48 7	TradeReportTransType	Y	The transaction identifier of the action i.e. new submission/withdrawal/response/ cancellation.
			The valid values will be;
			Value Meaning
			2 Replace
			Used in following messages;
			Dual Party Trade Reporting model
			Confirmation messages for initiating Firm and Counterparty side
			Single Party Trade Reporting model
			Confirmation message for initiating Firm
			0 New
			Used in the following message
			Single Party Reporting model
			Confirmation message for counterparty side of the trade
57 3	MatchStatus	Y	Status of the Trade, whether it is matched or unmatched
			The valid value will be;
			Value Meaning
			0 Matched
27 00	IsMarketOpsRequest	N	Specifies whether the action is done by JSE Market Operations/Surveillance departments
0			Value Meaning
			1 Yes
15 0	ЕхесТуре	Y	Execution Type of the Trade, whether it is a confirmed trade or cancelled trade
			The valid value will be;
			Value Meaning
			F Trade
82 9	TrdSubType	Y	Value included in each TCR

82	TrdType	Υ	The valid value will be
8			Value Meaning
			54 Off Book Trade
57	MatchType	Υ	Process at which this trade was matched
4			The valid values will be;
			Value Meaning
			1 One-Party Report for Pass Through
			2 Two Party Report
			Off Book Trade (One Party Report for Pass Through) (1) will be used to define the Dual Party Reporting model
			Off Book Trade (Two Party Report) (2) will be used to define the Single Party Reporting model
11 15	OrderCategory	Υ	The type of the order that makes the trade The valid value will be:
			Value Meaning
			3 Off Book trade
60	TransactTime	Y	TCR that sent to Initiating Firm.
			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
32	LastQty	Y	Value included in submission request will include in TCR that sent to Initiating Firm.
			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
42 3	PriceType	N	Quotation format for instrument. If an instrument is being traded on volatility, this field will be Price Per Unit (2) ⁵ . Absence of this field should be interpreted as Price Per Unit (2).
			Value Meaning
			1 Percent of Par
			2 Price Per Unit
			4 Discount Rate
			9 Yield
31	LastPx	Y	Value included in submission request will include in TCR that sent to Initiating Firm.
			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
66 9	LastParPx	N	Implied price per unit of the trade. Required only when the PriceType(423) is Discount Rate(1) or Yield(9).

⁵ This is because FIX protocol does not have an enum to identify when an instrument is traded on volatility.

23 6	S Yield N		Implied yield of the trade. Required only for fixed income instruments and only when the PriceType (423) is Percent of Par(1) or Price per Unit(2).
12 0	SettlCurrency	N	Value included in submission request will include in TCR that sent to Initiating Firm. Value included in counterparty response will include in the TCR sent to the counterparty Firm.
15	Currency	N	Currency attached to the instrument. This is the trading currency of the instrument. This will be populated for both On Book and Off Book trades.
11 25	OrigTradeDate		Value included in submission request will include in TCR that sent to Initiating Firm. Value included in counterparty response will include in the TCR sent to the counterparty Firm.
11 26	OrigTradeID		Value included in submission request will include in TCR that sent to Initiating Firm. Value included in counterparty response will include in the TCR sent to the counterparty Firm.
48	Security ID	Y	Value included in e submission request will include in TCR that sent to Initiating Firm. Value included in counterparty response will include in the TCR sent to the counterparty Firm.
38 1	GrossTradeAmt	N	Total consideration due from the buyer to the seller (Price * Qty).
76 2	SecuritySubType	N	Value included in e submission request will include in TCR that sent to Initiating Firm. Value included in counterparty response will include in the TCR sent to the counterparty Firm.
64	SettlDate	N	Value included in e submission request will include in TCR that sent to Initiating Firm. Value included in counterparty response will include in the TCR sent to the counterparty Firm.
11 15	OrderCategory	N	Value included in e submission request will include in TCR that sent to Initiating Firm. Value included in counterparty response will include in the TCR sent to the counterparty Firm.
27 10 0	StrategyLinkID	N	Value included in e submission request will include in TCR that sent to Initiating Firm. Value included in counterparty response will include in
27 11 0	Strategy Type N		the TCR sent to the counterparty Firm. Value included in e submission request will include in TCR that sent to Initiating Firm. Value included in counterparty response will include in the TCR sent to the counterparty Firm
27 10 1	Attribute	N	Value included in e submission request will include in TCR that sent to Initiating Firm. Value included in counterparty response will include in the TCR sent to the counterparty Firm.

27 10	CleanPrice	N	Value included in e submission request will include in TCR that sent to Initiating Firm.
2			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
92 1	StartCash	N	Value included in e submission request will include in TCR that sent to Initiating Firm.
			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
92 2	EndCash	N	Value included in e submission request will include in TCR that sent to Initiating Firm.
			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
92 0	EndAccruedInterestAmt	N	Value included in e submission request will include in TCR that sent to Initiating Firm.
			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
27 10	EndCleanPrice	N	Value included in e submission request will include in TCR that sent to Initiating Firm.
3			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
27 10	EndSettlDate	N	Value included in e submission request will include in TCR that sent to Initiating Firm.
4			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
27 10	EndYield	N	Value included in e submission request will include in TCR that sent to Initiating Firm.
5			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
27 10	Rate	N	Value included in e submission request will include in TCR that sent to Initiating Firm.
6			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
27 10	Delta	N	Value included in e submission request will include in TCR that sent to Initiating Firm.
7			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
21 8	Spread	N	Value included in e submission request will include in TCR that sent to Initiating Firm.
			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
66 2	BenchmarkPrice	N	Value included in e submission request will include in TCR that sent to Initiating Firm.
			Value included in counterparty response will include in the TCR sent to the counterparty Firm.
69 9	BenchmarkSecurityID	N	Value included in e submission request will include in TCR that sent to Initiating Firm.
			Value included in counterparty response will include in

81 0	Unde	erlyingF	Px	N	Value included in e submission request will include in TCR that sent to Initiating Firm.
				Value included in counterparty response will include in the TCR sent to the counterparty Firm.	
32 02 2	LastOptPx			N	Converted price of the executed volatility of the options instrument.
11 88	Vola	tility		N	Converted volatility of the executed price of the options instrument.
45 4	NoS	ecurity <i>F</i>	AltID	N	If present, value in this field will always be "1".
→	45 5	Secur	rityAltID	N	Identification number of the instrument. This field will identify the ISIN.
•	45	Secur	rityAltID Source	N	Type of instrument identification used. Required if SecurityAltID (455) is specified.
	6				Value Meaning
					4 ISIN
12 27	Prod	luctCom	nplex	N	Segment the instrument belongs to.
20	PutC	utOrCall		N	Required for options instruments.
1					Value Meaning
					0 Put
					1 Call
20 2	Strik	ePrice		N	Strike price of an options instrument. Required for options instruments.
55 2	NoS	ides		Y	Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	54 Side		Y	Value included in submission request will include in TCR that sent to Initiating Firm.	
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	45 3	NoPartyIDs		Υ	Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	•	448	PartyID	Y	Executing Firm
					Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.

→	→	447	PartyID Source	Υ	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
					Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	→	452	Party Role	Y	· · ·
			, , ,		Value Meaning
					1 Executing Firm
					Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	→	448	PartyID	Υ	Trader ID
					Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	→	447	PartyID Source	Y	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
					Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	→	452	Party Role	Y	The valid value will be;
					Value Meaning
					53 Trader (5 digit number)
					Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	→	448	PartyID	Υ	
					Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	→	447	PartyID Source	Υ	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
					Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.

→	•	452	Party Role	Υ	The valid value will be;
					Value Meaning
					76 Trader Group
					Value included in submission request will include in TCR that sent to Initiating Firm. Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	1	Acco	punt	Y	
					Value included in counterparty response will include in the TCR sent to the counterparty Firm. Initiating party's Client Account will not be sent to the counterparty Firm. Counterparty Firm's response will not be sent to the initiating party
→	52 8	Orde	rCapacity	Y	Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
•	11 8	NetMoney		N	Total consideration due from the buyer to the seller inclusive of accrued interest. Required if the trade is for a Bond or TIPS.
•	15 9	AccruedInterestAmt		Z	Value included in e submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	54	Side		Y	Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	45 3	NoPa	artyIDs	Y	TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	→	44	PartyID	Υ	
		8			Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.
→	→	44	PartyID Source	Υ	D
		7			Value included in submission request will include in TCR that sent to Initiating Firm.
					Value included in counterparty response will include in the TCR sent to the counterparty Firm.

→	→	45	Party Role	Υ	The valid	value will be;
		2			Value	Meaning
					17	Counterparty Firm
						cluded in submission request will include in sent to Initiating Firm.
						cluded in counterparty response will include in sent to the counterparty Firm.
→	•	448	PartyID	Y*	-	only in Single Party Reporting model uded in trade submission request report for contra
→	→	447	PartyID Source	Y*	Required	only in Single Party Reporting model
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Y*	Required	only in Single Party Reporting model
					Value	Meaning
					37	Counterparty Trader
→	•	448	PartyID	Y*	-	only in Single Party Reporting model oup ID of the Trader in the counterparty red)
→	→	447	PartyID Source	Y*	Required	only in Single Party Reporting model
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Y*	Required	only in Single Party Reporting model
					Value	Meaning
					100	Counterparty Trader Group
•	52 8	Orde	erCapacity	Υ*	Dealing (I in Single Party Trade Reporting model Capacity of the counterparty side cluded in submission request report for contra
→	1	Acco	ount	Y*	Required	I in Single Party Trade Reporting model
					This is th	e Client Account of the counterparty Firm
					Value ind side	cluded in submission request report for contra
•	11 8	NetN	<i>l</i> loney	Z	inclusive	nsideration due from the buyer to the seller of accrued interest. Required if the trade is ad or TIPS.
87 0	NoIr	strAttr	ib	N	Value in	this field will always be "2".
→	87	Instr	AttribType	N	Codes to	represent the type of instrument attribute.
	1		,,		Value	Meaning
					101	Instrument Category

→	87 2	InstrAttribValue	N	Attribute value appropriate to the InstrAttribType (871) field. If InstrAttribType = 101, the InstrAttribValue field will contain Instrument Category short code attached to the instrument. If InstrAttribType = 102, the InstrAttribValue field will
				contain Instrument Sub Category attached to the instrument.

8.6.2.5 Trade Capture Report for the confirmation of the Decline of the Trade

Tag	Field Name Req	D	escription
Stan	dard Header		
35	MsgType	Υ	AE = Trade Capture Report
Mess	sage Body		
118 0	AppIID	Y	Identifier of the partition.
118 1	ApplSeqNum	Υ	Partition's sequence number for trade.
135 0	ApplLastSeqNum	N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
135 2	ApplResendFlag	N	Whether the message is sent in response to an Application Message Request. Absence of this field is interpreted as Original Transmission (N).
			Value Meaning
			Y Response to Application Message Request
			N Original Transmission
571	TradeReportID	N	Message identifier assigned to message by server.
818	SecondaryTradeReportID	N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.
100 3	TradeID	Υ	Unique trade identifier generated by the system
104 1	FirmTradeID	Y	Same value as in TCR of each party
112 3	TradeHandlingInstr	Y	Specified how the Trade Capture Report should be handled, whether it is Single Party Reporting model, Dual Party Reporting model or a trade confirmation
			Valid value for this message is
			Value Meaning
			3 One-Party Report for Pass Through
856	TradeReportType	Y	Identified the Trade Report action for the trade capture report (submit, cancel, notification, accept, decline)
			The valid value for this message;
			Value Meaning
			3 Decline
487	TradeReportTransType	Υ	The transaction identifier of the action i.e. new submission/withdrawal/response/ cancellation.
			The valid value for this message;
			Value Meaning
Volun	ne 03 – Post Trade Gateway (FIX 5.0 S	P2) v3	.07 1 Cancel Page 113 / 183
	<u> </u>	1	I

132 8	RejectText	Y	Reason, if any, provided when the request was declined by contra firm
270 00	IsMarketOpsRequest	N	Specifies whether the action is done by JSE Market Operations/Surveillance departments
			Value Meaning
			1 Yes
829	TrdSubType	Υ	Value included in submission request
60	TransactTime	Y*	Required only if a value is included in submission request
32	LastQty	Υ	Value included in submission request
31	LastPx	Υ	Value included in submission request
423	PriceType	N	Quotation format for instrument. If an instrument is being traded on volatility, this field will be Price Per Unit (2) ⁶ . Absence of this field should be interpreted as Price Per Unit (2).
			Value Meaning
			1 Percent of Par
			2 Price Per Unit
			4 Discount Rate
			9 Yield
669	LastParPx	N	Value included in trade submission request report
236	Yield	N	Value included in trade submission request report
381	GrossTradeAmt	N	Value included in trade submission request report
120	SettlCurrency	N	Value included in submission request
15	Currency	N	Currency attached to the instrument. This is the trading currency of the instrument. This will be populated for both On Book and Off Book trades.
139	TradePublishIndicator	N	Value included in submission request. If the internal Off Book status has values 1,3,4 or 6, the Trade Publish Indicator will be stamped based on the Publish Indicator specified in the Trade Type table for the TradeSubType (829) mentioned here, regardless of whether the user has submitted a value for the TradePublishIndactor (1390)
112 5	OrigTradeDate	Y*	Required only if a value is included in submission request
112 6	OrigTradeID	Y*	Required only if a value included in submission request
48	Security ID	Υ	Value included in submission request
762	SecuritySubType	Н	Value included in submission request
64	SettlDate	N	Value included in submission request

⁶ This is because FIX protocol does not have an enum to identify when an instrument is traded on volatility.

