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# CME Globex Front-End Audit Trail Requirements

This section of the Client System Wiki provides the CME Globex Front-End Audit Trail Requirements which is supplement documentation for the Market Regulation Advisory Notice [RA1503-5](#).

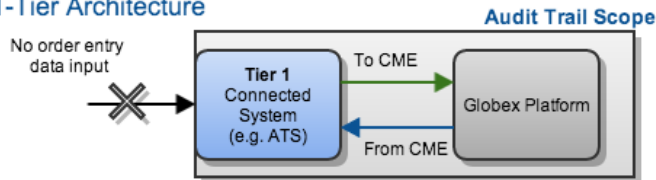
CME, CBOT, NYMEX, COMEX Rule 536.B.2. requires that the electronic audit trail associated with any system that accesses the CME Globex platform through the CME iLink<sup>®</sup> gateway contain a complete and accurate record of all activity through that connection, and account for every electronic communication by the order routing or front-end system from the time such order routing or front-end system receives or generates an electronic communication until it is communicated to CME Globex. Further, the Rule requires that clearing members guaranteeing a connection to CME Globex are responsible for maintain, or causing to be maintained, the electronic audit trail for a minimum of 5 years by the responsible party as set forth in the Rule.

Firms responsible for the order routing/front-end audit trail of a trading system that accesses CME Globex through the CME iLink gateway must have the ability to display data in the required format. Further, the connected entity must ensure that all trading functionality supported by the system is appropriately reflected in the audit trail. For the convenience of those responsible for such order routing or front-end systems, the Exchanges have updated the data definitions, required format, and validation rules applied through the certification process of the minimum acceptable audit trail elements that such systems must capture.

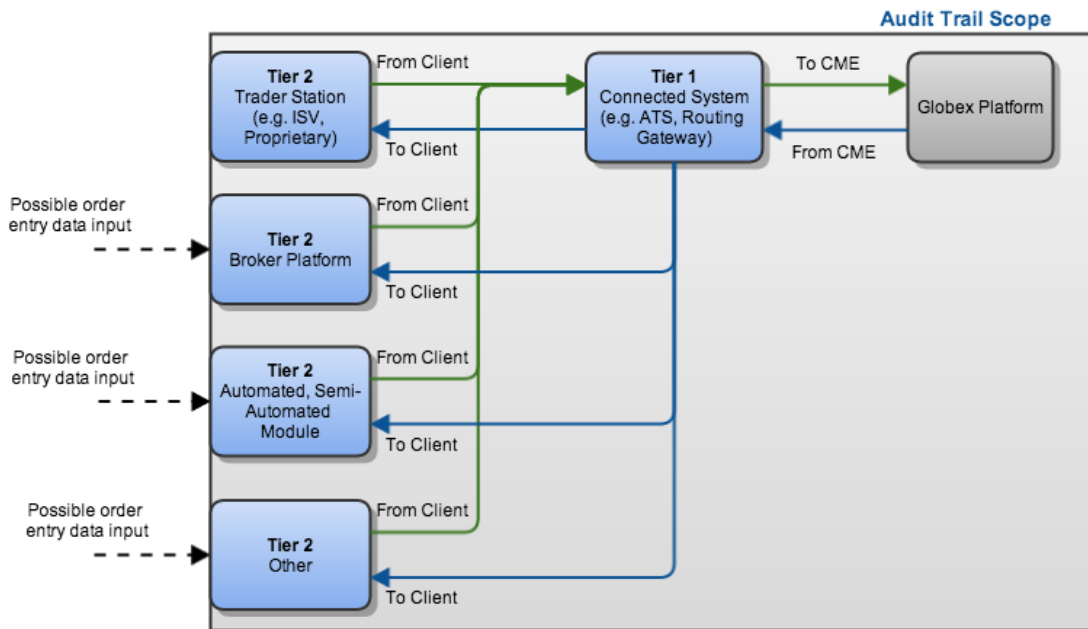
## Front-End Audit Trail (FAT) Scope

Each front-end audit trail must account for every electronic communication by the order routing or front-end system from the time such order routing or front-end system receives or generates an electronic communication until it is communicated to CME Globex. The diagram below clarifies the scope of audit trail based on architecture type.

### 1-Tier Architecture



### N-Tier Architecture



## Minimum Acceptable Audit Trail Elements - Data Definitions and

# Validation Rules

The order of the columns must be respected. Additional columns may be added at the end of the file for the internal use for the firm.

| Position | Columns                  | TO/FROM CME<br>(Tier 1 component interactions with Globex)  | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)   |
|----------|--------------------------|---|---|
| 1        | Sending Timestamps       | <p>Description: Time at which the message leaves the Tier 1 component towards the Globex platform.</p> <p>The time stamp must be in UTC Timestamp format (YY YMMDD-HH:MM:SS.sss)<br/>and must have at least millisecond precision.</p>  | <p>Description: Time at which the message/data leaves the Tier 1 component towards the Tier 2 component.</p> <p>The time stamp must be in UTC Timestamp format (YYYY MMDD-HH:MM:SS.sss)<br/>and must have at least millisecond precision.</p>   |
| 2        | Receiving Timestamps     | <p>Description: Time at which the message is received by the Tier 1 component from the Globex platform.</p> <p>The time stamp must be in UTC Timestamp format (YYYYMMDD-HH:MM:SS.sss)<br/>and must have at least millisecond precision.</p>   | <p>Description: Time at which the message/data is received by the Tier 1 component from the Tier 2 component.</p> <p>The time stamp must be in UTC Timestamp format (YYYYMMDD-HH:MM:SS.sss)<br/>and must have at least millisecond precision.</p>   |
| 3        | Message Direction        | <p>Description: Explicit labeling of the direction of the captured message.</p> <p>"TO CME" : for messages leaving Tier 1 component towards the Globex platform<br/>"FROM CME" : for messages received by Tier 1 component from the Globex platform</p>   | <p>Description: Explicit labeling of the direction of the captured message.</p> <p>"TO CLIENT" : for messages/data leaving the Tier 1 component towards the Tier 2 component.<br/>"FROM CLIENT" : for messages/data received by the Tier 1 component from the Tier 2 component.</p>   |
| 4        | Operator ID              | <p>Description: Identifier of the operator, who submitted the message or<br/>is responsible for its submission.</p>   | <p>Description: Identifier of the operator, who submitted the message or<br/>is responsible for its submission.</p>   |
| 5        | Self-Match Prevention ID | <p>Description: Identifier submitted on messages to prevent self-match on Globex trading engines.</p>   |   |
| 6        | Account Number           | <p>Description: Trading account number.</p>   | <p>Description: Trading account number.</p>   |
| 7        | Session ID               | <p>Description: Identifier of the iLink Order Entry session.</p>  |   |
| 8        | Executing Firm ID        | <p>Description: Identifier of the Executing Trading Firm submitting the messages to Globex.</p>   |   |
| 9        | Manual Order Identifier  | <p>Description: Identifies if the captured message was submitted manually or automatically.</p>   |   |
| 10       | Message Type             | <p>Description: Identifies the type of the message captured.</p>  | <p>Description: Identifies the type of the message captured.</p>  |
| 11       | Customer Type Indicator  | <p>Description: Customer Type Indicator.</p>  |   |
| 12       | Origin                   | <p>Description: Origin of the order (customer or Firm).</p>   |   |
| 13       | Globex Message ID        | <p>Description: Execution Report identifier.</p>  |   |
| 14       | Message Link ID          | <p>Description: Identifier linking message/data sent from the Tier 2 component to Tier 1 component to Globex and,<br/>from Globex to Tier 1 component to Tier 2 component.<br/>(This ID must be generated as part of the audit trail, it is not part of the data captured)<br/>This identifier may link 1:1, 1:N or N:1 messages. Typically, Parent order received on</p> | <p>Description: Identifier linking message/data sent from the Tier 2 component to Tier 1 component to Globex and,<br/>from Globex to Tier 1 component to Tier 2 component.<br/>(This ID must be generated as part of the audit trail, it is not part of the data captured)<br/>This identifier may link 1:1, 1:N or N:1 messages.</p> |

|    |                        |   |   |
|----|------------------------|---|---|
| 15 | Order Flow ID          | Description: Identifier linking all inbound and outbound messages associated with a New Order Messages.<br><br>(This ID must be generated as part of the audit trail, it is not part of the data captured).<br><br>(This ID is not required for Mass Quote related messages.) | Description: Identifier linking all inbound and outbound messages associated with a New Order Messages.<br><br>(This ID must be generated as part of the audit trail, it is not part of the data captured).<br><br>(This ID is not required for Mass Quote related messages.) |
| 16 | Spread/Leg Link ID     | Description: Identifier assigned by Globex to legs and spread fill notices<br><br>and spread trade cancellation to link the messages together.  |   |
| 17 | Instrument Description | Description: Globex-assigned code to uniquely identify a futures or options contract.   | Description: Code uniquely identifying futures or options contracts between Tier 1 and Tier 2 components.   |
| 18 | Market Segment ID      | Description: Globex-assigned code to uniquely identify the trading unit<br><br>on which a future or options contract trades.  |   |
| 19 | Client Order ID        | Description: Customer-generated code uniquely identifying an order, a cancel or cancel replace message.   | Description: Customer-generated code uniquely identifying an order, a cancel or cancel replace message.   |
| 20 | Globex Order ID        | Description: Globex-assigned code uniquely identifying an order.<br><br>This code does not change regardless of the changes applied to it.  |   |
| 21 | Buy/Sell Indicator     | Description: Side of the order.   | Description: Side of the order as defined between Tier 1 and Tier 2 component.  |
| 22 | Quantity               | Description: Quantity of the order.   | Description: Quantity of the order as defined between Tier 1 and Tier 2 component.  |
| 23 | Limit Price            | Description: Limit price of the order.  | Description: Limit price of the order as defined between Tier 1 and Tier 2 component.   |
| 24 | Stop Price             | Description: Stop (trigger) price of the order.   | Description: Stop (trigger) price of the order as defined between Tier 1 and Tier 2 component.  |
| 25 | Order Type             | Description: Type of the order: limit, market with protection, market-limit, stop with protection or stop-limit.  | Description: Type of the order as defined between Tier 1 and Tier 2 component.  |
| 26 | Order Qualifier        | Description: Qualifier of the order: day, gtc, gtd, fak   | Description: Qualifier of the order as defined between Tier 1 and Tier 2 component.   |
| 27 | IFM Flag               | Description: Modification flag identifying if in-flight-mitigation functionality is activated or not.   | Description: Modification flag identifying if in-flight-mitigation functionality is activated or not.   |
| 28 | Display Quantity       | Description: Display quantity of an order to be shown in the order book at any given time.  | Description: Display quantity of an order to be shown in the order book at any given time.  |
| 29 | Minimum Quantity       | Description: Minimum quantity of an order to be executed.   | Description: Minimum quantity of an order to be executed.   |
| 30 | Country of Origin      | Description: Location of the operator.  | Description: Location of the operator.  |
| 31 | Fill Price             | Description: Price at which the order has been executed.  | Description: Price at which the order has been executed.  |
| 32 | Fill Quantity          | Description: Quantity at which the order has been executed.   | Description: Quantity at which the order has been executed.   |
| 33 | Cumulative Quantity    | Description: Cumulated fill quantity for the order.   | Description: Cumulated fill quantity for the order.   |
| 34 | Remaining Quantity     | Description: Remaining open quantity on the order book for the order.   | Description: Remaining open quantity on the order book for the order.   |
| 35 | Aggressor Flag         | Description: Flag indicating whether the order was the aggressor in the match.  | Description: Flag indicating whether the order was the aggressor in the match.  |
| 36 | Source of Cancellation | Description: Globex-generated code identifying the source of a cancel when triggered by CME Group.  |   |
| 37 | Reject Reason          | Description: Code or text identifying the reason why an order was rejected.   | Description: Code or text identifying the reason why an order was rejected.   |

|   |                  |  |                                       |
|---|------------------|--|---------------------------------------|
| 38  | Processed Quotes | Description: Number of quote successfully acknowledged or cancelled.                       |                                       |
| 39  | Cross ID         | Description: Customer-generated code uniquely identifying an order Cross (RFC).            |                                       |
| 40  | Quote Request ID | Description: Customer-generated code uniquely identifying a Request for Quote (RFQ).       |                                       |
| 41  | Message Quote ID | Description: Customer-generated code uniquely identifying a Mass Quote message.            |                                       |
| 42  | Quote Entry ID   | Description: Customer-generated code uniquely identifying a Quote in a Mass Quote message. |                                       |
| 43  | Bid Price        | Description: Bid price of quote.   | Description: Bid price of quote.      |
| 44  | Bid Size         | Description: Bid quantity of quote.  | Description: Bid quantity of quote.   |
| 45  | Offer Price      | Description: Offer price of quote.   | Description: Offer price of quote.    |
| 46  | Offer Size       | Description: Offer quantity of quote.  | Description: Offer quantity of quote. |
| Additional columns implemented for trading system needs. Ignored by CME Market Regulation |                  |  |                                       |

