# O*U*C*H
## Version 3.1
*Updated April 23, 2018*

**Contents**

Functionality that is not available will be greyed out in the specifications. Any changes will be conveyed via the NASDAQ OMX Head Trader Alerts or Technical Updates.

# 1    Overview

NASDAQ OMX BX accepts limit orders from system participants and executes matching orders when possible. Non-matching orders may be added to the NASDAQ OMX BX Limit Order Book, a database of available limit orders, where they wait to be matched in price-time priority.

OUCH is a simple protocol that allows NASDAQ OMX BX participants to enter orders, cancel existing orders and receive executions. It is intended to allow participants and their software developers to integrate NASDAQ OMX BX into their proprietary trading systems or to build custom front ends.

OUCH only provides a method for participants to send orders to NASDAQ OMX BX and receive updates on those orders entered. For information about all orders entered into and executed on the NASDAQ OMX BX book, refer to the ITCH protocol (available separately).

OUCH is the low-level native protocol for connecting to NASDAQ OMX BX. It is designed to offer the maximum possible performance at the cost of flexibility and ease of use. For applications that do not require this extreme level of performance, NASDAQ OMX BX offers other, more standard interfaces that may be more suitable and easier to develop to.

## 1.1  Architecture

The OUCH protocol is composed of logical messages passed between the OUCH host and the client application. Each message type has a fixed message length. All messages are composed of non-control ASCII bytes.

All messages sent from the OUCH host to the client are assumed to be sequenced, and their delivery must be guaranteed by some lower level protocol. The SoupTCP (available separately) is typically used to guarantee the delivery and sequencing of OUCH messages sent from the host to the client.

Messages sent from the OUCH client to the host are inherently non-guaranteed, even if they are carried by a lower level protocol that guarantees delivery (like TCP/IP sockets). Therefore, all host-bound messages are designed so that they can be benignly resent for robust recovery from connection and application failures.

Each physical OUCH host port is bound to a NASDAQ OMX BX-assigned logical OUCH Account. On a given day, every order entered on OUCH is uniquely identified by the combination of the logical OUCH Account and the participant-created Token field.

## 1.2  Data Types

Numeric fields are a string of ASCII-coded digits, right-justified and zero-filled on the left.

Alpha fields are left-justified and padded on the right with spaces.

Prices are given in decimal format with 6 whole number places followed by 4 decimal digits. The whole number portion is padded on the left with zeros; the decimal portion is padded

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on the right with zeros. The decimal point is implied by position; it does not appear inside the price field. The maximum valid price value on THE NASDAQ OMX BX SYSTEM is $199,000.00. Timestamp fields are given in milliseconds past midnight, Eastern Time (ET).

## 1.3  Fault Redundancy

A single OUCH Account can be bound to multiple physical OUCH machines. These OUCH machines then act as mirrors of each other for fault redundancy. In this configuration, both machines are able to accept orders and cancel requests, and any outbound messages would be simultaneously generated by both physical OUCH hosts.

## 1.4  Service Bureau Configuration

A single OUCH Account can accept orders from one or more firms, allowing a service bureau configuration. The service bureau OUCH Account must be specifically authorized to enter trades on behalf of each represented participant with a NASDAQ OMX BX Service Bureau Agreement, available separately. Once an agreement has been submitted, the OUCH Account set up as the service bureau may enter orders for the represented firm by putting the represented firm's Market Maker Identifier in the Firm field upon order entry.

# 2  Inbound Messages

Inbound messages are sent from the participant's application to the OUCH host. They are not sequenced. All Inbound Messages may be repeated benignly. This gives the client the ability to re-send any Inbound message if it is uncertain whether NASDAQ OMX BX received it in the case of a connection loss or an application error.

The idea of benign inbound message retransmission with end-to-end acknowledgement is fundamental to NASDAQ OMX BX's fail-over redundancy. If your connection ever fails, there is no way for you to know if pending messages actually made it over the link before the failure. A robust OUCH client can safely re-send any pending messages over a mirrored link without worrying about generating duplicates. This applies to NASDAQ OMX BX's disaster fail over capability as well; if NASDAQ OMX BX ever needs to fail over to the backup site, some messages sent at the moment of the failure may be lost. A robust application can simply re-send the pending messages, making the fail over seamless to the end user.

