PHLX XL

NASDAQ OMX

RISK MANAGEMENT

FIRM INTERFACE SPECIFICATION

Prepared By: OTS Team

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1 PURPOSE AND SCOPE

The purpose of this document is to provide details of the message format and protocol of the firm's connection to the NASDAQ OMX PHLX (PHLX) Risk Management (RMP) Interface. The intended audience of this document is a firm's Production Support and Development/R&D personnel. The firm must represent PHLX Specialists and Market makers that are members of PHLX to be eligible to use this interface.

Following is the list of companion documents that give additional information related to the interface.

- **PHLX-XL TCP/IP Communication Manual**: The intended audience of this document is a firm's Communications personnel. The objective is to help them understand the physical and transport level details of the firm's connection to all the TCP/IP PHLX-XL Interfaces.

- **PHLX-XL SQF Business Manual**: The purpose of this document is to provide details of the supported business functionality to firms that wish to connect to the PHLX-XL Quoting system using the Specialized Quote Feed interface. The intended audience of this document is the marketing and product development personnel at the firm who wish to understand the details of the SQF Business functionality.

- **PHLX-XL SOF Messaging Manual**: The intended audience of this document is a firm's Production Support and Development/R&D personnel. The objective is to help them understand the message format and protocol details of the firm's connection to the PHLX-XL SOF Interface. Using this interface, the firms can receive Order and Book information in real time from PHLX-XL.

- **PHLX-XL SQF Messaging Manual**: The intended audience of this document is a firm's Production Support and Development/R&D personnel. The objective is to help them understand the message format and protocol details of the firm's connection to the PHLX-XL SQF Interface. Using this interface, the firms can send quotes representing Specialists and Market Makers at PHLX.

2 RISK MANAGEMENT OVERVIEW

PHLX has developed a real-time risk management reporting capability for its Options Trading System. The information that this system will provide to its participating clearing firm members will significantly enhance their ability to manage a trader's risk. The clearing firms will be provided with real-time information regarding all trades affecting a trader's positions through this interface.

It is important to note that it will be the responsibility of the clearing firms to provide a mechanism to send this data to the traders on the floor. This data can be used by the traders to determine when they are involved with a trade for the purpose of tracking their position.

In addition, the firms may send requests to retransmit trade messages.

The purpose of this document is to describe the necessary elements that will be needed by the clearing firms in order for them to receive real-time risk management feed and send their requests. It covers the hardware interface, communication protocol, message layout, and application protocol that each firm will need to communicate with the PHLX-XL Risk Management System.

3 COMMUNICATION PROTOCOL

3.1 Description

Each firm will initiate a TCP/IP connection to PHLX-XL over the primary communication line (to be described later). All firms will connect to the PHLX-XL at a specific IP address and port number (this information will be supplied to each firm).

Each firm must make known to PHLX-XL the identity of the IP address assigned to PHLX-XL on their network. PHLX-XL will then assign each firm a port number for that IP address from which they must establish a connection to PHLX-XL. Based on each firm's IP address and port number, PHLX-XL will be able to uniquely identify the firm upon connection.

3.2 Firewall

PHLX will utilize a firewall to provide system security. All firms will connect into the PHLX firewall where authorization will take place. If authorized, a TCP/IP session will be established between the firm and the PHLX-XL Risk Management Process (RMP). Firms must originate connection with PHLX-XL on the specified IP address and port number in order to be permitted past the firewall.

3.3 Communication Startup / Failure

It will be the clearing firm's responsibility to establish a connection with the Exchange. Each firm will connect to the Exchange's router and upon successful authorization, the Exchange will accept the connection.

4 APPLICATION PROTOCOL

4.1 Trade Message

When a trade is executed for a firm participating in the Risk Management Service, a message containing the trade information will be sent to that firm over the communication line. By default, the PHLX-XL Risk Management Process (the RMP) will expect the firm to respond to each add, change, or cancel message with an acknowledgement to indicate that the message was received.

Each message will contain a unique, six digit sequence number which will be initialized to 1 each morning. This number will be incremented for each message sent to each firm throughout the day and can be used to help detect message gaps or to request retransmission of a specific message or range of messages.

Section 6 – MESSAGE FORMATS – describes the content of the trade messages that will be sent to the firms and the acknowledgement received from the firm.

The acknowledgement message format, to be sent by the firm, is identical to the original message with the timestamp in the header updated to reflect the time that the firm acknowledged the message. If a firm does not want to send acknowledgements for messages it receives, acknowledgement processing can be disabled. However, initially this is not recommended since the PHLX Operations will have no way of knowing whether the firm receives its messages. If the acknowledgement messages impact any performance, the acknowledgement processing can be disabled. The trade messages will be sent with the confirmation indicator set to “N”.

If the connection between the firm and the RMP is broken, messages intended for that firm will be queued until the link is restored. Once communication has been reestablished, these queued messages will be automatically sent to the firm.

4.2 Retransmission of Trades Message

The RMP interface provides a facility to request retransmission of trade messages that have been sent earlier through the feed. The firm can use this request to recover from a system or network failure when the trade messages sent earlier are lost or the firm detects a gap in the sender sequence number for two consecutive messages. The firm can request retransmission by the following criteria:

- All trade messages that have been sent until the current time for the day
- Messages between a given start and end sequence number. The sequence number is the unique sender sequence number that is assigned to each message on a given line.

The response message will be sent after all the trades have been retransmitted to the firm. The response will include the status and total number of messages retransmitted based on the request. The firm should assign a unique token to each request and include it as part of the request. This token is echoed back in the response to help the firm to map the response with the corresponding request.

The retransmitted trades will be interleaved with real time trade messages so the firm should ensure that its processing is not affected by the same. The retransmitted messages will have the resend indicator set to differentiate between the retransmitted and real time trade messages.

Please refer to section 2 for the format of these messages and sections 7.3 and 7.5 for examples of retransmission of trades messages.

4.2.1 Unsolocited Retranmission

The RMP interface provides a facility to send unsolicited retransmission of trade messages that may have already been reveived by firms. This facility is used in failure recovery scenarios, is applicable in version 4.2 of the protocol specification and will be supported in subsequent versions.

Unsolicited retransmission messages are identified using the Send_or_resend field with a value of 'P' indicating a possible duplicate. Since these are messages that may have already been processed, it is suggested that firms compare Trade_ID_number (formerly Trade_seq_number) and Correction_number of the possible duplicate trade message against any previously received trade message to ensure proper handling.

4.3 Heartbeat Message

The PHLX-XL Trading System will periodically send a heartbeat message to each firm to ensure proper communication at the application level. When the firm receives these heartbeat messages, they must respond to them immediately.

When a heartbeat message is not responded within a given period of time (60 seconds), the PHLX XL operations will be immediately notified of the same. PHLX XL system will not disconnect the line or take any other action and will attempt to send the real time trade messages.

Please refer to Section 3 for the format of these messages.

5 FIRM INFORMATION

PHLX-XL will require the following information from each participating clearing firm:

- The IP address that identifies PHLX-XL on their network. PHLX-XL will then assign a port number on that address for the firm.
- A list of all firms that clear though your firm and their corresponding OCC numbers.

In addition, the firm will need to identify the mechanism that it would prefer for routing of these messages. The PHLX system provides routing of trades on a given line using the following criteria:

- CMTA or OCC Number
- PHLX Badge or House Number
- PHLX internal firm identifier (IFI), this groups all the PHLX House or Account numbers that belong to the same member firm at the PHLX.

6 MESSAGE FORMATS

All messages are an ASCII stream of characters. All trade messages sent from PHLX-XL to the firm will have the following format:

NOTE: All spaces are represented by the symbol: º (circle)

6.1 Trade Message Format

Message Format sent to the Clearing Firm

Field Name	Len	Value	Description
Process_name	16	PHLXOPTRISKMGMTº	Identifier for PHLX-XL Risk Management Process
Sender_SYSID	4	PH44	PHLX-XL Risk Management ID
Send_response	4	0001 to 9999	Number of send attempts. This field will be incremented whenever the message is resent to the firm due to a retransmission request.
Target_SYSID	4	[A-Z]{1,4}º{0,3} Left justified padded with spaces	Clearing Firm Mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	CCYYMMDDHHMMSS	Date / Timestamp
Sender_sequence	7	0000001 to 9999999	Sequential number for each participating clearing firm. This number will be reset to 0000001 each morning.
Send_or_resend	1	[SRP]	Indicates if this is the original transmission or re-transmission of a message. Possible values are: S = Send R = Resend (solicited retransmission) P = Possible duplicate (unsolicited retransmission)
Confirm_or_no_confirm	1	[NY]	An indicator that specifies whether an acknowledgement is expected from the firm. "Y" if a confirmation is expected.

Field Name	Len	Value	Description
			"N" if no confirmation is expected.
Symbol Information			
Underlying	13	A..Z	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
Security_symbol	5	A..Z, 0-9, Spaces	Security Symbol, left justified, space filled. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
put_call_ind	1	[CP º]	An indicator specifying whether this transaction is a Call or a Put. Possible values are: C = Call P = Put Space = This side of the trade is Stock Leg of a tied to stock complex order.
expr_date	8	CCYYMMDD, Spaces	Expiration Date with 4-digit year. Format is CCYYMMDD. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
exer_price_amt	9	NNNNNFFFF, Spaces	The exercise price of the option. The format of this field is NNNNNFFFF NNNNN = Whole dollars FFFF = decimal Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
Trade Information			
Trans_code	1	[XYZ]	Indicates if this is a new trade "X", a change "Y" or a deletion "Z"
Liquidity	1	[ARN]	Indicates if this side of the trade is a maker or taker. Possible values are: A – Maker R – Taker

Field Name	Len	Value	Description
			N – None. Maker/Taker not applicable to this side of the trade.
Filler	3	spaces	Filler for future use
Trade_ID_number (formerly Trade_sequence_number)	8	00000001 to 99999999	Unique system trade identification number of the PHLX-XL trade. Recipients should note that the trade identification number, although unique, is not guaranteed to always be increasing. It may, in fact, at any time increase or decrease by any incremental value.
Correction_number	2	00 to 99	Trade correction number; will be zero for a new trade (New v4.0)
Cross_ID	8	00000000 to 99999999	Transaction Id of trade. Ties together all clearing trades of a given execution. Right justified, 0 filled. 00000000 if cross id is not available.
Auction_ID	8	00000000 to 99999999	Auction Id if any. Right Justified 0 filled. 00000000 if auction id not available.
Ref_trade_ID_number (formerly Ref_trade_seq_number)	8	00000000 to 99999999	Refers to the system identification number of the original PHLX-XL trade for any changes; otherwise zero (New v4.0)
Ref_correction_number	2	00 to 99	Refers to the trade correction number of the original PHLX-XL trade before any changes; otherwise zero (New v4.0)
Trade_source	1	[ABCGLMOPQSUXYZ]	The source of the transaction. Possible values are: A = Auto-ex (PHLX-XL order automatically executed) B = Floor Broker (FBMS) entered C = Complex Order Traded in

Field Name	Len	Value	Description
			COLA G = Complex Order Legged against single orders or quotes P = Complex Sweep L = Trade generated by PHLX-XL due to a corresponding linkage trade executed at another exchange M = Manual Q = Quote match S = Sweep U = Complex Order Traded in COLA after cross resolution Y = Complex Order Auto Executed Z = Complex Order Traded after cross resolution O = Other ! Note, the permissible values of this field have changed starting v4.0. We explicitly indicate Quote Match, Sweep and Specialist execution source. Also, this will NOT be affected when the trade is corrected, we have introduced a new field correction source for the same !
Exec_market_ID	1	[ABCINQWZ] or Space	Executing market id (for linkage trade): A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space = Not a linkage trade New v4.0. When a Customer

Field Name	Len	Value	Description
			order is shipped to away exchange for execution, we will indicate the Market where it was executed. Since the Specialist represents the customer order on the away exchange and acts a contra side to the order on the PHLX, this indicator will be set for the side represented by the Specialist on the wash trade.
Correction_source	1	[MOR] or Space	The source of trade correction. Possible values are: M = Manual R = Remote firm O = Other Space = No correction New 4.0
Trade_date	8	CCYYMMDD	Trade date which should be today's date. Format of this field is: CCYYMMDD
Trade_time	8	hhmmsscc	Time the trade occurred hh = hours mm = minutes ss = seconds cc = hundredths of second
Trade_status_ind	1	[BMU]	Status of the transaction. Possible values are: B = Busted (canceled) M = Matched U = Unmatched.
buy_sell_code	1	[12]	An indicator specifying whether this transaction is a buy or a sell. Possible values are: 1 = Buy 2 = Sell
Prem_price_amt	9	NNNNNFFFF	The premium price for this transaction. The format of this field is: NNNNNFFFF

Field Name	Len	Value	Description
			NNNNN = whole dollars FFFF = decimal format
Contract_qty	8	[0-9]{8} Right justified, padded with zeros	Contract quantity right justified with leading zeros
Side_changed	1	[NY]	Indicates whether there is a possible change on this side of the trade N = No Y = Yes New 4.0. Indicates if correction affected this side of the trade
strategy_id	6	[A-Z][0-9] or Spaces	Strategy id if this trade involves a complex order or complex sweep on either side. If the trade does not involve a complex order or complex sweep, then this field will be space filled.
phlx_leg_ref_id	5	[0-9] Space Right justified, padded with zeros; or 5 spaces.	Leg ref id of a complex order set by PHLX if the trade involves a complex order or sweep on either side. If this does not involve a complex order or sweep, then this field will be set to spaces. Please note, this is zero based, that is, first leg id is 0, second is 1 and so on.
side_type	1	[A-Z] Space	Indicates type of order/sweep/quote for this side of the trade. B = Resting Complex Order C = Complex Order that didn't start/join Cola I = Complex Order that initiated Cola J = Complex Order that joined Cola O = Single Order Q = Quote

Field Name	Len	Value	Description
			S = Complex Sweep W = Single Order Sweep Space = None of the above Single or Complex Orders can originate from FIX or FBMS
Clearing Information			
Exec MPID	5	[A-Zº][0-9] Up to 5 chars, left justified, Padded with spaces	NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Exec NSCC	5	[0-9] or Spaces. Right justified, 0 filled.	NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
exec_firm_code	5	(º{5}|[0-9]{5}) Right justified, padded with zeros	This is the *actual* OCC clearing number.
exec_broker_code	5	(º{5}|[0-9]{5}) Right justified, padded with zeros; or 5 spaces.	The PHLX floor broker number
exec_2nd_broker_code	5	(º{5}|[0-9]{5}) Right justified, padded with zeros; or 5 spaces.	The PHLX 2nd floor broker number
exec_house_number	5	(º{5}|[0-9]{5}) Right justified, padded with zeros.	The PHLX House number of the executing firm
exec_clearing_number	5	(º{5}|[0-9]{5}) Right justified, padded with zeros.	The PHLX Clearing number of the executing firm
CMTA_firm_number	5	(º{5}|[0-9]{5}) Right justified, padded with zeros or 5 spaces	Give-up firm OCC if a CMTA trade; otherwise, spaces.
Mm_acronym	5	[A-Zº][0-9] Up to 5 chars, left justified, Padded with spaces	Sub or Multi Account id for a Off-floor Market Maker order or linkage order or spaces
Market_ ID	1	[ABCINQWZ] or Space	Originating market id for the order: A = Amex B = BOX

Field Name	**Len**	**Value**	**Description**
			C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space
account_id	10	[A-Z] [0-9] Space	Account ID as specified in the order involved with this trade or spaces
Origin_ind	1	[CFMPº]	This is the prefix to the house number. Possible values are: C = Customer F = Firm M = Market Maker P = Professional Customer
yield_ind	1	Y or N	This is the yield indicator in the trade
Open_close_ind	1	[A-Zº]	This is the suffix to the house number or 1 space.
Mm_broker_code	5	(º{5}|[0-9]{5}) Right justified, padded with zeros; or 5 spaces	PHLX Market maker badge number when floor broker executes trade for market maker.
Contra – Clearing Information			
Contra MPID	5	[A-Zº][0-9] Up to 5 chars, left justified, Padded with spaces	Contra side NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra NSCC	5	[0-9] or Spaces. Right justified, 0 filled.	Contra side NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra_exec_firm_code	5	(º{5}|[0-9]{5}) Right justified, padded with zeros; or 5 spaces	The *actual* OCC number of the contra side.
Contra_exec_broker_c	5	(º{5}|[0-9]{5})	Contra side PHLX floor broker