## New Order and RFC - Audit Trail Requirements

Each side of a Cross order must be submitted as a separate entry following New Order specifications with the same Cross ID, Message Link ID and Order Flow ID populated for both entries.

| Position | Field Name               | TO/FROM CME<br>(Tier 1 component interactions with Globex)  | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)   | Associated iLink Tag         |
|----------|--------------------------|---|---|------------------------------|
| 1        | Sending Timestamps       | Presence: Mandatory for all architecture<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds  |   | 52 - SendingTime             |
| 2        | Receiving Timestamps     |   | Presence: Mandatory for 2-tier architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sssxxx populated at least at the milliseconds | 60 - Transact Time           |
| 3        | Message Direction        | Presence: Mandatory<br>Format: String<br>Value: "TO CME"  | Presence: Mandatory for 2-tier architectures<br>Format: String<br>Value: "FROM CLIENT"  | 57 - TargetSubID             |
| 4        | Operator ID              | Presence: Mandatory<br>Format: String with a maximum length of 18 bytes.<br>Value: Must not contain the following special characters:<br><SINGLE QUOTE>, <DOUBLE QUOTE>,<br><SPACE>, <PIPE><br><STAR>, <COMMA>, <SEMICOLON> | Presence: Mandatory<br>Format: String   | 50 - SenderSubID             |
| 5        | Self-Match Prevention ID | Presence: Mandatory if present in captured message<br>Format: String  |   | 7928 - SelfMatchPreventionID |
| 6        | Account Number           | Presence: Mandatory<br>Format: String   | Presence: Mandatory<br>Format: String   | 1 - Account                  |

|    |                         |   |   |  |
|----|-------------------------|---|---|--|
| 7  | Session ID              | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters  |   | 49 - SenderCompID                                    |
| 8  | Execution Firm ID       | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters.   |   | 49 - SenderCompID                                    |
| 9  | Manual Order Identifier | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'  |   | 1028 - ManualOrderIndicator                          |
| 10 | Message Type            | Presence: Mandatory<br>Format: String<br>Value: 'D' for orders or 's' for RFC   | Presence: Mandatory<br>Format: String   | 35 - MsgType   |
| 11 | Customer Type Indicator | Presence: Mandatory<br>Format: Integer<br>Value: 1, 2, 3 or 4   |   | 9702 - CTICode                                       |
| 12 | Origin                  | Presence: Mandatory<br>Format: Integer<br>Value: 0 or 1   |   | 204-CustomerOrFirm                                   |
| 14 | Message Link ID         | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file  | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "TO CME" | N/A - This identifier exist only in the audit trail. |
| 15 | Order Flow ID           | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file  | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file                | N/A - This identifier exist only in the audit trail. |
| 17 | Instrument Description  | Presence: Mandatory<br>Format: String<br>Value: Must follow CME Group instrument code nomenclature.   | Presence: Mandatory<br>Format: String   | 107 - SecurityDesc                                   |
| 18 | Market Segment ID       | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument  |   | 57 - TargetSubID                                     |
| 19 | Client Order ID         | Presence: Mandatory<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other Client Order Id from customer-generated messages in the file |   | 11 - ClOrdID   |
| 21 | Buy/Sell Indicator      | Presence: Mandatory<br>Format: Integer<br>Value: 1 or 2   | Presence: Mandatory<br>Format: String   | 54 - Side  |
| 22 | Quantity                | Presence: Mandatory<br>Format: Integer  | Presence: Mandatory<br>Format: Integer  | 38 - Quantity  |

|    |                   |   |   |                        |
|----|-------------------|---|---|------------------------|
| 23 | Limit Price       | Presence: Mandatory if <TO CME> Order Type: 2 or 4,<br>Format: Integer / Decimal Number   | Presence: Mandatory if <TO CME> Order Type: 2 or 4<br>Format: Integer / Decimal Number  | 44 - Price             |
| 24 | Stop Price        | Presence: Mandatory if <TO CME> Order Type: 3 or 4,<br>Format: Integer / Decimal Number   | Presence: Mandatory if <TO CME> Order Type: 3 or 4<br>Format: Integer / Decimal Number  | 99 - StopPx            |
| 25 | Order Type        | Presence: Mandatory<br>Format: String<br>Value: 1, 2, 3, 4 or K   | Presence: Mandatory<br>Format: String   | 40 - OrderType         |
| 26 | Order Qualifier   | Presence: Mandatory<br>Format: Integer<br>Value: 0, 1, 3 or 6   | Presence: Mandatory<br>Format: String   | 59 - TimeInForce       |
| 28 | Display Quantity  | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: Must be a number between 1 and Order Quantity   | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: Must be a number between 1 and Order Quantity | 210 - MaxShow          |
| 29 | Minimum Quantity  | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: Must be a number between 1 and Order Quantity   | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: Must be a number between 1 and Order Quantity | 110 - MinQty           |
| 30 | Country of Origin | Presence: Mandatory<br>Format: String<br>Value: Must follow ISO standard  | Presence: Mandatory<br>Format: String   | 142 - SenderLocationID |
| 39 | Cross ID          | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must only contain number and letters<br><br>Must not be used for any other Cross ID from customer-generated messages in the file |   | 548 - Cross ID         |

## Order Cancel Request- Audit Trail Requirements

| Position | Field Name         | TO/FROM CME<br>(Tier 1 component interactions with Globex)   | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component) | Associated iLink Tag |
|----------|--------------------|--|---|----------------------|
| 1        | Sending Timestamps | Presence: Mandatory for all architecture<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds |   | 52 - SendingTime     |

|    |                         |   |  |   |
|----|-------------------------|---|--|---|
| 2  | Receiving Timestamps    |   | <p>Presence: Mandatory for 2-tier architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sssxxx populated at least at the milliseconds</p> | 60 - Transact Time                                  |
| 3  | Message Direction       | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "TO CME"</p>   | <p>Presence: Mandatory for 2-Tier architectures</p> <p>Format: String</p> <p>Value: "FROM CLIENT"</p>  | 57 - TargetSubID                                    |
| 4  | Operator ID             | <p>Presence: Mandatory</p> <p>Format: String with a maximum length of 18 bytes.</p> <p>Value: Must not contain the following special characters:<br/>&lt;SINGLE QUOTE&gt;, &lt;DOUBLE QUOTE&gt;, &lt;SPACE&gt;, &lt;PIPE&gt;<br/>&lt;STAR&gt;, &lt;COMMA&gt;, &lt;SEMICOLON&gt;</p> | <p>Presence: Mandatory</p> <p>Format: String</p>   | 50 - SenderSubID                                    |
| 6  | Account Number          | <p>Presence: Mandatory</p> <p>Format: String</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 1 - Account   |
| 7  | Session ID              | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters.</p>  |  | 49 - SenderCompID                                   |
| 8  | Execution Firm ID       | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters</p>   |  | 49 - SenderCompID                                   |
| 9  | Manual Order Identifier | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 'Y' or 'N'</p>   |  | 1028 - ManualOrderIndicator                         |
| 10 | Message Type            | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 'F'</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 35 - MsgType  |
| 14 | Message Link ID         | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique within the audit trail file</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Must have same value as at least one entry with message direction "TO CME"</p>                             | N/A - This identifier exist only in the audit trail |
| 15 | Order Flow ID           | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>  | N/A - This identifier exist only in the audit trail |
| 17 | Instrument Description  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must follow CME Group instrument code nomenclature.</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 107 - SecurityDesc                                  |



|    |                    |  |  |                        |
|----|--------------------|--|--|------------------------|
| 18 | Market Segment ID  | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> <p>Value: Must be the Market Segment ID corresponding to the Instrument</p>  |  | 57 - TargetSubID       |
| 19 | Client Order ID    | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must only contain number and letters</p> <p>Must not be used for any other Client Order Id from customer-generated messages in the file</p> |  | 41 - OrigClOrdID       |
| 20 | Globex Order ID    | <p>Presence: Mandatory</p> <p>Format: String</p>   |  | 37 - OrderID           |
| 21 | Buy/Sell Indicator | <p>Presence: Mandatory</p> <p>Format: Integer</p> <p>Value: 1 or 2</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> | 54 - Side              |
| 30 | Country of Origin  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must follow ISO standard</p>  | <p>Presence: Mandatory</p> <p>Format: String</p> | 142 - SenderLocationID |

## Order Modification - Audit Trail Requirements

| Position | Field Name           | TO/FROM CME<br>(Tier 1 component interactions with Globex)  | TO/FROM CME<br>(Tier 1 component interactions with Tier 2 component)  | Associated iLink Tag |
|----------|----------------------|---|---|----------------------|
| 1        | Sending Timestamps   | <p>Presence: Mandatory for all architecture</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p> |   | 52 - SendingTime     |
| 2        | Receiving Timestamps |   | <p>Presence: Mandatory for all architecture</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p> | 60 - Transact Time   |
| 3        | Message Direction    | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "TO CME"</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "FROM CLIENT"</p>  | 57 - TargetSubID     |

|    |                          |   |  |   |
|----|--------------------------|---|--|---|
| 4  | Operator ID              | <p>Presence: Mandatory</p> <p>Format: String with a maximum length of 18 bytes.</p> <p>Value: Must not contain the following special characters:</p> <p>&lt;SINGLE QUOTE&gt;, &lt;DOUBLE QUOTE&gt;, &lt;PIPE&gt;</p> <p>&lt;SPACE&gt;, &lt;STAR&gt;, &lt;COMMA&gt;, &lt;SEMICOLON&gt;</p> | <p>Presence: Mandatory</p> <p>Format: String</p>   | 50 - SenderSubID                                    |
| 5  | Self-Match Prevention ID | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer</p>  |  | 7928 - SelfMatchPreventionID                        |
| 6  | Account Number           | <p>Presence: Mandatory</p> <p>Format: String</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 1 - Account   |
| 7  | Session ID               | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters.</p>  |  | 49 - SenderCompID                                   |
| 8  | Execution Firm ID        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters.</p>  |  | 49 - SenderCompID                                   |
| 9  | Manual Order Identifier  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 'Y' or 'N'</p>   |  | 1028 - ManualOrderIndicator                         |
| 10 | Message Type             | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 'G'</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 35 - MsgType  |
| 11 | Customer Type Indicator  | <p>Presence: Mandatory</p> <p>Format: Integer and Value: 1, 2, 3 or 4</p>   |  | 9702 - CTICode                                      |
| 12 | Origin                   | <p>Presence: Mandatory</p> <p>Format: Integer and Value: 0 or 1</p>   |  | 204-CustomerOrFirm                                  |
| 14 | Message Link ID          | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique within the audit trail file</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Must have same value as at least one entry with message direction "TO CME"</p> | N/A - This identifier exist only in the audit trail |
| 15 | Order Flow ID            | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>                | N/A - This identifier exist only in the audit trail |
| 17 | Instrument Description   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must follow CME Group instrument code nomenclature.</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 107 - SecurityDesc                                  |
| 18 | Market Segment ID        | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> <p>Value: Must be the Market Segment ID corresponding to the Instrument</p>   |  | 57 - TargetSubID                                    |