All inbound messages on an OUCH port are processed sequentially. This guarantees that if two orders are entered consecutively on the same connection, the first order entered will always be accepted first.

## 2.1  Enter Continuous Order Message

The Enter Continuous Order Message lets you enter a new order into NASDAQ OMX BX.

Each new order must have a Token that is unique to the day and that logical OUCH account. If you send a valid order, you should receive an Accepted Continuous Order Message. If you send an Enter Continuous Order Message with a previously used Token, the new order will be ignored.

| **Enter Order Message** |
| --- |

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| Name | Offset | Len | Value | Notes |
|------|--------|-----|-------|-------|
| Type | 0 | 1 | "O" | Identifies this message as Enter Order Message type |
| Order Token | 1 | 14 | Alpha-numeric | This is a free-form alpha-numeric field. You can put any information you like. Token must be day-unique for each OUCH account. Token is case sensitive, but mixing upper- and lower-case Tokens is not recommended. |
| Buy/Sell Indicator | 15 | 1 | Alpha | "B" = buy order<br>"S" = sell order<br>= sell short, client affirms ability to borrow securities in good deliverable form for delivery within three business days<br>= sell short exempt, client affirms ability to borrow securities in good deliverable form for delivery within three business days |
| Shares | 16 | 6 | Numeric | Total number of shares entered. Must be greater than zero |
| Stock | 22 | 6 | Alpha | Stock Symbol |
| Price | 28 | 10 | Price | The limit price of the order. The price is a 6-digit whole number portion followed by a 4-digit decimal portion. The whole number part should be left-padded with zeros, and the decimal part must be right-filled with zeros. Must be greater than zero |
| Time in Force | 38 | 5 | Numeric | The number of seconds that this order should live before being automatically canceled. Special values for Time in Force are listed below. |
| Firm | 43 | 4 | Alpha | This field should contain the all caps. Firm Identifier for the order entry firm. One logical OUCH Account can potentially enter orders for multiple firms in a Service Bureau configuration. If this field is blank-filled, the default firm for the OUCH Account will be used. |
| Display | 47 | 1 | Alpha | "A" = Attributable-Price to Display<br>"Y" = Anonymous-Price to Comply<br>"I" = Imbalance-Only<br>"N" = Non-Display<br>"P" = Post-Only (For stocks over $1, BX Post Only Orders will remove liquidity at any price equal to or better than its limit.)<br>"M" = Mid-Point Peg |
| Capacity | 48 | 1 | Alpha | Values other than "A", "P", or "R" will be converted to "O" = Other<br>"A" = agency |

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| | | | | "P" = principal |
|---|---|---|---|---|
| | | | | "R" = risk-less |
| Intermarket sweep eligibility | 49 | 1 | Alpha | "Y" = eligible<br>"N" = not eligible<br>"y" = Trade-at Intermarket Sweep Order |

## 2.1.1    Special values for Time in Force

| Special Values for Time in Force | |
|---|---|
| **Value** | **Explanation** |
| 0 | Immediate or cancel — If no match for the order is available at the moment the order is accepted, any unexecuted shares in the order are immediately canceled. |
| 99998 | Market Hours — Indicates that the order should live until the market close on the primary market for the security |
| 99999 | System Hours — Indicates that the order should live until the end of the NASDAQ OMX BX trading day |

## 2.2  Enter Cross Order Message

The Enter Cross Order Message lets you enter a new cross order into NASDAQ OMX BX.

An order that participates in a Cross but enters the continuous market afterward if any portion of it is not executed is also considered a cross order. The difference in behavior is implied by the Time in Force field. Time in Force of 0 (immediate-or-cancel) will ensure that the order does not stay live beyond the Cross. Any other Time in Force is applied to the unexecuted portion of the order that enters the continuous market.

Each new order must have a Token that is unique to the day and that logical OUCH account. If you send a valid order, you should receive an Accepted Cross Order Message. If you send an Enter Cross Order Message with a previously used Token, the new order will be ignored.

All Cross Orders in the Opening and Closing Crosses are Non-displayed.  Orders entered as Displayed will be converted to Non-displayed for the Cross. Once the Cross is complete, orders will be treated with the display attributes as entered.