444	0.1.	0-1		T	Web attack to the advantage of
111 5	Order	Catego	ory	N	Value included in submission request
271 00	Strate	egyLink	ID	N	Value included in submission request
271 10	Strate	еду Тур	e	N	Value included in submission request
271 01	Attrib	ute		N	Value included in submission request
271 02	Clear	Price		N	Value included in submission request
159	Accru	edInter	estAmt	N	Value included in submission request
921	Start0	Cash		N	Value included in submission request
922	EndC	ash		N	Value included in submission request
920	EndA	ccrued	InterestAmt	N	Value included in submission request
271 03	EndC	leanPri	ce	N	Value included in submission request
271 04	EndS	ettlDate	9	N	Value included in submission request
271 05	EndY	ield		N	Value included in submission request
271 06	Rate			N	Value included in submission request
271 07	Delta			N	Value included in submission request
218	Sprea	ad		N	Value included in submission request
662	Bencl	nmarkF	Price	N	Value included in submission request
699	Bencl	nmarkS	SecurityID	N	Value included in submission request
810	Unde	rlyingP	x	N	Value included in submission request
320 22	LastC	ptPx		N	Converted price of the executed volatility of the options instrument.
118 8	Volati	lity		N	Converted volatility of the executed price of the options instrument.
552	NoSid	des		Υ	Value included in submission request
→	54	Side		Y	Value included in submission request
→	453	NoPa	rtyIDs	Υ	Value included in submission request
→	→	448	PartyID	Y	Firm ID of firm in submission request
→	→	447	PartyID Source	Υ	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Υ	The valid value will be;
					Value Meaning
					1 Executing Firm
	•				

		4.40	D ID		T + 1D (f) + 1 + 1 + 1	
-	•	448	PartyID	Y	Trader ID of firm in submission request	
→	→	447	PartyID Source	Y	The valid value will be;	
					Value Meaning	
					D Proprietary/Custom code	
→	→	452	Party Role	Υ	The valid value will be;	
					Value Meaning	
					53 Trader (5 digit number)	
→	→	448	PartyID	Υ	Trader Group ID of firm in submission request	
→	→	447	PartyID Source	Υ	The valid value will be;	
					Value Meaning	
					D Proprietary/Custom code	
→	→	452	Party Role	Υ	The valid value will be;	
					Value Meaning	
					76 Trader Group	
→	528	Orde	Capacity	Y	Value included in submission request	
→	1	Account		Υ	Value included in submission request	
→	118	NetMoney		N	Total consideration due from the buyer to the seller inclusive of accrued interest. Required if the trade is for a Bond or TIPS.	
•	159	AccruedInterestAmt		N	Value included in submission request will include in TCR that sent to Initiating Firm. Value included in counterparty response will include in the TCR sent to the counterparty Firm.	
→	54	Side		Y	Value included in submission request	
→	453		ırtylDs	Y	Value included in submission request for the contra side	
•	→	448	PartyID	Υ	counterparty Firm in submission request	
→	→	447	PartyID Source	Y	The valid value will be;	
					Value Meaning	
					D Proprietary/Custom code	
→	→	452	Party Role	Υ	The valid value will be;	
					Value Meaning	
					17 Counterparty Firm	
870	Nolne	l strAttrib		N	Value in this field will always be "2".	
→	871	ı		N	Codes to represent the type of instrument attribute.	
7	0/1	IIISU <i>P</i>	AttribType	IN	Value Meaning	
					101 Instrument Category	
					102 Instrument Sub Category	

•	872	InstrAttribValue	N	Attribute value appropriate to the InstrAttribType (871) field.
				If InstrAttribType = 101, the InstrAttribValue field will contain Instrument Category short code attached to the instrument.
				If InstrAttribType = 102, the InstrAttribValue field will contain Instrument Sub Category attached to the instrument.

8.6.2.6 Acknowledgment of the Withdrawal of a Submission Request to the initiating Firm – TCR Ack (AR)

Tag	Field Name Req	D	escription
Stan	dard Header		
35	MsgType	Υ	AR = Trade Capture Report
Mess	sage Body		
11 81	ApplSeqNum	N	Partition's sequence number for trade.
13 50	ApplLastSeqNum	N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
571	TradeReportID	N	Value, if any, included in cancellation request
81 8	SecondaryTradeReportID	N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.
100 3	TradeID	Υ	Value included in cancellation request
112 3	TradeHandlingInstr	Υ	Value included in cancellation request
939	TrdRptStatus	Y	Whether the trade report is accepted or rejected by the System The valid values will be
			Value Meaning
			0 Accepted
			1 Rejected
751	TradeReportReject Reason	N	Reject code. Required if the request is rejected.
58	Text	N	Reject reason. Required if request is rejected.
856	TradeReportType	Υ	Value included in cancellation request
487	TradeReportTransType	Υ	Value included in cancellation request
573	MatchStatus	Υ	Status of the Trade, whether it is matched or unmatched The valid values will be;
			Value Meaning
			0 Matched
			1 Unmatched
48	Security ID	Υ	Value included in submission request

60	Trans	actTime		Y	Time the m	nessage is generated by the System
552	52 NoSides		Y	The valid v	s reporting in this message (buy and sell). ralue will be 2.	
						d for both Single and Dual Party Reporting has to specify the counterparty Firm details
					Even in Sir has to be s	ngle Party Reporting model the counterparty Firm pecified.
→	54	Side		Y	Side of rep submission	orting firm. Value included in withdrawal of request
→	453	NoPa	rtyIDs	Υ	Valid value	is 3
→	→	448	PartyID	Υ	Firm ID for	reporting firm
→	→	447	PartyID Source	Υ	The valid v	alue will be;
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Υ	The valid v	alue will be;
					Value	Meaning
					1	Executing Firm
→	→	448	PartyID	Y	Trader ID o	of the firm the message is sent to
→	→	447	PartyID Source	Υ	The valid v	alue will be;
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Y	The valid v	alue will be;
					Value	Meaning
					53	Trader
→	→	448	PartyID	Y	Trader Gro	up ID of the firm the message is sent to
→	→	447	PartyID Source	Υ	The valid v	alue will be;
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Y	The valid v	alue will be;
					Value	Meaning
					76	Trader Group
→	1	Accou	ınt	N	Client Acco	ount of the party that the message is sent to
→	528	Order	Capacity	Y	Order Capa	acity of the party that the message is sent to
					Value	Meaning
					A	Agency
					P	Principal
•	54	Side		Y	Side of cor submission	ntra firm. Value included in the withdrawal of request
→	453	NoPa	rtyIDs	Y	Valid value	e is 1
→	→	448	PartyID	Υ	Firm ID of	contra firm

→	→	447	PartyID Source	Υ	The valid v	value will be;
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Υ	The valid v	value will be;
					Value	Meaning
					17	Contra Firm

8.6.2.7 Notification of withdrawal of a submission request to the counterparty Firm

Tag	Field Name Ro	eq Descr	ription
Standa	ard Header		
35	MsgType	Y	AR = Trade Capture Report Acknowledgment
Messa	ge Body		
1180	ApplID	Y	Identifier of the partition.
1181	ApplSeqNum	Υ	Partition's sequence number for trade.
1350	ApplLastSeqNum	N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
1352	ApplResendFlag	N	Whether the message is sent in response to an Application Message Request. Absence of this field is interpreted as Original Transmission (N).
			Value Meaning
			Y Response to Application Message Request
			N Original Transmission
571	TradeReportID	Υ	Identifier assigned to message by server.
1003	TradeID	Y	Unique trade identifier generated by the system
1041	FirmTradeID	Y	Value included in submission request
1123	TradeHandlingInstr	Y	Specified how the Trade Capture Report should be handled, whether it is Single Party Reporting model, Dual Party Reporting model or a trade confirmation The valid value for Dual Party Reporting model will be;
			Value Meaning
			One-Party Report for Pass Through
856	TradeReportType	Y	The valid value will be;
			Value Meaning
			11 Alleged New

487	TradeR		ransType	Υ	The valid value will be;
				Value Meaning	
					1 Cancel
829	TrdSub	Туре		Y	Value included in submission request
60	Transa	ctTime		Y	Value included in submission request
32	LastQty	/		Y	Value included in submission request
31	LastPx			Y	Value included in submission request
423	PriceT	уре		N	Quotation format for instrument. If an instrument is being traded on volatility, this field will be Price Per Unit (2) ⁷ . Absence of this field should be interpreted as Price Per Unit (2).
					Value Meaning
					1 Percent of Par
					2 Price Per Unit
					4 Discount Rate
					9 Yield
669	LastParPx			N	Value included in trade submission request report
236	Yield	Yield		N	Value included in trade submission request report
381	Gross	GrossTradeAmt		N	Value included in trade submission request report
1390	TradePublishIndicator			N	Value, if any, included in submission request. If the internal Off Book status has values 1,3,4 or 6, the Trade Publish Indicator will be stamped based on the Publish Indicator specified in the Trade Type table for the TradeSubType (829) mentioned here, regardless of whether the user has submitted a value for the TradePublishIndactor (1390)
48	Securit	yID		Y	Value included in submission request
552	NoSides		Y	No of sides reporting in this message (buy and sell). The valid value will be 2. This is used for both Single and Dual Party Reporting Model; it has to specify the counterparty Firm details Even in Single Party Reporting model the counterparty Firm has to be specified.	
→	54	Side		Y	Side of the firm that submits the withdrawal Valid values will be
				Value Meaning	
					2 Sell
→	453	NoPartyIDs		Y	Valid value is 1
→	→	448	PartyID	Y	Firm ID of the firm that submitted the withdrawal

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⁷ This is because FIX protocol does not have an enum to identify when an instrument is traded on volatility.

→	→	447	PartyID Source	Υ	The valid	value will be;
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Υ	The valid v	/alue will be;
					Value	Meaning
					17	Counterparty Firm
→	54	Side		Υ	Side of the	e firm that the message is sent to
					Value	Meaning
					1	Buy
					2	Sell
→	453	NoPa	rtyIDs	Υ	Valid value	e is 1
→	→	448	PartyID	Υ	Firm ID of	the firm that the notification is sent to
→	→	447	PartyID Source	Υ	The valid v	value will be;
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Υ	The valid v	/alue will be;
					Value	Meaning
					1	Executing Firm

8.6.2.8 Trade Capture Report Ack for cancellation request by the initiating Firm

Tag	Field Name R	eq [Description
Standa	rd Header		
35	MsgType	,	Y AR = Trade Capture Report Acknowledgment
Messag	ge Body		
1181	ApplSeqNum	ı	N Partition's sequence number for trade.
1350	ApplLastSeqNum	ı	N ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
571	TradeReportID	ı	N Value, if any, included in cancellation request
1003	TradeID	,	Y Value included in cancellation request
1123	TradeHandlingInstr	,	Y Value included in cancellation request
939	TrdRptStatus	,	Y Whether the trade report is accepted or rejected by the System The valid values will be Value Meaning
			0 Accepted
			1 Rejected
751	TradeReportReject Reason		N Reject code. Required if the request is rejected.
58	Text	ı	N Reject reason. Required if request is rejected.

856	Tradel	TradeReportType			Value included in cancellation request
487	Tradel	ReportTi	ransType	Υ	Value included in cancellation request
573	Match	Status		Υ	Status of the Trade, whether it is matched or unmatched
					The valid value will be;
					Value Meaning
					0 Matched
					1 Unmatched
48	Securi	tyID		Υ	Value included in cancellation request
60	Transa	actTime		Υ	Time message is generated by the system
552	NoSid	es		Υ	The valid value will be; 2
•	54	Side		Υ	Value in cancel request for executing firm
→	453	NoPai	rtyIDs	Υ	The valid value will be;
			1		3
→	→	448	PartyID	Y	Value in cancel request for executing firm
→	→	447	PartyID Source	Υ	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Υ	The valid value will be;
					Value Meaning
					1 Executing Firm
•	→	448	PartyID	Υ	Value in cancel request for Trader
→	→	447	PartyID Source	Υ	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Υ	The valid value will be;
					Value Meaning
					53 Trader (5 digit number)
	→	448	PartyID	Υ	Value in cancel request for Trader Group
+	→	447	PartyID Source	Υ	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Υ	The valid value will be;
					Value Meaning
				1	76 Trader Group
→	1	1 Account			Value included in cancellation request if any
→	528	Order	Capacity	Υ	Value included in cancellation request
→	54	Side		Υ	Value in cancel request for contra firm
→	453	NoPai	rtyIDs	Υ	1 or 3 (Value in cancel request for contra firm)
	1	1		_1	I.