Field Name	**Len**	**Value**	**Description**
ode		Right justified, padded with zeros; or 5 spaces	number
Contra_exec_2nd_broker_code	5	(º{5}|[0-9]{5}) Right justified, padded with zeros; or 5 spaces	Contra side PHLX 2nd floor broker number
Contra_exec_house_number	5	(º{5}|[0-9]{5}) Right justified, padded with zeros; or 5 spaces	The PHLX House number of the contra firm
Contra_exec_clearing_number	5	(º{5}|[0-9]{5}) Right justified, padded with zeros; or 5 spaces	The PHLX Clearing number of the contra firm
Contra_CMTA_firm_number	5	(º{5}|[0-9]{5}) Right justified, padded with zeros or 5 spaces	Contra Give-up firm OCC if a CMTA trade; otherwise, spaces.
Order Information			
Firm_mnemonic	4	[A-Z] Up to 4 chars, left justified, padded with spaces	Firm mnemonic associated with this order or spaces
Client_ID	30	[A-Z][0-9] Up to 30 chars, left justified with spaces	FIX id assigned by the sending firm or exchange for fix orders. For example: Side_type = B/C/I/J/O, this field will contain fix id if the order originated from fix.
cust_leg_ref_id	5	[A-Z][0-9] Space	Leg ref id of a complex order as sent by the customer. If this side is not a complex order, then this field will be set to spaces
Order_received_date	8	CCYYMMDD	Date when order is received on PHLX-XL or spaces
Short_Sale	1	[YNE, Space]	Indicates whether this is a short sale for the stock leg of a complex order tied to stock. “Y” = Short Sale. Applicable to Sell side of Complex orders and sweeps tied to stock only. “N” = Not a short sale

Field Name	Len	Value	Description
			"E" = Short Sale Exempt. Space = Not sell side of a Stock Leg
Equity Order Capacity	1	[PAR, Space]	A= Agency Order P = Principal Order R = Riskless Principal Order Space = Not a Stock Leg of tied to stock complex order. For Complex Sweeps, this field will always be 'P'
Firm_opt_descrip	16	[A-Z][0-9][-º] Up to 16 characters (alphanumeric, hyphen, space), left justified, padded with spaces; last 3 characters are spaces	The ID field from the order ticket NOTE, staring v4.0 this field will NOT be filled with MM acronym for Off floor Market Maker orders, the firm needs to use the MM acronym field for the same
Class_code	5	[A-Z]{1,3}º{0,2}[A-Z]{2}	Option class symbol. After symbology, this field will not be populated.
End_msg_ind	1	Hex character 03	ETX

Acknowledgement Message Format sent by the Clearing Firm to PHLX-XL

The firm's acknowledgement message is identical to the message received by the firm with only the timestamp (Sender_timestamp) being updated by the firm.

Field Name	Len	Value	Description
Process_name	16	PHLXOPTRISKMGMTº	Identifier for PHLX-XL Risk Management Process
Sender_SYSID	4	PH44	PHLX-XL Risk Management ID
Send_response	4	0001 to 9999	Number of send attempts. This field will be incremented whenever the message is resent to the firm due to a retransmission request.
Target_SYSID	4	[A-Z]{1,4}º{0,3} Left justified padded with spaces	Clearing Firm Mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	CCYYMMDDHHMMSS	Date / Timestamp
Sender_sequence	7	0000001 to 9999999	Sequential number for each participating clearing firm. This number will be reset to 0000001 each morning.
Send_or_resend	1	[SRP]	Indicates if this is the original transmission or re-transmission of a message. Possible values are: S = Send R = Resend P = Possible duplicate
Confirm_or_no_confirm	1	[NY]	An indicator that specifies whether an acknowledgement is expected from the firm. "Y" if a confirmation is expected. "N" if no confirmation is expected.
Symbol Information			
Underlying	13	A..Z	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
Security_symbol	5	A..Z, 0-9, Spaces	Security Symbol, left justified, space filled Spaces = This side of the trade is

Field Name	**Len**	**Value**	**Description**
			Stock Leg of a tied to stock complex order.
put_call_ind	1	[CP º]	An indicator specifying whether this transaction is a Call or a Put. Possible values are: C = Call P = Put Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
expr_date	8	CCYYMMDD, Spaces	Expiration Date with 4-digit year. Format is CCYYMMDD Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
exer_price_amt	9	NNNNNFFFF, Spaces	The exercise price of the option. The format of this field is NNNNNFFFF NNNNN = Whole dollars FFFF = decimal Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
Trade Information			
Trans_code	1	[XYZ]	Indicates if this is a new trade “X”, a change “Y” or a deletion “Z”
Liquidity	1	[ARN]	Indicates if this side of the trade is a maker or taker. Possible values are: A – Maker R – Taker N – None. Maker/Taker not applicable to this side of the trade.
Filler	3	spaces	Filler for future use
Trade_ID_number (formerly Trade_seq_number)	8	00000001 to 99999999	Unique system identification number of the PHLX-XL trade

Field Name	**Len**	**Value**	**Description**
Correction_number	2	00 to 99	Trade correction number; will be zero for a new trade
Cross_ID	8	00000000 to 99999999	Transaction Id of trade. Ties together all clearing trades of a given execution. Right justified, 0 filled. Will be 00000000 if no cross id present.
Auction_ID	8	00000000 to 99999999, Spaces	Auction Id if any. Right Justified 0 filled. Will be 00000000 if no auction id present.
Ref_trade_ID_number (formerly Ref_trade_seq_number)	8	00000001 to 99999999	Refers to the system identification number of the original PHLX-XL trade for any changes; otherwise zero
Ref_correction_number	2	00 to 99	Refers to the trade correction number of the original PHLX-XL trade before any changes; otherwise zero
Trade_source	1	[ABCGLMOPQSUXYZ]	The source of the transaction. Possible values are: A = Auto-ex (PHLX-XL order automatically executed) B = Floor Broker (FBMS) entered C = Complex Order Traded in COLA G = Complex Order Legged against single orders or quotes P = Complex Sweep L = Trade generated by PHLX-XL due to a corresponding linkage trade executed at another exchange M = Manual Q = Quote match S = Sweep U = Complex Order Traded in COLA after cross resolution Y = Complex Order Auto Executed Z = Complex Order Traded in

Field Name	Len	Value	Description
			after cross resolution O = Other ! Note, the permissible values of this field have changed starting v4.0. We explicitly indicate Quote Match, Sweep and Specialist execution source. Also, this will NOT be affected when the trade is corrected, we have introduced a new field correction source for the same !
Exec_market_ID	1	[ABCINQWZ] or Space	Executing market id (for linkage trade): A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space = Not a linkage trade New v4.0. When a Customer order is shipped to away exchange for execution, we will indicate the Market where it was executed. Since the Specialist represents the customer order on the away exchange and acts a contra side to the order on the PHLX, this indicator will be set for the side represented by the Specialist on the wash trade.
Correction_source	1	[MOR] or Space	The source of trade correction. Possible values are: M = Manual R = Remote firm O = Other

Field Name	Len	Value	Description
			Space = No correction
Trade_date	8	CCYYMMDD	Trade date which should be today's date. Format of this field is: CCYYMMDD
Trade_time	8	hhmmsscc	Time the trade occurred hh = hours mm = minutes ss = seconds cc = hundredths of second
Trade_status_ind	1	[BMU]	Status of the transaction. Possible values are: B = Busted (canceled) M = Matched U = Unmatched.
buy_sell_code	1	[12]	An indicator specifying whether this transaction is a buy or a sell. Possible values are: 1 = Buy 2 = Sell
Prem_price_amt	9	NNNNNFFFF	The premium price for this transaction. The format of this field is: NNNNNFFFF NNNNN = whole dollars FFFF = decimal format
Contract_qty	8	[0-9]{8} Right justified, padded with zeros	Contract quantity right justified with leading zeros
Side_changed	1	[NY]	Indicates whether there is a possible change (with respect to the user) on this side of the trade N = No Y = Yes
strategy_id	6	[A-Z][0-9] or Spaces	Strategy id if this trade involves a complex order or complex sweep on either side. If the trade does not involve a complex order or complex sweep, then this field will be space filled.
phlx_leg_ref_id	5	[0-9] Space Right justified, padded	Leg ref id of a complex order set by PHLX if the trade involves a

Field Name	Len	Value	Description
		with zeros; or 5 spaces.	complex order or sweep on either side. If this does not involve a complex order or sweep, then this field will be set to spaces. Please note, this is zero based, that is, first leg id is 0, second is 1 and so on.
side_type	1	[A-Z] Space	Indicates type of order/sweep/quote for this side of the trade. B = Resting Complex Order C = Complex Order that didn't start/join Cola I = Complex Order that initiated Cola J = Complex Order that joined Cola O = Single Order Q = Quote S = Complex Sweep W = Single Order Sweep Space = None of the above Single or Complex Orders can originate from FIX or FBMS
Clearing Information			
Exec MPID	5	[A-Zº][0-9] Up to 5 chars, left justified, Padded with spaces	NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Exec NSCC	5	[0-9] or Spaces. Right justified, 0 filled.	NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
exec_firm_code	5	(º{5}|[0-9]{5}) Right justified, padded with zeros	This is the *actual* OCC clearing number.
exec_broker_code	5	(º{5}|[0-9]{5}) Right justified, padded	The PHLX floor broker number

Field Name	**Len**	**Value**	**Description**
		with zeros; or 5 spaces.	
exec_2nd_broker_code	5	(º{5}|[0-9]{5}) Right justified, padded with zeros; or 5 spaces.	The PHLX 2nd floor broker number
exec_house_number	5	(º{5}|[0-9]{5}) Right justified, padded with zeros.	The PHLX House number of the executing firm
exec_clearing_number	5	(º{5}|[0-9]{5}) Right justified, padded with zeros.	The PHLX Clearing number of the executing firm
CMTA_firm_number	5	(º{5}|[0-9]{5}) Right justified, padded with zeros or 5 spaces	Give-up firm OCC if a CMTA trade; otherwise, spaces.
Mm_acronym	5	[A-Zº][0-9] Up to 5 chars, left justified, Padded with spaces	Sub or Multi Account id for a Off-floor Market Maker order or linkage order or spaces
Market_ ID	1	[ABCINQWZ] or Space	Originating market id for the order: A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space
Account_id	10	[A-Z] [0-9] Spaces	Account ID as specified in the order involved with this trade or spaces
Origin_ind	1	[CFMPº]	This is the prefix to the house number. Possible values are: C = Customer F = Firm M = Market Maker P = Professional Customer
yield_ind	1	Y or N	This is the yield indicator in the trade

Field Name	Len	Value	Description
Open_close_ind	1	[A-Zº]	This is the suffix to the house number or 1 space.
Mm_broker_code	5	(º{5}|[0-9]{5}) Right justified, padded with zeros; or 2 spaces	PHLX Market maker badge number when floor broker executes trade for market maker.
Contra – Clearing Information			
Contra MPID	5	[A-Zº][0-9] Up to 5 chars, left justified, Padded with spaces	Contra side NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra NSCC	5	[0-9] or Spaces. Right justified, 0 filled.	Contra side NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra_exec_firm_code	5	(º{5}|[0-9]{5}) Right justified, padded with zeros; or 5 spaces	The *actual* OCC number of the contra side.
Contra_exec_broker_code	5	(º{5}|[0-9]{5}) Right justified, padded with zeros; or 5 spaces	Contra side PHLX floor broker number
Contra_exec_2nd_broker_code	5	(º{5}|[0-9]{5}) Right justified, padded with zeros; or 5 spaces	Contra side PHLX 2nd floor broker number
Contra_exec_house_number	5	(º{5}|[0-9]{5}) Right justified, padded with zeros; or 5 spaces	The PHLX House number of the contra firm
Contra_exec_clearing_number	5	(º{5}|[0-9]{5}) Right justified, padded with zeros;or 5 spaces	The PHLX Clearing number of the contra firm
Contra_CMTA_firm_number	5	(º{5}|[0-9]{5}) Right justified, padded with zeros or 5 spaces	Contra Give-up firm OCC if a CMTA trade; otherwise, spaces.
Order Information			
Firm_mnemonic	4	[A-Z] Up to 4 chars, left justified, padded with spaces	Firm mnemonic associated with this order or spaces

Field Name	Len	Value	Description
Client_ID	30	[A-Z][0-9] Up to 30 chars, left justified with spaces	FIX id assigned by the sending firm or exchange for fix orders. For example: Side_type = B/C/I/J/O, this field will contain fix id if the order originated from fix.
cust_leg_ref_id	5	[A-Z][0-9] Space	Leg ref id of a complex order as sent by the customer. If this side is not a complex order, then this field will be set to spaces
Order_received_date	8	CCYYMMDD	Date when order is received on PHLX-XL or spaces
Short_Sale	1	[YNE, Space]	Indicates whether this is a short sale for the stock leg of a complex order tied to stock. "Y" = Short Sale. Applicable to Sell side of Complex orders and sweeps tied to stock only. "N" = Not a short sale "E" = Short Sale Exempt. Space = Not sell side of a Stock Leg
Equity Order Capacity	1	[PAR, Space]	A= Agency Order P = Principal Order R = Riskless Principal Order Space = Not a Stock Leg of tied to stock complex order. For Complex Sweeps, this field will always be 'P'
Firm_opt_descrip	16	[A-Z][0-9][-º] Up to 16 characters (alphanumeric, hyphen, space), left justified, padded with spaces; last 3 characters are spaces	The ID field from the order ticket
Class_code	5	[A-Z]{1,3}º{0,2}[A-	Option class symbol.

Field Name	Len	Value	Description
		Z]{2}	After symbology, this field will not be populated.
End_msg_ind	1	Hex character 03	ETX

6.2 Retransmission of Trades Message Format

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The RMP interface provides a facility to request retransmission of trade messages that have been sent earlier through the feed. The firm can use this request to recover from a system or network failure when the trade messages sent earlier are lost or the firm detects a gap in the sender sequence number for two consecutive messages. The firm can request retransmission by the following criteria:

- All trade messages that have been sent until the current time for the day
- Messages between a given start and end sequence number. The sequence number is the unique sender sequence number that is assigned to each message on a given line.

The response message will be sent after all the trades have been retransmitted to the firm. The response will include the status and total number of messages retransmitted based on the request. The firm should assign a unique token to each request and include it as part of the request. This token is echoed back in the response to help the firm to map the response with the corresponding request.

The retransmitted trades will be interleaved with real time trade messages so the firm should ensure that its processing is not affected by the same. The retransmitted messages will have the resend indicator set to differentiate between the retransmitted and real time trade messages.

See Sections 7.3 and 7.5 for examples of retransmission of trade messages.

Message Format of Retransmission of Trades Request sent by the Clearing Firm to PHLX-XL

NOTE: All spaces are represented by the symbol: º (circle)

Field Name	***Len***	***Value***	***Description***
Header			
Message_ID	3	200	Message identifier for PHLX-XL Risk Management Process
System_version	4	PH44	PHLX-XL System version
Firm_ID	4	[A-Z]{1,4}º{0,3} Left justified padded with spaces	Clearing firm mnemonic. This is the mnemonic of the participating clearing firm.

Sender_timestamp	14	CCYYMMDDhhmmss	Date/time stamp
Sender_token	7	[A-Zº][0-9] Up to 7 characters, left justified, padded with spaces	Unique token used by the participating clearing firm (to match request with the response message)

Data			
Retransmission_type	1	[ARU]	A = All messages R = A range of trade messages U = All unacknowledged messages
Start_seq_number	7	0000000 to 9999999	Starting sender sequence number, used when requesting a range of trade messages; otherwise zero
End_seq_number	7	0000000 to 9999999	Ending sender sequence number, used when requesting a range of trade messages; otherwise zero

Note: *End_seq_number* must not be less than *Start_seq_number*.

