BX BEST BID AND OFFER VERSION 2.0 INTERFACE SPECIFICATION



NASDAQ OMX BX Best Bid and Offer

For BX Trading Venue

NASDAQ OMX Global Data Products 805 King Farm Blvd. Rockville, MD 20850 +1 301 978 5307

BX Best Bid and Offer (BX BBO)

1 Overview

1.1 Product Description

BX Best Bid and Offer (BX BBO) is a direct data feed product offered by NASDAQ OMX to support the BX Trading Market. BX BBO provides the exchange's best bid and offer position for securities listed on the NASDAQ, New York Stock Exchange (NYSE), NYSE MKT, BATS BZX Exchange (BATS) and other U.S. regional exchanges.

Market data distributors may use the BX BBO data feed to feed dynamically updating stock tickers, portfolio trackers, trade alert programs, time and quote graphs, and other display systems. For market data administration purposes, BX BBO is part of the BX Basic entitlement.

For pricing and ordering information:

- 1. Refer to Market Data section of the NASDAQ OMX Trader website.
- 2. Contact the <u>NASDAQ OMX Global Data Products Account Team</u> at +1 301 978 5307 or +45 33 93 33 66.

2 Network Protocol Options

For direct data feed subscribers, NASDAQ OMX will offer the BX BBO data feed in the following protocol options:

- SoupBinTCP
- MoldUDP64

In order to match the BX Basic entitlement structure, BX BBO will initially support three outbound channles for both protocol options. The BX BBO data set will be channelized based on the listing market of a security.

Data Channel	Securities coverage
1	NASDAQ-listed issues
2	NYSE- and BATS-listed issues
3	NYSE MKT-, NYSE Arca- and U.S. regional stock exchange-listed
	issues

3 Architecture

BX BBO will be made up of a series of sequenced messages. Each message is variable in length based on the message type. The messages that make up the BX BBO protocol are typically delivered using a higher level protocol that takes care of sequencing and delivery guarantees.

4 Data Types

All integer fields are unsigned big-endian (network byte order) binary encoded numbers.

All alphanumeric fields are ASCII fields which are left justified and padded on the right with spaces.

Prices are integer fields, supplied with an associated precision. When converted to a decimal format, prices are in a fixed point format, where the precision defines the number of decimal places. For example, a field flagged as Price (4) has an implied 4 decimal digits.

Timestamps reflects the NASDAQ system time at which the outbound message was generated. NASDAQ states time as the number of nanoseconds past midnight. The time zone is U.S. Eastern Time.

5 Message Formats

5.1 System Event Message

The System Event message is used to signal key market or data feed control events. BX BBO will support the System Event messages.

SYSTEM EVENT MESSAGE						
Name	Offset	Length	Value	Notes		
Message Type	0	1	"S″	System Event		
Tracking	1	2	Integer	NASDAQ OMX internal tracking		
Number				number		
Time Stamp	3	6	Timestamp	Time stamp		
Event Code	9	1	Alphanumeric	Denotes the type of event for which		
				the message is being generated.		
				See list below for allowable values.		

On a daily basis, BX BBO will support the following event codes:

SYSTEM EVENT CODES	SYSTEM EVENT CODES – DAILY				
Code	Explanation				
0	Start of Transmissions: Denotes that BX BBO has started its daily transmission schedule				
S	Start of System Hours: This message indicates that BX is open and ready to start accepting orders.				
Q	<i>Start of Market Hours:</i> This message is intended to indicate that Market Hours orders are available for execution.				
Μ	<i>End of Market Hours:</i> This message is intended to indicate that Market Hours orders are no longer available for execution.				
E	<i>End of System Hours:</i> It indicates that BX is now closed and will not accept any new orders today.				
С	<i>End of Transmissions:</i> Denotes that BX BBO has completed its daily transmission schedule.				

5.2 Administrative Messages

5.2.1 Stock Directory

At the start of each trading day, NASDAQ OMX BX disseminates stock directory messages for all active symbols in its market center system.

Market data vendors should process this message to populate the Financial Status Indicator (required display field) and the Market Category (recommended display field) for <u>NASDAQ-listed and BX-listed issues</u>.