→	→	448	PartyID	Υ	Value in cancel request for contra firm
→	→	447	PartyID Source	Y	The valid value will be;
			,		Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Υ	The valid value will be;
					Value Meaning
					17 Counterparty Firm
•	•	448	PartyID	Y*	Required only in Single Party Reporting model Value included in trade cancellation request report for contra side
→	•	447	PartyID Source	Y*	Required only in Single Party Reporting model
					Value Meaning
					D Proprietary/Custom code Identifies class or source of the PartyID (448) value. E.g: B = BIC C = Generally accepted market Firm identifier (e.g. NASD mnemonic) D = Proprietary/Custom code E = ISO Country Code F = Settlement Entity Location System always uses 'D' to indicate that the Source is Exchange System
→	→	452	Party Role	Y*	Required only in Single Party Reporting model
					Value Meaning
					37 Counterparty Trader
•	•	448	PartyID	Y*	Required only in Single Party Reporting model Trader Group ID of the Trader in the counterparty side(required)
→	→	447	PartyID Source	Y*	Required only in Single Party Reporting model
					Value Meaning
					D Proprietary/Custom code Identifies class or source of the PartyID (448) value. E.g: B = BIC C = Generally accepted market Firm identifier (e.g. NASD mnemonic) D = Proprietary/Custom code E = ISO Country Code F = Settlement Entity Location System always uses 'D' to indicate that the Source is Exchange System
→	→	452	Party Role	Y*	Required only in Single Party Reporting model
					Value Meaning
					100 Counterparty Trader Group

•	528	OrderCapacity	Y*	Required only in Single Party Trade Reporting model Value included in trade cancellation request for contra side
•	1	Account	N*	Required only in Single Party Trade Reporting model Value included in trade cancellation request if any for contra side

8.6.2.9 Trade Capture Report Notification to the counterparty to cancel the trade

Tag	Field Name	Req	Descr	iption
Standar	d Header			
35	MsgType		Υ	AE = Trade Capture Report
Messag	e Body		·	
1180	ApplID		Υ	Identifier of the partition.
1181	ApplSeqNum		Υ	Partition's sequence number for trade.
1350	ApplLastSeqNum		N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
1352	ApplResendFlag		N	Whether the message is sent in response to an Application Message Request. Absence of this field is interpreted as Original Transmission (N).
				Value Meaning
				Y Response to Application Message Request
				N Original Transmission
571	TradeReportID		Υ	Message Identifier assigned to message by server.
1003	TradeID		Y	Value included in cancellation request. The contra firm is expected to refer to this ID when accepting or declining the request.
1041	FirmTradeID		Υ	Identifier assigned to trade by counterparties
1123	TradeHandlingInstr		Y	Specified how the Trade Capture Report should be handled, whether it is Single Party Reporting model, Dual Party Reporting model or a trade confirmation
				The valid value for this message will be;
				Value Meaning
				3 One-Party Report for Pass Through
856	TradeReportType		Y	Identified the Trade Report action for the trade capture report (submit, cancel, notification, accept, decline)
				The valid value for this message will be;
				Value Meaning

					14 Alleged Trade Report Cancel
487	TradeReportTransType		Y	The transaction identifier of the action i.e. new submission/withdrawal/response/ cancellation. The valid value for this message will be; Value Meaning	
					0 New
829	TrdSi	ıbType		Υ	Off Book trade type
60		actTime	<u> </u>	Y	Time message is generated by the System
32	LastC		7	Y	Trade quantity
31	LastP			Y	Trade price
423		^ Type		N	Quotation format for instrument. If an instrument is being traded on volatility, this field will be Price Per Unit (2) ⁸ . Absence of this field should be interpreted as Price Per Unit (2).
					Value Meaning
					1 Percent of Par
					2 Price Per Unit
					4 Discount Rate
					9 Yield
669	LastF	ParPx		N	Value included in trade submission request report
236	Yield		N	Value included in trade submission request report	
381	GrossTradeAmt			N	Value included in trade submission request report
48	Secu	rityID		Υ	Identifier of the instrument (Instrument ID)
552	NoSides			Y	No of sides to the trade (buy and sell). The valid value will be 2 This is used for both Single and Dual Party Reporting Model; it has to specify the counterparty Firm details Even in Single Party Reporting model the counterparty Firm has to be specified.
→	54	Side		Υ	Side of the firm that submitted the request
→	453 NoPartyIDs		Υ	1	
→	→	448	PartyID	Υ	Firm ID of the firm that submitted the cancellation request
→	→	447	PartyID Source	Υ	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Υ	The valid value will be;
					Value Meaning
					17 Counterparty Firm
→	54	Side		Υ	Side of the firm that the notification is sent to

⁸ This is because FIX protocol does not have an enum to identify when an instrument is traded on volatility.

→	453	NoPa	tylDs	Υ	1
→	→	448	PartyID	Υ	Firm ID of the firm the notification is sent to
→	→	447	PartyID Source	Υ	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Υ	The valid value will be;
					Value Meaning
					1 Executing Firm
870) NoInstrAttrib			N	Value in this field will always be "2".
→	871	1 InstrAttribType		N	Codes to represent the type of instrument attribute.
					Value Meaning
					101 Instrument Category
					102 Instrument Sub Category
-	872	InstrAttribValue		N	Attribute value appropriate to the InstrAttribType (871) field. If InstrAttribType = 101, the InstrAttribValue field will contain Instrument Category short code attached to the instrument. If InstrAttribType = 102, the InstrAttribValue field will contain Instrument Sub Category attached to the instrument.

8.6.2.10 Trade Capture Report Ack of Response for the counterparty Firm on the cancellation

Tag	Field Name Req Description						
Standard Header							
35	MsgType		Υ	AR = Trade Capture Report Acknowledgment			
Messa	ge Body						
1181	ApplSeqNum		N	Partition's sequence number for trade.			
1350	ApplLastSeqNum		N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.			
571	TradeReportID		Υ	Identifier assigned to message by client			
1003	TradeID		Y	Identifier of notification the message is sent in response to. This should be the TradeID (1003) of the TCR sent to the contra firm to notify it of the request to cancel the trade.			
1123	TradeHandlingInstr		Y	Specified how the Trade Capture Report should be handled, whether it is Single Party Reporting model, Dual Party Reporting model or a trade confirmation The valid value for the message will be;			

				Value Meaning
				3 One-Party Report for Pass Through
856	TradeReportType		Y	Identified the Trade Report action for the trade capture report (submit, cancel, notification, accept, decline) Valid value for this message will be; Value Meaning
				2 Accept
487	Trodo	ReportTransType	Y	3 Decline The transaction identifier of the action i.e. new
407	ITAGE	тероптианутуре	'	submission/withdrawal/response/ cancellation.
				The valid value for this message will be;
				Value Meaning
				2 Replace
1328	Reject	tText	N	Reason request was declined by contra firm.
939	TrdRp	otStatus	Y	Whether the trade report is accepted or rejected by the System
				The valid values will be;
				Value Meaning
				0 Accepted
				1 Rejected
751	Trade	ReportReject Reason	N	Reject code. Required if the request is rejected.
58	Text		N	Reject reason. Required if request is rejected.
573	Match	Status	Y	The Status of the Trade whether it is matched or unmatched
				The valid value will be;
				Value Meaning
				0 Matched
				1 Unmatched
60	Transa	actTime	Y	Time message is generated by the system
48	Secur	ityID	Y	Identifier of the instrument. (Instrument ID)
552	NoSides		Y	No of sides to the trade (buy and sell). The valid value will be 2
				This is used for both Single and Dual Party Reporting Model; it has to specify the counterparty Firm details
				Even in Single Party Reporting model the counterparty Firm has to be specified.
→	54	Side	Y	Side of the Firm the message is sent by
→	453	NoPartyIDs	Y	3 JSE Markets requires 3 blocks to represent: 1. Firm (required) 2. Trader (required) 3. Trader Group (required)

_	→	448	PartyID	Υ	Firm ID of the Firm the message is sent by
7					
7	•	447	PartyID Source	Y	The valid value will be;
					Value Meaning
	+,-				D Proprietary/Custom code
→	→	452	Party Role	Y	The valid value will be;
					Value Meaning
					1 Executing Firm
•	•	448	PartyID	Y	Value in cancel response for Trader
→	→	447	PartyID Source	Y	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Y	The valid value will be;
					Value Meaning
					53 Trader (5 digit number)
•	→	448	PartyID	Y	Value in cancel response for Trader Group
→	•	447	PartyID Source	Y	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Y	The valid value will be;
					Value Meaning
					76 Trader Group
→	1	Accou	ınt	N	Value in cancel response if any
→	528	Order	Capacity	Υ	Dealing Capacity
					The valid values will be;
					Value Meaning
					A Agency
					P Principal
→	54	Side		Υ	Side of the firm that submitted the request
→	453	NoPa	rtyIDs	Υ	1
→	→	448	PartyID	Υ	Firm ID of firm that submitted the request
→	→	447	PartyID Source	Υ	The valid value will be;
					Value Meaning
					D Proprietary/Custom code
→	→	452	Party Role	Y	The valid value will be;
					Value Meaning
					17 Counterparty Firm

8.6.2.11 Trade Capture Report for confirmation of the acceptance of the cancellation

Tag	Field Name	Req	Description
Standa	rd Header		
35	MsgType	Υ	AE = Trade Capture Report
Messag	ge Body		
1180	ApplID	Υ	Identifier of the partition.
1181	ApplSeqNum	Υ	Partition's sequence number for trade.
1350	ApplLastSeqNum	N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
1352	ApplResendFlag	N	Whether the message is sent in response to an Application Message Request. Absence of this field is interpreted as Original Transmission (N).
			Value Meaning
			Y Response to Application Message Request
			N Original Transmission
571	TradeReportID	Υ	Unique Identifier assigned to message by <u>server</u> . Each TCR should contain a different TradeReportID
818	SecondaryTradeReportI D	N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.
1003	TradeID	Υ	This should be the TradeID (1003) of the TCR sent to the contra firm to notify of the request to cancel the trade.
572	TradeReportRefID	Υ	(571) field of the original messages.
1123	TradeHandlingInstr	Υ	Specified how the Trade Capture Report should be handled, whether it is Single Party Reporting model, Dual Party Reporting model or a trade confirmation
			The valid value for the message will be;
			Value Meaning
			0 Trade Confirmation
1124	OrigTradeHandlingInstr	Υ	Valid values will be
			Value Meaning
			1 Two Party Report (Single Party Reporting model
			One-Party Report for Pass Through (Dual Party Reporting model)
856	TradeReportType	Υ	Identifies the Trade Report action for the trade capture report (submit, cancel, notification, accept, decline)
			The valid value will be
			Value Meaning

			6 Trade Report Cancel
			7 Trade Break
487	TradeReportTransType	Υ	The transaction identifier of the action i.e. new submission/withdrawal/response/cancellation.
			The valid value will be;
			Value Meaning
			2 Replace Used in following messages; Dual Party Trade Reporting model Confirmation messages for initiating Firm and Counterparty side Single Party Trade Reporting model Confirmation message for initiating Firm 1 Cancel Used in the following message Single Party Reporting model Confirmation message for counterparty
			Confirmation message for counterparty side of the trade
150	ExecType	Y	Execution Type of the Trade, whether it is a confirmed trade or cancelled trade The valid value will be; Value Meaning H Trade Cancel
573	MatchStatus	Υ	Status of the Trade, whether it is matched or unmatched The valid value will be;
			Value Meaning
			1 Unmatched
27000	IsMarketOpsRequest	N	Specifies whether the action is done by Service Desk Value Meaning 1 Yes
60	TransactTime	Υ	This will be the Transact Time submitted by the Client on his trade submission request. TCR's generated for contra-party will contain the Transact Time submitted by the contra-party.
1041	FirmTradeID	Υ	Value assigned by counterparties on submitting the trade
32	LastQty	Υ	Traded Quantity
31	LastPx	Υ	Trade price
423	PriceType	N	Quotation format for instrument. If an instrument is being traded on volatility, this field will be Price Per Unit (2) ⁹ . Absence of this field should be interpreted as Price Per Unit (2).

⁹ This is because FIX protocol does not have an enum to identify when an instrument is traded on volatility.

				Value	Meaning	
				1	Percent of Par	
				2	Price Per Unit	
				4	Discount Rate	
				9	Yield	
669	LastPa	arPx	N	Value in	cluded in trade submission request report	
236	Yield		N	Value in	cluded in trade submission request report	
381	Gross	TradeAmt	N	Value in	cluded in trade submission request report	
829	TrdSu	bType	Υ	Off Book	trade type. Refer Section 9.	
820	Tradel	_inkID	Y	A transa	a confirmation report. ction identifier generated by the System. Both TCRs ontain the same TradeLinkID	
828	TrdTyp	oe	Υ		he same value as used in trade submission tion TCR (AE).	
				Value	Meaning	
				54	Off Book trade	
1115	Order	Category	Υ		he same value as used in trade submission tion TCR (AE).	
				Value	Meaning	
				3	Off Book trade	
574	Match	Туре	Y		he same value as used in trade submission tion TCR (AE).	
				Value	Meaning	
				1	One-Party Report for Pass Through	
				2	Two Party Report	
				be used Off Book	Trade (One Party Report for Pass Through) (1) will to define the Dual Party Reporting model Trade (Two Party Report) (2) will be used to define the Party Reporting model	
48	Securi	tyID	Υ	Identifier	of the instrument	
381	GrossTradeAmt		N	Total cor Qty).	nsideration due from the buyer to the seller (Price *	
454	NoSecurityAltID		N	If present, value in this field will always be "1".		
→	455	SecurityAltID	N	Identificathe ISIN.	ation number of the instrument. This field will identify	
→	456	SecurityAltID Source	N	Type o Security	f instrument identification used. Required if AltID (455) is specified.	
				Value	Meaning	
				4	ISIN	

1227	ProductComplex I			N	Segment	the instrument belongs to.
201	PutOr	Call		N	Required	for options instruments.
					Value	Meaning
					0	Put
					1	Call
202	Strike	StrikePrice			Strike prid	ce of an options instrument. Required for options nts.
552	NoSid	es		Y	The valid	es to the trade (buy and sell). value will be
					Model; it Even in th	sed for both Single and Dual Party Reporting has to specify the counterparty Firm details ne Single Party Reporting model the counterparty to be specified.
→	54	Side		Υ		ne firm the message is sent by
					Valid valu	ues are;
					Value	Meaning
					1	Buy
					2	Sell
•	453	NoPar	tyIDs	Υ	3	
→	→	448	PartyID	Υ	Firm ID o	f the firm the message is sent to
→	→	447	PartyID	Υ	The valid	value will be;
			Source		Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party	Y	The valid	value will be;
			Role		Value	Meaning
					1	Executing Firm
→	→	448	PartyID	Υ	Trader ID	of the firm the message is sent to
→	→	447	PartyID	Υ	The valid	value will be;
			Source		Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party	Υ	The valid	value will be;
			Role		Value	Meaning
					53	Trader (5 digit number)
→	→	448	PartyID	Υ	Trader G	roup ID of the firm the message is sent to
→	→	447	PartyID	Υ	The valid	value will be;
			Source		Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party Role	Υ	The valid	value will be;