Minimum Quantity orders are not allowed for Opening and Close Crosses. This field should be 0.

| Enter Order Message | | | | |
|---|---|---|---|---|
| **Name** | **Offset** | **Len** | **Value** | **Notes** |
| Type | 0 | 1 | "Q" | Identifies this message as Enter Order Message type |
| Order Token | 1 | 14 | Alpha-numeric | This is a free-form alpha-numeric field. You can put any information you like. Token must be day-unique for each OUCH account. Token is case sensitive, but mixing upper- and lower-case Tokens |

| | | | | is not recommended. |
|---|---|---|---|---|
| Buy/Sell Indicator | 15 | 1 | Alpha | "B" = buy order<br>"S" = sell order<br>⊨ sell short, client affirms ability to borrow securities in good deliverable form for delivery within three business days<br>⊨ sell short exempt, client affirms ability to borrow securities in good deliverable form for delivery within three business days<br>⊨ short sale, client unable to affirm delivery of securities within three business days |
| Shares | 16 | 6 | Numeric | Total number of shares entered. Must be greater than zero |
| Stock | 22 | 6 | Alpha | Stock Symbol |
| Price | 28 | 10 | Price | For limit orders it is price of the order. The price is a 6-digit whole number portion followed by a 4-digit decimal portion. The whole number part should be left-padded with zeros, and the decimal part must be right-filled with zeros. Must be greater than zero<br><br>Clients could specify a "market" cross order by filling the price field with '9999999999' (10-9s). |
| Time in Force | 38 | 5 | Numeric | The number of seconds that any portion of this order unexecuted in the Cross should live before being automatically canceled.<br><br>If the price in this message is the special "market" price, the Time in Force will automatically be changed to 0.<br><br>Special values for Time in Force are listed below. |
| Firm | 43 | 4 | Alpha | This field should contain the all caps Firm Identifier for the order-entry firm. One logical OUCH Account can potentially enter orders for multiple firms in a Service Bureau configuration. If this field is blank-filled, the default firm for the OUCH Account will be used. |
| Display | 47 | 1 | Alpha | "A" = Attributable-Price to Display<br>"Y" = Anonymous-Price to Comply<br>"I" = Imbalance-Only<br>"N" = Non-Display<br>"O" = Retail Order Type 1<br>"T" = Retail Order Type 2 |

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| | | | | "Q" = Retail Price Improvement Order |
|---|---|---|---|---|
| Capacity | 48 | 1 | Alpha | Values other than "A", "P", or "R" will be converted to "O" = Other<br>"A" = agency<br>"P" = principal<br>"R" = risk-less |
| Intermarket sweep eligibility | 49 | 1 | Alpha | "Y" = eligible<br>"N" = not eligible<br>"y" = Trade-at Intermarket Sweep Order |
| Minimum Quantity | 50 | 6 | Numeric | Minimum number of shares that could be traded. |
| Cross Type | 56 | 1 | Alpha | "O" = open<br>"C" = close<br>"R" = Retail Cross |

## 2.2.1    *Special values for Time in Force*

| Special Values for Time in Force | |
|---|---|
| **Value** | **Explanation** |
| 0 | Immediate or cancel — If no match for the order is available in the Cross, any unexecuted shares in the order are canceled right after the Cross completes. |
| 99998 | Market Hours — Indicates that any portion of the order unexecuted in the Cross should live until the market close on the primary market for the security. |
| 99999 | System Hours — Indicates that any portion of the order unexecuted in the Cross should live until the end of the NASDAQ OMX BX trading day. |

## 2.3  Cancel Order Message

The Cancel Order Message is used to request that an order be canceled or reduced. In the Cancel Order Message, you must specify the new "intended order size" for the order. The "intended order size" is the maximum number of shares that can be executed in total after the cancel is applied.

To cancel the entire balance of an order, you would enter a Cancel Order Message with a Shares field of zero.

| Cancel Order Message | | | | |
|---|---|---|---|---|
| **Name** | **Offset** | **Len** | **Value** | **Notes** |
| Type | 0 | 1 | "X" | Cancel Order Message |
| Order Token | 1 | 14 | Alpha-numeric | The Order Token as was originally transmitted in an Enter Order Message |

| Shares | 15 | 6 | Numeric | This is the new intended order size. This limits the maximum number of shares that can potentially be executed in total after the cancel is applied. Entering a zero here will cancel any remaining open shares on this order. |
|--------|----|----|---------|------|

Note that the only acknowledgement to a Cancel Order Message is the resulting Canceled Order Message. There is no "too late to cancel" message since by the time you received it, you would already have gotten the execution. Superfluous Cancel Order Messages are silently ignored.