|    |                    |   |   |                        |
|----|--------------------|---|---|------------------------|
| 19 | Client Order ID    | Presence: Mandatory<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other Client Order Id from customer-generated messages in the file |   | 11 - ClOrdID           |
| 20 | Globex Order ID    | Presence: Mandatory<br>Format: Integer  |   | 37 - OrderID           |
| 21 | Buy/Sell Indicator | Presence: Mandatory<br>Format: Integer<br>Value: 1 or 2   | Presence: Mandatory<br>Format: String   | 54 - Side              |
| 22 | Quantity           | Presence: Mandatory<br>Format: Integer  | Presence: Mandatory<br>Format: Integer  | 38 - Quantity          |
| 23 | Limit Price        | Presence: Mandatory if <TO CME> Order Type: 2 or 4,<br>Format: Integer / Decimal Number   | Presence: Mandatory if <TO CME> Order Type: 2 or 4<br>Format: Integer / Decimal Number  | 44 - Price             |
| 24 | Stop Price         | Presence: Mandatory if <TO CME>Order Type: 3 or 4,<br>Format: Integer / Decimal Number  | Presence: Mandatory if <TO CME> Order Type: 3 or 4<br>Format: Integer / Decimal Number  | 99 - StopPx            |
| 25 | Order Type         | Presence: Mandatory<br>Format: String<br>Value: 1, 2, 3, 4 or K   | Presence: Mandatory<br>Format: String   | 40 - OrderType         |
| 26 | Order Qualifier    | Presence: Mandatory<br>Format: Integer<br>Value: 0, 1, 3 or 6   | Presence: Mandatory<br>Format: String   | 59 - TimeInForce       |
| 27 | IFM Flag           | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'  | Presence: Mandatory<br>Format: String   | Tag 9768 - OFMOverride |
| 28 | Display Quantity   | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: Must be a number between 1 and Order Quantity   | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: Must be a number between 1 and Order Quantity | 210 - MaxShow          |
| 29 | Minimum Quantity   | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: Must be a number between 1 and Order Quantity   | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: Must be a number between 1 and Order Quantity | 110 - MinQty           |
| 30 | Country of Origin  | Presence: Mandatory<br>Format: String<br>Value: Must follow ISO standard  | Presence: Mandatory<br>Format: String   | 142 - SenderLocationID |

## Execution Report - Acknowledgement - Audit Trail Requirements

| Position | Field Name               | TO/FROM CME<br>(Tier 1 component interactions with Globex)  | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)   | Associated iLink Tag          |
|----------|--------------------------|---|---|-------------------------------|
| 1        | Sending Timestamps       |   | <p>Presence: Mandatory for 2-tier architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p> | 52 - SendingTime              |
| 2        | Receiving Timestamps     | <p>Presence: Mandatory for all architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p>  |   | 60 - Transact Time            |
| 3        | Message Direction        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "FROM CME"</p>   | <p>Presence: Mandatory for 2-tier architectures</p> <p>Format: String</p> <p>Value: "TO CLIENT"</p>   | 57 - TargetSubID              |
| 4        | Operator ID              | <p>Presence: Mandatory</p> <p>Format: String with a maximum length of 18 bytes.</p> <p>Value: Must not contain the following special characters:<br/>&lt;SINGLE QUOTE&gt;, &lt;DOUBLE QUOTE&gt;, &lt;SPACE&gt;, &lt;PIPE&gt;<br/>&lt;STAR&gt;, &lt;COMMA&gt;, &lt;SEMICOLON&gt;</p> | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   | 57 - TargetSubID              |
| 5        | Self-Match Prevention ID | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   |   | 7928 - SelfMatchPreventionID  |
| 6        | Account Number           | <p>Presence: Mandatory</p> <p>Format: String</p>  | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   | 1 - Account                   |
| 7        | Session ID               | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters.</p>  |   | 56 - TargetCompID             |
| 8        | Execution Firm ID        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters.</p>  |   | 56 - TargetCompID             |
| 9        | Manual Order Identifier  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 'Y' or 'N'</p>   |   | 1028 - ManualOrderIndicator   |
| 10       | Message Type             | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "8/0"</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>  | 35 - MsgType / 39 - OrdStatus |
| 13       | Globex Message ID        | <p>Presence: Mandatory</p> <p>Format: String</p>  |   | 17 - ExecID                   |

|    |                        |  |   |   |
|----|------------------------|--|---|---|
| 14 | Message Link ID        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique within the audit trail file</p>  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Must have same value as at least one entry with message direction "FROM CME"</p>                                      | <p>N/A - This identifier exist only</p> <p>in the audit trail</p> |
| 15 | Order Flow ID          | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>   | <p>N/A - This identifier exist only</p> <p>in the audit trail</p> |
| 17 | Instrument Description | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must follow CME Group instrument code nomenclature.</p>   | <p>Presence: Mandatory</p> <p>Format: String</p>  | 107 - SecurityDesc  |
| 18 | Market Segment ID      | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> <p>Value: Must be the Market Segment ID corresponding to the Instrument</p>  |   | 50 - SenderSubID  |
| 19 | Client Order ID        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must only contain number and letters</p> <p>Must not be used for any other Client Order Id from customer-generated messages in the file</p> |   | 11 - ClOrdID  |
| 20 | Globex Order ID        | <p>Presence: Mandatory</p> <p>Format: String</p>   |   | 37 - OrderID  |
| 21 | Buy/Sell Indicator     | <p>Presence: Mandatory</p> <p>Format: Integer</p> <p>Value: 1 or 2</p>   | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   | 54 - Side   |
| 22 | Quantity               | <p>Presence: Mandatory</p> <p>Format: Integer</p>  | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer</p>  | 38 - Quantity   |
| 23 | Limit Price            | <p>Presence: Mandatory if &lt;FROM CME&gt; Order Type: 2 or 4,</p> <p>Format: Integer / Decimal Number</p>   | <p>Presence: Mandatory if present in captured message.</p> <p>For Order Type: 2 or 4 from the Tier 1 interactions with Globex</p> <p>Format: Integer / Decimal Number</p> | 44 - Price  |
| 24 | Stop Price             | <p>Presence: Mandatory if &lt;FROM CME&gt; Order Type: 3 or 4,</p> <p>Format: Integer / Decimal Number</p>   | <p>Presence: Mandatory if present in captured message.</p> <p>For Order Type: 3 or 4 from the Tier 1 interactions with Globex</p> <p>Format: Integer / Decimal Number</p> | 99 - StopPx   |
| 25 | Order Type             | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 1, 2, 3, 4 or K</p>   | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   | 40 - OrderType  |
| 26 | Order Qualifier        | <p>Presence: Mandatory</p> <p>Format: Integer</p> <p>Value: 0, 1, 3 or 6</p>   | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   | 59 - TimeInForce  |

|    |                  |  |   |               |
|----|------------------|--|---|---------------|
| 28 | Display Quantity | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: Must be a number between 1 and Order Quantity  | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: Must be a number between 1 and Order Quantity | 210 - MaxShow |
| 29 | Minimum Quantity | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: Must be a number between 1 and Order Quantity  | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: Must be a number between 1 and Order Quantity | 110 - MinQty  |
| 39 | Cross ID         | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other Cross ID from customer-generated messages in the file. |   | 548 - CrossID |

## Execution Report - Fill Notice - Audit Trail Requirements

Audit Trail must capture both Spread Summary and individual Leg Execution Reports - Fill Notices.

For Synthetic spreads, only information related to CME instruments can be included.

| Position | Field Name               | Tier 1 (GW)<br>Requirement - Value Sample   | Tier 2 (Client)<br>Requirement - Value Sample  | Associated iLink Tag         |
|----------|--------------------------|---|--|------------------------------|
| 1        | Sending Timestamps       |   | Presence: Mandatory for 2-tier architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds | 52 - SendingTime             |
| 2        | Receiving Timestamps     | Presence: Mandatory for all architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds   |  | 60 - Transact Time           |
| 3        | Message Direction        | Presence: Mandatory<br>Format: String<br>Value: "FROM CME"  | Presence: Mandatory<br>Format: String<br>Value: "TO CLIENT"  | 57 - TargetSubID             |
| 4        | Operator ID              | Presence: Mandatory<br>Format: String with a maximum length of 18 bytes.<br>Value: Must not contain the following special characters:<br><SINGLE QUOTE>, <DOUBLE QUOTE>, <SPACE>,<br><STAR>, <COMMA>, <SEMICOLON> | Presence: Mandatory<br>Format: String  | 57 - TargetSubID             |
| 5        | Self-Match Prevention ID | Presence: Mandatory if present in captured message<br>Format: String  |  | 7928 - SelfMatchPreventionID |

|    |                         |   |   |   |
|----|-------------------------|---|---|---|
| 6  | Account Number          | Presence: Mandatory<br>Format: String   | Presence: Mandatory<br>Format: String   | 1 - Account   |
| 7  | Session ID              | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters.   |   | 56 - TargetCompID                                   |
| 8  | Execution Firm ID       | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters.   |   | 56 - TargetCompID                                   |
| 9  | Manual Order Identifier | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'  |   | 1028 - ManualOrderIndicator                         |
| 10 | Message Type            | Presence: Mandatory<br>Format: String<br>Value: "8/1" for Partial Fill or "8/2" for Complete Fill   | Presence: Mandatory<br>Format: String   | 35 - MsgType  |
| 13 | Globex Message ID       | Presence: Mandatory<br>Format: String<br>Values: Last 9 characters must follow format "TN" + 7 digits   |   | 17 - ExecID   |
| 14 | Message Link ID         | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file  | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "FROM CME" | N/A - This identifier exist only in the audit trail |
| 15 | Order Flow ID           | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file  | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file                  | N/A - This identifier exist only in the audit trail |
| 16 | Spread/Leg Link ID      | Presence: Mandatory for Spread and Leg Fill Notices<br>Format: String   |   | 527 - SecondaryExecID                               |
| 17 | Instrument Description  | Presence: Mandatory<br>Format: String<br>Value: Must follow CME Group instrument code nomenclature.   | Presence: Mandatory<br>Format: String   | 107 - SecurityDesc                                  |
| 18 | Market Segment ID       | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument  |   | 50 - SenderSubID                                    |
| 19 | Client Order ID         | Presence: Mandatory<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other Client Order Id from customer-generated messages in the fill |   | 11 - ClOrdID  |
| 20 | Globex Order ID         | Presence: Mandatory<br>Format: String   |   | 37 - OrderID  |

|    |                     |  |   |                           |
|----|---------------------|--|---|---------------------------|
| 21 | Buy/Sell Indicator  | Presence: Mandatory<br>Format: Integer<br>Value: 1 or 2  | Presence: Mandatory<br>Format: String                                 | 54 - Side                 |
| 31 | Fill Price          | Presence: Mandatory<br>Format: Integer / Decimal Number  | Presence: Mandatory<br>Format: Integer / Decimal Number               | 31 - LastPx               |
| 32 | Fill Quantity       | Presence: Mandatory<br>Format: Integer   | Presence: Mandatory<br>Format: Integer                                | 32 - LastQty              |
| 33 | Cumulative Quantity | Presence: Mandatory<br>Format: Integer   | Presence: Mandatory if present in captured message<br>Format: Integer | 14 - CumQty               |
| 34 | Remaining Quantity  | Presence: Mandatory<br>Format: Integer   | Presence: Mandatory if present in captured message<br>Format: Integer | 151 - LeavesQty           |
| 35 | Aggressor Flag      | Presence: Mandatory<br>Format: String<br>Values: 'Y' or 'N'  |   | 1057 - AggressorIndicator |
| 39 | Cross ID            | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other Cross ID from customer-generated messages in the file. |   | 548 - CrossID             |