If retransmission of only one trade message is required, *Start_seq_number* and *End_seq_number* must be set to the same sequence number.

End of Message			
End_msg_ind	1	Hex character 03	ETX

Message Format of Response to the Retransmission of Trades Request sent by PHLX-XL to the Clearing Firm

NOTE: All spaces are represented by the symbol: º (circle)

Field Name	Len	Value	Description
Header			
Message_ID	3	201	Message identifier for PHLX-XL Risk Management Process
System_version	4	PH44	PHLX-XL System version
Firm_ID	4	[A-Z]{1,4}º{0,3} Left justified padded with spaces	Clearing firm mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	CCYYMMDDhhmmss	Date/time stamp
Requester_token	7	[A-Zº][0-9] Up to 7 characters, left justified, padded with spaces	Original token in the request sent by the participating clearing firm

Data			
Reply_code	2	00 to 06	00 = No error 01 = Previous request being processed 02 = No messages to retransmit 03 = Invalid retransmission type 04 = Invalid range 05 = Invalid format 06 = System error
Num_messages_retrans	7	0000000 to 9999999	Number of messages retransmitted

End of Message			
End_msg_ind	1	Hex character 03	ETX

6.3 Heartbeat Message Format

The heartbeat messages are an ASCII stream of characters. The record size of each message is 10 bytes and will have the following format:

NOTE: All spaces are represented by the symbol: º (circle)

Field Name	**Len**	**Value**	**Description**
Trans_code	1	M	Heartbeat Message Transaction Code
Sender_SYSID	4	PH44	PHLX-XL Risk Management ID
Target_SYSID	4	[A-Z]{1,4}º{0,3} Left justified padded with spaces	Clearing Firm Mnemonic. This is the mnemonic of the participating clearing firm.
End_msg_ind	1	Hex character 03	ETX (End of text)

Upon receipt of a heartbeat message, the firm should immediately send the message back to PHLX-XL.

7 RMP Message Examples

Following are a series of sample PHLX-XL trade tickets and the contents of the messages that would be sent to the participating clearing firm for each side of the trade.

NOTE: All spaces are represented by the symbol: º (circle)

Assume the following PHLX Number / OCC Number / Clearing Firm Relationships.

PHLX Number	***OCC Number***	***FIRM Mnemonic***
0407	447	ABC
0958	547	XYZ
0818	647	KLM
0912	647	KLM
0812	747	DMT
0165	165	IMU
0909	847	MNOP
436	549	FOC
671	671	BLJ
112	112	PAX

7.1 Example 1: Normal Trade

Trade Seq	Symbol	Buy	Sell	Volume	Price
7800	HD Call Apr 17 2010, 60.0	Fix Order: Fix Firm BRW (House 407, PHLX Clearing 407)	Single Sweep: PHLX badge 958-F	1	5.3

BUY MESSAGE

Based on the information contained in the trade ticket shown above, the following is the message that would be generated and sent to the clearing firm for the *buy* side of the trade:

Field Name	Len	Value	Description
Process_name	16	PHLXOPTRISKMGMTº	Identifier for PHLX-XL Risk Management Process
Sender_SYSID	4	PH44	PHLX-XL Risk Management ID
Send_response	4	0001	Number of send attempts. This field will be incremented whenever the message is resent to the firm due to a retransmission request.
Target_SYSID	4	ABCº	Clearing Firm Mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	20100222123000	Date / Timestamp
Sender_sequence	7	0000001	Sequential number for each participating clearing firm. This number will be reset to 0000001 each morning.
Send_or_resend	1	S	Indicates if this is the original transmission or re-transmission of a message. Possible values are: S = Send R = Resend.
Confirm_or_no_confirm	1	Y	An indicator that specifies whether an acknowledgement is

Field Name	Len	Value	Description
			expected from the firm. “Y” if a confirmation is expected. “N” if no confirmation is expected.
Symbol Information			
Underlying	13	HDººººººººººº	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
Security_symbol	5	HDººº	Security Symbol, left justified, space filled. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
put_call_ind	1	C	An indicator specifying whether this transaction is a Call or a Put. Possible values are: C = Call P = Put Space = This side of the trade is Stock Leg of a tied to stock complex order.
expr_date	8	20100417	Expiration Date with 4-digit year. Format is CCYYMMDD. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
exer_price_amt	9	000600000	The exercise price of the option. The format of this field is NNNNNFFFF NNNNN = Whole dollars FFFF = decimal Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
Trade Information			
Trans_code	1	X	Indicates if this is a new trade “X”, a change “Y” or a deletion “Z”
Liquidity	1	A	Indicates if this side of the trade is a maker or taker. Possible values are:

Field Name	Len	Value	Description
			A – Maker R – Taker N – None. Maker/Taker not applicable to this side of the trade.
Filler	3	spaces	Filler for future use
Trade_ID _number (formerly Trade_seq_number)	8	00007800	Unique system identification number of the PHLX-XL trade. Recipients should note that the trade identification number (formerly trade sequence number), although unique, is not guaranteed to always be increasing. It may, in fact, at any time increase or decrease by any incremental value.
Correction_number	2	00	Trade correction number; will be zero for a new trade
Cross_ID	8	00000001	Transaction Id of trade. Ties together all clearing trades of a given execution. Right justified, 0 filled. 00000000 if cross id is not available.
Auction_ID	8	00000000	Auction Id if any. Right Justified 0 filled. 00000000 if auction id not available.
Ref_trade_ID_number (formerly Ref_trade_seq_number)	8	00000000	Refers to the system identification number of the original PHLX-XL trade for any changes; otherwise zero
Ref_correction_number	2	00	Refers to the trade correction number of the original PHLX-XL trade before any changes; otherwise zero
Trade_source	1	S	The source of the transaction. Possible values are: A = Auto-ex (PHLX-XL order automatically executed)

Field Name	Len	Value	Description
			B = Floor Broker (FBMS) entered C = Complex Order Traded in COLA G = Complex Order Legged against single orders or quotes P = Complex Sweep L = Trade generated by PHLX-XL due to a corresponding linkage trade executed at another exchange M = Manual Q = Quote match S = Sweep U = Complex Order Traded in COLA after cross resolution X = Specialist Y = Complex Order Auto Executed Z = Complex Order Traded in after cross resolution O = Other ! Note, the permissible values of this field have changed starting v4.0. We explicitly indicate Quote Match, Sweep and Specialist execution source. Also, this will NOT be affected when the trade is corrected, we have introduced a new field correction source for the same !
Exec_market_ID	1	Space	Executing market id (for linkage trade): A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS

Field Name	Len	Value	Description
			Space = Not a linkage trade New v4.0. When a Customer order is shipped to away exchange for execution, we will indicate the Market where it was executed. Since the Specialist represents the customer order on the away exchange and acts a contra side to the order on the PHLX, this indicator will be set for the side represented by the Specialist on the wash trade.
Correction_source	1	Space	The source of trade correction. Possible values are: M = Manual R = Remote firm O = Other Space = No correction
Trade_date	8	20100222	Trade date, which should be today 's date. Format of this field is: CCYYMMDD
Trade_time	8	12300089	Time the trade occurred hh = hours mm = minutes ss = seconds cc = hundredths of second
Trade_status_ind	1	M	Status of the transaction. Possible values are: B = Busted (canceled) M = Matched U = Unmatched.
buy_sell_code	1	1	An indicator specifying whether this transaction is a buy or a sell. Possible values are: 1 = Buy 2 = Sell
Prem_price_amt	9	000053000	The premium price for this transaction. The format of this field is: NNNNNFFFF NNNNN = whole dollars

Field Name	Len	Value	Description
			FFFF = decimal format
Contract_qty	5	00000001	Contract quantity right justified with leading zeros
Side_changed	1	Y	Indicates whether there is a possible change (with respect to the user) on this side of the trade N = No Y = Yes
Strategy_id	6	°°°°°° 6 spaces	Strategy id if this trade involves a complex order or complex sweep on either side. If the trade does not involve a complex order or complex sweep, then this field will be space filled.
Phlx_leg_ref_id	5	°°°°° 5 spaces	Leg ref id of a complex order set by PHLX if the trade involves a complex order or sweep on either side. If this does not involve a complex order or sweep, then this field will be set to spaces. Please note, this is zero based, that is, first leg id is 0, second is 1 and so on.
Side_type	1	O	Indicates type of order/sweep/quote for this side of the trade. B = Resting Complex Order C = Complex Order that didn't start/join Cola I = Complex Order that initiated Cola J = Complex Order that joined Cola O = Single Order Q = Quote S = Complex Sweep W = Single Order Sweep Space = None of the above

Field Name	Len	Value	Description
			Single or Complex Orders can originate from FIX or FBMS
Clearing Information			
Exec MPID	5	ººººº 5 spaces	NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Exec NSCC	5	ººººº 5 spaces	NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
exec_firm_code	5	00447	This is the *actual* OCC clearing number.
exec_broker_code	5	00111	The PHLX floor broker number
exec_2nd_broker_code	5	ººººº 5 spaces	The PHLX 2nd floor broker number
exec_house_number	5	00407	The PHLX House number of the executing firm
exec_clearing_number	5	00407	The PHLX Clearing number of the executing firm
CMTA_firm_number	5	ººººº 5 spaces	Give-up firm OCC if a CMTA trade; otherwise, spaces.
Mm_acronym	5	ººººº 5 spaces	Sub or Multi Account id for a Off-floor Market Maker order or linkage order or spaces
Market_ ID	1	º 1 space	Originating market id for the order: A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space

Field Name	**Len**	**Value**	**Description**
Account_id	10	12345ººººº	Account ID as specified in the order involved with this trade or spaces
Origin_ind	1	P	This is the prefix to the house number. Possible values are: C = Customer F = Firm M = Market Maker P = Professional Customer
yield_ind	1	Y	This is the yield indicator in the trade
Open_close_ind	1	O	This is the suffix to the house number or 1 space.
Mm_broker_code	5	ººººº 5 spaces	PHLX Market maker badge number when floor broker executes trade for market maker.
Contra – Clearing Information			
Contra MPID	5	ººººº 5 spaces	Contra side NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra NSCC	5	ººººº 5 spaces	Contra side NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra_exec_firm_code	5	00547	The *actual* OCC number of the contra side.
Contra_exec_broker_code	5	ººººº 5 spaces	Contra side PHLX floor broker number
Contra_exec_2nd_broker_code	5	ººººº 5 spaces	Contra side PHLX 2nd floor broker number
Contra_exec_house_number	5	00958	The PHLX House number of the contra firm
Contra_exec_clearing_number	5	00958	The PHLX Clearing number of the contra firm
Contra_CMTA_firm_number	5	ººººº 5 spaces	Contra Give-up firm OCC if a CMTA trade; otherwise, spaces.

Field Name	**Len**	**Value**	**Description**
Order Information			
Firm_mnemonic	4	BRWº	Firm mnemonic associated with this order or spaces
Client_ID	30	12345ºººººººººººººººººººººººººº	FIX id assigned by the sending firm or exchange for fix orders. For example: Side_type = B/C/I/J/O, this field will contain fix id if the order originated from fix.
Customer_leg_ref_id	5	ººººº 5 spaces	Leg ref id of a complex order as sent by the customer. If this side is not a complex order, then this field will be set to spaces
Order_received_date	8	20100222	Date when order is received on PHLX-XL or spaces
Short_Sale	1	º 1 space	Indicates whether this is a short sale for the stock leg of a complex order tied to stock. "Y" = Short Sale. Applicable to Sell side of Complex orders and sweeps tied to stock only. "N" = Not a short sale "E" = Short Sale Exempt. Space = Not sell side of a Stock
Equity Order Capacity	1	º 1 space	A= Agency Order P = Principal Order R = Riskless Principal Order Space = Not a Stock Leg of tied to stock complex order. For Complex Sweeps, this field will always be 'P'
Firm_opt_descrip	16	AE430ººººººººººº	The ID field from the order ticket
Class_code	5	ººººº 5 spaces	Option class symbol
End_msg_ind	1	Hex character 03	ETX

SELL MESSAGE

Based on the information contained in the trade ticket shown above, the following is the message that would be generated and sent to the clearing firm for the *sell* side of the trade:

Field Name	Len	Value	Description
Process_name	16	PHLXOPTRISKMGMTº	Identifier for PHLX-XL Risk Management Process
Sender_SYSID	4	PH44	PHLX-XL Risk Management ID
Send_response	4	0001	Number of send attempts. This field will be incremented whenever the message is resent to the firm due to a retransmission request.
Target_SYSID	4	XYZº	Clearing Firm Mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	20100222123000	Date / Timestamp
Sender_sequence	7	0000001	Sequential number for each participating clearing firm. This number will be reset to 0000001 each morning.
Send_or_resend	1	S	Indicates if this is the original transmission or re-transmission of a message. Possible values are: S = Send R = Resend.
Confirm_or_no_confirm	1	Y	An indicator that specifies whether an acknowledgement is expected from the firm. "Y" if a confirmation is expected. "N" if no confirmation is expected.
Symbol Information			
Underlying	13	HDººººººººººº	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
Security_symbol	5	HDººº	Security Symbol, left justified, space filled. Spaces = This side of the trade is Stock Leg of a tied to stock

Field Name	Len	Value	Description
			complex order.
put_call_ind	1	C	An indicator specifying whether this transaction is a Call or a Put. Possible values are: C = Call P = Put Space = This side of the trade is Stock Leg of a tied to stock complex order.
expr_date	8	20100417	Expiration Date with 4-digit year. Format is CCYYMMDD. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
exer_price_amt	9	000600000	The exercise price of the option. The format of this field is NNNNNFFFF NNNNN = Whole dollars FFFF = decimal Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
Trade Information			
Trans_code	1	X	Indicates if this is a new trade "X", a change "Y" or a deletion "Z"
Liquidity	1	R	Indicates if this side of the trade is a maker or taker. Possible values are: A – Maker R – Taker N – None. Maker/Taker not applicable to this side of the trade.
Filler	3	spaces	Filler for future use
Trade_ID_number (formerly Trade_seq_number)	8	00007800	Unique system identification number of the PHLX-XL trade. Recipients should note that the trade identification number

Field Name	Len	Value	Description
			(formerly trade sequence number), although unique, is not guaranteed to always be increasing. It may, in fact, at any time increase or decrease by any incremental value.
Correction_number	2	00	Trade correction number; will be zero for a new trade
Cross_ID	8	00000001	Transaction Id of trade. Ties together all clearing trades of a given execution. Right justified, 0 filled. 00000000 if cross id is not available.
Auction_ID	8	00000000	Auction Id if any. Right Justified 0 filled. 00000000 if auction id not available.
Ref_trade_ID_number (formerly Ref_trade_seq_number)	8	00000000	Refers to the system identification number of the original PHLX-XL trade for any changes; otherwise zero
Ref_correction_number	2	00	Refers to the trade correction number of the original PHLX-XL trade before any changes; otherwise zero
Trade_source	1	S	The source of the transaction. Possible values are: A = Auto-ex (PHLX-XL order automatically executed) B = Floor Broker (FBMS) entered C = Complex Order Traded in COLA G = Complex Order Legged against single orders or quotes P = Complex Sweep L = Trade generated by PHLX-XL due to a corresponding linkage trade executed at another exchange M = Manual Q = Quote match

Field Name	Len	Value	Description
			S = Sweep U = Complex Order Traded in COLA after cross resolution X = Specialist Y = Complex Order Auto Executed Z = Complex Order Traded in after cross resolution O = Other **! Note**, the permissible values of this field have changed starting v4.0. We explicitly indicate Quote Match, Sweep and Specialist execution source. Also, this will NOT be affected when the trade is corrected, we have introduced a new field correction source for the same !
Exec_market_ID	1	Space	Executing market id (for linkage trade): A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space = Not a linkage trade New v4.0. When a Customer order is shipped to away exchange for execution, we will indicate the Market where it was executed. Since the Specialist represents the customer order on the away exchange and acts a contra side to the order on the PHLX, this indicator will be set for the side represented by the

Field Name	Len	Value	Description
			Specialist on the wash trade.
Correction_source	1	Space	The source of trade correction. Possible values are: M = Manual R = Remote firm O = Other Space = No correction
Trade_date	8	20100222	Trade date, which should be today 's date. Format of this field is: CCYYMMDD
Trade_time	8	12300089	Time the trade occurred hh = hours mm = minutes ss = seconds cc = hundredths of second
Trade_status_ind	1	M	Status of the transaction. Possible values are: B = Busted (canceled) M = Matched U = Unmatched.
Buy_sell_code	1	2	An indicator specifying whether this transaction is a buy or a sell. Possible values are: 1 = Buy 2 = Sell
Prem_price_amt	9	000053000	The premium price for this transaction. The format of this field is: NNNNNFFFF NNNNN = whole dollars FFFF = decimal format
Contract_qty	5	00000001	Contract quantity right justified with leading zeros
Side_changed	1	Y	Indicates whether there is a possible change (with respect to the user) on this side of the trade N = No Y = Yes
Strategy_id	6	°°°°°° 6 spaces	Strategy id if this trade involves a complex order or complex

Field Name	Len	Value	Description
			sweep on either side. If the trade does not involve a complex order or complex sweep, then this field will be space filled.
Phlx_leg_ref_id	5	°°°°° 5 spaces	Leg ref id of a complex order set by PHLX if the trade involves a complex order or sweep on either side. If this does not involve a complex order or sweep, then this field will be set to spaces. Please note, this is zero based, that is, first leg id is 0, second is 1 and so on.
Side_type	1	W	Indicates type of order/sweep/quote for this side of the trade. B = Resting Complex Order C = Complex Order that didn't start/join Cola I = Complex Order that initiated Cola J = Complex Order that joined Cola O = Single Order Q = Quote S = Complex Sweep W = Single Order Sweep Space = None of the above Single or Complex Orders can originate from FIX or FBMS
Clearing Information			
Exec MPID	5	°°°°° 5 spaces	NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Exec NSCC	5	°°°°° 5 spaces	NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.