					Value	Meaning
					76	Trader Group
→	1	Accou	unt	Y		ount of the party that the message is sent to. The e is used in request and acknowledgement of the
•	528	OrderCapacity		Y	Valid value	,
					Value	Meaning
					A	Agency
	110				P	Principal
•	118	NetM	oney	N		ideration due from the buyer to the seller inclusive interest. Required if the trade is for a Bond or
→	54	Side		Y	Side of the Valid value	counterparty Firm that the message is sent to es are;
					Value	Meaning
					1	Buy
					2	Sell
→	453	NoPa	ırtyIDs	Υ	1 or 3 depe	ending on the reporting model used
→	→	448	PartyID	Υ	Firm ID of	firm that submitted the request
→	→	447	PartyID Source	Y	The valid v	value will be;
					Value	Meaning
					D	Proprietary/Custom code
→	→	452	Party	Υ	The valid v	value will be;
			Role		Value	Meaning
					17	Counterparty Firm
•	•	448	PartyID	Υ*	-	only in Single Party Reporting model uded in trade cancellation request report for contra
→	→	447	PartyID	Y*	Required of	only in Single Party Reporting model
			Source		Value	Meaning
					D	Proprietary/Custom code
					E.g: B = BIC C = General mnemonic D = Proprid E = ISO Co	elass or source of the PartyID (448) value. ally accepted market Firm identifier (e.g. NASD) etary/Custom code ountry Code nent Entity Location
					System alv	vays uses 'D' to indicate that the Source is

					Exchange System
→	→	452	Party	Y*	Required only in Single Party Reporting model
			Role		Value Meaning
					37 Counterparty Trader
→	→	448	PartyID	Y*	Required only in Single Party Reporting model Trader Group ID of the Trader in the counterparty side(required)
→	→	447	PartyID	Y*	Required only in Single Party Reporting model
			Source		Value Meaning
					D Proprietary/Custom code
					Identifies class or source of the PartyID (448) value. E.g: B = BIC C = Generally accepted market Firm identifier (e.g. NASD mnemonic) D = Proprietary/Custom code E = ISO Country Code F = Settlement Entity Location
					System always uses 'D' to indicate that the Source is Exchange System
→	→	452	Party	Y*	Required only in Single Party Reporting model
			Role		Value Meaning
					100 Counterparty Trader Group
→	528	Order	Capacity	Y*	Required only in Single Party Trade Reporting model Value included in trade cancellation request report for contra side.
→	1	Accou	unt	Y*	Required only in Single Party Trade Reporting model The same value used in request and acknowledgement of the trade.
15	Curre	ncy		N	Currency attached to the instrument. This is the trading currency of the instrument. This will be populated for both On Book and Off Book trades.
870	Nolns	trAttrib		N	Value in this field will always be "2".
→	871	InstrA	ttribType	N	Codes to represent the type of instrument attribute.
					Value Meaning 101 Instrument Category 102 Instrument Sub Category
→	872	InstrA	ttribValue	N	Attribute value appropriate to the InstrAttribType (871) field. If InstrAttribType = 101, the InstrAttribValue field will contain Instrument Category short code attached to the instrument. If InstrAttribType = 102, the InstrAttribValue field will contain Instrument Sub Category attached to the instrument.

8.6.2.12 Trade Capture Report for confirmation of the decline of the cancellation

Tag	Field Name	Req	Description
Standa	rd Header		
35	MsgType	Υ	AE = Trade Capture Report
Messag	ge Body		
1180	ApplID	Υ	Identifier of the partition.
1181	ApplSeqNum	Υ	Partition's sequence number for trade.
1350	ApplLastSeqNum	N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
1352	ApplResendFlag	N	Whether the message is sent in response to an Application Message Request. Absence of this field is interpreted as Original Transmission (N).
			Value Meaning
			Y Response to Application Message Request
			N Original Transmission
571	TradeReportID	Υ	Message identifier assigned by the server
818	SecondaryTradeRep ortID	N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.
1003	TradeID	Y	This should be the TradeID (1003) of the TCR sent to the contra firm to notify it of the request to cancel the trade.
1123	TradeHandlingInstr	Y	Specifies how the Trade Capture Report should be handled, whether it is Single Party Reporting model, Dual Party Reporting model or a trade confirmation Valid value for this message One-Party Report for Pass Through (3)
856	TradeReportType	Y	Identifies the Trade Report action for the trade capture report (submit, cancel, notification, accept, decline) The valid value for this message; Value Meaning 3 Decline
1041	FirmTradeID	Y	Include the same value as used in trade submission confirmation TCR (AE).
487	TradeReportTransType	Y	The transaction identifier of the action i.e. new submission/withdrawal/response/cancellation. The valid value for this message; Value Meaning 1 Cancel
27000	IsMarketOpsRequest	N	Specifies whether the action is done by Service Desk Value Meaning

					1 Yes
1328	Rejec	tText		N	Reason request was declined by contra firm.
60	TransactTime		Υ	Time message is generated by the system	
829	TrdS	ubType		Y	Off Book trade type. Refer to section 9.
48	Secu	rityID		Υ	Identifier of the instrument
32	LastC	Qty		Υ	Traded Quantity
31	LastF	УX		Υ	Trade price
423	Price	Туре		N	Quotation format for instrument. If an instrument is being traded on volatility, this field will be Price Per Unit (2) ¹⁰ . Absence of this field should be interpreted as Price Per Unit (2).
					Value Meaning
					1 Percent of Par
					2 Price Per Unit
					4 Discount Rate
					9 Yield
669	Lastl	ParPx		N	Value included in trade submission request report
236	Yield		N	Value included in trade submission request report	
381	Gros	sTrade	eAmt	N	Value included in trade submission request report
552	NoSides			Y	No of sides to the trade (buy and sell). The valid value will be 2 This is used for both Single and Dual Party Reporting Model; it has to specify the counterparty Firm details Even in the Single Party Reporting model the counterparty Firm has to be specified.
→	54	Side		Υ	Side of the firm the message is sent by
→	453	NoPa	rtyIDs	Υ	3
→	→	448	PartyID	Υ	Firm ID of the firm the message is sent to
→	→	447	PartyID	Υ	The valid value will be;
			Source		Value Meaning
					D Proprietary/Custom code
→	→	452	Party	Υ	The valid value will be;
			Role		Value Meaning
					1 Executing Firm
→	→	448	PartyID	Υ	Trader ID of the firm the message is sent to
→	→	447	PartyID	Υ	The valid value will be;
			Source		Value Meaning
					D Proprietary/Custom code

This is because FIX protocol does not have an enum to identify when an instrument is traded on volatility.

→	→	452	Party	Υ	The valid	value will be;		
			Role		Value	Meaning		
					53	Trader (5 digit number)		
→	→	448	PartyID	Υ	Trader Gro	oup ID of the firm the message is sent to		
→	→	447	PartyID	Υ	The valid	value will be;		
			Source		Value	Meaning		
					D	Proprietary/Custom code		
→	→	452	Party	Υ	The valid	value will be;		
			Role		Value	Meaning		
					76	Trader Group		
→	1	Accou	int	Y	Client Acc	ount of the party that the message is sent to		
→	528	Order	Capacity	Υ	Dealing Ca	apacity of the party that the message is sent to		
→	11 8	NetM	oney	N	inclusive	Total consideration due from the buyer to the seller inclusive of accrued interest. Required if the trade is for a Bond or TIPS.		
→	54	Side		Υ	Side of the	e contra firm that the message is sent to		
→	453	NoPa	rtyIDs	Υ	1			
→	→	448	PartyID	Υ	Firm ID of	firm that submitted the request		
→	→	447	PartyID	Y	The valid	value will be;		
			Source		Value	Meaning		
					D	Proprietary/Custom code		
→	→	452	Party	Y	The valid	value will be;		
			Role		Value	Meaning		
					17	Counterparty Firm		
15	Curre	ency		N	currency	attached to the instrument. This is the trading of the instrument. This will be populated for both and Off book trades.		
201	PutC	rCall		N	Required	for options instruments.		
					Value	Meaning		
					0	Put		
					1	Call		
202	Strik	ePrice		N	_	Strike price of an options instrument. Required for options instruments.		
→	871	Instr	AttribType	N	Codes to	represent the type of instrument attribute.		
					Value	Meaning		
					101	Instrument Category		
					102	Instrument Sub Category		
•	872	Instr <i>i</i> e	AttribValu	N	field.	value appropriate to the InstrAttribType (871) ttribType = 101, the InstrAttribValue field will		

contain Instrument Category short code attached to the instrument.
If InstrAttribType = 102, the InstrAttribValue field will contain Instrument Sub Category attached to the instrument.

8.6.2.13 Trade Capture Report Ack of the withdrawal of the cancellation request

Tag	Field Name	Req	Description
Standa	ard Header		
35	MsgType	Υ	AR = Trade Capture Report Acknowledgment
Messa	ge Body		
1181	ApplSeqNum	N	Partition's sequence number for trade.
1350	ApplLastSeqNum	N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.
571	TradeReportID	N	Value, if any, included in withdrawal request
818	SecondaryTradeRep ortID	N	Free-text field to pass instructions relating to the trade to back-office users or Clearing Members.
1003	TradeID	Υ	Value included in withdrawal request
1123	TradeHandlingInstr	Υ	Value included in withdrawal request
939	TrdRptStatus	Υ	Whether the trade report is accepted or rejected by the System
			The valid value for this message will be;
			Value Meaning
			0 Accepted
			1 Rejected
751	TradeReportReject Reason	N	Reject code. Required if the request is rejected.
58	Text	N	Reject reason. Required if request is rejected.
856	TradeReportType	Υ	Value included in withdrawal request
487	TradeReportTransType	Υ	Value included in withdrawal request
573	MatchStatus	Y	Status of the Trade, whether it is matched or unmatched
			The valid value will be;
			Value Meaning
			0 Matched
			1 Unmatched
48	Security ID	Υ	Identifier of the instrument (Instrument ID)
60	TransactTime	Υ	Time message is generated by the system
552	NoSides	Υ	2
•	54 Side	Υ	Side of Firm that requested the cancellation

→	453	NoPar	rtvIDs	Υ	3				
·		110. a.	.,		JSE Markets requires 3 blocks to represent:				
					1. F	irm (required)			
						rader (required) rader Group (required)			
→	→	448	PartyID	Υ	ID of Firm that requested the cancellation				
→	•	447	PartyID	Y		value will be;			
ŕ	ŕ		Source		Value	Meaning			
					D	Proprietary/Custom code			
→	→	452	Party	Υ	The valid v	value will be;			
			Role		Value	Meaning			
					1	Executing Firm			
→	→	448	PartyID	Υ	Trader ID	of the firm the message is sent to			
→	→	447	PartyID	Υ	The valid v	value will be;			
			Source		Value	Meaning			
					D	Proprietary/Custom code			
→	→	452	Party	Υ	The valid v	value will be;			
			Role		Value	Meaning			
					53	Trader (5 digit number)			
→	→	448	PartyID	Υ	Trader Gro	oup ID of the firm the message is sent to			
→	→	447	PartyID	Υ	The valid v	value will be;			
			Source		Value	Meaning			
					D	Proprietary/Custom code			
→	→	452	Party	Υ	The valid v	value will be;			
			Role		Value	Meaning			
					76	Trader Group			
→	1	Accou	ınt	N		ount of the party that the message is sent to. System he value it received from the user.			
→	528	Order	Capacity	Y	Dealing Ca values are	apacity of the party that the message is sent to. Valid			
					Value	Meaning			
					A	Agency			
					P	Principal			
→	54	Side		Υ	Side of co	ntra firm			
				Valid Valu	es are;				
				Value	Meaning				
					1	Buy			
					2	Sell			
→	453	NoPartyIDs Y			Valid valu	ne is 1			

→	→	447	PartyID	Υ	The valid	value will be;	
			Source		Value	Meaning	
					D	Proprietary/Custom code	
→	→	452	Party	Υ	The valid value will be;		
			Role		Value	Meaning	
					17	Counterparty Firm	

8.6.2.14 Trade Capture Report Notification of withdrawal to the counterparty Firm TCR (AE)

Tag	Field Name	Req	Description			
Standa	ard Header					
35	MsgType	Υ	AE = Trade Capture Report			
Messa	ge Body					
1180	ApplID	Υ	Identifier of the partition.			
1181	ApplSeqNum	Υ	Partition's sequence number for trade.			
1350	ApplLastSeqNum	N	ApplSeqNum of last trade generated for client. Required if ApplResendFlag (1352) is "N" and TradeRequestID (568) is not present.			
1352	ApplResendFlag	MFlag N Whether the message is sent in response Application Message Request. Absence of this interpreted as Original Transmission (N).				
			Value Meaning			
			Y Response to Application Message Request			
			N Original Transmission			
571	TradeReportID	N	Value, if any, included in cancellation request			
1003	TradeID	Υ	Value included in cancellation request			
1123	TradeHandlingInstr	Υ	Value included in cancellation request			
856	TradeReportType	Y	Value included in cancellation request.			
			The valid value will be;			
			Value Meaning			
			14 Alleged Trade Report Cancel			
487	TradeReportTransType	Υ	Value included in cancellation request.			
			The valid value will be;			
			Value Meaning			
			1 Cancel			
48	Security ID	Υ	Identifier of the instrument (Instrument ID)			
60	TransactTime	Υ	Date and time message is generated by the system			
1041	FirmTradeID	Υ	Value included in submission request			
829	TrdSubType	Υ	Value included in submission request			
32	LastQty	Υ	Value included in submission request			
31	LastPx	Υ	Value included in submission request			

552	NoSides			Υ	2				
→	54	54 Side			Side of firm that requested the cancellation Valid Values will be:				
				Value Meaning					
				1 Buy					
					2 Sell				
→	453	NoPai	rtyIDs	Υ	1				
→	→	448	PartyID	Υ	ID of firm that requested the cancellation				
→	→ 447 PartyID		Υ	The valid value will be;					
			Source		Value Meaning				
					D Proprietary/Custom code				
→	→	452	Party Role	Y	The valid value will be;				
					Value Meaning				
					17 Counterparty Firm				
→	54	Side	•	Υ	Side of the firm the message is sent to				
→	453	NoPai	rtyIDs	Υ	1				
→	→	448	PartyID	Y	Firm ID of firm that the message is sent to				
→	+	447	PartyID	Υ	The valid value will be;				
			Source		Value Meaning				
					D Proprietary/Custom code				
→	→	452	Party Role	Y	The valid value will be;				
					Value Meaning				
					1 Executing Firm				
870	NoIn	strAttril	b	N	Value in this field will always be "2".				
•	871	Instr	AttribType	N	Codes to represent the type of instrument attribute.				
					Value Meaning				
					101 Instrument Category				
					102 Instrument Sub Category				
→	872	Instr/e	AttribValu	N	Attribute value appropriate to the InstrAttribType (871) field. If InstrAttribType = 101, the InstrAttribValue field will contain Instrument Category short code attached to the instrument. If InstrAttribType = 102, the InstrAttribValue field will contain Instrument Sub Category attached to the instrument.				