## Execution Report - Cancel Confirmation - Audit Trail Requirements

| Position | Field Name           | TO/FROM CME<br>(Tier 1 component interactions with Globex)  | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)  | Associated iLink Tag |
|----------|----------------------|---|--|----------------------|
| 1        | Sending Timestamps   |   | Presence: Mandatory for 2-tier architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds | 52 - SendingTime     |
| 2        | Receiving Timestamps | Presence: Mandatory for all architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds |  | 60 - Transact Time   |
| 3        | Message Direction    | Presence: Mandatory<br>Format: String<br>Value: "FROM CME"  | Presence: Mandatory<br>Format: String<br>Value: "TO CLIENT"  | 57 - TargetSubID     |



|    |                          |   |  |   |
|----|--------------------------|---|--|---|
| 4  | Operator ID              | <p>Presence: Mandatory</p> <p>Format: String with a maximum length of 18 bytes.</p> <p>Value: Must not contain the following special characters:<br/>&lt;SINGLE QUOTE&gt;, &lt;DOUBLE QUOTE&gt;, &lt;SPACE&gt;, &lt;PIPE&gt;<br/>&lt;STAR&gt;, &lt;COMMA&gt;, &lt;SEMICOLON&gt;</p> | <p>Presence: Mandatory</p> <p>Format: String</p>   | 57 - TargetSubID                                    |
| 5  | Self-Match Prevention ID | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   |  | 7928 - SelfMatchPreventionID                        |
| 6  | Account Number           | <p>Presence: Mandatory</p> <p>Format: String</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 1 - Account   |
| 7  | Session ID               | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters</p>   |  | 56 - TargetCompID                                   |
| 8  | Execution Firm ID        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters</p>   |  | 56 - TargetCompID                                   |
| 9  | Manual Order Identifier  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 'Y' or 'N'</p>   |  | 1028 - ManualOrderIndicator                         |
| 10 | Message Type             | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "8/4"</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 35 - MsgType  |
| 13 | Globex Message ID        | <p>Presence: Mandatory</p> <p>Format: String</p>  |  | 17 - ExecID   |
| 14 | Message Link ID          | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique within the audit trail file</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Must have same value as at least one entry with message direction "TO CME"</p> | N/A - This identifier exist only in the audit trail |
| 15 | Order Flow ID            | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>                | N/A - This identifier exist only in the audit trail |
| 17 | Instrument Description   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must follow CME Group instrument code nomenclature.</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 107 - SecurityDesc                                  |
| 18 | Market Segment ID        | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> <p>Value: Must be the Market Segment ID corresponding to the Instrument</p>   |  | 50 - SenderSubID                                    |

|    |                        |   |   |                             |
|----|------------------------|---|---|-----------------------------|
| 19 | Client Order ID        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must only contain number and letters</p> <p>Must not be used for any other Client Order Id from customer-generated messages in the file</p>                          |   | 11 - ClOrdID                |
| 20 | Globex Order ID        | <p>Presence: Mandatory</p> <p>Format: String</p>  |   | 37 - OrderID                |
| 21 | Buy/Sell Indicator     | <p>Presence: Mandatory</p> <p>Format: Integer</p> <p>Value: 1 or 2</p>  | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> | 54 - Side                   |
| 36 | Source of Cancellation | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer and Value: 8, 100, 103, 104, 105 or 106</p>  |   | 378 - ExecRestatementReason |
| 39 | Cross ID               | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> <p>Value: Must only contain number and letters</p> <p>Must not be used for any other Cross ID from customer-generated messages in the file.</p> |   | 548 - CrossID               |

## Execution Report - Modification Confirmation - Audit Trail Requirements

| Position | Field Name           | TO/FROM CME<br>(Tier 1 component interactions with Globex)   | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)   | Associated iLink Tag |
|----------|----------------------|--|---|----------------------|
| 1        | Sending Timestamps   |  | <p>Presence: Mandatory for 2-tier architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p> | 52 - SendingTime     |
| 2        | Receiving Timestamps | <p>Presence: Mandatory for all architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p> |   | 60 - Transact Time   |
| 3        | Message Direction    | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "FROM CME"</p>  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "TO CLIENT"</p>  | 57 - TargetSubID     |

|    |                          |  |  |   |
|----|--------------------------|--|--|---|
| 4  | Operator ID              | <p>Presence: Mandatory</p> <p>Format: String with a maximum length of 18 bytes.</p> <p>Value: Must not contain the following special characters:<br/>&lt;SINGLE QUOTE&gt;, &lt;DOUBLE QUOTE&gt;, &lt;SPACE&gt;, &lt;STAR&gt;, &lt;COMMA&gt;, &lt;SEMICOLON&gt;</p> | <p>Presence: Mandatory</p> <p>Format: String</p>   | 57 - TargetSubID                                    |
| 5  | Self-Match Prevention ID | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>  |  | 7928 - SelfMatchPreventionID                        |
| 6  | Account Number           | <p>Presence: Mandatory</p> <p>Format: String</p>   | <p>Presence: Mandatory</p> <p>Format: String</p>   | 1 - Account   |
| 7  | Session ID               | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters.</p>   |  | 56 - TargetCompID                                   |
| 8  | Execution Firm ID        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters.</p>   |  | 56 - TargetCompID                                   |
| 9  | Manual Order Identifier  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 'Y' or 'N'</p>  |  | 1028 - ManualOrderIndicator                         |
| 10 | Message Type             | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "8/5"</p>   | <p>Presence: Mandatory</p> <p>Format: String</p>   | 35 - MsgType  |
| 13 | Globex Message ID        | <p>Presence: Mandatory</p> <p>Format: String</p>   |  | 17 - ExecID   |
| 14 | Message Link ID          | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique within the audit trail file</p>  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Must have same value as at least one entry with message direction "TO CME"</p> | N/A - This identifier exist only in the audit trail |
| 15 | Order Flow ID            | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>                | N/A - This identifier exist only in the audit trail |
| 17 | Instrument Description   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must follow CME Group instrument code nomenclature.</p>   | <p>Presence: Mandatory</p> <p>Format: String</p>   | 107 - SecurityDesc                                  |
| 18 | Market Segment ID        | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> <p>Value: Must be the Market Segment ID corresponding to the Instrument</p>  |  | 50 - SenderSubID                                    |

|    |                    |   |  |                  |
|----|--------------------|---|--|------------------|
| 19 | Client Order ID    | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must only contain number and letters</p> <p>Must not be used for any other Client Order Id from customer-generated messages in the file</p>                          |  | 11 - ClOrdID     |
| 20 | Globex Order ID    | <p>Presence: Mandatory</p> <p>Format: String</p>  |  | 37 - OrderID     |
| 21 | Buy/Sell Indicator | <p>Presence: Mandatory</p> <p>Format: Integer</p> <p>Value: 1 or 2</p>  | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>  | 54 - Side        |
| 22 | Quantity           | <p>Presence: Mandatory</p> <p>Format: Integer</p>   | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer</p>   | 38 - Quantity    |
| 23 | Limit Price        | <p>Presence: Mandatory if Order Type: 2 or 4,</p> <p>Format: Integer / Decimal Number</p>   | <p>Presence: Mandatory if Order Type: 2 or 4 from the Tier 1 interactions with Globex</p> <p>Format: Integer / Decimal Number</p>            | 44 - Price       |
| 24 | Stop Price         | <p>Presence: Mandatory if Order Type: 3 or 4,</p> <p>Format: Integer / Decimal Number</p>   | <p>Presence: Mandatory if Order Type: 3 or 4 from the Tier 1 interactions with Globex</p> <p>Format: Integer / Decimal Number</p>            | 99 - StopPx      |
| 25 | Order Type         | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 1, 2, 3, 4 or K</p>  | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>  | 40 - OrderType   |
| 26 | Order Qualifier    | <p>Presence: Mandatory</p> <p>Format: Integer</p> <p>Value: 0, 1, 3 or 6</p>  | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>  | 59 - TimeInForce |
| 28 | Display Quantity   | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer</p> <p>Value: Must be a number between 1 and Order Quantity</p>  | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer</p> <p>Value: Must be a number between 1 and Order Quantity</p> | 210 - MaxShow    |
| 29 | Minimum Quantity   | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer</p> <p>Value: Must be a number between 1 and Order Quantity</p>  | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer</p> <p>Value: Must be a number between 1 and Order Quantity</p> | 110 - MinQty     |
| 39 | Cross ID           | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> <p>Value: Must only contain number and letters</p> <p>Must not be used for any other Cross ID from customer-generated messages in the file.</p> |  | 548 - CrossID    |

## Execution Report - Trade Cancel Confirmation - Audit Trail Requirements

| Position | Field Name               | TO/FROM CME<br>(Tier 1 component interactions with Globex)  | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)  | Associated iLink Tag                                |
|----------|--------------------------|---|--|---|
| 1        | Sending Timestamps       |   | Presence: Mandatory for 2-tier architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds | 52 - SendingTime                                    |
| 2        | Receiving Timestamps     | Presence: Mandatory for all architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds |  | 60 - Transact Time                                  |
| 3        | Message Direction        | Presence: Mandatory<br>Format: String<br>Value: "FROM CME"  | Presence: Mandatory<br>Format: String<br>Value: "TO CLIENT"  | 57 - TargetSubID                                    |
| 4        | Operator ID              | Presence: Mandatory<br>Format: String   | Presence: Mandatory<br>Format: String  | 57 - TargetSubID                                    |
| 5        | Self-Match Prevention ID | Presence: Mandatory if present in captured message<br>Format: String  |  | 7928 - SelfMatchPreventionID                        |
| 6        | Account Number           | Presence: Mandatory<br>Format: String   | Presence: Mandatory<br>Format: String  | 1 - Account   |
| 7        | Session ID               | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters  |  | 56 - TargetCompID                                   |
| 8        | Execution Firm ID        | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters  |  | 56 - TargetCompID                                   |
| 9        | Manual Order Identifier  | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'  |  | 1028 - ManualOrderIndicator                         |
| 10       | Message Type             | Presence: Mandatory<br>Format: String<br>Value: "8/H"   | Presence: Mandatory<br>Format: String  | 35 - MsgType  |
| 13       | Globex Message ID        | Presence: Mandatory<br>Format: String   |  | 17 - ExecID   |
| 14       | Message Link ID          | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file  | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "FROM CME"                        | N/A - This identifier exist only in the audit trail |
| 15       | Order Flow ID            | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file                                      | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file   | N/A - This identifier exist only in the audit trail |

|    |                        |   |  |                       |
|----|------------------------|---|--|-----------------------|
| 15 | Spread/Leg Link ID     | Presence: Mandatory<br>Format: String<br>Value: Identifier for spread leg trade cancellation, "NA" for outright.  |  | 527 - SecondaryExecID |
| 16 | Instrument Description | Presence: Mandatory<br>Format: String<br>Value: Must follow CME Group instrument code nomenclature.   | Presence: Mandatory<br>Format: String  | 107 - SecurityDesc    |
| 17 | Market Segment ID      | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument  |  | 50 - SenderSubID      |
| 18 | Client Order ID        | Presence: Mandatory<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other Client Order Id from customer-generated messages in the file |  | 11 - ClOrdID          |
| 19 | Globex Order ID        | Presence: Mandatory<br>Format: String   |  | 37 - OrderID          |
| 20 | Buy/Sell Indicator     | Presence: Mandatory<br>Format: Integer<br>Value: 1 or 2   | Presence: Mandatory if present in captured message<br>Format: String                   | 54 - Side             |
| 30 | Fill Price             | Presence: Mandatory<br>Format: Integer / Decimal Number   | Presence: Mandatory if present in captured message<br>Format: Integer / Decimal Number | 31 - LastPx           |
| 31 | Fill Quantity          | Presence: Mandatory<br>Format: Integer  | Presence: Mandatory if present in captured message<br>Format: Integer                  | 32 - LastQty          |