Field Name	Len	Value	Description
exec_firm_code	5	00547	This is the *actual* OCC clearing number.
exec_broker_code	5	ººººº 5 spaces	The PHLX floor broker number
exec_2nd_broker_code	5	ººººº 5 spaces	The PHLX 2nd floor broker number
exec_house_number	5	00958	The PHLX House number of the executing firm
exec_clearing_number	5	00958	The PHLX Clearing number of the executing firm
CMTA_firm_number	5	ººººº 5 spaces	Give-up firm OCC if a CMTA trade; otherwise, spaces.
Mm_acronym	5	ººººº 5 spaces	Sub or Multi Account id for a Off-floor Market Maker order or linkage order or spaces
Market_ ID	1	º 1 space	Originating market id for the order: A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space
Account_id	10	ºººººººººº 10 spaces	Account ID as specified in the order involved with this trade or spaces
Origin_ind	1	M	This is the prefix to the house number. Possible values are: C = Customer F = Firm M = Market Maker P = Professional Customer
yield_ind	1	N	This is the yield indicator in the trade

Field Name	Len	Value	Description
Open_close_ind	1	F	This is the suffix to the house number or 1 space.
Mm_broker_code	5	ººººº	PHLX Market maker badge number when floor broker executes trade for market maker.
Contra – Clearing Information			
Contra MPID	5	ººººº 5 spaces	Contra side NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra NSCC	5	ººººº 5 spaces	Contra side NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra_exec_firm_code	5	00447	The *actual* OCC number of the contra side.
Contra_exec_broker_code	5	00111	Contra side PHLX floor broker number
Contra_exec_2nd_broker_code	5	ººººº 5 spaces	Contra side PHLX 2nd floor broker number
Contra_exec_house_number	5	00407	The PHLX House number of the contra firm
Contra_exec_clearing_number	5	00407	The PHLX Clearing number of the contra firm
Contra_CMTA_firm_number	5	ººººº 5 spaces	Contra Give-up firm OCC if a CMTA trade; otherwise, spaces.
Order Information			
Firm_mnemonic	4	ºººº 4 spaces	Firm mnemonic associated with this order or spaces
Client_ID	30	ºººººººººººººººººººººººº ºººººº 30 spaces	FIX id assigned by the sending firm or exchange for fix orders. For example: Side_type = B/C/I/J/O, this field will contain fix id if the order originated from fix.

Field Name	**Len**	**Value**	**Description**
Customer_leg_ref_id	5	ººººº 5 spaces	Leg ref id of a complex order as sent by the customer. If this side is not a complex order, then this field will be set to spaces
Order_received_date	8	ºººººººº 8 spaces	Date when order is received on PHLX-XL or spaces
Short_Sale	1	Space	Indicates whether this is a short sale for the stock leg of a complex order tied to stock. "Y" = Short Sale. Applicable to Sell side of Complex orders and sweeps tied to stock only. "N" = Not a short sale "E" = Short Sale Exempt. Space = Not sell side of a Stock
Equity Order Capacity	1	Space	A= Agency Order P = Principal Order R = Riskless Principal Order Space = Not a Stock Leg of tied to stock complex order. For Complex Sweeps, this field will always be 'P'
Firm_opt_descrip	16	ºººººººººººººººº 16 spaces	The ID field from the order ticket
Class_code	5	ººººº 5 spaces	Option class symbol
End_msg_ind	1	Hex character 03	ETX

7.2 Example 2: Modification of Previous Trade

NOTE: Volume and Clearing Firm on Buy side is changed.

BUY MESSAGE

Based on the information contained in the trade ticket shown above, the following is the message that would be generated and sent to the clearing firm for the *buy* side of the trade: There are two messages here. First one is a delete message for firm ABC. Second one is a new trade message to the firm DMT.

Trade bust to firm ABC

Field Name	Len	Value	Description
Process_name	16	PHLXOPTRISKMGMTº	Identifier for PHLX-XL Risk Management Process
Sender_SYSID	4	PH44	PHLX-XL Risk Management ID
Send_response	4	0001	Number of send attempts. This field will be incremented whenever the message is resent to the firm due to a retransmission request.
Target_SYSID	4	ABCº	Clearing Firm Mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	20100222123000	Date / Timestamp
Sender_sequence	7	0000001	Sequential number for each participating clearing firm. This number will be reset to 0000001 each morning.
Send_or_resend	1	S	Indicates if this is the original transmission or re-transmission of a message. Possible values are: S = Send R = Resend.
Confirm_or_no_confirm	1	Y	An indicator that specifies whether an acknowledgement is expected from the firm. “Y” if a confirmation is expected.

Field Name	Len	Value	Description
			"N" if no confirmation is expected.
Symbol Information			
Underlying	13	HDººººººººººº	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
Security_symbol	5	HDººº	Security Symbol, left justified, space filled. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
put_call_ind	1	C	An indicator specifying whether this transaction is a Call or a Put. Possible values are: C = Call P = Put Space = This side of the trade is Stock Leg of a tied to stock complex order.
expr_date	8	20100417	Expiration Date with 4-digit year. Format is CCYYMMDD. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
exer_price_amt	9	000600000	The exercise price of the option. The format of this field is NNNNNFFFF NNNNN = Whole dollars FFFF = decimal Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
Trade Information			
Trans_code	1	Z	Indicates if this is a new trade "X", a change "Y" or a deletion "Z"
Liquidity	1	A	Indicates if this side of the trade is a maker or taker. Possible values are: A – Maker R – Taker

Field Name	Len	Value	Description
			N – None. Maker/Taker not applicable to this side of the trade.
Filler	3	spaces	Filler for future use
Trade_ID _number (formerly Trade_seq_number)	8	00007800	Unique system identification number of the PHLX-XL trade. Recipients should note that the trade identification number (formerly trade sequence number), although unique, is not guaranteed to always be increasing. It may, in fact, at any time increase or decrease by any incremental value.
Correction_number	2	00	Trade correction number; will be zero for a new trade
Cross_ID	8	00000001	Transaction Id of trade. Ties together all clearing trades of a given execution. Right justified, 0 filled. 00000000 if cross id is not available.
Auction_ID	8	00000000	Auction Id if any. Right Justified 0 filled. 00000000 if auction id not available.
Ref_trade_ID_number (formerly Ref_trade_seq_number)	8	00007800	Refers to the system identification number of the original PHLX-XL trade for any changes; otherwise zero
Ref_correction_number	2	00	Refers to the trade correction number of the original PHLX-XL trade before any changes; otherwise zero
Trade_source	1	S	The source of the transaction. Possible values are: A = Auto-ex (PHLX-XL order automatically executed) B = Floor Broker (FBMS) entered C = Complex Order Traded in

Field Name	Len	Value	Description
			COLA G = Complex Order Legged against single orders or quotes P = Complex Sweep L = Trade generated by PHLX-XL due to a corresponding linkage trade executed at another exchange M = Manual Q = Quote match S = Sweep U = Complex Order Traded in COLA after cross resolution X = Specialist Y = Complex Order Auto Executed Z = Complex Order Traded in after cross resolution O = Other ! Note, the permissible values of this field have changed starting v4.0. We explicitly indicate Quote Match, Sweep and Specialist execution source. Also, this will NOT be affected when the trade is corrected, we have introduced a new field correction source for the same !
Exec_market_ID	1	Space	Executing market id (for linkage trade): A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space = Not a linkage trade

Field Name	Len	Value	Description
			New v4.0. When a Customer order is shipped to away exchange for execution, we will indicate the Market where it was executed. Since the Specialist represents the customer order on the away exchange and acts a contra side to the order on the PHLX, this indicator will be set for the side represented by the Specialist on the wash trade.
Correction_source	1	Space	The source of trade correction. Possible values are: M = Manual R = Remote firm O = Other Space = No correction
Trade_date	8	20100222	Trade date, which should be today 's date. Format of this field is: CCYYMMDD
Trade_time	8	12300089	Time the trade occurred hh = hours mm = minutes ss = seconds cc = hundredths of second
Trade_status_ind	1	M	Status of the transaction. Possible values are: B = Busted (canceled) M = Matched U = Unmatched.
buy_sell_code	1	1	An indicator specifying whether this transaction is a buy or a sell. Possible values are: 1 = Buy 2 = Sell
Prem_price_amt	9	000053000	The premium price for this transaction. The format of this field is: NNNNNFFFF NNNNN = whole dollars FFFF = decimal format
Contract_qty	5	00000001	Contract quantity right justified

Field Name	Len	Value	Description
			with leading zeros
Side_changed	1	Y	Indicates whether there is a possible change (with respect to the user) on this side of the trade N = No Y = Yes
Strategy_id	6	°°°°°° 6 spaces	Strategy id if this trade involves a complex order or complex sweep on either side. If the trade does not involve a complex order or complex sweep, then this field will be space filled.
Phlx_leg_ref_id	5	°°°°° 5 spaces	Leg ref id of a complex order set by PHLX if the trade involves a complex order or sweep on either side. If this does not involve a complex order or sweep, then this field will be set to spaces. Please note, this is zero based, that is, first leg id is 0, second is 1 and so on.
Side_type	1	O	Indicates type of order/sweep/quote for this side of the trade. B = Resting Complex Order C = Complex Order that didn't start/join Cola I = Complex Order that initiated Cola J = Complex Order that joined Cola O = Single Order Q = Quote S = Complex Sweep W = Single Order Sweep Space = None of the above Single or Complex Orders can originate from FIX or FBMS

Field Name	Len	Value	Description
Clearing Information			
Exec MPID	5	ººººº 5 spaces	NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Exec NSCC	5	ººººº 5 spaces	NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
exec_firm_code	5	00447	This is the *actual* OCC clearing number.
exec_broker_code	5	00111	The PHLX floor broker number
exec_2nd_broker_code	5	ººººº 5 spaces	The PHLX 2nd floor broker number
exec_house_number	5	00407	The PHLX House number of the executing firm
exec_clearing_number	5	00407	The PHLX Clearing number of the executing firm
CMTA_firm_number	5	ººººº 5 spaces	Give-up firm OCC if a CMTA trade; otherwise, spaces.
Mm_acronym	5	ººººº 5 spaces	Sub or Multi Account id for a Off-floor Market Maker order or linkage order or spaces
Market_ ID	1	º 1 space	Originating market id for the order: A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space
Account_id	10	12345ººººº	Account ID as specified in the order involved with this trade or

Field Name	Len	Value	Description
			spaces
Origin_ind	1	P	This is the prefix to the house number. Possible values are: C = Customer F = Firm M = Market Maker P = Professional Customer
yield_ind	1	Y	This is the yield indicator in the trade
Open_close_ind	1	O	This is the suffix to the house number or 1 space.
Mm_broker_code	5	°°°°° 5 spaces	PHLX Market maker badge number when floor broker executes trade for market maker.
Contra – Clearing Information			
Contra MPID	5	°°°°° 5 spaces	Contra side NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra NSCC	5	°°°°° 5 spaces	Contra side NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra_exec_firm_code	5	00547	The *actual* OCC number of the contra side.
Contra_exec_broker_code	5	°°°°° 5 spaces	Contra side PHLX floor broker number
Contra_exec_2nd_broker_code	5	°°°°° 5 spaces	Contra side PHLX 2nd floor broker number
Contra_exec_house_number	5	00958	The PHLX House number of the contra firm
Contra_exec_clearing_number	5	00958	The PHLX Clearing number of the contra firm
Contra_CMTA_firm_number	5	°°°°° 5 spaces	Contra Give-up firm OCC if a CMTA trade; otherwise, spaces.
Order Information			

Field Name	Len	Value	Description
Firm_mnemonic	4	BRWº	Firm mnemonic associated with this order or spaces
Client_ID	30	12345ºººººººººººººººººººººººº	FIX id assigned by the sending firm or exchange for fix orders. For example: Side_type = B/C/I/J/O, this field will contain fix id if the order originated from fix.
Customer_leg_ref_id	5	ººººº 5 spaces	Leg ref id of a complex order as sent by the customer. If this side is not a complex order, then this field will be set to spaces
Order_received_date	8	20100222	Date when order is received on PHLX-XL or spaces
Short_Sale	1	º 1 space	Indicates whether this is a short sale for the stock leg of a complex order tied to stock. "Y" = Short Sale. Applicable to Sell side of Complex orders and sweeps tied to stock only. "N" = Not a short sale "E" = Short Sale Exempt. Space = Not sell side of a Stock
Equity Order Capacity	1	º 1 space	A= Agency Order P = Principal Order R = Riskless Principal Order Space = Not a Stock Leg of tied to stock complex order. For Complex Sweeps, this field will always be 'P'
Firm_opt_descrip	16	AE430ººººººººººº	The ID field from the order ticket
Class_code	5	ººººº 5 spaces	Option class symbol
End_msg_ind	1	Hex character 03	ETX

New Trade to firm DMT

Field Name	Len	Value	Description
Process_name	16	PHLXOPTRISKMGMTº	Identifier for PHLX-XL Risk Management Process
Sender_SYSID	4	PH44	PHLX-XL Risk Management ID
Send_response	4	0001	Number of send attempts. This field will be incremented whenever the message is resent to the firm due to a retransmission request.
Target_SYSID	4	DMTº	Clearing Firm Mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	20100222123500	Date / Timestamp
Sender_sequence	7	0000001	Sequential number for each participating clearing firm. This number will be reset to 0000001 each morning.
Send_or_resend	1	S	Indicates if this is the original transmission or re-transmission of a message. Possible values are: S = Send R = Resend.
Confirm_or_no_confirm	1	Y	An indicator that specifies whether an acknowledgement is expected from the firm. “Y” if a confirmation is expected. “N” if no confirmation is expected.
Symbol Information			
Underlying	13	HDººººººººººº	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
Security_symbol	5	HDººº	Security Symbol, left justified, space filled. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
put_call_ind	1	C	An indicator specifying whether this transaction is a Call or a Put. Possible values are: C = Call

Field Name	Len	Value	Description
			P = Put Space = This side of the trade is Stock Leg of a tied to stock complex order.
expr_date	8	20100417	Expiration Date with 4-digit year. Format is CCYYMMDD. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
exer_price_amt	9	000600000	The exercise price of the option. The format of this field is NNNNNFFFF NNNNN = Whole dollars FFFF = decimal Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
Trade Information			
Trans_code	1	X	Indicates if this is a new trade "X", a change "Y" or a deletion "Z"
Liquidity	1	A	Indicates if this side of the trade is a maker or taker. Possible values are: A – Maker R – Taker N – None. Maker/Taker not applicable to this side of the trade.
Filler	3	spaces	Filler for future use
Trade_ID _number (formerly Trade_seq_number)	8	00007800	Unique system identification number of the PHLX-XL trade. Recipients should note that the trade identification number (formerly trade sequence number), although unique, is not guaranteed to always be increasing. It may, in fact, at any time increase or decrease by any incremental value.