STOCK DIRECT	ORY				
Name	Offset	Length	Value	Notes	
Message Type	0	1	"R″	Stock Directory Message	
Tracking Number	1	2	Integer	NASDAQ O	MX internal tracking number
Timestamp	3	6	Timestamp	was genera	ich the directory message ated. Refer to Data Types for asing notes.
Stock	9	8	Alphanumeric	Denotes the	e security symbol for the issue in Q execution system.
Market Category	17	1	Alphanumeric	Indicates List tier for the i	sting market or listing market issue
				Code	Definition
				NASDAQ-L	isted Instruments
				Q	NASDAQ Global Select Market SM
				G	NASDAQ Global Market SM
				S	NASDAQ Capital Market
				Non-NASD	AQ-Listed Instruments
				N	New York Stock
					Exchange (NYSE)
				А	NYSE MKT
				Р	NYSE Arca
				Z	BATS Z Exchange
				<space></space>	Not available
Financial Status Indicator	18	1	Alphanumeric	indicates wi	Q-listed issues, this field hen a firm is not in compliance AQ continued listing ts.
				Code	Definition
					isted Instruments
				D	Deficient
				E	Delinquent
				Q	Bankrupt
				S	Suspended
				G	Deficient and Bankrupt
				Н	Deficient and Delinquent
				J	Delinquent and Bankrupt

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				I - I	1
				к	Deficient, Delinquent and Bankrupt
				С	Creations and/or
					Redemptions Suspended
					for Exchange Traded
					Product
				N	Normal (Default): Issuer
					Is NOT Deficient,
					Delinquent, or Bankrupt
				Non-NASDA	AQ-Listed Instruments
				<space></space>	Not available. Firms
					should refer to SIAC
					feeds for code if needed.
					leeds for bode in needed
Round Lot Size	19	4	Integer	Denotes the	number of shares that
			5		round lot for the issue
Round Lots	23	1	Alphanumeric		IASDAQ system limits order
Only	-			entry for issu	•
,					
				Code	Definition
				Y	NASDAQ OMX system
				'	only accepts round lots
					orders for this security.
				N	NASDAQ OMX system
					does not have any order
					size restrictions for this
					security. Odd and mixed
					lot orders are allowed.
Issue	24	1	Alphanumeric		e security class for the issue as
Classification					NASDAQ. See Appendix for
				allowable va	lues.
Issue Sub-Type	25	2	Alphanumeric	Identifies the	e security sub-type for the issue
				as assigned b	by NASDAQ. See Appendix for
				allowable va	lues.
Authenticity	27	1	Alphanumeric	Denotes if ar	n issue or quoting participant
				record is set-	-up in NASDAQ systems in a
					ion, test, or demo state. Please
					ms should only show live issues
					participants on public
				quotation dis	
				1	-11
				Code	Definition
				P	Live/Production
				T	Test
	20	1	Alabaa		
Short Sale	28	1	Alphanumeric		security is subject to
Threshold					lose-out of short sales under
Indicator				SEC Rule 203	5(D)(3).

				Code	Definition
				Y	Issue is restricted under SEC Rule 203(b)(3)
				Ν	Issue is not restricted
				<space></space>	Threshold Indicator not available
IPO Flag	29	1	Alphanumeric	for IPO rele help NASDA comply with Code NASDAQ-L Y	the NASDAQ security is set up ase. This field is intended to AQ market participant firms h FINRA Rule 5131(b). Definition Listed Instruments NASDAQ listed instrument is set up as a new IPO security NASDAQ listed instrument is not set up as a new IPO security DAQ-Listed Instruments
				<space></space>	Not available
LULD Reference Price Tier	30	1	Alphanumeric	band calcul	hich Limit Up / Limit Down price ation parameter is to be used rument. Refer to <u>LULD Rule</u> for Definition
				1	Tier 1 NMS Stocks and
				-	select ETPs
				2	Tier 2 NMS Stocks
				<space></space>	Not applicable
ETP Flag	31	1	Alphanumeric		hether the security is an
					raded product (ETP):
				Code	Definition
				Y	Instrument is an ETP
				N	Instrument is not an ETP
				<space></space>	Not available
ETP Leverage Factor	32	4	Integer	to the unde underlying and the ETF	ntgeral relationship of the ETP rlying index. Example: If the Index increases by a value of 1 2's Leverage factor is 3, indicates increase/decrease (see Inverse)
				Note: Lever is NOT leve	age Factor of 1 indicates the ETP raged.