8.6.3 **Business Message Reject**

Tag	Field Name	Req	Description					
Stand	Standard Header							
35	MsgType Y		j = Business Message Reject					
Mess	age Body							
45	RefSeqNum	Υ	MsgSeqNum (34) of the rejected message.					
372	RefMsgType	Υ	MsgType (35) of the rejected message.					
371	RefTagID	Ν	If a message is rejected due to an issue with a particular field its tag number will be indicated.					
380	BusinessReject Reason	Y	Code specifying the reason for the reject. Please refer to Section 11 for a list of reject codes.					
58	Text	N	Text specifying the BusinessRejectReason(380)					
Stand	Standard Trailer							

9 TRADE TYPES

TrdSubType (829) Value	Trade Name	Trade Type	Dealing Capacity	Reporting Model		Published to Market Y/N	Include In Cumulative Statistics for Current Trading Day
1014	Automated Trade	AT	A-A, A-P, P-A, P-P	N/A	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	Y	Υ
1015	Uncrossing Trade	UT	A-A, A-P, P-A, P-P	N/A	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	Y	Υ
1016	Cross Trades	XT	A-A, A-P, P-A, P-P	N/A	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12	Y	Z
1017	EOD Volume Auction Trade	VT	A-A, A-P, P-A, P-P	N/A	JSE (ZA01, ZA02, ZA03)	Y	N
2001	Block Trade	ВТ	A-A, A-P, P-A, P-P	Both	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	Y	Υ
3001	Book Build	BK	A-A, P-P, P-A, A-P	Dual	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	Y	Υ
2002	Corporate Finance Trade	CF	A-A, A-P, P-A, P-P	Both	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	Y	Υ
2005	Delta Trade	OD	P-P, P-A, A-A, A-P	Dual	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	N	N
2013	Give Up	GU	P-P, A-P, P-A	Dual	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	N	N
17	Post Contra Trade (correction of previous day's published off book trade)	LC	A-A, A-P, P-A, P-P	Both	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	Y	N
3015	Post Contra Trade (correction of previous day's non- published off book trade)	NC	A-A, A-P, P-A, P-P	Both	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	N	N

TrdSubType (829) Value	Trade Name	Trade Type	Dealing Capacity	Reporting Model	Market	Published to Market Y/N	Include In Cumulative Statistics for Current Trading Day
2003	Late Trade (After Hours Trade)	LT	A-A, P-A, A-P, P-P	Single	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	Y	Y
2004	Namibia Trade	NX	A-A	Single	NSX (ZA11, ZA12)	Υ	Υ
2006	Off Order Book Principal Trade	OP	P-P	Single	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	Y	Υ
2007	Option Exercised	OX	A-A, P-P, A-P, P-A	Both	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	N	N
2009	Portfolio Trade	PF	A-A, P-A, A-P, P-P	Both	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	Y	Y
24	Post Contra Trade(correct ion of previous day's on book trade)	PC	A-A, A-P, P-A, P-P	Both	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	Y	N
2008	Traded Option Exercised	TX	A-A, P-P, A-P, P-A	Both	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	N	N
2011	Warrant Exercised	WX	A-A, P-P, A-P, P-A	Both	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	N	N
3016	Book Over Trade	ВО	A-A, P-P, A-P, P-A	Both	JSE (ZA01, ZA02, ZA03, ZA04, ZA06) NSX (ZA11, ZA12)	Y	Y
4001	Negotiated Trade	NT	A-A, P-P, A-P, P-A	Both	JSE_EDM, JSE_FXM, Bonds, JSE_CDM	Y	Y
4002	Tap Issue	TI	A-A, P-P, A-P, P-A	Both	Bonds	Υ	Υ
4003	Primary Trade	PT	A-A, P-P, A-P, P-A	Both	Bonds	Υ	Y
4004	Structured Trade	ST	A-A, P-P, A-P, P-A	Both	Bonds	Y	Υ
4005	Option Exercised	ВХ	A-A, P-P, A-P, P-A	Both	Bonds	Y	Υ
4006	Book Over	BV	A-A, P-P, A-P, P-A	Both	Bonds	Υ	Υ
4007	Repo	RO	A-A, P-P, A-P, P-A	Both	Bonds	Y	Y

TrdSubType (829) Value	Trade Name	Trade Type	Dealing Capacity	Reporting Model	Market	Published to Market Y/N	Include In Cumulative Statistics for Current Trading Day
4008	Reverse Repo	RR	A-A, P-P, A-P, P-A	Both	Bonds	Y	Υ
4009	Give-Up - Bonds and Der	GI	A-A, P-P, A-P, P-A	Both	JSE_EDM, JSE_FXM, Bonds, JSE_CDM	Y	Υ
4010	Exchange for Physical	EP	A-A, P-P, A-P, P-A	Both	JSE_FXM, JSE_CDM	Y	Υ
4011	Exchange for Risk	ER	A-A, P-P, A-P, P-A	Both	JSE_CDM	Υ	Υ
4013	Delta trades	DT	A-A, P-P, A-P, P-A	Both	JSE_EDM, JSE_FXM, JSE_CDM	Υ	Υ
4014	Late Trades	LD	A-A, P-P, A-P, P-A	Both	JSE_EDM, JSE_FXM	Υ	Y
4015	Roll Trades	RT	A-A, P-P, A-P, P-A	Both	JSE_FXM, JSE_EDM, JSE_CDM	Y	Υ
4016	Structured Option	SO	A-A, P-P, A-P, P-A	Both	JSE_CDM	Y	Υ
4017	Net Offs	NO	A-A, P-P, A-P, P-A	Both	JSE_CDM	Υ	Υ
4018	Non Standard Strategy Trade	NS	A-A, P-P, A-P, P-A	Both	JSE_EDM, JSE_FXM, JSE_CDM	Y	Υ
4019	CFD Reported Trade	CD	A-A, P-P, A-P, P-A	Both	JSE_EDM	Y	Υ
4020	Strategy Trade	SR	A-A, P-P, A-P, P-A	Both	JSE_EDM, JSE_FXM, JSE_CDM	Y	Υ
4021	Bond Spread Trade	BS	A-A, P-P, A-P, P-A	Both	Bonds	Y	Υ
4023	Price Adjust	PA	A-A, P-P, A-P, P-A	Both	JSE_EDM, JSE_FXM, JSE_CDM, Bonds	Y	Υ
4024	Reported Trade	RP	A-A, P-P, A-P, P-A	Both	JSE_EDM, JSE_FXM, JSE_CDM, Bonds	Y	Υ

10 TRADE VALIDATIONS

- **10.1** The system will perform the following validations upon receipt of Off Book Trade Reporting and Cancellations:
 - whether the trade type is valid for the segment;
 - the dealing capacity is allowed per trade type;
 - whether it is a valid Trade Reporting session;
 - whether a Firm can be the same on both sides (single party trade reporting model);
 - whether a Firm can be different on each side (dual party trade reporting model);
 - whether it is allowed in that market/segment;
 - ensure that trades are not backdated by more than the permitted number of days
 - whether it is published to the market in the public data;
 - whether it is included or excluded in the cumulative statistics calculations
- 10.2 In addition to the validations stated above, the System will reject the withdrawal request if:
 - The Trade ID is not a valid Trade ID in the System.
 - The Trade Reporting model specified on the withdrawal does not match the Trade Reporting Model on the original Submission Request.
 - The original trade report request has already been accepted or declined by the counterparty Firm.
 - The Dealing Capacity on the withdrawal by the submitting party does not match the Dealing Capacity specified on the Submission Request
- 10.3 Further validation will be performed on an Instrument Type and Instrument Trade Sub Type basis as per the table below:

Note: This is in addition to any additional attributes that are matched on Off Book trades already.

Instrument Type	Instrument Trade Sub Type	List of Mandatory Fields
Equity Options	N/A	Price or Volatility (based on the trade method of the instrument) (FIX (31) Futures Price (FIX 810)
FX Options	N/A	Price or Volatility (based on the trade method of the instrument) (FIX (31)
		Futures Price (FIX 810)
Commodity	N/A	Price or Volatility (based on the trade method of the instrument) (FIX (31)
Options		Futures Price (FIX 810)
Equity Derivatives	CD	Interest rate spread (FIX 218)
N/A	EP	Spot Rate (FIX 27106) All-in-Price (FIX 921

		,
		Clean Price (FIX 27102)
Danda and		All-in-Price (i.e. Dirty Price) (FIX 921)
Bonds and TIPS	N/A	Accrued Interest (FIX 159)
		Settlement Date (FIX 64)
		Clean Price (FIX 27102)
		All-in-Price (i.e. Dirty Price) (FIX 921)
N/A	BS	Accrued Interest (FIX 159)
IN/A	D0	Settlement Date (FIX 64)
		Reference Instrument (Tag 699)
		Reference Instrument Yield(Tag 662)
		Clean Price (FIX 27102)
		All-in-Price (i.e. Dirty Price) (FIX 921)
		Accrued Interest (FIX 159)
		Settlement Date (FIX 64)
N/A	RO and RR	2 nd Leg Clean Price (FIX 27103)
TV// C	TO and Tax	2 nd Leg Yield (FIX 27105)
		2 nd Leg All-in-Price (Dirty Price) (FIX 922)
		2 nd Leg Accrued Interest (FIX 920)
		2 nd Leg Settlement Date (FIX 27104)
		Rate – This is the carry rate for the repo (FIX 27106)

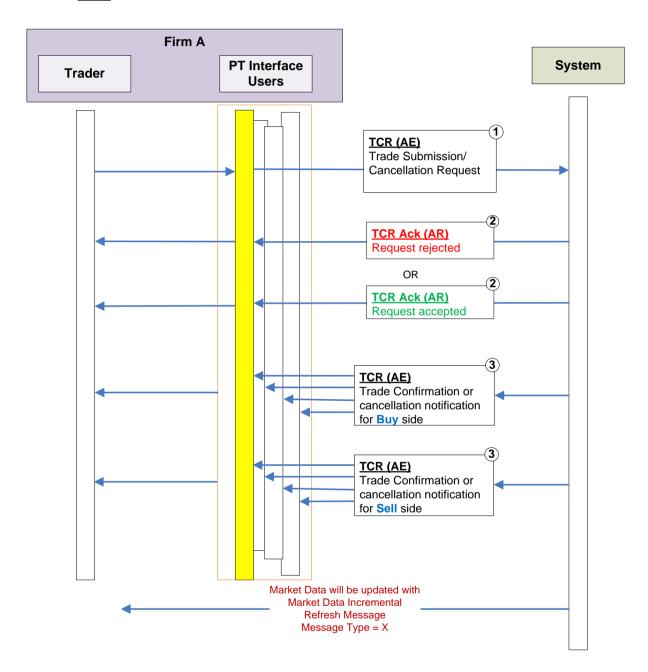
11 REJECT CODES

Please refer to Volume 10-JSE Reject Codes Document for the full list of reject codes and meanings specific to the System.

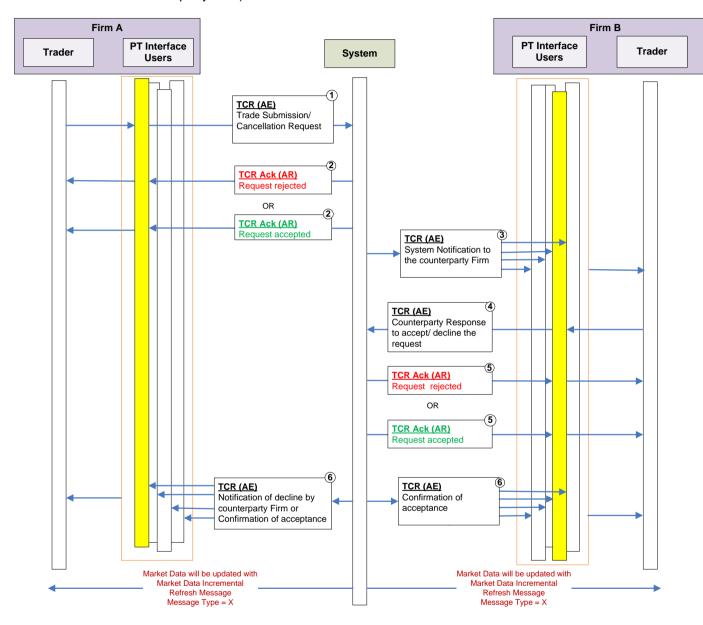
12 APPENDIX

12.1 Single Party Reporting model

Post Trade Interface User who submits the TCR (AE) to the System



12.2 Dual Party Reporting model



12.3 Suspension Scenarios

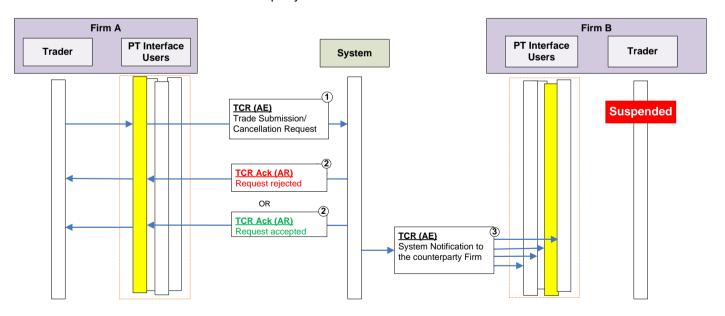
12.3.1 Trader (User) Suspension

The following scenarios will be considered under Trader Suspensions.