Field Name	Len	Value	Description
Correction_number	2	01	Trade correction number; will be zero for a new trade
Cross_ID	8	00000001	Transaction Id of trade. Ties together all clearing trades of a given execution. Right justified, 0 filled. 00000000 if cross id is not available.
Auction_ID	8	00000000	Auction Id if any. Right Justified 0 filled. 00000000 if auction id not available.
Ref_trade_ID_number (formerly Ref_trade_seq_number)	8	00007800	Refers to the system identification number of the original PHLX-XL trade for any changes; otherwise zero
Ref_correction_number	2	00	Refers to the trade correction number of the original PHLX-XL trade before any changes; otherwise zero
Trade_source	1	S	The source of the transaction. Possible values are: A = Auto-ex (PHLX-XL order automatically executed) B = Floor Broker (FBMS) entered C = Complex Order Traded in COLA G = Complex Order Legged against single orders or quotes P = Complex Sweep L = Trade generated by PHLX-XL due to a corresponding linkage trade executed at another exchange M = Manual Q = Quote match S = Sweep U = Complex Order Traded in COLA after cross resolution X = Specialist Y = Complex Order Auto Executed Z = Complex Order Traded in

Field Name	Len	Value	Description
			after cross resolution O = Other ! Note, the permissible values of this field have changed starting v4.0. We explicitly indicate Quote Match, Sweep and Specialist execution source. Also, this will NOT be affected when the trade is corrected, we have introduced a new field correction source for the same !
Exec_market_ID	1	Space	Executing market id (for linkage trade): A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space = Not a linkage trade New v4.0. When a Customer order is shipped to away exchange for execution, we will indicate the Market where it was executed. Since the Specialist represents the customer order on the away exchange and acts a contra side to the order on the PHLX, this indicator will be set for the side represented by the Specialist on the wash trade.
Correction_source	1	Space	The source of trade correction. Possible values are: M = Manual R = Remote firm O = Other Space = No correction
Trade_date	8	20100222	Trade date, which should be

Field Name	Len	Value	Description
			today 's date. Format of this field is: CCYYMMDD
Trade_time	8	12350089	Time the trade occurred hh = hours mm = minutes ss = seconds cc = hundredths of second
Trade_status_ind	1	M	Status of the transaction. Possible values are: B = Busted (canceled) M = Matched U = Unmatched.
buy_sell_code	1	1	An indicator specifying whether this transaction is a buy or a sell. Possible values are: 1 = Buy 2 = Sell
Prem_price_amt	9	000053000	The premium price for this transaction. The format of this field is: NNNNNFFFF NNNNN = whole dollars FFFF = decimal format
Contract_qty	5	00000010	Contract quantity right justified with leading zeros
Side_changed	1	Y	Indicates whether there is a possible change (with respect to the user) on this side of the trade N = No Y = Yes
Strategy_id	6	°°°°°° 6 spaces	Strategy id if this trade involves a complex order or complex sweep on either side. If the trade does not involve a complex order or complex sweep, then this field will be space filled.
Phlx_leg_ref_id	5	°°°°° 5 spaces	Leg ref id of a complex order set by PHLX if the trade involves a complex order or sweep on either side. If this does not involve a complex order or sweep, then this field will be set

Field Name	Len	Value	Description
			to spaces. Please note, this is zero based, that is, first leg id is 0, second is 1 and so on.
Side_type	1	O	Indicates type of order/sweep/quote for this side of the trade. B = Resting Complex Order C = Complex Order that didn't start/join Cola I = Complex Order that initiated Cola J = Complex Order that joined Cola O = Single Order Q = Quote S = Complex Sweep W = Single Order Sweep Space = None of the above Single or Complex Orders can originate from FIX or FBMS
Clearing Information			
Exec MPID	5	°°°°° 5 spaces	NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Exec NSCC	5	°°°°° 5 spaces	NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
exec_firm_code	5	00747	This is the *actual* OCC clearing number.
exec_broker_code	5	00111	The PHLX floor broker number
exec_2nd_broker_code	5	°°°°° 5 spaces	The PHLX 2nd floor broker number
exec_house_number	5	00812	The PHLX House number of the executing firm
exec_clearing_number	5	00812	The PHLX Clearing number of the

Field Name	Len	Value	Description
			executing firm
CMTA_firm_number	5	ººººº 5 spaces	Give-up firm OCC if a CMTA trade; otherwise, spaces.
Mm_acronym	5	ººººº 5 spaces	Sub or Multi Account id for a Off-floor Market Maker order or linkage order or spaces
Market_ ID	1	º 1 space	Originating market id for the order: A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space
Account_id	10	12345ººººº	Account ID as specified in the order involved with this trade or spaces
Origin_ind	1	P	This is the prefix to the house number. Possible values are: C = Customer F = Firm M = Market Maker P = Professional Customer
yield_ind	1	Y	This is the yield indicator in the trade
Open_close_ind	1	O	This is the suffix to the house number or 1 space.
Mm_broker_code	5	ººººº 5 spaces	PHLX Market maker badge number when floor broker executes trade for market maker.
Contra – Clearing Information			
Contra MPID	5	ººººº 5 spaces	Contra side NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.

Field Name	Len	Value	Description
Contra NSCC	5	ººººº 5 spaces	Contra side NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra_exec_firm_code	5	00547	The *actual* OCC number of the contra side.
Contra_exec_broker_code	5	ººººº 5 spaces	Contra side PHLX floor broker number
Contra_exec_2nd_broker_code	5	ººººº 5 spaces	Contra side PHLX 2nd floor broker number
Contra_exec_house_number	5	00818	The PHLX House number of the contra firm
Contra_exec_clearing_number	5	00958	The PHLX Clearing number of the contra firm
Contra_CMTA_firm_number	5	ººººº 5 spaces	Contra Give-up firm OCC if a CMTA trade; otherwise, spaces.
Order Information			
Firm_mnemonic	4	BRWº	Firm mnemonic associated with this order or spaces
Client_ID	30	12345ºººººººººººººººººººººººº	FIX id assigned by the sending firm or exchange for fix orders. For example: Side_type = B/C/I/J/O, this field will contain fix id if the order originated from fix.
Customer_leg_ref_id	5	ººººº 5 spaces	Leg ref id of a complex order as sent by the customer. If this side is not a complex order, then this field will be set to spaces
Order_received_date	8	20100222	Date when order is received on PHLX-XL or spaces
Short_Sale	1	º 1 space	Indicates whether this is a short sale for the stock leg of a complex order tied to stock. “Y” = Short Sale. Applicable to

Field Name	Len	Value	Description
			Sell side of Complex orders and sweeps tied to stock only. “N” = Not a short sale “E” = Short Sale Exempt. Space = Not sell side of a Stock
Equity Order Capacity	1	º 1 space	A= Agency Order P = Principal Order R = Riskless Principal Order Space = Not a Stock Leg of tied to stock complex order. For Complex Sweeps, this field will always be ‘P’
Firm_opt_descrip	16	AE430ººººººººººº	The ID field from the order ticket
Class_code	5	ººººº 5 spaces	Option class symbol
End_msg_ind	1	Hex character 03	ETX

SELL MESSAGE

Based on the information contained in the trade ticket shown above, the following is the message that would be generated and sent to the clearing firm for the *sell* side of the trade:

Field Name	Len	Value	Description
Process_name	16	PHLXOPTRISKMGMTº	Identifier for PHLX-XL Risk Management Process
Sender_SYSID	4	PH44	PHLX-XL Risk Management ID
Send_response	4	0001	Number of send attempts. This field will be incremented whenever the message is resent to the firm due to a retransmission request.
Target_SYSID	4	XYZº	Clearing Firm Mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	20100222123500	Date / Timestamp
Sender_sequence	7	0000002	Sequential number for each participating clearing firm. This number will be reset to 0000001 each morning.
Send_or_resend	1	S	Indicates if this is the original transmission or re-transmission of a message. Possible values are: S = Send R = Resend.
Confirm_or_no_confirm	1	Y	An indicator that specifies whether an acknowledgement is expected from the firm. “Y” if a confirmation is expected. “N” if no confirmation is expected.
Symbol Information			
Underlying	13	HDººººººººººº	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
Security_symbol	5	HDººº	Security Symbol, left justified, space filled. Spaces = This side of the trade is Stock Leg of a tied to stock

Field Name	Len	Value	Description
			complex order.
put_call_ind	1	C	An indicator specifying whether this transaction is a Call or a Put. Possible values are: C = Call P = Put Space = This side of the trade is Stock Leg of a tied to stock complex order.
expr_date	8	20100417	Expiration Date with 4-digit year. Format is CCYYMMDD. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
exer_price_amt	9	000600000	The exercise price of the option. The format of this field is NNNNNFFFF NNNNN = Whole dollars FFFF = decimal Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
Trade Information			
Trans_code	1	Y	Indicates if this is a new trade “X”, a change “Y” or a deletion “Z”
Liquidity	1	R	Indicates if this side of the trade is a maker or taker. Possible values are: A – Maker R – Taker N – None. Maker/Taker not applicable to this side of the trade.
Filler	3	spaces	Filler for future use
Trade_ID_number (formerly Trade_seq_number)	8	00007800	Unique system identification number of the PHLX-XL trade. Recipients should note that the trade identification number

Field Name	Len	Value	Description
			(formerly trade sequence number), although unique, is not guaranteed to always be increasing. It may, in fact, at any time increase or decrease by any incremental value.
Correction_number	2	01	Trade correction number; will be zero for a new trade
Cross_ID	8	00000001	Transaction Id of trade. Ties together all clearing trades of a given execution. Right justified, 0 filled. 00000000 if cross id is not available.
Auction_ID	8	00000000	Auction Id if any. Right Justified 0 filled. 00000000 if auction id not available.
Ref_trade_ID_number (formerly Ref_trade_seq_number)	8	00007800	Refers to the system identification number of the original PHLX-XL trade for any changes; otherwise zero
Ref_correction_number	2	00	Refers to the trade correction number of the original PHLX-XL trade before any changes; otherwise zero
Trade_source	1	S	The source of the transaction. Possible values are: A = Auto-ex (PHLX-XL order automatically executed) B = Floor Broker (FBMS) entered C = Complex Order Traded in COLA G = Complex Order Legged against single orders or quotes P = Complex Sweep L = Trade generated by PHLX-XL due to a corresponding linkage trade executed at another exchange M = Manual Q = Quote match

Field Name	Len	Value	Description
			S = Sweep U = Complex Order Traded in COLA after cross resolution X = Specialist Y = Complex Order Auto Executed Z = Complex Order Traded in after cross resolution O = Other **! Note**, the permissible values of this field have changed starting v4.0. We explicitly indicate Quote Match, Sweep and Specialist execution source. Also, this will NOT be affected when the trade is corrected, we have introduced a new field correction source for the same !
Exec_market_ID	1	Space	Executing market id (for linkage trade): A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space = Not a linkage trade New v4.0. When a Customer order is shipped to away exchange for execution, we will indicate the Market where it was executed. Since the Specialist represents the customer order on the away exchange and acts a contra side to the order on the PHLX, this indicator will be set for the side represented by the

Field Name	**Len**	**Value**	**Description**
			Specialist on the wash trade.
Correction_source	1	Space	The source of trade correction. Possible values are: M = Manual R = Remote firm O = Other Space = No correction
Trade_date	8	20100222	Trade date, which should be today 's date. Format of this field is: CCYYMMDD
Trade_time	8	12300089	Time the trade occurred hh = hours mm = minutes ss = seconds cc = hundredths of second
Trade_status_ind	1	M	Status of the transaction. Possible values are: B = Busted (canceled) M = Matched U = Unmatched.
Buy_sell_code	1	2	An indicator specifying whether this transaction is a buy or a sell. Possible values are: 1 = Buy 2 = Sell
Prem_price_amt	9	000053000	The premium price for this transaction. The format of this field is: NNNNNFFFF NNNNN = whole dollars FFFF = decimal format
Contract_qty	5	00000010	Contract quantity right justified with leading zeros
Side_changed	1	Y	Indicates whether there is a possible change (with respect to the user) on this side of the trade N = No Y = Yes
Strategy_id	6	°°°°°° 6 spaces	Strategy id if this trade involves a complex order or complex

Field Name	Len	Value	Description
			sweep on either side. If the trade does not involve a complex order or complex sweep, then this field will be space filled.
Phlx_leg_ref_id	5	ᵒᵒᵒᵒᵒ 5 spaces	Leg ref id of a complex order set by PHLX if the trade involves a complex order or sweep on either side. If this does not involve a complex order or sweep, then this field will be set to spaces. Please note, this is zero based, that is, first leg id is 0, second is 1 and so on.
Side_type	1	W	Indicates type of order/sweep/quote for this side of the trade. B = Resting Complex Order C = Complex Order that didn't start/join Cola I = Complex Order that initiated Cola J = Complex Order that joined Cola O = Single Order Q = Quote S = Complex Sweep W = Single Order Sweep Space = None of the above Single or Complex Orders can originate from FIX or FBMS
Clearing Information			
Exec MPID	5	ᵒᵒᵒᵒᵒ 5 spaces	NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Exec NSCC	5	ᵒᵒᵒᵒᵒ 5 spaces	NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.

Field Name	Len	Value	Description
exec_firm_code	5	00547	This is the *actual* OCC clearing number.
exec_broker_code	5	ººººº 5 spaces	The PHLX floor broker number
exec_2nd_broker_code	5	ººººº 5 spaces	The PHLX 2nd floor broker number
exec_house_number	5	00958	The PHLX House number of the executing firm
exec_clearing_number	5	00958	The PHLX Clearing number of the executing firm
CMTA_firm_number	5	ººººº 5 spaces	Give-up firm OCC if a CMTA trade; otherwise, spaces.
Mm_acronym	5	ººººº 5 spaces	Sub or Multi Account id for a Off-floor Market Maker order or linkage order or spaces
Market_ ID	1	º 1 space	Originating market id for the order: A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space
Account_id	10	ºººººººººº 10 spaces	Account ID as specified in the order involved with this trade or spaces
Origin_ind	1	M	This is the prefix to the house number. Possible values are: C = Customer F = Firm M = Market Maker P = Professional Customer
yield_ind	1	N	This is the yield indicator in the trade

Field Name	Len	Value	Description
Open_close_ind	1	F	This is the suffix to the house number or 1 space.
Mm_broker_code	5	ººººº	PHLX Market maker badge number when floor broker executes trade for market maker.
Contra – Clearing Information			
Contra MPID	5	ººººº 5 spaces	Contra side NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra NSCC	5	ººººº 5 spaces	Contra side NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra_exec_firm_code	5	00747	The *actual* OCC number of the contra side.
Contra_exec_broker_code	5	00111	Contra side PHLX floor broker number
Contra_exec_2nd_broker_code	5	ººººº 5 spaces	Contra side PHLX 2nd floor broker number
Contra_exec_house_number	5	00812	The PHLX House number of the contra firm
Contra_exec_clearing_number	5	00812	The PHLX Clearing number of the contra firm
Contra_CMTA_firm_number	5	ººººº 5 spaces	Contra Give-up firm OCC if a CMTA trade; otherwise, spaces.
Order Information			
Firm_mnemonic	4	ºººº 4 spaces	Firm mnemonic associated with this order or spaces
Client_ID	30	ºººººººººººººººººººººººº ºººººº 30 spaces	FIX id assigned by the sending firm or exchange for fix orders. For example: Side_type = B/C/I/J/O, this field will contain fix id if the order originated from fix.