				This field is u calculation p	used for LULD Tier I price band purposes.	
Inverse Indicator	36	1	Alphanumeric	Indicates the directional relationship between the ETP and underlying index.		
				Code	Definition	
				Y	ETP is an Inverse ETP	
				Ν	ETP is not an Inverse ETP	
				Example: An ETP Leverage Factor of 3 and		
				an Inverse value of 'Y' indicates the ETP will decrease by a value of 3.		
				uecrease by	a value 01 5.	

5.2.2 Stock Trading Action

NASDAQ OMX BX uses this administrative message to indicate the current trading status of a security to the trading community.

Prior to the start of system hours, NASDAQ OMX BX will send out a Trading Action spin. In the spin, NASDAQ OMX BX will send out a Stock Trading Action message with the "T" (Trading Resumption) for all NASDAQ- and other exchange-listed securities that are eligible for trading at the start of the system hours. If a security is absent from the pre-opening Trading Action spin, firms should assume that the security is being treated as halted in the NASDAQ OMX BX platform at the start of the system hours. Please note that securities may be halted in the NASDAQ OMX BX system for regulatory or operational reasons.

After the start of system hours, BX will use the Trading Action message to relay changes in trading status for an individual security. Messages will be sent when a stock is halted / paused, is released for quotation, or is released for trading.

STOCK TRADING ACTION MESSAGE						
Name	Offset	Length	Value	Notes		
Message Type	0	1	"H"	Trading Action		
Tracking Number	1	2	Integer	NASDAQ OMX internal tracking number		
Time Stamp	3	6	Timestamp	Time Stamp.		
Issue Symbol	9	8	Alphanumeric	Denotes the security symbol for the issue for which the stock trading action message is being generated. For details on symbology, please refer to Appendix A.		
Security Class	17	1	Alphanumeric	Indicates the primary listing market for the issue. Allowable values are:		

				Code		Value		
					Q		NASDAQ Listed Is	sue
				N		NYSE		
				А		NYSE MKT		
				Р		NYSE Arca		
				Z		BATS		
Current Trading State	18	1	Alphanumeric			urrent trading state fo values are:	or the issue.	
				Code	V	alue		
				Н		alted across all .S. equity markets		
				Ρ	U S	aused across all .S. equity markets / ROs (NASDAQ- sted securities only)		
				Q	Q	uotation only eriod for cross-SRO alt or pause		
				Т	Т	rading on BX		
Reason	19	4	Alphanumeric	code for t	he tr	larket Ops or Market ading state change. r current code list.		

5.2.3 Reg SHO Short Sale Price Test Restricted Indicator

In February 2011, the Securities and Exchange Commission (SEC) implemented changes to Rule 201 of the Regulation SHO (Reg SHO). For details, please refer to <u>SEC Release Number 34-61595</u>. In association with the Reg SHO rule change, NASDAQ introduced the following Reg SHO Short Sale Price Test Restricted Indicator message format.

For NASDAQ-listed issues, NASDAQ supports a full pre-opening spin of Reg SHO Short Sale Price Test Restricted Indicator messages indicating the Rule 201 status for all active issues. NASDAQ also sends the Reg SHO Short Sale Price Test Restricted Indicator message in the event of an intraday status change.

REG SHO RESTRICTION						
Name	Offset	Length	Value	Notes		
Message Type	0	1	"Υ"	Reg SHO Short Sale Price Test Restricted Indicator		
Tracking Number	1	2	Integer	NASDAQ OMX internal tracking number		
Timestamp	3	6	Timestamp	Time at which the market participant position message was generated		
Stock	9	8	Alpha	Stock symbol right padded with spaces.		
Reg SHO Action	17	1	Alpha	Denotes the Reg SHO Short Sale Price Test Restriction status for the issue at the time of the message dissemination. Allowable values are:		

NASDAQ processes orders based on the most Reg SHO Restriction status value.