## Execution Report - Elimination Notice - Audit Trail Requirements

| Position | Field Name           | TO/FROM CME<br>(Tier 1 component interactions with Globex)  | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)  | Associated iLink Tag |
|----------|----------------------|---|--|----------------------|
| 1        | Sending Timestamps   |   | Presence: Mandatory for 2-tier architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds | 52 - SendingTime     |
| 2        | Receiving Timestamps | Presence: Mandatory for all architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds |  | 60 - Transact Time   |
| 3        | Message Direction    | Presence: Mandatory<br>Format: String<br>Value: "FROM CME"  | Presence: Mandatory<br>Format: String<br>Value: "TO CLIENT"  | 57 - TargetSubID     |

|    |                          |   |  |   |
|----|--------------------------|---|--|---|
| 4  | Operator ID              | <p>Presence: Mandatory</p> <p>Format: String with a maximum length of 18 bytes.</p> <p>Value: Must not contain the following special characters:<br/>&lt;SINGLE QUOTE&gt;, &lt;DOUBLE QUOTE&gt;, &lt;SPACE&gt;, &lt;PIPE&gt;<br/>&lt;STAR&gt;, &lt;COMMA&gt;, &lt;SEMICOLON&gt;</p> | <p>Presence: Mandatory</p> <p>Format: String</p>   | 57 - TargetSubID                                    |
| 5  | Self-Match Prevention ID | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   |  | 7928 - SelfMatchPreventionID                        |
| 6  | Account Number           | <p>Presence: Mandatory</p> <p>Format: String</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 1 - Account   |
| 7  | Session ID               | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters</p>   |  | 56 - TargetCompID                                   |
| 8  | Execution Firm ID        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters</p>   |  | 56 - TargetCompID                                   |
| 9  | Manual Order Identifier  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 'Y' or 'N'</p>   |  | 1028 - ManualOrderIndicator                         |
| 10 | Message Type             | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "8/C"</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 35 - MsgType  |
| 13 | Globex Message ID        | <p>Presence: Mandatory</p> <p>Format: String</p>  |  | 17 - ExecID   |
| 14 | Message Link ID          | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique within the audit trail file</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Must have same value as at least one entry with message direction "FROM CME"</p> | N/A - This identifier exist only in the audit trail |
| 15 | Order Flow ID            | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>                  | N/A - This identifier exist only in the audit trail |
| 17 | Instrument Description   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must follow CME Group instrument code nomenclature.</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 107 - SecurityDesc                                  |
| 18 | Market Segment ID        | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> <p>Value: Must be the Market Segment ID corresponding to the Instrument</p>   |  | 50 - SenderSubID                                    |

|    |                     |  |  |                 |
|----|---------------------|--|--|-----------------|
| 19 | Client Order ID     | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must only contain number and letters</p> <p>Must not be used for any other Client Order Id from customer-generated messages in the file</p> |  | 11 - ClOrdID    |
| 20 | Globex Order ID     | <p>Presence: Mandatory</p> <p>Format: String</p>   |  | 37 - OrderID    |
| 21 | Buy/Sell Indicator  | <p>Presence: Mandatory</p> <p>Format: Integer</p> <p>Value: 1 or 2</p>   | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>  | 54 - Side       |
| 33 | Cumulative Quantity | <p>Presence: Mandatory</p> <p>Format: Integer</p>  | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer</p> | 14 - CumQty     |
| 34 | Remaining Quantity  | <p>Presence: Mandatory</p> <p>Format: Integer</p>  | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer</p> | 151 - LeavesQty |

## Execution Report - Reject - Audit Trail Requirements

| Position | Field Name               | TO/FROM CME<br>(Tier 1 component interactions with Globex)  | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)   | Associated iLink Tag         |
|----------|--------------------------|---|---|------------------------------|
| 1        | Sending Timestamps       |   | <p>Presence: Mandatory for 2-tier architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p> | 52 - SendingTime             |
| 2        | Receiving Timestamps     | <p>Presence: Mandatory for all architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p>  |   | 60 - Transact Time           |
| 3        | Message Direction        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "FROM CME"</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "TO CLIENT"</p>  | 57 - TargetSubID             |
| 4        | Operator ID              | <p>Presence: Mandatory</p> <p>Format: String with a maximum length of 18 bytes.</p> <p>Value: Must not contain the following special characters:<br/>&lt;SINGLE QUOTE&gt;, &lt;DOUBLE QUOTE&gt;, &lt;SPACE&gt;, &lt;PIPE&gt;<br/>&lt;STAR&gt;, &lt;COMMA&gt;, &lt;SEMICOLON&gt;</p> | <p>Presence: Mandatory</p> <p>Format: String</p>  | 57 - TargetSubID             |
| 5        | Self-Match Prevention ID | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   |   | 7928 - SelfMatchPreventionID |
| 6        | Account Number           | <p>Presence: Mandatory</p> <p>Format: String</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>  | 1 - Account                  |



|    |                         |   |   |   |
|----|-------------------------|---|---|---|
| 7  | Session ID              | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters  |   | 56 - TargetCompID                                   |
| 8  | Execution Firm ID       | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters  |   | 56 - TargetCompID                                   |
| 9  | Manual Order Identifier | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'  |   | 1028 - ManualOrderIndicator                         |
| 10 | Message Type            | Presence: Mandatory<br>Format: String<br>Value: "8/8"   | Presence: Mandatory<br>Format: String   | 35 - MsgType  |
| 13 | Globex Message ID       | Presence: Mandatory<br>Format: String   |   | 17 - ExecID   |
| 14 | Message Link ID         | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file  | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "FROM CME" | N/A - This identifier exist only in the audit trail |
| 15 | Order Flow ID           | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file  | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file                  | N/A - This identifier exist only in the audit trail |
| 17 | Instrument Description  | Presence: Mandatory<br>Format: String<br>Value: Must follow CME Group instrument code nomenclature.   | Presence: Mandatory<br>Format: String   | 107 - SecurityDesc                                  |
| 18 | Market Segment ID       | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument  |   | 50 - SenderSubID                                    |
| 19 | Client Order ID         | Presence: Mandatory<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other Client Order Id from customer-generated messages in the file |   | 11 - ClOrdID  |
| 20 | Globex Order ID         | Presence: Mandatory<br>Format: String   |   | 37 - OrderID  |
| 21 | Buy/Sell Indicator      | Presence: Mandatory<br>Format: Integer<br>Value: 1 or 2   | Presence: Mandatory if present in captured message<br>Format: String  | 54 - Side   |
| 37 | Reject Reason           | Presence: Mandatory<br>Format: String   | Presence: Mandatory<br>Format: String   | 103 - OrdRejReason, 58 - Text                       |

## Session-Level Reject - Audit Trail Requirements

| Position | Field Name              | TO/FROM CME<br>(Tier 1 component interactions with Globex)  | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)   | Associated iLink Tag                                |
|----------|-------------------------|---|---|---|
| 1        | Sending Timestamps      |   | <p>Presence: Mandatory for 2-tier architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p> | 52 - SendingTime                                    |
| 2        | Receiving Timestamps    | <p>Presence: Mandatory for all architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p>  |   | 60 - Transact Time                                  |
| 3        | Message Direction       | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "FROM CME"</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "TO CLIENT"</p>  | 57 - TargetSubID                                    |
| 4        | Operator ID             | <p>Presence: Mandatory</p> <p>Format: String with a maximum length of 18 bytes.</p> <p>Value: Must not contain the following special characters:<br/>&lt;SINGLE QUOTE&gt;, &lt;DOUBLE QUOTE&gt;, &lt;SPACE&gt;, &lt;PIPE&gt;<br/>&lt;STAR&gt;, &lt;COMMA&gt;, &lt;SEMICOLON&gt;</p> | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   | 57 - TargetSubID                                    |
| 7        | Session ID              | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters</p>   |   | 56 - TargetCompID                                   |
| 8        | Execution Firm ID       | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters</p>   |   | 56 - TargetCompID                                   |
| 9        | Manual Order Identifier | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 'Y' or 'N'</p>   |   | 1028 - ManualOrderIndicator                         |
| 10       | Message Type            | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: '3'</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>  | 35 - MsgType  |
| 14       | Message Link ID         | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique within the audit trail file</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Must have same value as at least one entry with message direction "FROM CME"</p>                        | N/A - This identifier exist only in the audit trail |
| 15       | Order Flow ID           | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must be unique per order within the audit trail file</p>   | N/A - This identifier exist only in the audit trail |

|    |                   |  |  |                                     |
|----|-------------------|--|--|-------------------------------------|
| 18 | Market Segment ID | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument |  | 50 - SenderSubID                    |
| 37 | Reject Reason     | Presence: Mandatory<br>Format: String  | Presence: Mandatory if present in captured message<br>Format: String | 45 - RefSeqNum,<br>372 - RefMsgType |

## Business-Level Reject - Audit Trail Requirements

| Position | Field Name              | TO/FROM CME<br>(Tier 1 component interactions with Globex)   | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)  | Associated iLink Tag        |
|----------|-------------------------|--|--|-----------------------------|
| 1        | Sending Timestamps      |  | Presence: Mandatory for 2-tier architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds | 52 - SendingTime            |
| 2        | Receiving Timestamps    | Presence: Mandatory for all architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds  |  | 60 - Transact Time          |
| 3        | Message Direction       | Presence: Mandatory<br>Format: String<br>Value: "FROM CME"   | Presence: Mandatory<br>Format: String<br>Value: "TO CLIENT"  | 57 - TargetSubID            |
| 4        | Operator ID             | Presence: Mandatory<br>Format: String with a maximum length of 18 bytes.<br>Value: Must not contain the following special characters:<br><SINGLE QUOTE>, <DOUBLE QUOTE>, <SPACE>, <PIPE><br><STAR>, <COMMA>, <SEMICOLON> | Presence: Mandatory<br>Format: String  | 57 - TargetSubID            |
| 7        | Session ID              | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters   |  | 56 - TargetCompID           |
| 8        | Execution Firm ID       | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters   |  | 56 - TargetCompID           |
| 9        | Manual Order Identifier | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'   |  | 1028 - ManualOrderIndicator |
| 10       | Message Type            | Presence: Mandatory<br>Format: String<br>Value: 'j'  | Presence: Mandatory<br>Format: String  | 35 - MsgType                |

|    |                   |  |   |   |
|----|-------------------|--|---|---|
| 14 | Message Link ID   | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file   | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "FROM CME" | N/A - This identifier exist only in the audit trail |
| 15 | Order Flow ID     | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file   | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file                  | N/A - This identifier exist only in the audit trail |
| 18 | Market Segment ID | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument |   | 50 - SenderSubID                                    |
| 37 | Reject Reason     | Presence: Mandatory<br>Format: String  | Presence: Mandatory<br>Format: String   | 45 - RefSeqNum,<br>372 - RefMsgType                 |