Field Name	Len	Value	Description
Customer_leg_ref_id	5	ººººº 5 spaces	Leg ref id of a complex order as sent by the customer. If this side is not a complex order, then this field will be set to spaces
Order_received_date	8	ºººººººº 8 spaces	Date when order is received on PHLX-XL or spaces
Short_Sale	1	Space	Indicates whether this is a short sale for the stock leg of a complex order tied to stock. "Y" = Short Sale. Applicable to Sell side of Complex orders and sweeps tied to stock only. "N" = Not a short sale "E" = Short Sale Exempt. Space = Not sell side of a Stock
Equity Order Capacity	1	Space	A= Agency Order P = Principal Order R = Riskless Principal Order Space = Not a Stock Leg of tied to stock complex order. For Complex Sweeps, this field will always be 'P'
Firm_opt_descrip	16	ºººººººººººººººº 16 spaces	The ID field from the order ticket
Class_code	5	ººººº 5 spaces	Option class symbol
End_msg_ind	1	Hex character 03	ETX

7.3 Example 3: Complex Order With Stock

Strategy ID: 010001
Stock: AMD
Normalized Strategy: (**Note** second leg is a stock leg)

Leg	Security Symbol	Exp. Day Mon Year	Strike	Put/Call	Buy/Sell	Ratio

1	AMD	17 APR 2010	5	Call	Buy	1
2					Short Sale	100

PBBO for Leg 1: 1 (100) x 1.2 (100)
BBO for Leg 2 : 10 (1000) x 10.1 (1000)

Complex Order for Strategy 010001

Side	Volume	Price	Firm	PHLX Clearing #	OCC Clearing #
Buy	2	8.8 Credit	BLJ	407	447

Complex Sweep for Strategy 010001

Side	Volume	Price	Firm	PHLX Clearing #	OCC Clearing #
Sell	2	8.8 Debit	PAX	436	549

Based on the above information, following clearing trades are generated –

Trade Seq	Security Symbol	Put/Call	Buy	Sell	Volume	Price
00000162	AMD	Call	(CO)	(CS)	2	1.2
00000163	Stock AMD		(CS)	(CO)	200	10.0

A firm will receive <u>a message for a trade</u> <u>for each leg</u> in which the firm was involved in.
Buy Message for Trade # 162

Field Name	**Len**	**Value**	**Description**
Process_name	16	PHLXOPTRISKMGMTº	Identifier for PHLX-XL Risk Management Process
Sender_SYSID	4	PH44	PHLX-XL Risk Management ID
Send_response	4	0001	Number of send attempts. This field will be incremented whenever the message is resent to the firm due to a retransmission request.
Target_SYSID	4	ABCº	Clearing Firm Mnemonic. This is the mnemonic of the

Field Name	**Len**	**Value**	**Description**
			participating clearing firm.
Sender_timestamp	14	20100223115025	Date / Timestamp
Sender_sequence	7	0000015	Sequential number for each participating clearing firm. This number will be reset to 0000001 each morning.
Send_or_resend	1	S	Indicates if this is the original transmission or re-transmission of a message. Possible values are: S = Send R = Resend.
Confirm_or_no_confirm	1	Y	An indicator that specifies whether an acknowledgement is expected from the firm. “Y” if a confirmation is expected. “N” if no confirmation is expected.
Symbol Information			
Underlying	13	AMDºººººººººº	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
Security_symbol	5	AMDºº	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
put_call_ind	1	C	Security Symbol, left justified, space filled. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
expr_date	8	20100417	An indicator specifying whether this transaction is a Call or a Put. Possible values are: C = Call P = Put Space = This side of the trade is Stock Leg of a tied to stock complex order.
exer_price_amt	9	000050000	Expiration Date with 4-digit year. Format is CCYYMMDD. Spaces = This side of the trade is

Field Name	Len	Value	Description
			Stock Leg of a tied to stock complex order.
Trade Information			
Trans_code	1	X	Indicates if this is a new trade "X", a change "Y" or a deletion "Z"
Liquidity	1	N	Indicates if this side of the trade is a maker or taker. Possible values are: A – Maker R – Taker N – None. Maker/Taker not applicable to this side of the trade.
Filler	3	spaces	Filler for future use
Trade_ID_number (formerly Trade_seq_number)	8	00000162	Unique system identification number of the PHLX-XL trade. Recipients should note that the trade identification number (formerly trade sequence number), although unique, is not guaranteed to always be increasing. It may, in fact, at any time increase or decrease by any incremental value.
Correction_number	2	00	Trade correction number; will be zero for a new trade
Cross_ID	8	00000011	Transaction Id of trade. Ties together all clearing trades of a given execution. Right justified, 0 filled. 00000000 if cross id is not available.
Auction_ID	8	00000008	Auction Id if any. Right Justified 0 filled. 00000000 if auction id not available.
Ref_trade_ID_number (formerly Ref_trade_seq_numbe	8	00000000	Refers to the system identification number of the original PHLX-XL trade for any

Field Name	Len	Value	Description
r)			changes; otherwise zero
Ref_correction_number	2	00	Refers to the trade correction number of the original PHLX-XL trade before any changes; otherwise zero
Trade_source	1	C	The source of the transaction. Possible values are: A = Auto-ex (PHLX-XL order automatically executed) B = Floor Broker (FBMS) entered C = Complex Order Traded in COLA G = Complex Order Legged against single orders or quotes P = Complex Sweep L = Trade generated by PHLX-XL due to a corresponding linkage trade executed at another exchange M = Manual Q = Quote match S = Sweep U = Complex Order Traded in COLA after cross resolution X = Specialist Y = Complex Order Auto Executed Z = Complex Order Traded in after cross resolution O = Other ! Note, the permissible values of this field have changed starting v4.0. We explicitly indicate Quote Match, Sweep and Specialist execution source. Also, this will NOT be affected when the trade is corrected, we have introduced a new field correction source for the same !
Exec_market_ID	1	Space	Executing market id (for linkage

Field Name	Len	Value	Description
			trade): A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space = Not a linkage trade New v4.0. When a Customer order is shipped to away exchange for execution, we will indicate the Market where it was executed. Since the Specialist represents the customer order on the away exchange and acts a contra side to the order on the PHLX, this indicator will be set for the side represented by the Specialist on the wash trade.
Correction_source	1	Space	The source of trade correction. Possible values are: M = Manual R = Remote firm O = Other Space = No correction
Trade_date	8	20100223	Trade date, which should be today 's date. Format of this field is: CCYYMMDD
Trade_time	8	11502579	Time the trade occurred hh = hours mm = minutes ss = seconds cc = hundredths of second
Trade_status_ind	1	M	Status of the transaction. Possible values are: B = Busted (canceled) M = Matched U = Unmatched.

Field Name	Len	Value	Description
buy_sell_code	1	1	An indicator specifying whether this transaction is a buy or a sell. Possible values are: 1 = Buy 2 = Sell
Prem_price_amt	9	000012000	The premium price for this transaction. The format of this field is: NNNNNFFFF NNNNN = whole dollars FFFF = decimal format
Contract_qty	5	00000002	Contract quantity right justified with leading zeros
Side_changed	1	Y	Indicates whether there is a possible change (with respect to the user) on this side of the trade N = No Y = Yes
Strategy_id	6	010001	Strategy id if this trade involves a complex order or complex sweep on either side. If the trade does not involve a complex order or complex sweep, then this field will be space filled.
Phlx_leg_ref_id	5	00000	Leg ref id of a complex order set by PHLX if the trade involves a complex order or sweep on either side. If this does not involve a complex order or sweep, then this field will be set to spaces. Please note, this is zero based, that is, first leg id is 0, second is 1 and so on.
side_type	1	I	Indicates type of order/sweep/quote for this side of the trade. B = Resting Complex Order C = Complex Order that didn't start/join Cola I = Complex Order that

Field Name	**Len**	**Value**	**Description**
			initiated Cola J = Complex Order that joined Cola O = Single Order Q = Quote S = Complex Sweep W = Single Order Sweep Space = None of the above Single or Complex Orders can originate from FIX or FBMS
Clearing Information			
Exec MPID	5	ººººº	NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Exec NSCC	5	ººººº	NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
exec_firm_code	5	00447	This is the *actual* OCC clearing number.
exec_broker_code	5	00111	The PHLX floor broker number
exec_2nd_broker_code	5	ººººº 5 spaces	The PHLX 2nd floor broker number
exec_house_number	5	00407	The PHLX House number of the executing firm
exec_clearing_number	5	00407	The PHLX Clearing number of the executing firm
CMTA_firm_number	5	ººººº 5 spaces	Give-up firm OCC if a CMTA trade; otherwise, spaces.
Mm_acronym	5	ººººº 5 spaces	Sub or Multi Account id for a Off-floor Market Maker order or linkage order or spaces
Market_ ID	1	º 1 space	Originating market id for the order: A = Amex B = BOX C = CBOE

Field Name	Len	Value	Description
			I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space
Account_id	10	°°°°°°°°°°	Account ID as specified in the order involved with this trade or spaces
Origin_ind	1	C	This is the prefix to the house number. Possible values are: C = Customer F = Firm M = Market Maker P = Professional Customer
yield_ind	1	N	This is the yield indicator in the trade
Open_close_ind	1	O	This is the suffix to the house number or 1 space.
Mm_broker_code	5	°°°°° 5 spaces	PHLX Market maker badge number when floor broker executes trade for market maker.
Contra – Clearing Information			
Contra MPID	5	°°°°° 5 spaces	Contra side NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra NSCC	5	°°°°° 5 spaces	Contra side NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra_exec_firm_code	5	00549	The *actual* OCC number of the contra side.
Contra_exec_broker_code	5	00112	Contra side PHLX floor broker number
Contra_exec_2nd_bro	5	°°°°°	Contra side PHLX 2nd floor

Field Name	Len	Value	Description
ker_code		5 spaces	broker number
Contra_exec_house_number	5	00112	The PHLX House number of the contra firm
Contra_exec_clearing_number	5	00436	The PHLX Clearing number of the contra firm
Contra_CMTA_firm_number	5	ººººº 5 spaces	Contra Give-up firm OCC if a CMTA trade; otherwise, spaces.
Order Information			
Firm_mnemonic	4	BLJº	Firm mnemonic associated with this order or spaces
Client_ID	30	1234567890ºººººººººººººººººººº	FIX id assigned by the sending firm or exchange for fix orders. For example: Side_type = B/C/I/J/O, this field will contain fix id if the order originated from fix.
Customer_leg_ref_id	5	1ºººº	Leg ref id of a complex order as sent by the customer. If this side is not a complex order, then this field will be set to spaces
Order_received_date	8	20100223	Date when order is received on PHLX-XL or spaces
Short_Sale	1	º 1 space	Indicates whether this is a short sale for the stock leg of a complex order tied to stock. “Y” = Short Sale. Applicable to Sell side of Complex orders and sweeps tied to stock only. “N” = Not a short sale “E” = Short Sale Exempt. Space = Not sell side of a Stock
Equity Order Capacity	1	A	A= Agency Order P = Principal Order R = Riskless Principal Order Space = Not a Stock Leg of tied to stock complex order.

Field Name	Len	Value	Description
			For Complex Sweeps, this field will always be 'P'
Firm_opt_descrip	16	ºººººººººººººººº	The ID field from the order ticket
Class_code	5	ººººº	Option class symbol. After symbology, this field will not be populated.
End_msg_ind	1	Hex character 03	ETX

Sell Message for Trade # 162

Field Name	Len	Value	Description
Process_name	16	PHLXOPTRISKMGMTº	Identifier for PHLX-XL Risk Management Process
Sender_SYSID	4	PH44	PHLX-XL Risk Management ID
Send_response	4	0001	Number of send attempts. This field will be incremented whenever the message is resent to the firm due to a retransmission request.
Target_SYSID	4	FOCº	Clearing Firm Mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	20100223115025	Date / Timestamp
Sender_sequence	7	0000015	Sequential number for each participating clearing firm. This number will be reset to 0000001 each morning.
Send_or_resend	1	S	Indicates if this is the original transmission or re-transmission of a message. Possible values are: S = Send R = Resend.
Confirm_or_no_confirm	1	Y	An indicator that specifies whether an acknowledgement is expected from the firm. "Y" if a confirmation is expected. "N" if no confirmation is expected.

Field Name	**Len**	**Value**	**Description**
Symbol Information			
Underlying	13	AMD°°°°°°°°°°	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
Security_symbol	5	AMD°°	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
put_call_ind	1	C	Security Symbol, left justified, space filled. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
expr_date	8	20100417	An indicator specifying whether this transaction is a Call or a Put. Possible values are: C = Call P = Put Space = This side of the trade is Stock Leg of a tied to stock complex order.
exer_price_amt	9	000050000	Expiration Date with 4-digit year. Format is CCYYMMDD. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
Trade Information			
Trans_code	1	X	Indicates if this is a new trade “X”, a change “Y” or a deletion “Z”
Liquidity	1	N	Indicates if this side of the trade is a maker or taker. Possible values are: A – Maker R – Taker N – None. Maker/Taker not applicable to this side of the trade.
Filler	3	spaces	Filler for future use
Trade_ID_number	8	00000162	Unique system identification

Field Name	Len	Value	Description
(formerly Trade_seq_number)			number of the PHLX-XL trade. Recipients should note that the trade identification number (formerly trade sequence number), although unique, is not guaranteed to always be increasing. It may, in fact, at any time increase or decrease by any incremental value.
Correction_number	2	00	Trade correction number; will be zero for a new trade
Cross_ID	8	00000011	Transaction Id of trade. Ties together all clearing trades of a given execution. Right justified, 0 filled. 00000000 if cross id is not available.
Auction_ID	8	00000008	Auction Id if any. Right Justified 0 filled. 00000000 if auction id not available.
Ref_trade_ID_number (formerly Ref_trade_seq_number)	8	00000000	Refers to the system identification number of the original PHLX-XL trade for any changes; otherwise zero
Ref_correction_number	2	00	Refers to the trade correction number of the original PHLX-XL trade before any changes; otherwise zero
Trade_source	1	C	The source of the transaction. Possible values are: A = Auto-ex (PHLX-XL order automatically executed) B = Floor Broker (FBMS) entered C = Complex Order Traded in COLA G = Complex Order Legged against single orders or quotes P = Complex Sweep L = Trade generated by PHLX-XL due to a corresponding linkage trade executed at another

Field Name	Len	Value	Description
			exchange M = Manual Q = Quote match S = Sweep U = Complex Order Traded in COLA after cross resolution X = Specialist Y = Complex Order Auto Executed Z = Complex Order Traded in after cross resolution O = Other ! Note, the permissible values of this field have changed starting v4.0. We explicitly indicate Quote Match, Sweep and Specialist execution source. Also, this will NOT be affected when the trade is corrected, we have introduced a new field correction source for the same !
Exec_market_ID	1	Space	Executing market id (for linkage trade): A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space = Not a linkage trade New v4.0. When a Customer order is shipped to away exchange for execution, we will indicate the Market where it was executed. Since the Specialist represents the customer order on the away exchange and acts a

Field Name	Len	Value	Description
			contra side to the order on the PHLX, this indicator will be set for the side represented by the Specialist on the wash trade.
Correction_source	1	Space	The source of trade correction. Possible values are: M = Manual R = Remote firm O = Other Space = No correction
Trade_date	8	20080317	Trade date, which should be today 's date. Format of this field is: CCYYMMDD
Trade_time	8	11502579	Time the trade occurred hh = hours mm = minutes ss = seconds cc = hundredths of second
Trade_status_ind	1	M	Status of the transaction. Possible values are: B = Busted (canceled) M = Matched U = Unmatched.
buy_sell_code	1	2	An indicator specifying whether this transaction is a buy or a sell. Possible values are: 1 = Buy 2 = Sell
Prem_price_amt	9	000012000	The premium price for this transaction. The format of this field is: NNNNNFFFF NNNNN = whole dollars FFFF = decimal format
Contract_qty	5	00000002	Contract quantity right justified with leading zeros
Side_changed	1	Y	Indicates whether there is a possible change (with respect to the user) on this side of the trade N = No Y = Yes