- (1) The initiating Firm Trader submits the trade report submission request while the counterparty Firm Trader is suspended
- (2) The counterparty Firm Trader is suspended before responding to the TCR notification generated by the System.
- (3) The counterparty Firm Trader is suspended after he responds to the TCR notification generated by the System.
- (4) The initiating Firm Trader is suspended before the counterparty Firm Trader responds to the TCR notification generated by the System.

12.3.1.1 The initiating Firm Trader submits the trade report submission request while the counterparty Firm Trader is suspended.

Refer the following diagram.

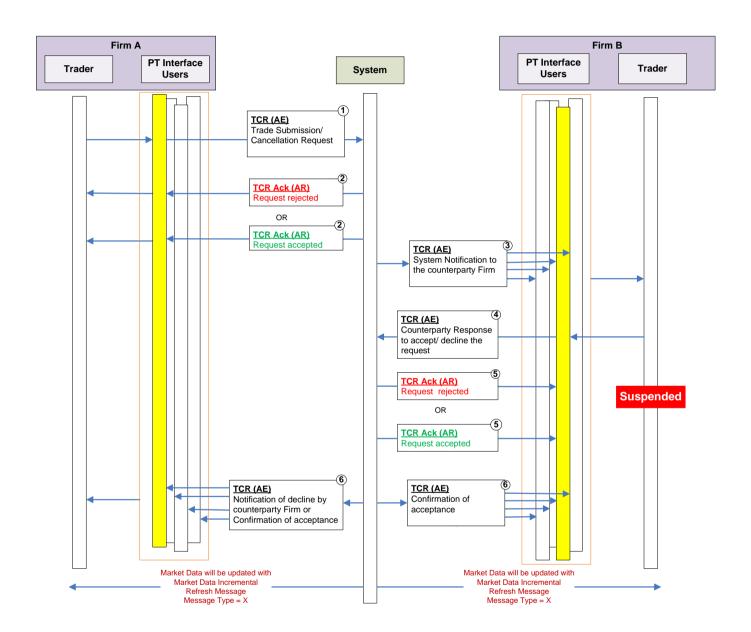


12.3.1.1.1 The initiating Firm Trader submits a trade submission request report via a TCR (AE).

- 12.3.1.1.2 The System validates the submitted TCR (AE) and acknowledges the initiating Firm with a TCR Ack (AR).
- 12.3.1.1.3 If the TCR (AE) is accepted, the System will notify the counterparty Firm via a TCR (AE) and this message will be delivered to all privileged Post Trade Interface Users of the counterparty Firm.
- 12.3.1.1.4 Since the counterparty Firm Trader is already suspended, the counterparty Firm Trader will not be able to accept or decline the trade report of the initiating Firm via a TCR (AE). Any other Trader in the counterparty Firm that is not suspended can accept/deny the request back to the System.
- 12.3.1.1.5 If the counterparty Firm does not respond to the unconfirmed trade submission report of the initiating Firm, the unconfirmed trade report will be expired at the End of Day. A notification of the expiry will not be sent to the initiating Firm or the counterparty Firm.
- 12.3.1.2 The counterparty Firm Trader is suspended before responding to the TCR notification generated by the System.
- 12.3.1.2.1 The behavior of this scenario is the same as the counterparty Firm Trader suspension in section 12.3.1.1 as the TCR (AE) notification will be received by all privileged Post Trade Interface Users of the counterparty Firm. Since the counterparty Firm Trader is suspended at this stage he will not be able to send any response to the System.
- 12.3.1.2.2 Any TCR (AE) submitted by a suspended Trader (User) will be rejected by the System. Any other Trader with Instrument Group privileges to Submit/Cancel Trade Reports in the counterparty Firm that is not suspended can accept/deny request back to the System.
- 12.3.1.2.3 If the counterparty Firm does not respond to the unconfirmed trade submission report of the initiating Firm, the unconfirmed trade report will be expired at the End of Day. A notification of the expiry will not be sent to the initiating Firm or the counterparty Firm.

12.3.1.3 The counterparty Firm Trader is suspended after he responds to the TCR notification generated by the System

Refer the following diagram.

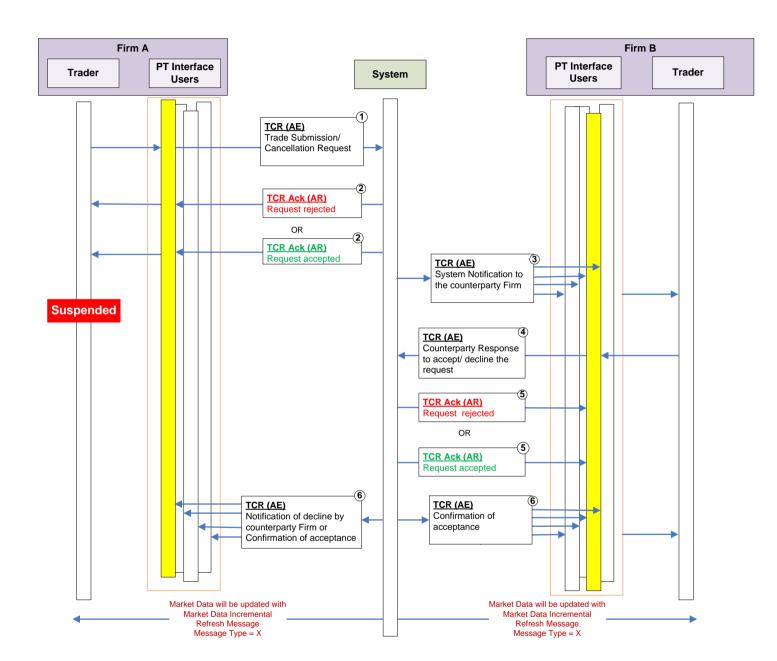


- 12.3.1.3.1 The initiating Firm submits a trade submission request report via a TCR (AE).
- 12.3.1.3.2 The System validates the submitted TCR (AE) and acknowledges the initiating Firm with a TCR Ack (AR).
- 12.3.1.3.3 The System will notify the counterparty Firm via a TCR (AE) and this message will be delivered to all the privileged Post Trade Interface Users of the counterparty Firm.

- 12.3.1.3.4 The counterparty Firm Trader accepts or declines the initiating Firm's trade report via a TCR (AE) through a logged in privileged Post Trade Interface User.
- 12.3.1.3.5 The System validates the counterparty Firm response TCR (AE) and acknowledges the counterparty Firm with a TCR Ack (AR).
- 12.3.1.3.6 The counterparty Firm Trader is suspended after this stage of the process.
- 12.3.1.3.7 Even though the counterparty Firm Trader is suspended, this message will be delivered to the all privileged Post Trade Gateway Interface Users of the counterparty Firm via which the counterparty Trader was logged in.
- 12.3.1.3.8 If the counterparty Firm Trader has accepted the trade report, the System will confirm the trade to both Firms (i.e. initiating Firm and the counterparty Firm) via TCR (AE) messages. Even though the counterparty Firm Trader is suspended, this message will be delivered to all the privileged Post Trade Interface Users of the counterparty Firm. If the counterparty Trader declines the trade report, the System will notify only the initiating Firm via a TCR (AE).
- 12.3.1.3.9 If the Trade is accepted by another User of the counterparty Firm with Instrument Group privileges to Submit/Cancel Trade Reports, the trade will be published on Market data and System statistics will be updated based on the rules for the Trade Type submitted to the System.

The initiating Firm Trader is suspended before the counterparty Firm Trader responds to the TCR notification generated by the System.

Refer the following diagram.



- The initiating Firm submits a trade submission request report via a TCR (AE). The System validates the submitted TCR (AE) and acknowledges the initiating Firm with a TCR Ack (AR).
- 12.3.1.4.2 The System will notify the counterparty Firm via a TCR (AE) and this message will be delivered to all privileged Post Trade Interface Users of the counterparty Firm.

- The counterparty Firm Trader accepts or declines the initiating Firm's trade report via a TCR (AE). The counterparty Firm Trader will send a response to the System notification via the Post Trade Interface User logged in for the counterparty Firm
- The System validates the counterparty Firm response TCR (AE) and acknowledges the counterparty Firm with a TCR Ack (AR).
- 12.3.1.4.5 The initiating Firm Trader is suspended at this stage of the process.
- 12.3.1.4.6 If the counterparty Firm Trader accepts the trade report, the System will notify confirmation of the trade to both Firms (i.e. initiating Firm and the counterparty Firm) via TCR (AE) messages. Even though the initiating Firm Trader is suspended, this message will be delivered to all the privileged Post Trade Interface Users of the initiating Firm. If the counterparty Firm Trader declines the trade report, the System will notify all the privileged Post Trade Interface Users of the initiating Firm via a TCR (AE).
- 12.3.1.4.7 If the Trade is accepted by the counterparty Firm, the trade will be published on Market data and System statistics will be updated based on the rules for the Trade Type submitted to the System.

12.3.2 Trader Group Suspension

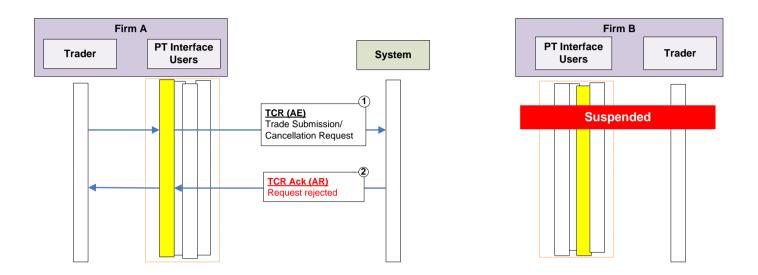
- On suspension of a Trader Group all the Traders (users) who belong to the suspended Trader Group will automatically be suspended.
- The behaviour for the suspended Trader Group (and all Traders in the group) under the Dual Party Trade Reporting model will be same as in section 11.3.1 (by replacing Trader with Trader Group).

12.3.3 Firm Suspension

- 12.3.3.1 The following scenarios will be considered under Firm Suspensions.
 - (1) The initiating Firm is submitting the trade submission request report while the counterparty Firm is suspended.
 - (2) The counterparty Firm is suspended before responding to TCR notification generated by the System.
 - (3) The counterparty Firm is suspended after responding to the TCR notification generated by the System.
 - (4) The initiating Firm is suspended before the counterparty Firm responds to the TCR notification generated by the System.

12.3.3.2 The initiating Firm is submitting the trade submissions request report while the counterparty Firm is suspended.

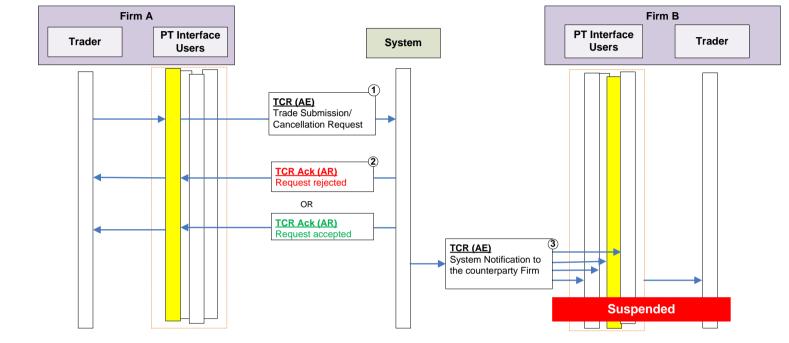
Refer the following diagram.



- 12.3.3.2.1 The initiating Firm submits a trade submission request report via a TCR (AE).
- 12.3.3.2.2 Since the counterparty Firm is suspended when the System received the trade submission request report, the initiating Firm's TCR (AE) will be rejected by the System via a TCR Ack (AR) with an error message "invalid counterparty Firm".
- 12.3.3.2.3 The unconfirmed trade report submission request of the initiating Firm will be expired at the End of Day if the System does not receive any response from the counterparty Firm by the End of Day.

12.3.3.3 The counterparty Firm is suspended before responding to TCR notification generated by the System.

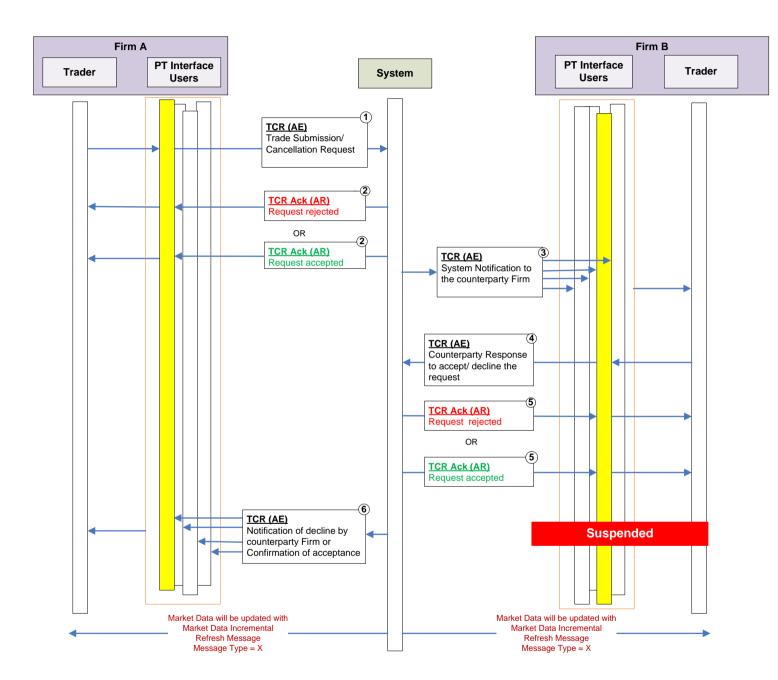
Refer the following diagram.