# 3 Outbound Sequenced Messages

Outbound messages are generated by the OUCH host port and received by your client application.

## 3.1 System Event Messages

System Event Messages signal events that affect the entire NASDAQ OMX BX system:

| System Event Message | | | | |
|------|------|------|------|------|
| **Name** | **Offset** | **Len** | **Value** | **Notes** |
| Timestamp | 0 | 8 | Timestamp | See Data Types above. |
| Message Type | 8 | 1 | "S" | System Event Message identifier |
| Event Code | 9 | 1 | Alpha | See Event Codes below. |

## 3.2 System Event Codes

| System Event Codes | |
|------|------|
| **Code** | **Explanation** |
| "S" | **Start of Day —** This is always the first message each day. It indicates that NASDAQ OMX BX is open and ready to start accepting orders. |
| "E" | **End of Day —** This indicates that NASDAQ OMX BX is now closed and will not accept any new orders in this session. There will be no further executions during this session; however, it is still possible to receive Broken Trade Messages and Canceled Order Messages |

## 3.3 Order Messages

Order messages inform you about each event in the lifetime of your orders.

## 3.3.1 Continuous Order Accepted Message

A Continuous Order Accepted Message acknowledges the receipt and acceptance of a valid Enter Continuous Order Message. The data fields from the Enter Continuous Order Message

are echoed back in the Continuous Order Accepted Message. Note that the accepted values may differ from the entered values for some fields. You will always receive an Accepted Order Message for an order before you get any Canceled Order Messages or Executed Order Messages for the order.

| Continuous Order Accepted Message | | | | |
|---|---|---|---|---|
| Name | Offset | Len | Value | Notes |
| Timestamp | 0 | 8 | Numeric | Timestamp |
| Message Type | 8 | 1 | "A" | Accept Order Message Identifier |
| Token | 9 | 14 | Alpha-numeric | The order Token field as entered |
| Buy/Sell Indicator | 23 | 1 | Alpha | Buy/sell indicator as entered |
| Shares | 24 | 6 | Numeric | Total number of shares accepted |
| Stock | 30 | 6 | Alpha | Stock symbol as entered |
| Price | 36 | 10 | Price | The accepted limit price of the order. Please note that the accepted price could potentially be different than the entered price if the order was re-priced by NASDAQ OMX BX on entry. The accepted price will always be better than or equal to the entered. |
| Time in Force | 46 | 5 | Numeric | The accepted Time in Force of the order. Please note that the accepted Time in Force may potentially be different than the entered Time in Force. The accepted Time in Force will always be equal to or shorter in scope than the entered Time in Force. |
| Firm | 51 | 4 | Alpha | The accepted firm for the order. Please note that if the firm was left blank on entry, the default firm for the OUCH account will appear here. |
| Display | 55 | 1 | Alpha | The display type for the order as entered |
| Order Reference Number | 56 | 12 | Numeric | The day-unique Order Reference Number assigned by NASDAQ OMX BX to this order |
| Capacity | 68 | 1 | Alpha | The capacity specified on the order |
| Intermarket sweep eligibility | 69 | 1 | Alpha | "Y" = eligible<br>"N" = not eligible<br>"y" = Trade-at Intermarket Sweep Order |

## 3.3.2  Cross Order Accepted Message

A Cross Order Accepted Message acknowledges the receipt and acceptance of a valid Enter Cross Order Message. The data fields from the Enter Cross Order Message are echoed back in the Cross Order Accepted Message. Cross Orders are not part of the continuous book. Please note that the accepted values may differ from the entered values for some fields.