Field Name	**Len**	**Value**	**Description**
Strategy_id	6	010001	Strategy id if this trade involves a complex order or complex sweep on either side. If the trade does not involve a complex order or complex sweep, then this field will be space filled.
Phlx_leg_ref_id	5	00000	Leg ref id of a complex order set by PHLX if the trade involves a complex order or sweep on either side. If this does not involve a complex order or sweep, then this field will be set to spaces. Please note, this is zero based, that is, first leg id is 0, second is 1 and so on.
side_type	1	S	Indicates type of order/sweep/quote for this side of the trade. B = Resting Complex Order C = Complex Order that didn't start/join Cola I = Complex Order that initiated Cola J = Complex Order that joined Cola O = Single Order Q = Quote S = Complex Sweep W = Single Order Sweep Space = None of the above Single or Complex Orders can originate from FIX or FBMS
Clearing Information			
Exec MPID	5	ººººº 5 spaces	NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Exec NSCC	5	ººººº 5 spaces	NSCC Clearing Number if this side of the trade is the Stock leg

Field Name	Len	Value	Description
			of a complex order tied to stock. Blank otherwise.
exec_firm_code	5	00549	This is the *actual* OCC clearing number.
exec_broker_code	5	00112	The PHLX floor broker number
exec_2nd_broker_code	5	ººººº 5 spaces	The PHLX 2nd floor broker number
exec_house_number	5	00112	The PHLX House number of the executing firm
exec_clearing_number	5	00436	The PHLX Clearing number of the executing firm
CMTA_firm_number	5	ººººº 5 spaces	Give-up firm OCC if a CMTA trade; otherwise, spaces.
Mm_acronym	5	ººººº 5 spaces	Sub or Multi Account id for a Off-floor Market Maker order or linkage order or spaces
Market_ ID	1	º 1 space	Originating market id for the order: A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space
Account_id	10	ºººººººººº	Account ID as specified in the order involved with this trade or spaces
Origin_ind	1	M	This is the prefix to the house number. Possible values are: C = Customer F = Firm M = Market Maker P = Professional Customer
yield_ind	1	N	This is the yield indicator in the

Field Name	Len	Value	Description
			trade
Open_close_ind	1	A	This is the suffix to the house number or 1 space.
Mm_broker_code	5	ººººº 5 spaces	PHLX Market maker badge number when floor broker executes trade for market maker.
Contra – Clearing Information			
Contra MPID	5	ººººº 5 spaces	Contra side NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra NSCC	5	ººººº 5 spaces	Contra side NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra_exec_firm_code	5	00447	The *actual* OCC number of the contra side.
Contra_exec_broker_code	5	00111	Contra side PHLX floor broker number
Contra_exec_2nd_broker_code	5	ººººº 5 spaces	Contra side PHLX 2nd floor broker number
Contra_exec_house_number	5	00407	The PHLX House number of the contra firm
Contra_exec_clearing_number	5	00407	The PHLX Clearing number of the contra firm
Contra_CMTA_firm_number	5	ººººº 5 spaces	Contra Give-up firm OCC if a CMTA trade; otherwise, spaces.
Order Information			
Firm_mnemonic	4	ºººº	Firm mnemonic associated with this order or spaces
Client_ID	30	SWP309199120ººººººººº ººººººººº	FIX id assigned by the sending firm or exchange for fix orders. For example: Side_type = B/C/I/J/O, this field will contain fix id if the order originated from fix.

Field Name	Len	Value	Description
Customer_leg_ref_id	5	ººººº	Leg ref id of a complex order as sent by the customer. If this side is not a complex order, then this field will be set to spaces
Order_received_date	8	ºººººººº	Date when order is received on PHLX-XL or spaces
Short_Sale	1	º 1 space	Indicates whether this is a short sale for the stock leg of a complex order tied to stock. "Y" = Short Sale. Applicable to Sell side of Complex orders and sweeps tied to stock only. "N" = Not a short sale "E" = Short Sale Exempt. Space = Not sell side of a Stock
Equity Order Capacity	1	P	A= Agency Order P = Principal Order R = Riskless Principal Order Space = Not a Stock Leg of tied to stock complex order. For Complex Sweeps, this field will always be 'P'
Firm_opt_descrip	16	ºººººººººººººººº	The ID field from the order ticket
Class_code	5	ººººº	Option class symbol. After symbology, this field will not be populated.
End_msg_ind	1	Hex character 03	ETX

Buy Message for Trade # 163

Field Name	Len	Value	Description
Process_name	16	PHLXOPTRISKMGMTº	Identifier for PHLX-XL Risk Management Process
Sender_SYSID	4	PH44	PHLX-XL Risk Management ID
Send_response	4	0001	Number of send attempts. This

Field Name	Len	Value	Description
			field will be incremented whenever the message is resent to the firm due to a retransmission request.
Target_SYSID	4	FOCº	Clearing Firm Mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	20100223115025	Date / Timestamp
Sender_sequence	7	0000016	Sequential number for each participating clearing firm. This number will be reset to 0000001 each morning.
Send_or_resend	1	S	Indicates if this is the original transmission or re-transmission of a message. Possible values are: S = Send R = Resend.
Confirm_or_no_confirm	1	Y	An indicator that specifies whether an acknowledgement is expected from the firm. "Y" if a confirmation is expected. "N" if no confirmation is expected.
Symbol Information			
Underlying	13	AMDºººººººººº	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
Security_symbol	5	ººººº	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
put_call_ind	1	º	Security Symbol, left justified, space filled. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
expr_date	8	ºººººººº	An indicator specifying whether this transaction is a Call or a Put. Possible values are: C = Call P = Put

Field Name	Len	Value	Description
			Space = This side of the trade is Stock Leg of a tied to stock complex order.
exer_price_amt	9	ººººººººº	Expiration Date with 4-digit year. Format is CCYYMMDD. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
Trade Information			
Trans_code	1	X	Indicates if this is a new trade "X", a change "Y" or a deletion "Z"
Liquidity	1	N	Indicates if this side of the trade is a maker or taker. Possible values are: A – Maker R – Taker N – None. Maker/Taker not applicable to this side of the trade.
Filler	3	spaces	Filler for future use
Trade_ID_number (formerly Trade_seq_number)	8	00000163	Unique system identification number of the PHLX-XL trade. Recipients should note that the trade identification number (formerly trade sequence number), although unique, is not guaranteed to always be increasing. It may, in fact, at any time increase or decrease by any incremental value.
Correction_number	2	00	Trade correction number; will be zero for a new trade
Cross_ID	8	00000011	Transaction Id of trade. Ties together all clearing trades of a given execution. Right justified, 0 filled. 00000000 if cross id is not available.
Auction_ID	8	00000008	Auction Id if any. Right Justified 0

Field Name	Len	Value	Description
			filled. 00000000 if auction id not available.
Ref_trade_ID_number (formerly Ref_trade_seq_number)	8	00000000	Refers to the system identification number of the original PHLX-XL trade for any changes; otherwise zero
Ref_correction_number	2	00	Refers to the trade correction number of the original PHLX-XL trade before any changes; otherwise zero
Trade_source	1	C	The source of the transaction. Possible values are: A = Auto-ex (PHLX-XL order automatically executed) B = Floor Broker (FBMS) entered C = Complex Order Traded in COLA G = Complex Order Legged against single orders or quotes P = Complex Sweep L = Trade generated by PHLX-XL due to a corresponding linkage trade executed at another exchange M = Manual Q = Quote match S = Sweep U = Complex Order Traded in COLA after cross resolution X = Specialist Y = Complex Order Auto Executed Z = Complex Order Traded in after cross resolution O = Other ! Note, the permissible values of this field have changed starting v4.0. We explicitly indicate Quote Match, Sweep and

Field Name	Len	Value	Description
			Specialist execution source. Also, this will NOT be affected when the trade is corrected, we have introduced a new field correction source for the same !
Exec_market_ID	1	Space	Executing market id (for linkage trade): A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space = Not a linkage trade New v4.0. When a Customer order is shipped to away exchange for execution, we will indicate the Market where it was executed. Since the Specialist represents the customer order on the away exchange and acts a contra side to the order on the PHLX, this indicator will be set for the side represented by the Specialist on the wash trade.
Correction_source	1	Space	The source of trade correction. Possible values are: M = Manual R = Remote firm O = Other Space = No correction
Trade_date	8	20080317	Trade date, which should be today ‘s date. Format of this field is: CCYYMMDD
Trade_time	8	11502579	Time the trade occurred hh = hours mm = minutes ss = seconds

Field Name	Len	Value	Description
			cc = hundredths of second
Trade_status_ind	1	M	Status of the transaction. Possible values are: B = Busted (canceled) M = Matched U = Unmatched.
buy_sell_code	1	1	An indicator specifying whether this transaction is a buy or a sell. Possible values are: 1 = Buy 2 = Sell
Prem_price_amt	9	000100000	The premium price for this transaction. The format of this field is: NNNNNFFFF NNNNN = whole dollars FFFF = decimal format
Contract_qty	5	00000200	Contract quantity right justified with leading zeros
Side_changed	1	Y	Indicates whether there is a possible change (with respect to the user) on this side of the trade N = No Y = Yes
Strategy_id	6	010001	Strategy id if this trade involves a complex order or complex sweep on either side. If the trade does not involve a complex order or complex sweep, then this field will be space filled.
Phlx_leg_ref_id	5	00001	Leg ref id of a complex order set by PHLX if the trade involves a complex order or sweep on either side. If this does not involve a complex order or sweep, then this field will be set to spaces. Please note, this is zero based, that is, first leg id is 0, second is 1 and so on.
side_type	1	S	Indicates type of

Field Name	Len	Value	Description
			order/sweep/quote for this side of the trade. B = Resting Complex Order C = Complex Order that didn't start/join Cola I = Complex Order that initiated Cola J = Complex Order that joined Cola O = Single Order Q = Quote S = Complex Sweep W = Single Order Sweep Space = None of the above Single or Complex Orders can originate from FIX or FBMS
Clearing Information			
Exec MPID	5	ABCDº	NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Exec NSCC	5	01234	NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
exec_firm_code	5	00549	This is the *actual* OCC clearing number.
exec_broker_code	5	00112	The PHLX floor broker number
exec_2nd_broker_code	5	ººººº 5 spaces	The PHLX 2nd floor broker number
exec_house_number	5	00112	The PHLX House number of the executing firm
exec_clearing_number	5	00436	The PHLX Clearing number of the executing firm
CMTA_firm_number	5	ººººº 5 spaces	Give-up firm OCC if a CMTA trade; otherwise, spaces.
Mm_acronym	5	ººººº 5 spaces	Sub or Multi Account id for a Off-floor Market Maker order or linkage order

Field Name	Len	Value	Description
			or spaces
Market_ ID	1	º 1 space	Originating market id for the order: A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space
Account_id	10	ºººººººººº	Account ID as specified in the order involved with this trade or spaces
Origin_ind	1	M	This is the prefix to the house number. Possible values are: C = Customer F = Firm M = Market Maker P = Professional Customer
yield_ind	1	N	This is the yield indicator in the trade
Open_close_ind	1	A	This is the suffix to the house number or 1 space.
Mm_broker_code	5	ººººº 5 spaces	PHLX Market maker badge number when floor broker executes trade for market maker.
Contra – Clearing Information			
Contra MPID	5	XYZºº	Contra side NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra NSCC	5	00987	Contra side NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank

Field Name	**Len**	**Value**	**Description**
			otherwise.
Contra_exec_firm_code	5	00447	The *actual* OCC number of the contra side.
Contra_exec_broker_code	5	00111	Contra side PHLX floor broker number
Contra_exec_2nd_broker_code	5	°°°°° 5 spaces	Contra side PHLX 2nd floor broker number
Contra_exec_house_number	5	00407	The PHLX House number of the contra firm
Contra_exec_clearing_number	5	00407	The PHLX Clearing number of the contra firm
Contra_CMTA_firm_number	5	°°°°° 5 spaces	Contra Give-up firm OCC if a CMTA trade; otherwise, spaces.
Order Information			
Firm_mnemonic	4	°°°°	Firm mnemonic associated with this order or spaces
Client_ID	30	SWP309199120°°°°°°°°°°°°°°°°°°	FIX id assigned by the sending firm or exchange for fix orders For example: Side_type = B/C/I/J/O, this field will contain fix id if the order originated from fix.
Customer_leg_ref_id	5	°°°°°	Leg ref id of a complex order as sent by the customer. If this side is not a complex order, then this field will be set to spaces
Order_received_date	8	°°°°°°°°	Date when order is received on PHLX-XL or spaces
Short_Sale	1	N	Indicates whether this is a short sale for the stock leg of a complex order tied to stock. "Y" = Short Sale. Applicable to Sell side of Complex orders and sweeps tied to stock only. "N" = Not a short sale "E" = Short Sale Exempt.

Field Name	Len	Value	Description
			Space = Not sell side of a Stock
Equity Order Capacity	1	P	A= Agency Order P = Principal Order R = Riskless Principal Order Space = Not a Stock Leg of tied to stock complex order. For Complex Sweeps, this field will always be ‘P’
Firm_opt_descrip	16	ºººººººººººººººº	The ID field from the order ticket
Class_code	5	ººººº	Option class symbol. After symbology, this field will not be populated.
End_msg_ind	1	Hex character 03	ETX

Sell Message for Trade # 163

Field Name	Len	Value	Description
Process_name	16	PHLXOPTRISKMGMTº	Identifier for PHLX-XL Risk Management Process
Sender_SYSID	4	PH44	PHLX-XL Risk Management ID
Send_response	4	0001	Number of send attempts. This field will be incremented whenever the message is resent to the firm due to a retransmission request.
Target_SYSID	4	ABCº	Clearing Firm Mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	20100223115025	Date / Timestamp
Sender_sequence	7	0000016	Sequential number for each participating clearing firm. This number will be reset to 0000001 each morning.
Send_or_resend	1	S	Indicates if this is the original transmission or re-transmission of a message. Possible values are: S = Send

Field Name	Len	Value	Description
			R = Resend.
Confirm_or_no_confirm	1	Y	An indicator that specifies whether an acknowledgement is expected from the firm. “Y” if a confirmation is expected. “N” if no confirmation is expected.
Symbol Information			
Underlying	13	AMDºººººººººº	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
Security_symbol	5	ººººº	Denotes the PHLX internal underlying stock symbol, left justified, space filled.
put_call_ind	1	º	Security Symbol, left justified, space filled. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
expr_date	8	ºººººººº	An indicator specifying whether this transaction is a Call or a Put. Possible values are: C = Call P = Put Space = This side of the trade is Stock Leg of a tied to stock complex order.
exer_price_amt	9	ººººººººº	Expiration Date with 4-digit year. Format is CCYYMMDD. Spaces = This side of the trade is Stock Leg of a tied to stock complex order.
Trade Information			
Trans_code	1	X	Indicates if this is a new trade “X”, a change “Y” or a deletion “Z”
Liquidity	1	N	Indicates if this side of the trade is a maker or taker. Possible values are: A – Maker R – Taker

Field Name	Len	Value	Description
			N – None. Maker/Taker not applicable to this side of the trade.
Filler	3	spaces	Filler for future use
Trade_ID_number (formerly Trade_seq_number)	8	00000163	Unique system identification number of the PHLX-XL trade. Recipients should note that the trade identification number (formerly trade sequence number), although unique, is not guaranteed to always be increasing. It may, in fact, at any time increase or decrease by any incremental value.
Correction_number	2	00	Trade correction number; will be zero for a new trade
Cross_ID	8	00000011	Transaction Id of trade. Ties together all clearing trades of a given execution. Right justified, 0 filled. 00000000 if cross id is not available.
Auction_ID	8	00000008	Auction Id if any. Right Justified 0 filled. 00000000 if auction id not available.
Ref_trade_ID_number (formerly Ref_trade_seq_number)	8	00000000	Refers to the system identification number of the original PHLX-XL trade for any changes; otherwise zero
Ref_correction_number	2	00	Refers to the trade correction number of the original PHLX-XL trade before any changes; otherwise zero
Trade_source	1	C	The source of the transaction. Possible values are: A = Auto-ex (PHLX-XL order automatically executed) B = Floor Broker (FBMS) entered C = Complex Order Traded in