"0" = No price test in place "1" = Reg SHO Short Sale Price Test Restriction in effect due to an intra-day price drop in security
"2" = Reg SHO Short Sale Price Test Restriction remains in effect

5.2.4 Market-Wide Circuit Breaker (MWCB) Messaging

5.2.4.1 MWCB Decline Level Message

Informs data recipients what the daily MWCB breach points are set to for the current trading day.

MWCB Decline Level Message						
Name	Offset	Length	Value	Notes		
Message Type	0	1	"V″	Market wide circuit breaker Decline Level Message.		
Tracking Number	1	2	Integer	NASDAQ OMX internal tracking number		
Timestamp	3	6	Timestamp	Time at which the MWCB Decline Level message was generated		
Level 1	9	8	Price (8)	Denotes the MWCB Level 1 Value.		
Level 2	17	8	Price (8)	Denotes the MWCB Level 2 Value.		
Level 3	25	8	Price (8)	Denotes the MWCB Level 3 Value.		

5.2.4.2 MWCB Status Message

Informs data recipients when a MWCB has breached one of the established levels

MWCB Breach Message				
Name	Offset	Length	Value	Notes
Message	0	1	"W″	Market-Wide Circuit Breaker Status
Туре				message
Tracking	1	2	Integer	NASDAQ OMX internal tracking
Number				number
Timestam	3	9	Timestamp	Time at which the MWCB Breaker
р				Status message was generated
Breached	9	1	Alphanumeric	Denotes the MWCB Level that was
Level				breached.
				"1" = Level 1
				"2" = Level 2
				"3" = Level 3

5.3 Quotation Message

BX BBO will broadcast a real-time update every time that the exchange's best bid and offer quote is updated during the trading day.

BX BBO Quo	BX BBO QUOTATION MESSAGE			
Name	Offset	Length	Value	Notes
Message	0	1	"Q"	QBBO Quotation Message
Туре				
Tracking	1	2	Integer	NASDAQ OMX internal tracking
Number	_	-		number
Time	3	6	Timestamp	Time stamp
Stamp		0		
Stock	9	8	Alphanumeric	Denotes the BX market center system issue identifier for which the BX BBO quotation message is being generated.
Security Class	17	1	Alphanumeric	Indicates the primary listing market for the stock. The allowable values are as follows:
				Code Value
				Q NASDAQ Listed Issue
				N NYSE
				A NYSE MKT
				P NYSE Arca
				Z BATS
BX Best Bid Price	18	4	Price (4)	Denotes the BX best bid price – the highest price for market buy order(s) in the BX system.
BX Best Bid Size	22	4	Integer	Denotes the aggregated number of shares available for display within the BX market center system at the BX best bid Price.
BX Best Offer Price	26	4	Price (4)	Denotes the BX exchange's best offer price – the lowest price for market sell order(s) in the BX system.
BX Best Offer Size	30	4	Integer	Denotes the aggregated number of shares available for display within the BX market center system at the BX Best Offer Price.

5.4 Price Interest Indicator (PII)

Indicates price improving interest of the Bid, $\ensuremath{\mathsf{Ask}}$ or both the Bid and $\ensuremath{\mathsf{Ask}}$ for a security.

Price Improvement Message				
Name	Offset	Length	Value	Notes
Message Type	0	1	"N″	Price Interest (PI) message
Tracking Number	1	2	Integer	NASDAQ OMX internal tracking number
Time Stamp	3	6	Timestamp	Time stamp
Stock	9	8	Alphanumeric	Denotes the security symbol for the issue in the NASDAQ execution system. Refer to Appendix B for stock symbol convention information.
Interest Flag	17	1	Alphanumeric	"B" = PI orders available on the buy side "S" = PI orders available on the sell side "A" = PI orders available on both sides (buy and sell) "N" = No PI orders available

6 Contact Information

Questions about the BX Basic entitlement and BX BBO specification document may be directed to <u>NASDAQ OMX Global Data Products</u> at +1 301 978 5307.