| Cross Order Accepted Message | | | | |
|---|---|---|---|---|
| Name | Offset | Len | Value | Notes |
| Timestamp | 0 | 8 | Numeric | Timestamp |
| Message Type | 8 | 1 | "R" | Accept Cross Order Message Identifier |
| Token | 9 | 14 | Alpha-numeric | The order Token field as entered |
| Buy/Sell Indicator | 23 | 1 | Alpha | Buy/sell indicator as entered |
| Shares | 24 | 6 | Numeric | Total number of shares accepted |
| Stock | 30 | 6 | Alpha | Stock symbol as entered |
| Price | 36 | 10 | Price | For limit orders, the accepted limit price of the order. Please note that the accepted price could potentially be different than the entered price if the order was re-priced by NASDAQ OMX BX on entry. The accepted price will always be better than or equal to the entered.<br><br>If the order was entered as a "market" order, this field will contain the special Market Order Price as it was entered. |
| Time in Force | 46 | 5 | Numeric | The accepted Time in Force of the order. Please note that the accepted Time in Force may potentially be different than the entered Time in Force. The accepted Time in Force will always be equal to or shorter in scope than the entered Time in Force. |
| Firm | 51 | 4 | Alpha | The accepted firm for the order. Please note that if the firm was left blank on entry, the default firm for the OUCH account will appear here. |
| Display | 55 | 1 | Alpha | The display type for the order as entered |
| Order Reference Number | 56 | 12 | Numeric | The day-unique Order Reference Number assigned by NASDAQ OMX BX to this order |
| Capacity | 68 | 1 | Alpha | The Capacity of the user as entered |
| Intermarket sweep eligibility | 69 | 1 | Alpha | "Y" = eligible<br>"N" = not eligible<br>"y" = Trade-at Intermarket Sweep Order |
| Minimum | 70 | 6 | Numeric | Minimum number of shares as |

| Quantity | | | | entered |
|---|---|---|---|---|
| Cross Type | 76 | 1 | Alpha | The Cross Type as entered |

### 3.3.3  Canceled Order Message

A Canceled Order Message informs you that an order has been reduced or canceled. This could be acknowledging a Cancel Order Request Message, or it could be the result of the order timing out or being canceled automatically.

Please note that a Cancel Order Message does not necessarily mean the entire order is dead; some portion of the order may still be alive.

| Canceled Order Message | | | | |
|---|---|---|---|---|
| **Name** | **Offset** | **Len** | **Value** | **Notes** |
| Timestamp | 0 | 8 | Numeric | Timestamp |
| Message Type | 8 | 1 | "C" | Canceled Order Message |
| Order Token | 9 | 14 | Alpha-numeric | The order Token field as entered |
| Decrement Shares | 23 | 6 | Numeric | The number of shares just decremented from the order. This number is incremental, not cumulative. |
| Reason | 29 | 1 | Alpha | Reason the order was reduced or canceled. See currently supported Cancel Order Reasons below. Clients should anticipate additions to this list and thus support all capital letters of the English alphabet. |

### 3.3.4  Cancel Order Reasons

| Cancel Order Reasons | |
|---|---|
| **Reason** | **Explanation** |
| "U" | User requested cancel. Sent in response to a Cancel Request Message |
| "I" | Immediate or Cancel order. This order was originally sent with a timeout of zero and no further matches were available on the book so the remaining unexecuted shares were immediately canceled. |
| "T" | Timeout. The Time In Force for this order has expired |
| "S" | Supervisory. This order was manually canceled or reduced by a NASDAQ OMX BX supervisory terminal. This is usually in response to a participant request via telephone. |
| "D" | This order cannot be executed because of a regulatory restriction (e.g., short sale or trade through restrictions). |
| "Q" | Self Match Prevention. The order was cancelled because it would have executed with an existing order entered by the same MPID. |
| "Z" | System cancel. This order was cancelled by the system. |
| "E" | Closed. Any DAY order that was received after the closing cross is |

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| | | | | | complete in a given symbol will receive this cancel reason. |
|---|---|---|---|---|---|

## 2.2.4 AIQ Cancelled Message

| AIQ Canceled Order Message | | | | |
|---|---|---|---|---|
| **Name** | **Offset** | **Len** | **Value** | **Notes** |
| Timestamp | 0 | 8 | Numeric | Timestamp |
| Message Type | 8 | 1 | "D" | Canceled Order Message |
| Order Token | 9 | 14 | Alpha-numeric | The order Token field as entered |
| Decrement Shares | 23 | 6 | Numeric | The number of shares just decremented from the order. This number is incremental, not cumulative. |
| Reason | 29 | 1 | "Q" | Reason the order was reduced or canceled. For AIQ Cancel message, this value will be "Q". |
| Quantity Prevented from Trading | 30 | 4 | Integer | Shares that would have executed if the trade would have occurred |
| Execution price | 34 | 4 | Integer | Price at which the trade would have occurred |
| Liquidity flag | 38 | 1 | Alpha | Liquidity code the order would have received |