## Cancel / Cancel-Replace Reject - Audit Trail Requirements

| Position | Field Name           | TO/FROM CME<br>(Tier 1 component interactions with Globex)   | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)  | Associated iLink Tag |
|----------|----------------------|--|--|----------------------|
| 1        | Sending Timestamps   |  | Presence: Mandatory for 2-tier architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds | 52 - SendingTime     |
| 2        | Receiving Timestamps | Presence: Mandatory for all architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds  |  | 60 - Transact Time   |
| 3        | Message Direction    | Presence: Mandatory<br>Format: String<br>Value: "FROM CME"   | Presence: Mandatory<br>Format: String<br>Value: "TO CLIENT"  | 57 - TargetSubID     |
| 4        | Operator ID          | Presence: Mandatory<br>Format: String with a maximum length of 18 bytes.<br>Value: Must not contain the following special characters:<br><SINGLE QUOTE>, <DOUBLE QUOTE>, <SPACE>, <PIPE><br><STAR>, <COMMA>, <SEMICOLON> | Presence: Mandatory if present in captured message<br>Format: String   | 57 - TargetSubID     |
| 6        | Account Number       | Presence: Mandatory<br>Format: String  | Presence: Mandatory if present in captured message<br>Format: String   | 1 - Account          |
| 7        | Session ID           | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters   |  | 56 - TargetCompID    |

|    |                         |   |   |   |
|----|-------------------------|---|---|---|
| 8  | Execution Firm ID       | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters  |   | 56 - TargetCompID                                   |
| 9  | Manual Order Identifier | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'  |   | 1028 - ManualOrderIndicator                         |
| 10 | Message Type            | Presence: Mandatory<br>Format: String<br>Value: "9/1" for Cancel Reject or "9/2" for Cancel/Replace Reject  | Presence: Mandatory<br>Format: String   | 35 - MsgType/434 - CancelRejResponseTo              |
| 13 | Globex Message ID       | Presence: Mandatory<br>Format: String   |   | 17 - ExecID   |
| 14 | Message Link ID         | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file  | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "FROM CME" | N/A - This identifier exist only in the audit trail |
| 15 | Order Flow ID           | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file  | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file                  | N/A - This identifier exist only in the audit trail |
| 17 | Instrument Description  | Presence: Mandatory<br>Format: String<br>Value: Must follow CME Group instrument code nomenclature.   | Presence: Mandatory<br>Format: String   | 107 - SecurityDesc                                  |
| 18 | Market Segment ID       | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument  |   | 50 - SenderSubID                                    |
| 19 | Client Order ID         | Presence: Mandatory<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other Client Order Id from customer-generated messages in the file |   | 11 - ClOrdID  |
| 20 | Globex Order ID         | Presence: Mandatory<br>Format: String   |   | 37 - OrderID  |
| 37 | Reject Reason           | Presence: Mandatory<br>Format: String   | Presence: Mandatory if present in captured message<br>Format: String  | 102 - CxlRejReason, 58 - Text                       |

## Mass Quote - Audit Trail Requirements

The Mass Quote message submitted to the Globex platform must be decomposed into its quote entries. The Audit Trail must include one line item per quote entry.

| Position | Field Name               | TO/FROM CME<br>(Tier 1 component interactions with Globex)  | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)  | Associated iLink Tag         |
|----------|--------------------------|---|--|------------------------------|
| 1        | Sending Timestamps       | <p>Presence: Mandatory for all architecture</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p>   |  | 52 - SendingTime             |
| 2        | Receiving Timestamps     |   | <p>Presence: Mandatory for 2-tier architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sssxxx populated at least at the milliseconds</p> | 60 - Transact Time           |
| 3        | Message Direction        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "TO CME"</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "FROM CLIENT"</p>   | 57 - TargetSubID             |
| 4        | Operator ID              | <p>Presence: Mandatory</p> <p>Format: String with a maximum length of 18 bytes.</p> <p>Value: Must not contain the following special characters:<br/>&lt;SINGLE QUOTE&gt;, &lt;DOUBLE QUOTE&gt;, &lt;SPACE&gt;, &lt;PIPE&gt;<br/>&lt;STAR&gt;, &lt;COMMA&gt;, &lt;SEMICOLON&gt;</p> | <p>Presence: Mandatory</p> <p>Format: String</p>   | 50 - SenderSubID             |
| 5        | Self-Match Prevention ID | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   |  | 7928 - SelfMatchPreventionID |
| 6        | Account Number           | <p>Presence: Mandatory</p> <p>Format: String</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 1 - Account                  |
| 7        | Session ID               | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters</p>   |  | 49 - SenderCompID            |
| 8        | Execution Firm ID        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters.</p>  |  | 49 - SenderCompID            |
| 9        | Manual Order Identifier  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 'Y' or 'N'</p>   |  | 1028 - ManualOrderIndicator  |
| 10       | Message Type             | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 'i'</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>   | 35 - MsgType                 |
| 11       | Customer Type Indicator  | <p>Presence: Mandatory</p> <p>Format: Integer</p> <p>Value: 1, 2, 3 or 4</p>  |  | 9702 - CTICode               |
| 12       | Origin                   | <p>Presence: Mandatory</p> <p>Format: Integer</p> <p>Value: 0 or 1</p>  |  | 204-CustomerOrFirm           |

|    |                        |   |   |   |
|----|------------------------|---|---|---|
| 14 | Message Link ID        | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file  | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "TO CME" | N/A - This identifier exist only in the audit trail |
| 17 | Instrument Description | Presence: Mandatory<br>Format: String<br>Value: Must follow CME Group instrument code nomenclature.   | Presence: Mandatory<br>Format: String   | 107 - SecurityDesc                                  |
| 18 | Market Segment ID      | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument                                      |   | 57 - TargetSubID                                    |
| 30 | Country of Origin      | Presence: Mandatory<br>Format: String<br>Value: Must follow ISO standard  | Presence: Mandatory<br>Format: String   | 142 - SenderLocationID                              |
| 40 | Quote Request ID       | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must only contain number and letters   |   | 131 - QuoteReqID                                    |
| 41 | Message Quote ID       | Presence: Mandatory<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other Mass Quote ID from customer-generated messages in the file |   | 117 - QuoteID                                       |
| 42 | Quote Entry ID         | Presence: Mandatory<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other instrument code in the file.                               |   | 299 - QuoteEntryID                                  |
| 43 | Bid Price              | Format: Integer or Decimal Number   | Format: Integer or Decimal Number   | 132 - BidPx   |
| 44 | Bid Quantity           | Format: Integer   | Format: Integer   | 133 - BidSize                                       |
| 45 | Offer Price            | Format: Integer or Decimal Number   | Format: Integer or Decimal Number   | 134 - OfferPx                                       |
| 46 | Offer Quantity         | Format: Integer   | Format: Integer   | 135 - OfferSize                                     |

The

## Mass Quote Acknowledgement - Accept and Partial Accept - Audit Trail Requirements

The Mass Quote Acknowledgement - Partial Accept message submitted by the Globex platform must be decomposed into its rejected quote entries. The Audit Trail must include one line item per rejected quote entry.

| Position | Field Name | TO/FROM CME<br>(Tier 1 component interactions with Globex) | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component) | Associated iLink Tag |
|----------|------------|--|---|----------------------|
|----------|------------|--|---|----------------------|

|    |                          |  |  |   |
|----|--------------------------|--|--|---|
| 1  | Sending Timestamps       |  | Presence: Mandatory for 2-tier architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds | 52 - SendingTime                                    |
| 2  | Receiving Timestamps     | Presence: Mandatory for all architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds  |  | 60 - Transact Time                                  |
| 3  | Message Direction        | Presence: Mandatory<br>Format: String<br>Value: "FROM CME"   | Presence: Mandatory<br>Format: String<br>Value: "TO CLIENT"  | 57 - TargetSubID                                    |
| 4  | Operator ID              | Presence: Mandatory<br>Format: String with a maximum length of 18 bytes.<br>Value: Must not contain the following special characters:<br><SINGLE QUOTE>, <DOUBLE QUOTE>, <SPACE>, <PIPE><br><STAR>, <COMMA>, <SEMICOLON> | Presence: Mandatory<br>Format: String  | 57 - TargetSubID                                    |
| 5  | Self-Match Prevention ID | Presence: Mandatory if present in captured message<br>Format: String   |  | 7928 - SelfMatchPreventionID                        |
| 6  | Account Number           | Presence: Mandatory<br>Format: String  | Presence: Mandatory<br>Format: String  | 1 - Account   |
| 7  | Session ID               | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters.  |  | 56 - TargetCompID                                   |
| 8  | Execution Firm ID        | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters.  |  | 56 - TargetCompID                                   |
| 9  | Manual Order Identifier  | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'   |  | 1028 - ManualOrderIndicator                         |
| 10 | Message Type             | Presence: Mandatory<br>Format: String<br>Value: "b/0"  | Presence: Mandatory<br>Format: String  | 35 - MsgType<br>/ 297 - QuoteAckStatus              |
| 14 | Message Link ID          | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file   | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "FROM CME"                        | N/A - This identifier exist only in the audit trail |
| 18 | Market Segment ID        | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument   |  | 57 - TargetSubID                                    |



|    |                  |   |  |                              |
|----|------------------|---|--|------------------------------|
| 37 | Reject Reason    | Presence: Must be indicated for each rejected quote entry.<br>Format: String  | Presence: Mandatory if present in captured message<br>Format: String | 368 - QuoteEntryRejectReason |
| 38 | Processed Quotes | Presence: Mandatory<br>Format: Integer  |  | 9772 - NoProcessedEntries    |
| 41 | Message Quote ID | Presence: Mandatory<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other Mass Quote ID from customer-generated messages in the file       |  | 117 - QuoteID                |
| 42 | Quote Entry ID   | Presence: Mandatory if present in the captured message.<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other instrument code in the file. |  | 299 - QuoteEntryID           |

## Mass Quote - Reject - Audit Trail Requirements

| Position | Field Name               | TO/FROM CME<br>(Tier 1 component interactions with Globex)   | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)  | Associated iLink Tag         |
|----------|--------------------------|--|--|------------------------------|
| 1        | Sending Timestamps       |  | Presence: Mandatory for 2-tier architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds | 52 - SendingTime             |
| 2        | Receiving Timestamps     | Presence: Mandatory for all architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds  |  | 60 - Transact Time           |
| 3        | Message Direction        | Presence: Mandatory<br>Format: String<br>Value: "FROM CME"   | Presence: Mandatory<br>Format: String<br>Value: "TO CLIENT"  | 57 - TargetSubID             |
| 4        | Operator ID              | Presence: Mandatory<br>Format: String with a maximum length of 18 bytes.<br>Value: Must not contain the following special characters:<br><SINGLE QUOTE>, <DOUBLE QUOTE>, <SPACE>, <PIPE><br><STAR>, <COMMA>, <SEMICOLON> | Presence: Mandatory<br>Format: String  | 57 - TargetSubID             |
| 5        | Self-Match Prevention ID | Presence: Mandatory if present in captured message<br>Format: String   |  | 7928 - SelfMatchPreventionID |

|    |                         |   |   |   |
|----|-------------------------|---|---|---|
| 6  | Account Number          | Presence: Mandatory<br>Format: String   | Presence: Mandatory<br>Format: String   | 1 - Account   |
| 7  | Session ID              | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters.   |   | 56 - TargetCompID                                   |
| 8  | Execution Firm ID       | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters.   |   | 56 - TargetCompID                                   |
| 9  | Manual Order Identifier | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'  |   | 1028 - ManualOrderIndicator                         |
| 10 | Message Type            | Presence: Mandatory<br>Format: String<br>Value: "b/5"   | Presence: Mandatory<br>Format: String   | 35 - MsgType<br>/ 297 - QuoteAckStatus              |
| 14 | Message Link ID         | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file  | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "FROM CME" | N/A - This identifier exist only in the audit trail |
| 18 | Market Segment ID       | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument                                      |   | 57 - TargetSubID                                    |
| 37 | Reject Reason           | Presence: Mandatory<br>Format: String   | Presence: Mandatory<br>Format: String   | 300 - QuoteRejectReason                             |
| 38 | Processed Quotes        | Presence: Mandatory<br>Format: Integer  |   | 9772 - NoProcessedEntries                           |
| 41 | Message Quote ID        | Presence: Mandatory<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other Mass Quote ID from customer-generated messages in the file |   | 117 - QuoteID                                       |