- 12.3.3.3.1 The initiating Firm submits a trade submission request report via a TCR (AE).
- 12.3.3.3.2 The System validates the submitted TCR (AE) and acknowledges the initiating Firm with a TCR Ack (AR).
- 12.3.3.3.3 The System will notify the counterparty Firm via a TCR (AE) and this message will be delivered to all the privileged Post Trade Interface Users of the counterparty Firm.
- 12.3.3.3.4 The counterparty Firm is suspended at this stage of the process.
- 12.3.3.5 Since all the Users and Trader Groups in the counterparty Firm are suspended (including Post Trade Interface Users), the counterparty Firm will not be able to send any response to the System.
- 12.3.3.3.6 The unconfirmed trade report submission request of the initiating Firm will be expired at the End of Day if the System does not receive any response from the counterparty Firm by the End of Day.

12.3.3.4 The counterparty Firm is suspended after responding to the TCR notification generated by the System

Refer the following diagram.

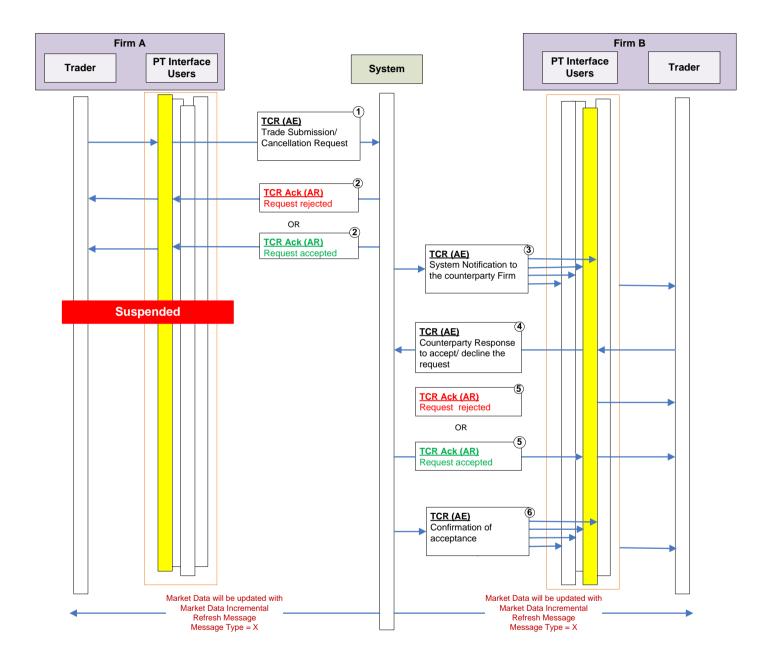


- 12.3.3.4.1 The initiating Firm submits a trade submission request report via a TCR (AE).
- 12.3.3.4.2 The System validates the submitted TCR (AE) and acknowledges the initiating Firm with a TCR Ack (AR).

- 12.3.3.4.3 The System will notify the counterparty Firm via a TCR (AE) and this message will be delivered to all the privileged Post Trade Interface Users of the counterparty Firm
- 12.3.3.4.4 The counterparty Firm accepts or declines the initiating Firm's trade report via a TCR (AE).
- 12.3.3.4.5 The System validates the counterparty Firm response TCR (AE) and acknowledges the counterparty Firm with a TCR Ack (AR).
- 12.3.3.4.6 The counterparty Firm is suspended at this stage of the process.
- 12.3.3.4.7 If the counterparty Firm had accepted the trade report prior to the suspension, the System will notify both Firms (i.e. initiating Firm and the counterparty Firm) via TCR (AE) messages of the trade confirmation to all the privileged Post Trade Interface Users. However since the counterparty Firm is suspended (including their Post Trade Interface Users), this TCR (AE) will not be delivered to the counterparty Firm due to the Post Trade Interface Users of the Firm being disconnected as a result of suspension.
- 12.3.3.4.8 If the counterparty Trader declines the trade report, the System will notify only the initiating Firm via a TCR (AE).
- 12.3.3.4.9 If the counterparty Trader accepts the Trade, it will be published on Market data and System statistics will be updated based on the rules for the Trade Type submitted to the System.

12.3.3.5 The initiating Firm is suspended before the counterparty Firm responds to the TCR notification generated by the System

Refer the following diagram.



- 12.3.3.5.1 The initiating party submits a trade submission request report via a TCR (AE).
- 12.3.3.5.2 The System validates the submitted TCR (AE) and acknowledges the initiating Firm with a TCR Ack (AR).
- 12.3.3.5.3 The System will notify the counterparty Firm via a TCR (AE) and this message will be delivered to all the privileged Post Trade Interface Users of the counterparty Firm.

- 12.3.3.5.4 The initiating Firm is suspended at this stage of the process.
- 12.3.3.5.5 The counterparty Firm Trader accepts or declines the initiating Firm's trade report via a TCR (AE).
- 12.3.3.5.6 Even though the initiating Firm is suspended, the System validates the counterparty Firm response TCR (AE) and acknowledges the counterparty Firm with a TCR Ack (AR).
- 12.3.3.5.7 If the counterparty Firm Trader accepts the trade report, the System will notify both Firms (i.e. initiating Firm and the counterparty Firm) via TCR (AE) messages. However since the initiating Firm is suspended (including its Post Trade Interface Users), this TCR (AE) will not be delivered to the initiating Firm due to the privileged Post Trade Interface Users of the Firm being disconnected as a result of suspension
- 12.3.3.5.8 If the counterparty Firm Trader declines the trade report, the System will notify only the initiating Firm via a TCR (AE). However since the initiating Firm is suspended (including its Post Trade Interface Users), this TCR (AE) will not be delivered to the initiating Firm due to the privileged Post Trade Interface Users of the Firm being disconnected as a result of suspension.
- 12.3.3.5.9 If the counterparty Firm Trader accepts the trade, it will be published on Market data and System statistics will be updated based on the rules for the Trade Type submitted to the System

12.4 Message Flow Matrices

The following matrices are included to clarify the sequence of messages and the status of TCRs involved in the submission and processing of On Book and Off Book Trades and cancellations. The matrices have been arranged in groups as follows:

Ref	Group	Description
A1	New	On Book Submission
A2	Cancel	Cancel request issued for On Book trade
A3	New	Off Book Single Party Submission
A4	Cancel	Cancel request issued for Single Party trade
A5	New	Off Book Dual Party Submission
A6	Cancel	Cancel request issued for Dual Party trade
A7	Withdrawal	Off Book Dual Party Withdrawal Submission
A8	Cancel	Withdrawal of cancellation request
A9	Decline	Off Book Dual Party Decline Submission
A10	Cancel	Decline the cancellation request

Note: IP – Initiating Party
CP – Counter Party

A1: On Book Submission

Ti me	Mess age Send	Messa ge Receiv ed	Mess age Type	TradeHan dlingInst	Orig Tra de Han dlin glns tr	Trade Report Type	TradeR eportT ransTy pe	Match status	Exec Type	Las tQty	Las tPx	Linked TCR message
1		TCR	AE	Trade Confirmatio n		Submit	New	Matched	Trade	100	10	Trade Capture Report for It confirmation of the acceptance of the Report for the acceptance of the acceptance of the Trade buy side
2		TCR	AE	Trade Confirmatio n		Submit	New	Matched	Trade	100	10	Trade Capture Report for I Confirmation of the acceptance of the Arage Trade Capture Report for the acceptance of the Trade Sell side

A2: Cancel request issued for On Book trade

Ti me	Mess age Send	Messa ge Receiv ed	Mess age Type	TradeHan dlingInst	OrigT rade Hand lingIn str	Trade Repo rtTyp e	TradeR eportT ransTy pe	Match status	Exec Type	Las tQty	Las tPx	Linked TCR message
1		TCR	AE	Trade Confirmatio n		Submit	New	Matched	Trade	100	10	Trade Capture Report for to Confirmation of the Acceptance of the Trade Trade Capture Report for the Confirmation of the Acceptance of the Trade
2		TCR	AE	Trade Confirmatio n		Submit	New	Matched	Trade	100	10	Trade Capture Report for to Confirmation of the Acceptance of the Trade Trade Capture Report for the confirmation of the Acceptance of the Trade - Sell side
3	TCR		AE			Trade Report Cancel	New			100	10	Trade Capture Report Trad Capture Report - Buy Side
4		TCR	AR			Submit	New	Unmatch ed		100	10	Trade Capture Report Ack the Initiating Firm for the Trade Report Submission Request Trade Capture Report Ack to the Initiating Firm for the Trade Report Submission Request
5	TCR		AE			Trade Report Cancel	New			100	10	Trade Capture Report Trad Capture Report - Sell Side
6		TCR	AR			Submit	New	Unmatch ed		100	10	Trade Capture Report Ack the Initiating Firm for the Trade Report Submission RequestTrade Capture Report Ack to the Initiating Firm for the Trade Report Submission Request
7		TCR	AE	Trade Confirmatio n		Submit	New	Matched	Trade	100	10	Trade Capture Report confirmation of t (U.S.) acceptance of trace cancellation Trade Capture Report for confirmation of the acceptance of the cancellation Buy side
8		TCR	AE	Trade Confirmatio n		Submit	New	Matched	Trade	100	10	Trade Capture Report Confirmation of tacceptance of the Capture Report for confirmation of the acceptance of the acceptance of the sacceptance of the cancellation Sell side

A3: Off Book Single Party Submission

Ti me	Mess age Send	Messa ge Receiv ed	Mess age Type	TradeHan dlingInst	OrigT rade Hand lingIn str	Trade Repo rtTyp e	TradeR eportT ransTy pe	Match status	Exec Type	Las tQty	Las tPx	Linked TCR message
1	TCR		AE	Two Party Report		Submit	New			100	10	Trade Report Submissi RequestTrade Report Submission Request
2		TCR	AR	Two Party Report		Submit	New	Unmatch ed		100	10	Trade Capture Report Ack the Initiating Firm for the Trade Report Submission Request Trade Capture Report Ack to the Initiating Firm for the Trade Report Submission Request
3		TCR	AE	Trade Confirmatio n	Two Party Report	Submit	Replace	Matched	Trade	100	10	Trade Capture Report for to confirmation of the acceptance of the Trade-Trade Capture Report for the confirmation of the acceptance of the Trade – Initiating Party
4		TCR	AE	Trade Confirmatio n	Two Party Report	Submit	New	Matched	Trade	100	10	Trade Capture Report for to confirmation of the acceptance of the Trade Trade Capture Report for the confirmation of the acceptance of the Trade – Counter Party

A4: Cancel request issued for Single Party trade

Ti me	Mess age Send	Messa ge Receiv ed	Mess age Type	TradeHan dlingInst	OrigT rade Hand lingIn str	Trade Repo rtTyp e	TradeR eportT ransTy pe	Match status	Exec Type	Las tQty	Las tPx	Linked TCR message
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													_
1	TCR		AE	Two Party Report		Submit	New			100	10	Trade Report Submission RequestTrade Report Submission Request	Formatte
2		TCR	AR	Two Party Report		Submit	New	Unmatch ed		100	10		Formatte Italic, Engl
3		TCR	AE	Trade Confirmatio n	Two Party Report	Submit	Replace	Matched	Trade	100	10		Formatte Italic, Engl
4		TCR	AE	Trade Confirmatio n	Two Party Report	Submit	New	Matched	Trade	100	10		Formatte Italic, Engl
5	TCR		AE	Two Party Report		Trade Report Cancel	New					Cancellation Request by Initiating Firm for a confirmed tradeCancellation Request by Initiating Firm for a confirmed trade	Formatte
6		TCR	AR	Two Party Report		Submit	New			100	10		Formatte Italic, Eng
7		TCR	AE	Trade Confirmatio n		Submit	Replace	Matched	Trade Cancel	100	10		Formatte (U.S.)
8		TCR	AE	Trade Confirmatio n		Submit	Cancel	Matched	Trade Cancel	100	10		Formatte (U.S.)