## 3.3.5 Executed Order Message

An Executed Order Message informs you that all or part of an order has been executed.

| Executed Order Message | | | | |
|---|---|---|---|---|
| **Name** | **Offset** | **Len** | **Value** | **Notes** |
| Timestamp | 0 | 8 | Numeric | Timestamp |
| Message Type | 8 | 1 | "E" | Order Executed Message |
| Order Token | 9 | 14 | Alpha-numeric | The order Token as entered |
| Executed Shares | 23 | 6 | Numeric | Incremental number of shares executed |
| Execution Price | 29 | 10 | Price | The price at which these shares were executed. |
| Liquidity Flag | 39 | 1 | Alpha | See Liquidity Flag Values table below. |
| Match Number | 40 | 12 | Numeric | Assigned by NASDAQ OMX BX to each match executed. Each match consists of one buy and one sell. The matching buy and sell executions share the same match number. |

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### 3.3.5.1  Liquidity Flags

| Liquidity Flags | |
|---|---|
| *Flag* | *Value* |
| A | Added |
| R | Removed |
| J | Non-displayed and added liquidity |
| m | Removed liquidity at a midpoint |
| k | Added liquidity via a midpoint order |
| j | RPI (Retail Price Improving) order provides liquidity |
| r | RMO Retail Order removes RPI liquidity |
| t | RMO Retail Order removes price improving non-displayed liquidity other than RPI liquidity |
| q | RMO Retail Order removes non-RPI midpoint liquidity |
| 7 | Displayed, liquidity-adding order improves the NBBO |
| 8 | Displayed, liquidity-adding order sets the BXBBO while joining the NBBO |
| p | Removed price improving non-displayed liquidity |
| N | Passive Midpoint Execution |

## 3.3.6  Broken Trade Message

A Broken Trade Message informs you that an execution has been broken. The trade is no longer good and will not clear. The reason for the break is given.

You will always get an Executed Order Message prior to getting a Broken Trade Message for a given order/execution.

| Broken Trade Message | | | | |
|---|---|---|---|---|
| **Name** | **Offset** | **Len** | **Value** | **Notes** |
| Timestamp | 0 | 8 | Numeric | Timestamp |
| Message Type | 8 | 1 | "B" | Broken Trade Message |
| Order Token | 9 | 14 | Alpha-numeric | The order Token field as entered |
| Match Number | 23 | 12 | Numeric | Match Number as transmitted in the preceding Executed Order Message |
| Reason | 35 | 1 | Alpha | The reason the trade was broken. See currently supported Broken Trade Reasons table below. Clients should anticipate additions to this list and thus support all capital letters of the English alphabet. |

## 3.3.7  Broken Trade Reasons

| Broken Trade Reasons | |
|---|---|
| **Reason** | **Explanation** |
| "E" | Erroneous — The trade was deemed clearly erroneous. |
| "C" | Consent — The two parties mutually agreed to break the trade. |

| "S" | Supervisory — The trade was manually broken by a NASDAQ OMX BX supervisory terminal. |
| "X" | External — The trade was broken by an external third party. |

## 3.3.8   Price Correction Message

A Price Correction Message informs you that an execution has been price-corrected.