## Mass Quote Cancel - Audit Trail Requirements

The Mass Quote message submitted to the Globex platform must be decomposed into its quote entries. The Audit Trail must include one line item per quote entry.

| Position | Field Name         | TO/FROM CME<br>(Tier 1 component interactions with Globex)   | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component) | Associated iLink Tag |
|----------|--------------------|--|---|----------------------|
| 1        | Sending Timestamps | Presence: Mandatory for all architecture<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds |   | 52 - SendingTime     |

|    |                          |   |   |  |
|----|--------------------------|---|---|--|
| 2  | Receiving Timestamps     |   | Presence: Mandatory for 2-tier architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sssxxx populated at least at the milliseconds | 60 - Transact Time                                   |
| 3  | Message Direction        | Presence: Mandatory<br>Format: String<br>Value: "TO CME"  | Presence: Mandatory<br>Format: String<br>Value: "FROM CLIENT"   | 57 - TargetSubID                                     |
| 4  | Operator ID              | Presence: Mandatory<br>Format: String with a maximum length of 18 bytes.<br>Value: Must not contain the following special characters:<br><SINGLE QUOTE>, <DOUBLE QUOTE>, <SPACE>, <PIPE><br><STAR>, <COMMA>, <SEMICOLON>                | Presence: Mandatory<br>Format: String   | 50 - SenderSubID                                     |
| 5  | Self-Match Prevention ID | Presence: Mandatory if present in captured message<br>Format: String  |   | 7928 - SelfMatchPreventionID                         |
| 6  | Account Number           | Presence: Mandatory<br>Format: String   | Presence: Mandatory<br>Format: String   | 1 - Account  |
| 7  | Session ID               | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters  |   | 49 - SenderCompID                                    |
| 8  | Execution Firm ID        | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters.   |   | 49 - SenderCompID                                    |
| 9  | Manual Order Identifier  | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'  |   | 1028 - ManualOrderIndicator                          |
| 10 | Message Type             | Presence: Mandatory<br>Format: String<br>Value:<br>"Z/1" for Cancel per instrument<br>"Z/3" for Cancel per instrument group<br>"Z/4" for Cancel all quotes  | Presence: Mandatory<br>Format: String   | 35 - MsgType   |
| 14 | Message Link ID          | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file  | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "TO CME"                             | N/A - This identifier exist only in the audit trail. |
| 17 | Instrument Description   | Presence: Mandatory for Message type Z/1 and Z/3.<br>Format: String<br>For message type Z/1: Value must follow CME Group instrument code nomenclature.<br>For message type Z/3: Value must be 2- or 3-character long.(instrument group) | Presence: Mandatory<br>Format: String   | 107 - SecurityDesc                                   |

|    |                   |  |  |                  |
|----|-------------------|--|--|------------------|
| 18 | Market Segment ID | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> <p>Value: Must be the Market Segment ID corresponding to the Instrument</p>  |  | 57 - TargetSubID |
| 41 | Message Quote ID  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must only contain number and letters</p> <p>Must not be used for any other Mass Quote ID from customer-generated messages in the file</p> |  | 117 - QuoteID    |

## Mass Quote Cancel Acknowledgement - Accept and Partial Accept - Audit Trail Requirements

| Position | Field Name               | TO/FROM CME<br>(Tier 1 component interactions with Globex)  | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)   | Associated iLink Tag         |
|----------|--------------------------|---|---|------------------------------|
| 1        | Sending Timestamps       |   | <p>Presence: Mandatory for 2-tier architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p> | 52 - SendingTime             |
| 2        | Receiving Timestamps     | <p>Presence: Mandatory for all architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p>  |   | 60 - Transact Time           |
| 3        | Message Direction        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "FROM CME"</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "TO CLIENT"</p>  | 57 - TargetSubID             |
| 4        | Operator ID              | <p>Presence: Mandatory</p> <p>Format: String with a maximum length of 18 bytes.</p> <p>Value: Must not contain the following special characters:<br/>&lt;SINGLE QUOTE&gt;, &lt;DOUBLE QUOTE&gt;, &lt;SPACE&gt;, &lt;PIPE&gt;<br/>&lt;STAR&gt;, &lt;COMMA&gt;, &lt;SEMICOLON&gt;</p> | <p>Presence: Mandatory</p> <p>Format: String</p>  | 57 - TargetSubID             |
| 5        | Self-Match Prevention ID | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   |   | 7928 - SelfMatchPreventionID |
| 6        | Account Number           | <p>Presence: Mandatory</p> <p>Format: String</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>  | 1 - Account                  |
| 7        | Session ID               | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters.</p>  |   | 56 - TargetCompID            |
| 8        | Execution Firm ID        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters.</p>  |   | 56 - TargetCompID            |

|    |                         |   |   |   |
|----|-------------------------|---|---|---|
| 9  | Manual Order Identifier | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'  |   | 1028 - ManualOrderIndicator                         |
| 10 | Message Type            | Presence: Mandatory<br>Format: String<br>Value:<br>"b/1" - Cancel per instrument accepted<br>"b/3" - Cancel per instrument group accepted<br>"b/4" - Cancel all accepted<br>"b/A" - Cancel Hard Disconnect accepted<br>"b/B" - Cancel Client Logout accepted<br>"b/C" - Cancel GCC Eliminated All accepted<br>"b/D" - Cancel GCC Eliminated Group accepted<br>"b/E" - Expired accepted<br>"b/F" - Cancel per Market Maker Protection accepted<br>"b/H" - Cancel due to Self-Trade Prevention accepted | Presence: Mandatory<br>Format: String   | 35 - MsgType / 297 - QuoteAckStatus                 |
| 14 | Message Link ID         | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file  | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "FROM CME" | N/A - This identifier exist only in the audit trail |
| 17 | Instrument Description  | Presence: Mandatory<br>Format: String<br>Value: must be 2- or 3-character long (instrument group)   |   | 107 - SecurityDesc                                  |
| 18 | Market Segment ID       | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument  |   | 57 - TargetSubID                                    |
| 37 | Reject Reason           | Presence: Mandatory if present in the captured message.<br>Format: String   | Presence: Mandatory if present in the captured message.<br>Format: String   | 368 - QuoteEntryRejectReason                        |
| 38 | Processed Quotes        | Presence: Mandatory<br>Format: Integer  |   | 9772 - NoProcessedEntries                           |
| 41 | Message Quote ID        | Presence: Mandatory<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other Mass Quote ID from customer-generated messages in the file   |   | 117 - QuoteID                                       |

|    |                |  |  |                    |
|----|----------------|--|--|--------------------|
| 42 | Quote Entry ID | <p>Presence: Mandatory if present in the captured message.</p> <p>Format: String</p> <p>Value: Must only contain number and letters</p> <p>Must not be used for any other instrument code in the file.</p> |  | 299 - QuoteEntryID |
|----|----------------|--|--|--------------------|

## Mass Quote Cancel - Reject - Audit Trail Requirements

| Position | Field Name               | TO/FROM CME<br>(Tier 1 component interactions with Globex)  | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)   | Associated iLink Tag         |
|----------|--------------------------|---|---|------------------------------|
| 1        | Sending Timestamps       |   | <p>Presence: Mandatory for 2-tier architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p> | 52 - SendingTime             |
| 2        | Receiving Timestamps     | <p>Presence: Mandatory for all architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p>  |   | 60 - Transact Time           |
| 3        | Message Direction        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "FROM CME"</p>   | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "TO CLIENT"</p>  | 57 - TargetSubID             |
| 4        | Operator ID              | <p>Presence: Mandatory</p> <p>Format: String with a maximum length of 18 bytes.</p> <p>Value: Must not contain the following special characters:<br/>&lt;SINGLE QUOTE&gt;, &lt;DOUBLE QUOTE&gt;, &lt;SPACE&gt;, &lt;PIPE&gt;<br/>&lt;STAR&gt;, &lt;COMMA&gt;, &lt;SEMICOLON&gt;</p> | <p>Presence: Mandatory</p> <p>Format: String</p>  | 57 - TargetSubID             |
| 5        | Self-Match Prevention ID | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   |   | 7928 - SelfMatchPreventionID |
| 6        | Account Number           | <p>Presence: Mandatory</p> <p>Format: String</p>  | <p>Presence: Mandatory</p> <p>Format: String</p>  | 1 - Account                  |
| 7        | Session ID               | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters.</p>  |   | 56 - TargetCompID            |
| 8        | Execution Firm ID        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters.</p>  |   | 56 - TargetCompID            |
| 9        | Manual Order Identifier  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 'Y' or 'N'</p>   |   | 1028 - ManualOrderIndicator  |

|    |                   |   |   |  |
|----|-------------------|---|---|--|
| 10 | Message Type      | Presence: Mandatory<br>Format: String<br>Value: "b/5"   | Presence: Mandatory<br>Format: String   | 35 - MsgType<br>/ 297 -<br>QuoteAckStatus              |
| 14 | Message Link ID   | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file  | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "FROM CME" | N/A - This identifier exist only<br>in the audit trail |
| 18 | Market Segment ID | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument                                      |   | 57 - TargetSubID                                       |
| 37 | Reject Reason     | Presence: Mandatory<br>Format: String   | Presence: Mandatory<br>Format: String   | 300 -<br>QuoteRejectReason                             |
| 38 | Processed Quotes  | Presence: Mandatory<br>Format: Integer  |   | 9772 -<br>NoProcessedEntries                           |
| 41 | Message Quote ID  | Presence: Mandatory<br>Format: String<br>Value: Must only contain number and letters<br>Must not be used for any other Mass Quote ID from customer-generated messages in the file |   | 117 - QuoteID  |

## Request For Quote (RFQ) - Audit Trail Requirements

| Position | Field Name           | TO/FROM CME<br>(Tier 1 component interactions with Tier 2 component)   | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)   | Associated iLink Tag |
|----------|----------------------|--|---|----------------------|
| 1        | Sending Timestamps   | Presence: Mandatory for all architecture<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds   |   | 52 - SendingTime     |
| 2        | Receiving Timestamps |  | Presence: Mandatory for 2-tier architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sssxxx populated at least at the milliseconds | 60 - Transact Time   |
| 3        | Message Direction    | Presence: Mandatory<br>Format: String<br>Value: "TO CME"   | Presence: Mandatory for 2-tier architectures<br>Format: String<br>Value: "FROM CLIENT"  | 57 - TargetSubID     |
| 4        | Operator ID          | Presence: Mandatory<br>Format: String with a maximum length of 18 bytes.<br>Value: Must not contain the following special characters:<br><SINGLE QUOTE>, <DOUBLE QUOTE>, <SPACE>, <PIPE><br><STAR>, <COMMA>, <SEMICOLON> | Presence: Mandatory<br>Format: String   | 50 - SenderSubID     |

|    |                          |  |   |   |
|----|--------------------------|--|---|---|
| 5  | Self-Match Prevention ID | Presence: Mandatory if present in captured message<br>Format: String   |   | 7928 - SelfMatchPreventionID                        |
| 6  | Account Number           | Presence: Mandatory<br>Format: String  | Presence: Mandatory<br>Format: String   | 1 - Account   |
| 7  | Session ID               | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters   |   | 49 - SenderCompID                                   |
| 8  | Execution Firm ID        | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters.  |   | 49 - SenderCompID                                   |
| 9  | Manual Order Identifier  | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'   |   | 1028 - ManualOrderIndicator                         |
| 10 | Message Type             | Presence: Mandatory<br>Format: String<br>Value: 'R'  | Presence: Mandatory<br>Format: String   | 35 - MsgType  |
| 14 | Message Link ID          | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file   | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "TO CME" | N/A - This identifier exist only in the audit trail |
| 17 | Instrument Description   | Presence: Mandatory<br>Format: String<br>Value: Must follow CME Group instrument code nomenclature.  | Presence: Mandatory<br>Format: String   | 107 - SecurityDesc                                  |
| 18 | Market Segment ID        | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument                     |   | 57 - TargetSubID                                    |
| 21 | Buy/Sell Indicator       | Presence: Mandatory if in the captured message<br>If present in the message, Format: Integer<br>Value: 1 (Buy), 2 (Sell) or 8 (Start of the Cross Order Process) | Presence: Mandatory if present in the captured message<br>Format: String  | 54 - Side   |
| 30 | Country of Origin        | Presence: Mandatory<br>Format: String<br>Value: Must follow ISO standard   | Presence: Mandatory<br>Format: String   | 142 - SenderLocationID                              |