Questions about BX BBO transmissions may also be directed to <u>NASDAQ OMX Operations</u> <u>Center</u>.

Appendix A

Stock Symbol Convention

For NASDAQ-listed issues, NASDAQ OMX currently restricts its symbol length to a maximum of 8 characters. For common stock issuances, NASDAQ, PSX and BX will only assign root symbols of 1 to 4 characters in length with possible fifth and or sixth character denoting a suffix. In certain instances, a dot "." delimiter may be applied to symbols after the root and between the suffix eg., XXXX.A. For subordinate securities, NASDAQ and BX will assign a 5 character symbol for which the last character relays information about the issue class or issue type. For the current list of fifth and or six character symbol suffixes, please refer to <u>Ticker Symbol Convention</u> page on the NASDAQ OMX Trader website.

For NYSE-, NYSE MKT- and NYSE Arca-listed securities with subordinate issue types, please refer to <u>Ticker Symbol Convention</u> page on the NASDAQ OMX Trader website.

Appendix B

Trading Action Reason Codes

For NASDAQ-listed issues, NASDAQ acts as the primary market and has the authority to institute a trading halt or trading pause in an issue due to news dissemination or regulatory reasons.

For BX-listed issues, NASDAQ OMX BX acts as the primary market and has the authority to institute a trading halt in an issue due to news dissemination or regulatory reasons.

For CQS issues, NASDAQ abides by any regulatory trading halts and trading pauses instituted by the primary or listing market as appropriate.

For all issue types, NASDAQ and/or BX may also halt trading for operational reasons.

NASDAQ and/or BX will send out a trading action message to inform its market participants when the trading status of an issue changes. For informational purposes, NASDAQ and BX also attempt to provide the reason for each trading action update. For bandwidth efficiency reasons, NASDAQ and BX use a 4-byte code for the reason on its outbound data feeds.

REASON CODES FOR TRADING HALT ACTIONS		
Code	Value	
T1	Halt News Pending	
T2	Halt News Disseminated	
T5	Single Security Trading Pause In Affect	
T6	Regulatory Halt — Extraordinary Market Activity	
Т8	Halt ETF	
T12	Trading Halted; For Information Requested by Listing Market	
H4	Halt Non-Compliance	
H9	Halt Filings Not Current	
H10	Halt SEC Trading Suspension	
H11	Halt Regulatory Concern	
LUDP	Volatility Trading Pause	
LUDS	Volatility Trading Pause – Straddle Condition	
MWC1	Market Wide Circuit Breaker Halt – Level 1	
MWC2	Market Wide Circuit Breaker Halt – Level 2	
MWC3	Market Wide Circuit Breaker Halt – Level 3	
MWC0	Market Wide Circuit Breaker Halt – Carry over from previous day	
O1	Operations Halt; Contact Market Operations	
IPO1	IPO Issue Not Yet Trading	
M1	Corporate Action	
M2	Quotation Not Available	
<space></space>	Reason Not Available	

REASON CODES FOR QUOTATION/TRADING RESUMPTION ACTIONS				
Code	Value			
Т3	News and Resumption Times			
T7	Single Security Trading Pause / Quotation Only Period			
R4	Qualifications Issues Reviewed/Resolved; Quotations/Trading to Resume			
R9	Filing Requirements Satisfied/Resolved; Quotations/Trading To Resume			
C3	Issuer News Not Forthcoming; Quotations/Trading To Resume			
C4	Qualifications Halt ended; Maintenance Requirements Met; Resume			
C9	Qualifications Halt Concluded; Filings Met; Quotes/Trades To Resume			

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C11	Trade Halt Concluded By Other Regulatory Auth.; Quotes/Trades Resume
MWCQ	Market Wide Circuit Breaker Resumption
R1	New Issue Available
R2	Issue Available
IPOQ	IPO Security Released for Quotation (NASDAQ and BX Securities Only)
IPOE	IPO Security — Positioning Window Extension (NASDAQ and BX Securities Only)
<space></space>	Reason Not Available

For the current list of regulatory halts, please refer to the <u>Trading Halts page</u> on the NASDAQ OMX Trader website.