You will always get an Executed Order Message prior to getting a Price Correction Message for a given order/execution.

| Price Correction Message | | | | |
|---|---|---|---|---|
| **Name** | **Offset** | **Len** | **Value** | **Notes** |
| Timestamp | 0 | 8 | Numeric | Timestamp |
| Message Type | 8 | 1 | "K" | Price Correction Message |
| Order Token | 9 | 14 | Alpha-numeric | The order Token field as entered |
| Match Number | 23 | 12 | Numeric | Match Number as transmitted in the preceding Executed Order Message |
| New Execution Price | 35 | 10 | Price | The corrected price of the execution |
| Reason | 45 | 1 | Alpha | The reason the trade was corrected. See Price Correction Reasons table below. |

## 3.3.8.1   Price Correction Reasons

| Price Correction Reasons | |
|---|---|
| **Reason** | **Explanation** |
| "E" | Erroneous — The trade was deemed clearly erroneous. |
| "C" | Consent — The two parties mutually agreed to correct the price. |
| "S" | Supervisory — The trade was manually price-corrected by a NASDAQ OMX BX supervisory terminal. |
| "X" | External — The trade was price-corrected by an external third party. |

## 3.3.9   Rejected Order Message

A Rejected Order Message may be sent in response to an Enter Order Message if the order cannot be accepted at this time. The reason for the rejection is given. No further actions are permitted on this order.

The Token of a rejected order cannot be re-used.

Functionality that is not available will be greyed out in the specifications. Any changes will be conveyed via the NASDAQ OMX Head Trader Alerts or Technical Updates

| Rejected Order Message | | | | |
|---|---|---|---|---|
| Name | Offset | Len | Value | Notes |
| Timestamp | 0 | 8 | Numeric | Timestamp |
| Message Type | 8 | 1 | "J" | Rejected Order Message |
| Order Token | 9 | 14 | Alpha-numeric | This is the order Token field as was transmitted with the order when entered. |
| Reason | 23 | 1 | Alpha | The reason the order was rejected. See currently supported Rejected Order Reasons below. Clients should anticipate additions to this list and thus support all capital letters of the English alphabet. |

## 3.3.9.1   Rejected Order Reasons

| Rejected Order Reasons | |
|---|---|
| Reason | Explanation |
| "T" | Test Mode — This OUCH Account is configured for test mode and is not able to accept orders in non-TEST securities. |
| "H" | Halted — There is currently a trading halt so no orders can be accepted in this stock at this time. |
| "Z" | Shares exceeds configured safety threshold — The number of shares entered must be less than the safety threshold configured for this Account. The safety threshold can be added/updated through NASDAQ OMX BX Subscriber Services. |
| "S" | Invalid stock — The stock field must be a valid issue, tradable on NASDAQ OMX BX. |
| "D" | Invalid Display Type — Sent when Display Type Entered cannot be accepted in current circumstances and can't be simply converted to a valid Display Type. |
| "C" | NASDAQ OMX BX is closed. |
| "L" | Requested firm not authorized for requested clearing type on this account — To authorize additional firms, use the NASDAQ OMX BX Service Bureau Agreement. |
| "M" | Outside of permitted times for requested clearing type |
| "R" | This order is not allowed in this type of cross (stock or time restrictions). |
| "X" | Invalid price |
| "N" | Invalid Minimum Quantity |
| "q" | Midpoint Peg orders are not accepted in a crossed market |

## 3.3.9.2   PRM Rejected Order Reasons

| PRM Rejected Order Reasons | |
|---|---|
| Reason | Explanation |
| "a" | Reject All enabled |
| "b" | Easy to Borrow (ETB) reject |
| "c" | Restricted symbol list reject |
| "d" | ISO order restriction |

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| "e" | Odd lot order restriction |
|---|---|
| "f" | Mid-Point order restriction |
| "g" | Pre-Market order restriction |
| "h" | Post market order restriction |
| "i" | Short sale order restriction |
| "j" | On Open order restriction |
| "k" | On Close order restriction |
| "l" | Two sided quote reject |
| "m" | Exceeded shares limit |
| "n" | Exceeded dollar value limit |

## *3.3.10    Cancel Pending Message*

A Cancel Pending Message is sent in response to a cancel request for a Cross Order during a pre-cross late period signifying that it cannot be canceled at this time, but any unexecuted portion of this order will automatically be canceled immediately after the cross completes.

This message will only be sent once for a given token. Duplicate cancel requests for the same token will be ignored by OUCH.

| Cancel Status Message | | | | |
|---|---|---|---|---|
| **Name** | **Offset** | **Len** | **Value** | **Notes** |
| Timestamp | 0 | 8 | Numeric | Timestamp |
| Message Type | 8 | 1 | "P" | Cancel Status Message |
| Order Token | 9 | 14 | Alpha-numeric | This is the order Token field as was transmitted with the order being cancel-rejected. |

## *3.3.11    Cancel Reject Message*

A Cancel Reject Message is sent in response to a partial cancel request (with non-zero "intended order size") for a Cross Order during a pre-cross late period signifying that it cannot be partially canceled at this time. No automatic cancel will be scheduled for this order. Clients could repeat their request for any unexecuted portion of the order after the cross completes.