Field Name	Len	Value	Description
			COLA G = Complex Order Legged against single orders or quotes P = Complex Sweep L = Trade generated by PHLX-XL due to a corresponding linkage trade executed at another exchange M = Manual Q = Quote match S = Sweep U = Complex Order Traded in COLA after cross resolution X = Specialist Y = Complex Order Auto Executed Z = Complex Order Traded in after cross resolution O = Other ! Note, the permissible values of this field have changed starting v4.0. We explicitly indicate Quote Match, Sweep and Specialist execution source. Also, this will NOT be affected when the trade is corrected, we have introduced a new field correction source for the same !
Exec_market_ID	1	Space	Executing market id (for linkage trade): A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space = Not a linkage trade

Field Name	**Len**	**Value**	**Description**
			New v4.0. When a Customer order is shipped to away exchange for execution, we will indicate the Market where it was executed. Since the Specialist represents the customer order on the away exchange and acts a contra side to the order on the PHLX, this indicator will be set for the side represented by the Specialist on the wash trade.
Correction_source	1	Space	The source of trade correction. Possible values are: M = Manual R = Remote firm O = Other Space = No correction
Trade_date	8	20100223	Trade date, which should be today 's date. Format of this field is: CCYYMMDD
Trade_time	8	11502579	Time the trade occurred hh = hours mm = minutes ss = seconds cc = hundredths of second
Trade_status_ind	1	M	Status of the transaction. Possible values are: B = Busted (canceled) M = Matched U = Unmatched.
buy_sell_code	1	2	An indicator specifying whether this transaction is a buy or a sell. Possible values are: 1 = Buy 2 = Sell
Prem_price_amt	9	00010000	The premium price for this transaction. The format of this field is: NNNNNFFFF NNNNN = whole dollars FFFF = decimal format
Contract_qty	5	00000200	Contract quantity right justified

Field Name	Len	Value	Description
			with leading zeros
Side_changed	1	Y	Indicates whether there is a possible change (with respect to the user) on this side of the trade N = No Y = Yes
Strategy_id	6	010001	Strategy id if this trade involves a complex order or complex sweep on either side. If the trade does not involve a complex order or complex sweep, then this field will be space filled.
Phlx_leg_ref_id	5	00001	Leg ref id of a complex order set by PHLX if the trade involves a complex order or sweep on either side. If this does not involve a complex order or sweep, then this field will be set to spaces. Please note, this is zero based, that is, first leg id is 0, second is 1 and so on.
side_type	1	I	Indicates type of order/sweep/quote for this side of the trade. B = Resting Complex Order C = Complex Order that didn't start/join Cola I = Complex Order that initiated Cola J = Complex Order that joined Cola O = Single Order Q = Quote S = Complex Sweep W = Single Order Sweep Space = None of the above Single or Complex Orders can originate from FIX or FBMS

Field Name	Len	Value	Description
Clearing Information			
Exec MPID	5	XYZºº	NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Exec NSCC	5	00987	NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
exec_firm_code	5	00447	This is the *actual* OCC clearing number.
exec_broker_code	5	00111	The PHLX floor broker number
exec_2nd_broker_code	5	ººººº 5 spaces	The PHLX 2nd floor broker number
exec_house_number	5	00407	The PHLX House number of the executing firm
exec_clearing_number	5	00407	The PHLX Clearing number of the executing firm
CMTA_firm_number	5	ººººº 5 spaces	Give-up firm OCC if a CMTA trade; otherwise, spaces.
Mm_acronym	5	ººººº 5 spaces	Sub or Multi Account id for a Off-floor Market Maker order or linkage order or spaces
Market_ ID	1	º 1 space	Originating market id for the order: A = Amex B = BOX C = CBOE I = ISE N = NYSE Q = NASDAQ W = C2 Z = BATS Space
Account_id	10	ºººººººººº	Account ID as specified in the order involved with this trade or spaces
Origin_ind	1	C	This is the prefix to the house

Field Name	Len	Value	Description
			number. Possible values are: C = Customer F = Firm M = Market Maker P = Professional Customer
yield_ind	1	N	This is the yield indicator in the trade
Open_close_ind	1	O	This is the suffix to the house number or 1 space.
Mm_broker_code	5	ººººº 5 spaces	PHLX Market maker badge number when floor broker executes trade for market maker.
Contra – Clearing Information			
Contra MPID	5	ABCDº	Contra side NASDAQ assigned MPID if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra NSCC	5	01234	Contra side NSCC Clearing Number if this side of the trade is the Stock leg of a complex order tied to stock. Blank otherwise.
Contra_exec_firm_code	5	00549	The *actual* OCC number of the contra side.
Contra_exec_broker_code	5	00112	Contra side PHLX floor broker number
Contra_exec_2nd_broker_code	5	ººººº 5 spaces	Contra side PHLX 2nd floor broker number
Contra_exec_house_number	5	00112	The PHLX House number of the contra firm
Contra_exec_clearing_number	5	00436	The PHLX Clearing number of the contra firm
Contra_CMTA_firm_number	5	ººººº 5 spaces	Contra Give-up firm OCC if a CMTA trade; otherwise, spaces.
Order Information			
Firm_mnemonic	4	BLJº	Firm mnemonic associated with this order or spaces

Field Name	Len	Value	Description
Client_ID	30	1234567890oooooooooooooooooooo	FIX id assigned by the sending firm or exchange for fix orders. For example: Side_type = B/C/I/J/O, this field will contain fix id if the order originated from fix.
Customer_leg_ref_id	5	2oooo	Leg ref id of a complex order as sent by the customer. If this side is not a complex order, then this field will be set to spaces
Order_received_date	8	20100223	Date when order is received on PHLX-XL or spaces
Short_Sale	1	E	Indicates whether this is a short sale for the stock leg of a complex order tied to stock. "Y" = Short Sale. Applicable to Sell side of Complex orders and sweeps tied to stock only. "N" = Not a short sale "E" = Short Sale Exempt. Space = Not sell side of a Stock
Equity Order Capacity	1	A	A= Agency Order P = Principal Order R = Riskless Principal Order Space = Not a Stock Leg of tied to stock complex order. For Complex Sweeps, this field will always be 'P'
Firm_opt_descrip	16	oooooooooooooooo	The ID field from the order ticket
Class_code	5	ooooo	Option class symbol. After symbology, this field will not be populated.
End_msg_ind	1	Hex character 03	ETX

7.4 Example 4: Retransmission of Trades Successful

Retransmission of Trades Request sent by the Clearing Firm to PHLX-XL:

NOTE: All spaces are represented by the symbol: º (circle)

Field Name	***Len***	***Value***	***Description***
Header			
Message_ID	3	200	Message identifier for PHLX-XL Risk Management Process
System_version	4	PH44	PHLX-XL System version
Firm_ID	4	PQR1	Clearing firm mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	20060216141516	Date/time stamp
Sender_token	7	0000003	Unique token used by the participating clearing firm (to match request with the response message)
Data			
Retransmission_type	1	R	Retransmission type (R = A range of trade messages)
Start_seq_number	7	0000006	Starting sender sequence number, used when requesting a range of trade messages; otherwise zero
End_seq_number	7	0000015	Ending sender sequence number, used when requesting a range of trade messages; otherwise zero
End of Message			
End_msg_ind	1	Hex character 03	ETX

Response to the Retransmission of Trades Request sent by PHLX-XL to the Clearing Firm:

NOTE: All spaces are represented by the symbol: º (circle)

The following response message will be sent after completion of the retransmission of trade messages:

Field Name	***Len***	***Value***	***Description***

Header			
Message_ID	3	201	Message identifier for PHLX-XL Risk Management Process
System_version	4	PH44	PHLX-XL System version
Firm_ID	4	PQR1	Clearing firm mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	20060216141517	Date/time stamp
Requester_token	7	0000003	Original token in the request sent by the participating clearing firm
Data			
Reply_code	2	00	Reply code (00 = No error)
Num_messages_retrans	7	0000010	Number of messages retransmitted
End of Message			
End_msg_ind	1	Hex character 03	ETX

7.5 Example 7: Retransmission of Trades Failed

Retransmission of Trades Request sent by the Clearing Firm to PHLX-XL:

NOTE: All spaces are represented by the symbol: º (circle)

Field Name	***Len***	***Value***	***Description***
Header			
Message_ID	3	200	Message identifier for PHLX-XL Risk Management Process
System_version	4	PH44	PHLX-XL System version
Firm_ID	4	ABCº	Clearing firm mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	20060216141516	Date/time stamp
Sender_token	7	0000004	Unique token used by the participating clearing firm (to match request with the response message)
Data			

Retransmission_type	1	R	Retransmission type (R = A range of trade messages)
Start_seq_number	7	0000025	Starting sender sequence number, used when requesting a range of trade messages; otherwise zero
End_seq_number	7	0000000	Ending sender sequence number, used when requesting a range of trade messages; otherwise zero
End of Message			
End_msg_ind	1	Hex character 03	ETX

Response to the Retransmission of Trades Request sent by PHLX-XL to the Clearing Firm:

NOTE: All spaces are represented by the symbol: º (circle)

Field Name	*Len*	*Value*	*Description*
Header			
Message_ID	3	201	Message identifier for PHLX-XL Risk Management Process
System_version	4	PH44	PHLX-XL System version
Firm_ID	4	ABCº	Clearing firm mnemonic. This is the mnemonic of the participating clearing firm.
Sender_timestamp	14	20060216141517	Date/time stamp
Requester_token	7	0000004	Original token in the request sent by the participating clearing firm
Data			
Reply_code	2	04	Reply code (04 = Invalid range)
Num_messages_retrans	7	0000000	Number of messages retransmitted
End of Message			
End_msg_ind	1	Hex character 03	ETX

7.6 Example 5: Heartbeat

The following is an example of a heartbeat message sent to firm ABC.

Field Name	Len	Value	Description
Trans_code	1	M	Heartbeat Message Transaction Code
Sender_SYSID	4	PH44	PHLX-XL Risk Management ID
Target_SYSID	4	ABCN	Clearing Firm Mnemonic. This is the mnemonic of the participating clearing firm.
End_msg_ind	1	Hex character 03	ETX (End of text)

The firm's response to this message is the message itself. No further processing is required other than sending the message back to PHLX-XL.

8 DISASTER/RECOVERY SUPPORT

8.1.1 Dual RMP Sourcing

The new XL2 platform has full disaster/recovery capability for RMP.

The connection level message sequencing on each firm line for all RMP messages disseminated from the primary site (Carteret, NJ) will differ from those disseminated from the secondary site (Ashburn, VA).

Firms are advised to connect to the backup site and process the RMP feed sourced from this site in such a manner that it may easily begin using this feed in the event of a failure at the primary site. This would provide the most seamless transition in the event of a failure. The Trade_ID_number (formerly Trade_seq_number) in each of the RMP messages can be used to reconcile order updates received from both sites.

Firms not previously connected to the backup site, that failover to that site in the event of a failure, will need to request an retransmission of all messages once they are connected.

9 VERSION CONTENTS

9.1 Version 1.0

Initial release.

9.2 Version 2.0

Changes to formats to support Market Maker and Broker Dealer project.

Expand format to include Branch code, Branch sequence number, Firm mnemonic and order received date when the trade is due to an order.

Added Off-floor market id, contra acronym and contra off-floor market id for identification of off-floor market makers. Expanded the use of *firm_opt_descrip* to hold the off-floor market id.

9.3 Version 3.0

Changed the format to add new fields and additional information such that we can support linkage and eliminate the need to print trade tickets.

9.4 Version 3.1

Added BOX.

Update source of “B” for FBMS entered trades

9.5 Version 4.0

Added correction/reassignment of trades message and retransmission of trade message.

Added new fields to the trade message: *Correction_number*, *Correction_source*, *Exec_market_ID*, *Ref_correction_number*, *Ref_trade_ID_number*, *Side_changed*.

Added hundredths of a second to *Trade_time*.

Modified values for *Trade_source*: added *M* (manual), *O* (other), *Q* (quote match), *S* (sweep), *X* (specialist); removed *F* (floor).

The field, *Firm_opt_descrip*, will contain only the identification field from the order/trade (and not the multi-account identification).

9.6 Version 4.1

Added new fields to support complex orders.

Following new fields are added to trade message

Strategy id, phlx leg ref id, account id, customer leg ref id, side type.

Following fields are modified

Order tanum, trade_source and contra_order_tanum size increased from 5 to 6

Fix order id size increased from 16 to 30

9.7 Version 4.2

Updated to (1) support Symbology, (2) modify Trade ACK protocol for enhanced performance (3) expand Trade Sequence Number from 6 to 8 digits.

Added support for unsolicited resend of trade messages.

9.8 Version 4.2.1

Updated

fix_order id description

From - FIX id assigned by the sending firm or exchange or spaces

To - FIX id ***or Complex Sweep Id*** assigned by the sending firm or exchange or spaces

Trade_source description

From - G = Complex Order Legged against single orders

To - G = Complex Order Legged against single orders ***or quote***

Added Class code (Option class symbol) to trade message at the end where filler was

Added section on Disaster/Recovery.

Updated contact list info.

The old 4 character Trade_ID has been removed and made a filler field

The Trade_sequence_number field has been renamed to th the Trade_ID_number field.

Added the following note to the Trade_ID_Number filed description…Recipients should note that the trade identification number, although unique, is not guaranteed to always be increasing. It may, in fact, at any time increase or decrease by any incremental value.

Removed support for reassignments messages.

Noted that the ORDER_TANUM will be space filled for XL II.

Noted that the Branch_Code and Branch_Sequence_no will be spaced filled for XL II.

9.9 Version 4.2.2

Updated Contact list

9.10 Version 4.2.3

fix_order id description

To - FIX id assigned by the sending firm or exchange or spaces

From - FIX id ***or Complex Sweep Id*** assigned by the sending firm or exchange or spaces

Trade_source description

Removed - X =Specialist

Contra_exec_firm_code value

From - (º{5}|[0-9]{5})

Right justified, padded with zeros;

To - (º{5}|[0-9]{5})

Right justified, padded with zeros; or 5 spaces

Contra_exec_firm_code value

From - (º{5}|[0-9]{5})

Right justified, padded with zeros;

To - (º{5}|[0-9]{5})

Right justified, padded with zeros; or 5 spaces

Contra_exec_house number value

From - (º{5}|[0-9]{5})

Right justified, padded with zeros;

To - (º{5}|[0-9]{5})

Right justified, padded with zeros; or 5 spaces

Contra_exec_clearing number value

From - (º{5}|[0-9]{5})

Right justified, padded with zeros;

To - (º{5}|[0-9]{5})

Right justified, padded with zeros; or 5 spaces

9.11 Version 4.3

New version

- Added Professional Customer Origin Indicator. For Professional Customer Orders, *origin_ind* will be set to 'P' and *yield_ind* will be 'Y'. Note: in prior releases of RMP, such orders will be displayed with a Customer Origin Indicator.
- Added support for liquidity code.
- Added support for BATS exchange code of 'Z' and C2 exchange code of 'W'.

9.12 Version 4.4

New version

- Added Support for complex order tied to stock

9.13 Version 4.4-D

Removed sweep id and quote id from Client_ID field. This field will only be populated for fix single and complex orders.

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Contact List

Role	Department	Contact	Phone	Email
New membership/ Changes to existing membership	Membership Services	Susan Murray	+1 215 496 5322	susan.murray@nasdaqomx.com
Key Functionality/Fees	Sales	NASDAQ OMX Market Sales	+1 800 846 0477	sales@nasdaqomx.com
Operational Issues	Market Operations	System Support	+1 215 496 1571	phlxsystemsupport@nasdaqomx.com
Functional & Application Message Interface Specification	Financial Automation	Doug Schafer Matt Rotella	+1 215 496 5628 +1 215 496 1186	douglas.schafer@nasdaqomx.com matt.rotella@nasdaqomx.com
TCP/IP Connectivity Options	Communication	Frank Ziegler	+1 215 496 6745	frank.ziegler@nasdaqomx.com
Establish Network Connection Firewall Configuration	Subscriber Services	Subscriber Services	+1 212 231 5180	subscriber@nasdaqomx.com
Schedule Testing	Subscriber Services	Subscriber Services	+1 212 231 5180	subscriber@nasdaqomx.com