## Quote Acknowledgement (RFQ) - Audit Trail Requirements

| Position | Field Name | TO/FROM CME<br>(Tier 1 component interactions with Globex) | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component) | Associated iLink Tag |
|----------|------------|--|---|----------------------|
|----------|------------|--|---|----------------------|



|    |                         |  |  |   |
|----|-------------------------|--|--|---|
| 1  | Sending Timestamps      |  | Presence: Mandatory for 2-tier architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds | 52 - SendingTime                                    |
| 2  | Receiving Timestamps    | Presence: Mandatory for all architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds  |  | 60 - Transact Time                                  |
| 3  | Message Direction       | Presence: Mandatory<br>Format: String<br>Value: "FROM CME"   | Presence: Mandatory<br>Format: String<br>Value: "TO CLIENT"  | 57 - TargetSubID                                    |
| 4  | Operator ID             | Presence: Mandatory<br>Format: String with a maximum length of 18 bytes.<br>Value: Must not contain the following special characters:<br><SINGLE QUOTE>, <DOUBLE QUOTE>, <SPACE>, <PIPE><br><STAR>, <COMMA>, <SEMICOLON> | Presence: Mandatory<br>Format: String  | 57 - TargetSubID                                    |
| 7  | Session ID              | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters.  |  | 56 - TargetCompID                                   |
| 8  | Execution Firm ID       | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters.  |  | 56 - TargetCompID                                   |
| 9  | Manual Order Identifier | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'   |  | 1028 - ManualOrderIndicator                         |
| 10 | Message Type            | Presence: Mandatory<br>Format: String<br>Value: "b/0" or "b/5"   | Presence: Mandatory<br>Format: String  | 35 - MsgType<br>/ 297 - QuoteAckStatus              |
| 14 | Message Link ID         | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file   | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "FROM CME"                        | N/A - This identifier exist only in the audit trail |
| 17 | Instrument Description  | Presence: Mandatory<br>Format: String<br>Value: Must follow CME Group instrument code nomenclature.  | Presence: Mandatory<br>Format: String  | 107 - SecurityDesc                                  |
| 18 | Market Segment          | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument   |  | 50 - SenderSubID                                    |
| 37 | Reject Reason           | Presence: Mandatory if present in the captured message.<br>Format: String  | Presence: Mandatory if present in the captured message.<br>Format: String  | 300 - QuoteRejectReason                             |

|    |                  |   |  |                  |
|----|------------------|---|--|------------------|
| 40 | Quote Request ID | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must only contain number and letters</p> |  | 131 - QuoteReqID |
|----|------------------|---|--|------------------|

## Order Mass Action Request - Audit Trail Requirements

| Position | Field Name               | TO/FROM CME<br>(Tier 1 component interactions with Globex)  | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component)  | Associated iLink Tag         |
|----------|--------------------------|---|--|------------------------------|
| 1        | Sending Timestamps       | <p>Presence: Mandatory for all architecture</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds</p>   |  | 52 - SendingTime             |
| 2        | Receiving Timestamps     |   | <p>Presence: Mandatory for 2-tier architectures</p> <p>Format: UTC Timestamp</p> <p>Value: YYYYMMDD-hh:mm:ss.sssxxx populated at least at the milliseconds</p> | 60 - Transact Time           |
| 3        | Message Direction        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: "TO CME"</p>   | <p>Presence: Mandatory for 2-tier architectures</p> <p>Format: String</p> <p>Value: "FROM CLIENT"</p>  | 57 - TargetSubID             |
| 4        | Operator ID              | <p>Presence: Mandatory</p> <p>Format: String with a maximum length of 18 bytes.</p> <p>Value: Must not contain the following special characters:<br/>&lt;SINGLE QUOTE&gt;, &lt;DOUBLE QUOTE&gt;, &lt;SPACE&gt;, &lt;PIPE&gt;<br/>&lt;STAR&gt;, &lt;COMMA&gt;, &lt;SEMICOLON&gt;</p> | <p>Presence: Mandatory</p> <p>Format: String</p>   | 50 - SenderSubID             |
| 5        | Self-Match Prevention ID | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   |  | 7928 - SelfMatchPreventionID |
| 6        | Account Number           | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   | <p>Presence: Mandatory</p> <p>Format: String</p>   | 1 - Account                  |
| 7        | Session ID               | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters</p>   |  | 49 - SenderCompID            |
| 8        | Execution Firm ID        | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Exactly 3 Characters.</p>  |  | 49 - SenderCompID            |
| 9        | Manual Order Identifier  | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: 'Y' or 'N'</p>   |  | 1028 - ManualOrderIndicator  |

|    |                        |  |   |  |
|----|------------------------|--|---|--|
| 10 | Message Type           | Presence: Mandatory<br>Format: String<br>Value: 'CA'   | Presence: Mandatory<br>Format: String   | 35 - MsgType   |
| 14 | Message Link ID        | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file   | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "TO CME" | N/A - This identifier exist only in the audit trail. |
| 15 | Order Flow ID          | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file   | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file                | N/A - This identifier exist only in the audit trail. |
| 17 | Instrument Description | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must follow CME Group instrument code nomenclature.           | Presence: Mandatory<br>Format: String   | 107 - SecurityDesc or tag 55 - Symbol                |
| 18 | Market Segment ID      | Presence: Mandatory if present in captured message<br>Format: String<br>Value: Must be the Market Segment ID corresponding to the Instrument |   | 57 - TargetSubID                                     |
| 21 | Buy/Sell Indicator     | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: 1 or 2   | Presence: Mandatory<br>Format: String   | 54 - Side  |
| 25 | Order Type             | Presence: Mandatory if present in captured message<br>Format: String<br>Value: 1, 2, 3, 4 or K   | Presence: Mandatory<br>Format: String   | 40 - OrderType                                       |
| 26 | Order Qualifier        | Presence: Mandatory if present in captured message<br>Format: Integer<br>Value: 0, 1, 3 or 6   | Presence: Mandatory<br>Format: String   | 59 - TimeInForce                                     |
| 30 | Country of Origin      | Presence: Mandatory<br>Format: String<br>Value: Must follow ISO standard   | Presence: Mandatory<br>Format: String   | 142 - SenderLocationID                               |

## Order Mass Action Report - Audit Trail Requirements

The Order Mass Action Report message submitted by the Globex platform must be decomposed into its confirmed cancelled orders. The Audit Trail must include one line item per cancelled order.

| Position | Field Name | TO/FROM CME<br>(Tier 1 component interactions with Globex) | TO/FROM CLIENT<br>(Tier 1 component interactions with Tier 2 component) | Associated iLink Tag |
|----------|------------|--|---|----------------------|
|----------|------------|--|---|----------------------|

|    |                          |  |   |  |
|----|--------------------------|--|---|--|
| 1  | Sending Timestamps       | Presence: Mandatory for all architecture<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sss populated at least at the milliseconds   |   | 52 - SendingTime                                     |
| 2  | Receiving Timestamps     |  | Presence: Mandatory for 2-tier architectures<br>Format: UTC Timestamp<br>Value: YYYYMMDD-hh:mm:ss.sssxxx populated at least at the milliseconds | 60 - Transact Time                                   |
| 3  | Message Direction        | Presence: Mandatory<br>Format: String<br>Value: "TO CME"   | Presence: Mandatory for 2-tier architectures<br>Format: String<br>Value: "FROM CLIENT"  | 57 - TargetSubID                                     |
| 4  | Operator ID              | Presence: Mandatory<br>Format: String with a maximum length of 18 bytes.<br>Value: Must not contain the following special characters:<br><SINGLE QUOTE>, <DOUBLE QUOTE>, <SPACE>, <PIPE><br><STAR>, <COMMA>, <SEMICOLON> | Presence: Mandatory<br>Format: String   | 50 - SenderSubID                                     |
| 5  | Self-Match Prevention ID | Presence:Mandatory if present in captured message<br>Format: String  |   | 7928 - SelfMatchPreventionID                         |
| 6  | Account Number           | Presence: Mandatory if present in captured message<br>Format: String   | Presence: Mandatory if present in captured message<br>Format: String  | 1 - Account  |
| 7  | Session ID               | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters   |   | 49 - SenderCompID                                    |
| 8  | Execution Firm ID        | Presence: Mandatory<br>Format: String<br>Value: Exactly 3 Characters.  |   | 49 - SenderCompID                                    |
| 9  | Manual Order Identifier  | Presence: Mandatory<br>Format: String<br>Value: 'Y' or 'N'   |   | 1028 - ManualOrderIndicator                          |
| 10 | Message Type             | Presence: Mandatory<br>Format: String<br>Value: 'BZ'   | Presence: Mandatory<br>Format: String   | 35 - MsgType   |
| 14 | Message Link ID          | Presence: Mandatory<br>Format: String<br>Value: Must be unique within the audit trail file   | Presence: Mandatory<br>Format: String<br>Must have same value as at least one entry with message direction "TO CME"                             | N/A - This identifier exist only in the audit trail. |
| 15 | Order Flow ID            | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file   | Presence: Mandatory<br>Format: String<br>Value: Must be unique per order within the audit trail file  | N/A - This identifier exist only in the audit trail. |

|    |                        |   |  |                                       |
|----|------------------------|---|--|---------------------------------------|
| 17 | Instrument Description | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> <p>Value: Must follow CME Group instrument code nomenclature.</p>   | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>  | 107 - SecurityDesc or tag 55 - Symbol |
| 18 | Market Segment ID      | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> <p>Value: Must be the Market Segment ID corresponding to the Instrument</p>   |  | 57 - TargetSubID                      |
| 19 | Client Order ID        | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> <p>Value: Must only contain number and letters</p> <p>Must not be used for any other Client Order Id from customer-generated messages in the file</p> |  | 11 - ClOrdID                          |
| 20 | Globex Order ID        | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>   |  | 37 - OrderID                          |
| 21 | Buy/Sell Indicator     | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer</p> <p>Value: 1 or 2</p>   | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>  | 54 - Side                             |
| 22 | Quantity               | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer</p>  | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer</p> | 38 - Quantity                         |
| 25 | Order Type             | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p> <p>Value: 1, 2, 3, 4 or K</p>   | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>  | 40 - OrderType                        |
| 26 | Order Qualifier        | <p>Presence: Mandatory if present in captured message</p> <p>Format: Integer</p> <p>Value: 0, 1, 3 or 6</p>   | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>  | 59 - TimeInForce                      |
| 30 | Country of Origin      | <p>Presence: Mandatory</p> <p>Format: String</p> <p>Value: Must follow ISO standard</p>   | <p>Presence: Mandatory if present in captured message</p> <p>Format: String</p>  | 142 - SenderLocationID                |