This message will only be sent once for a given token. Duplicate cancel requests for the same token will be ignored by OUCH.

| Cancel Status Message | | | | |
|---|---|---|---|---|
| **Name** | **Offset** | **Len** | **Value** | **Notes** |
| Timestamp | 0 | 8 | Numeric | Timestamp |
| Message Type | 8 | 1 | "I" | Cancel Status Message |
| Order Token | 9 | 14 | Alpha-numeric | This is the order Token field as was transmitted with the order being cancel-rejected. |

Functionality that is not available will be greyed out in the specifications. Any changes will be conveyed via the NASDAQ OMX Head Trader Alerts or Technical Updates

# 4 Support

If you have any questions or comments about this specification, email
tradingservices@NASDAQomx.com. We welcome suggestions for new features or
improvements.

# 5 Revision History

| Version | Date | Revision |
|---------|------|----------|
| 3.1 | 03/18/2008 | Initial Version for NASDAQ OMX BX |
| 3.1 | 10/28/2008 | Updated Reference field from 9 to 12 characters<br>Updated Match field from 9 to 12 characters |
| 3.1 | 01/02/2009 | Updated Display field to contain "P" for Post-Only for Enter Continuous Order Message section. |
| 3.1 | 05/06/2009 | Updated Display field to contain "S" for Non-routable Flash for Enter Continuous Order Message section. |
| 3.1 | 06/05/2009 | Added display flag value "F" for Non-routable Flash post only |
| 3.1 | 06/24/2009 | Revised description of cancelled order reason "I" for anti-internalization |
| 3.1 | 07/01/2009 | Revised description of cancelled order reason "I" for removing anti-internalization<br>Added cancelled order reason "Q" for anti-internalization |
| 3.1 | 08/10/2009 | Removed display flag value "F"<br>Removed display flag value "S" |
| 3.1 | 12/10/2009 | Revised anti-internalization language, replaced with self match prevention. |
| 3.1 | 04/16/2010 | Added display value "M" for mid-point pegging. |
| 3.1 | 08/12/2010 | Re-introduced the sell short exempt value in the buy sell field. |
| 3.1 | 08/15/2011 | Added PRM Rejects |
| 3.1 | 11/06/2011 | Added AIQ cancelled message |
| 3.1 | 03/08/2012 | Added default value for capacity field<br>Removed legacy value "I" from cross type field<br>Removed legacy value "I" from liquidity flag field |
| 3.1 | 04/19/2012 | Added liquidity flag values "k", "m" |
| 3.1 | 06/11/2014 | Updated the formatting of the document |
| 3.1 | 10/17/2014 | Added Cross type "R"<br>Added Display values "O", "T", "Q"<br>Added liquidity flag values "j", "r", "t" |
| 3.1 | 12/16/2014 | Updated liquidity flag values<br>Added liquidity flag value "q" |
| 3.1 | 02/23/2015 | Added additional description to post only display value. |
| 3.1 | 03/23/2015 | Added cancel reasons "E", "X" (greyed out) |
| 3.1 | 06/11/2015 | Added liquidity flag "7", "8" |
| 3.1 | 06//23/2015 | Updated description for cancel order reason "E"<br>Removed cancel order reason "X" |
| 3.1 | 07/18/2016 | Added intermarket sweep eligibility value "y" |
| 3.1 | 03/13/2017 | Added liquidity flag "p" |

| 3.1 | 09/28/2017 | Added value "Q" to rejected order reasons |
| --- | --- | --- |
| 3.1 | 10/02/2017 | Revised reject value "Q" to "q" |
| 3.1 | 10/20/2017 | Ungreyed reject value "q" |
| 3.1 | 04/23/2018 | Added liquidity flag "N" |

Functionality that is not available will be greyed out in the specifications. Any changes will be conveyed via the NASDAQ OMX Head Trader Alerts or Technical Updates