A5: Off Book Dual Party Submission

Ti me	Me ssag e sag e Typ e	TradeHandli Hand lingIn str	Trade Repo ortTr ansT ype	Match status	Exec Type	La st Qt y	Last Px	Linked TCR message
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1	TCR [IP]		AE	One-Party Report for Pass Through		Submit	New			100	10	Trade Report Submission RequestTrade Report Submission Request	Formatte
2		TCR [IP]	AR	One-Party Report for Pass Through		Submit	New	Unmatched		100	10	the Initiating Firm for the Trad	Formatte Italic, Engl
3		TCR [CP]	AE	One-Party Report for Pass Through		Alleged New	New			100	10		9
4	TCR [CP]		AE	One-Party Report for Pass Through		Accept	Replac e			100	10	Response from counterparty Firm for a trade report submission requestResponse from counterparty Firm for a trade report submission requestTrade Report Submission Request	Formatte
5		TCR [CP]	AR	One-Party Report for Pass Through		Accept	Replac e	Unmatched		100	10		Formatte Italic, Engl
6		TCR [IP]	AE	Trade Confirmation	One- Party Report for Pass Throug h	Submit	Replac e	Matched	Trade	100	10		Formatte Italic, Engl
7		TCR [CP]	AE	Trade Confirmation	One- Party Report for Pass Throug h	Submit	Replac e	Matched	Trade	100	10	confirmation of the accompany	Formatte Italic, Engl

A6: Cancel request issued for Dual Party trade

Ti m e	Messa ge Send	Messag e Receive d	Mes sag e Typ e	TradeHandlin glnst	OrigTr ade Handli ngInst r	TradeR eportTy pe	TradeR eportTr ansTyp e	Match status	Exec Type	Last Qty	Last Px	Linked TCR message	
1	TCR [IP]		ΑE	One-Party Report for Pass Through		Submit	New			100	10	Submission RequestTrade Report Submission Request	Formatto
2		TCR [IP]	AR	One-Party Report for Pass Through		Submit	New	Unmatc hed		100	10	Donow Apleto the	Formatte Italic, Eng
3		TCR [CP]	AE	One-Party Report for Pass Through		Alleged New	New			100	10		Formatte (U.S.)
4	TCR [CP]		AE	One-Party Report for Pass Through		Accept	Replace			100	10	counterparty Firm for a trade report submission requestResponse from counterparty Firm for a trade report submission requestTrade Report Submission Request	Formatto
5		TCR [CP]	AR	One-Party Report for Pass Through		Accept	Replace	Unmatc hed		100	10		Formatte Italic, Eng

6		TCR [IP]	ΑE	Trade Confirmation	One- Party Report for Pass Through	Submit	Replace	Matche d	Trade	100	10		Formatte Italic, Engl
7		TCR [CP]	ΑE	Trade Confirmation	One- Party Report for Pass Through	Submit	Replace	Matche d	Trade	100	10		Formatte Italic, Engl
8	TCR [IP]			One-Party Report for Pass Through		Trade Report Cancel	New					Cancellation Request by Initiating Firm for a confirmed tradeCancellation Request by Initiating Firm for a confirmed trade	Formatte
9		TCR [IP]	AR	One-Party Report for Pass Through		Trade report cancel	New	Matche d		100	10		Formatte Italic, Engl
10		TCR [CP]	ΑE	One-Party Report for Pass Through		Alleged Trade Report Cancel	New			100	10		(U.S.)
11	TCR [CP]		AE	One-Party Report for Pass Through		Accept	Replace					Response from the counterparty Firm for the cancellation RequestResponse from the counterparty Firm for the cancellation Request	Formatte

12	TCR [CP]	AR	One-Party Report for Pass Through		Accept	Replace	Matche d		100	10	Trade Capture Report Ack o Response for the counterparty Firm on the cancellationTrade Capture Report Ack of Response for the counterparty Firm on the cancellation	
13	TCR [IP]	AE	Trade Confirmation	One- Party Report for Pass Through	Trade Report Cancel	Replace		Trade Cancel	100	10	Trade Capture Report fo confirmation of the acceptance of the cancellationTrade Capture Report for confirmation of the acceptance of the cancellation Initiating Party	(U.S.)
14	TCR [CP]	ΑE		One- Party Report for Pass Through	Trade Report Cancel	Replace		Trade Cancel	100	10	Report for confirmation of the acceptance of the cancellation Trade Capture Report for confirmation of the acceptance of the cancellation — Counter Party	(U.S.)

A7: Off Book Dual Party Withdrawal Submission

Ti m e	Messa ge Send	Messag e Receiv ed	Mes sage Type	TradeHan dlingInst	OrigT rade Hand lingIn str	Trade Repo rtTyp e	TradeR eportT ransTy pe	Match status	Exec Type	LastQt y	Las tPx	Linked TCR message	
1	TCR [IP]		ΛE	One-Party Report for Pass Through		Submit	New			100	10	Trade Report Submissi RequestTrade Report Submission Request	matte
2		TCR [IP]	ΛĐ	One-Party Report for Pass Through		Submit	New	Unmatch ed		100	10		matte c, Engl
3		TCR [CP]	Λ <i>Ε</i>	One-Party Report for Pass Through		Alleged New	New			100	10	Trade Capture Rep Notification to t counterparty Firm of the Trade Report Submission RequestTrade Capture Report Notification to the counterparty Firm of the Trade Report Submission Request	matte 5.)
4	TCR [IP]			One-Party Report for Pass Through		Submit	Cancel			100	10	Withdrawal of Submissi Request by initiating firmWithdrawal of Submission Request by initiating firm	matte
5		TCR [IP]	ΛĐ	One-Party Report for Pass Through		Submit	Cancel	Unmatch ed		100	10	Acknowledgment of the Withdrawal of a Submission Request to the initiating Firm – TCR Ack (AR)Acknowledgment of the Withdrawal of a Submission Request to the initiating Firm – TCR Ack (AR)	matte
6		TCR [CP]		One-Party Report for Pass Through		Decline <u>Alleged</u> <u>New</u>	Cancel	Unmatch ed		100	10		matte c, Engl

A8: Withdrawal of cancellation request

Ti me	Mess age Send	Messa ge Receiv ed	Mess age Type	TradeHan dlingInst	OrigT rade Hand lingIn str	Trade Repo rtTyp e	TradeR eportT ransTy pe	Match status	Exec Type	Las tQty	Las tPx	Linked TCR message
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1	TCR [IP]		AE	One-Party Report for Pass Through		Submit	New			100	10	Trade Report Submission RequestTrade Report Submission Request
2		TCR [IP]	AR	One-Party Report for Pass Through		Submit	New	Unmatch ed		100	10	Trade Capture Report Ack the Initiating Firm for the Trade Report Submission Request Trade Capture Report Ack to the Initiating Firm for the Trade Report Submission Request
3		TCR [CP]	ΑE	One-Party Report for Pass Through		Alleged New	New			100	10	Trade Capture Rep Notification to t counterparty Firm of trade Report Submission RequestTrade Capture Report Notification to the counterparty Firm of the Trade Report Submission Request
4	TCR [CP]		AE	One-Party Report for Pass Through		Accept	Replace			100	10	Response from counterpar Firm for a trade report submission requestResponse from counterparty Firm for a trade report submission requestTrade Report Submission Request
5		TCR [CP]	AR	One-Party Report for Pass Through		Accept	Replace	Unmatch ed		100	10	Trade Capture Report Ack the Initiating Firm for the Trade Report Submission RequestTrade Capture Report Ack to the Initiating Firm for the Trade Report Submission Request
6		TCR [IP]	AE	Trade Confirmatio n	One- Party Report for Pass Throug h	Submit	Replace	Matched	Trade	100	10	Trade Capture Report for to Confirmation of the Acceptance of the Trade Trade Capture Report for the confirmation of the Acceptance of the Trade — Initiating Party
7		TCR [CP]	AE	Trade Confirmatio n	One- Party Report for Pass Throug h	Submit	Replace	Matched	Trade	100	10	Trade Capture Report for to Confirmation of the Acceptance of the Trade Trade Capture Report for the confirmation of the Acceptance of the Trade Counter Party
8	TCR [IP]		AE	One-Party Report for Pass Through		Trade Report Cancel	New					Cancellation Request by Initiating Firm for a confirmed tradeCancellation Request by Initiating Firm for a confirmed trade
9		TCR [IP]	AR	One-Party Report for Pass Through		Trade Report Cancel	New	Matched		100	10	Trade Capture Report Ack for cancellation request by the initiating FirmTrade Capture Report Ack for cancellation request by the initiating Firm
10		TCR [CP]	AE	One-Party Report for Pass Through		Alleged Trade Report Cancel	New			100	10	Notification to the counterparty to cancel the trade Trade Capture Report Notification to the counterparty to cancel the counterparty to cancel the trade

11	TCR [IP]			One-Party Report for Pass Through	Trade Report Cancel	Cancel				Withdrawal of a Cancellation Request by Initiating Firm— TCR (AE)Withdrawal of a Cancellation Request by Initiating Firm— TCR (AE)	For	matte
12		TCR	AR	One-Party Report for Pass Through	Trade Report Cancel	Cancel	Matched			Trade Capture Report Ack the withdrawal of the cancellation request Trade Capture Report Ack of the withdrawal of the cancellation request		matte ic, Engl
13		TCR	AE	One-Party Report for Pass Through	Alleged Trade Report Cancel	Cancel	Matched	100	10	Trade Capture Report Notification of withdrawal to the counterparty Firm TCR (AE)Trade Capture Report Notification of withdrawal to the counterparty Firm TCR (AE)	Itali	matte ic, Engl

A9: Off Book Dual Party Decline Submission

Ti me	Mess age Send	Messa ge Receiv ed	Mess age Type	TradeHan dlingInst	OrigT rade Hand lingIn str	Trade Repo rtTyp e	TradeR eportT ransTy pe	Match status	Exec Type	Las tQty	Las tPx	Linked TCR message
1	TCR [IP]		AE	One-Party Report for Pass Through		Submit	New			100	10	Trade Report Submission RequestTrade Report Submission Request
2		TCR [IP]	AR	One-Party Report for Pass Through		Submit	New	Unmatch ed		100	10	Trade Capture Report Ack the Initiating Firm for the Trade Report Submission Request Trade Capture Report Ack to the Initiating Firm for the Trade Report Submission Request
3		TCR [CP]	AE	One-Party Report for Pass Through		Alleged New	New			100	10	Trade Capture Rep Notification to t (U.S.) Trade Report Submission Request Trade Capture Report Notification to the counterparty Firm of the Trade Report Submission Request
4	TCR [CP]		AE	One-Party Report for Pass Through		Decline	Replace			100	10	Response from the counterparty Firm for the cancellation Request Response from the counterparty Firm for the cancellation Request
5		TCR [CP]	AR	One-Party Report for Pass Through		Decline	Replace	Unmatch ed		100	10	the Initiating Firm for the Italic, Engagement Trade Report Submission Request Trade Capture Report Ack to the Initiating Firm for the Trade Report Submission Request
6		TCR [IP]	AE	One-Party Report for Pass Through		Decline	Cancel	Unmatch ed		100	10	Trade Capture Report for the Confirmation of the Decline the Trade Trade Capture Report for the confirmation of the Decline of the Trade

A10: Decline the cancellation request

Ti me	Mess age Send	Messa ge Receiv ed	Mess age Type	TradeHan dlingInst	OrigT rade Hand lingIn str	Trade Repo rtTyp e	TradeR eportT ransTy pe	Match status	Exec Type	Las tQty	Las tPx	Linked TCR message
1	TCR [IP]		AE	One-Party Report for Pass Through		Submit	New			100	10	Trade Report Submission RequestTrade Report Submission Request
2		TCR [IP]	AR	One-Party Report for Pass Through		Submit	New	Unmatch ed		100	10	Trade Capture Report Ack the Initiating Firm for the Trade Report Submission Request Trade Capture Report Ack to the Initiating Firm for the Trade Report Submission Request
3		TCR [CP]	ΑE	One-Party Report for Pass Through		Alleged New	New			100	10	Trade Capture Rep Notification to to (U.S.) Counterparty Firm of tree Trade Report Submission Request Trade Capture Report Notification to the counterparty Firm of the Trade Report Submission Request
4	TCR [CP]		AE	One-Party Report for Pass Through		Accept	Replace			100	10	Response from counterpart Firm for a trade report submission requestResponse from counterparty Firm for a trade report submission requestTrade Report Submission Request
5		TCR [CP]	AR	One-Party Report for Pass Through		Accept	Replace	Unmatch ed		100	10	the Initiating Firm for the Trade Report Submission Request Trade Capture Report Ack to the Initiating Firm for the Trade Report Submission Request
6		TCR [IP]	AE		One- Party Report for Pass Throug h	Submit	Replace	Matched	Trade	100	10	Trade Capture Report for to Confirmation of the Acceptance of the Trade Trade Capture Report for the Confirmation of the Acceptance of the Trade Initiating Party
7		TCR [CP]	AE	Trade Confirmatio n	One- Party Report for Pass Throug h	Submit	Replace	Matched	Trade	100	10	Trade Capture Report for to confirmation of the acceptance of the Trade Trade Capture Report for the confirmation of the acceptance of the Trade – Counter Party
8	TCR [IP]		AE	One-Party Report for Pass Through		Trade Report Cancel	New					Cancellation Request by Initiating Firm for a confirmed tradeCancellation Request by Initiating Firm for a confirmed trade
9		TCR [IP]	AR	One-Party Report for Pass Through		Submit		Matched		100	10	Trade Capture Report Ack for cancellation request by the initiating FirmTrade Capture Report Ack for cancellation request by the

										initiating Firm	
10		TCR [CP]	AE	One-Party Report for Pass Through	Alleged Trade Report Cancel	New		100	10	Motification to the	ormatte talic, Eng
11	TCR [CP]		AE	One-Party Report for Pass Through	Decline	Replace				Response from the counterparty Firm for the cancellation RequestResponse from the counterparty Firm for the cancellation Request	ormatte
12		TCR [CP]	AR	One-Party Report for Pass Through	Decline	Cancel	Matched			and the state of t	talic, Eng
13		TCR [IP]	AE	One-Party Report for Pass Through	Alleged Trade Report Cancel	Cancel	Matched	100	10	to the Initiating Firm for th	ormatte talic, Eng

13 FUNCTIONAL AND IMPLEMENTATION LIMITATIONS

13.1.1.1 All the FIX gateways (FIX Trading, FIX Drop Copy and FIX Post Trade) currently use a common library. The system hence accepts all FIX messages defined for all three gateways, and cannot distinguish between them per gateway.

It will validate the incoming messages in the following sequence:

- 1. The system initially does a FIX library level validation
- 2. The system does a validation for required fields
- 3. The system finally does the Gateway level validation
- 13.1.1.2 Hence if a message is sent which does not comply with the specific gateway being used (but is defined in a different FIX gateway), it will validate the required fields. If any of the required tags are missing, it will give out a session reject with message "Required tag missing").
- 13.1.1.3 If a message is sent which does not comply with the specific gateway being used (but is defined in a different FIX gateway), it will validate the required fields. If all required fields are available, a gateway validation gives out a business reject message "Unsupported Message Type".
- 13.1.1.4 If a message is sent which does not comply with any of the FIX gateways used it will then give out a session reject message "Invalid Msg Type".
- 13.1.1.5 If an undefined tag is sent along with any of the Administrative messages, the system will ignore the undefined tags and process the rest of the message. This is a limitation exists in the FIX library.
- 13.1.1.6 If Post Trade Gateway generates a Business Reject at a time the post trade process PTTPS is unavailable, required tag 45 (RefSeqNum) would not be returned. This is due to a technical limitation between PTTPS and Post Trade Gateway.