Appendix C - Issue Classification Values

Identifies the security class for the issue as assigned by NASDAQ

CODES FOR ISSUE CLASSIFICATION VALUES		
Code	Value	
Α	American Depositary Share	
В	Bond	
С	Common Stock	
F	Depository Receipt	
Ι	144A	
L	Limited Partnership	
Ν	Notes	
0	Ordinary Share	
Р	Preferred Stock	
Q	Other Securities	
R	Right	
S	Shares of Beneficial Interest	
Т	Convertible Debenture	
U	Unit	
V	Units/Benif Int	
W	Warrant	

Appendix D - Issue Sub-Type Values

CODES FOR IS	SSUE CLASSIFICATION VALUES		
Code	Value		
A	Preferred Trust Securities		
AI	Alpha Index ETNs		
В	Index Based Derivative		
С	Common Shares		
СВ	Commodity Based Trust Shares		
CF	Commodity Futures Trust Shares		
CL	Commodity-Linked Securities		
СМ	Commodity Index Trust Shares		
СО	Collateralized Mortgage Obligation		
СТ	Currency Trust Shares		
CU	Commodity-Currency-Linked Securities		
CW	Currency Warrants		
D	Global Depositary Shares		
E	ETF-Portfolio Depositary Receipt		
EG	Equity Gold Shares		
EI	ETN-Equity Index-Linked Securities		
EN	Exchange Traded Notes		
EU	Equity Units		
F	HOLDRS		
FI	ETN-Fixed Income-Linked Securities		
FL	ETN-Futures-Linked Securities		
G	Global Shares		
1	ETF-Index Fund Shares		
IR	Interest Rate		
IW	Index Warrant		
IX	Index-Linked Exchangeable Notes		
J	Corporate Backed Trust Security		
L	Contingent Litigation Right		
LL	Identifies securities of companies that are set up as a Limited Liability		
	Company (LLC)		
Μ	Equity-Based Derivative		
MF	Managed Fund Shares		
ML	ETN-Multi-Factor Index-Linked Securities		
MT	Managed Trust Securities		
Ν	NY Registry Shares		
0	Open Ended Mutual Fund		
Р	Privately Held Security		
PP	Poison Pill		
PU	Partnership Units		
Q	Closed-End Funds		
R	Reg-S		

RC	Commodity-Redeemable Commodity-Linked Securities
RF	ETN-Redeemable Futures-Linked Securities
RT	REIT
RU	Commodity-Redeemable Currency-Linked Securities
S	SEED
SC	Spot Rate Closing
SI	Spot Rate Intraday
Т	Tracking Stock
TC	Trust Certificates
TU	Trust Units
U	Portal
V	Contingent Value Right
W	Trust Issued Receipts
WC	World Currency Option
Х	Trust
Y	Other
Z	Not Applicable
_	

Appendix E

Documentation Version Control Log

December 5, 2014: BX BBO Version 2.00

The BX BBO Specification was updated to include missing Issue Sub-Type Codes (Appendix D):

- AI Alpha Indexes ETNs
- CO Collateralized Mortgage Obligation
- EU Equity Units
- F HOLDRS
- IR Interest Rate
- IW Index Warrant
- J Corporate Backed Trust Security
- PP Poison Pill
- Q Closed -End Funds
- RT REIT
- SC Spot Rate Closing
- SI Spot Rate Intraday
- WC World Currency Option
- X Trust
- Y Other
- Z NA

July 2, 2014: BX BBO 2.00

Released a new version of BX BBO documentation to support the following changes:

• Per Data Technical News #2014-18, added the PII message (Message Type "N")

October 1, 2013: BX BBO 2.00

Released a new version of BX BBO documentation to support the following changes:

Conversion to binary

August 2, 2013: BX BBO Version 2.00

Released a new version of BX BBO documentation to support the following changes:

- Inclusion of the Appendices for Issue Classification and Issue Sub-Type
- Updated offsets in the Symbol Directory Message
- Updated offsets and lengths for the MWCB Decline Level Message
- Renamed the Compliance ID field to TrackingID
- Updated the offsets for the Reg SHO Short Sale Price Test Restricted Indicator

July 10, 2013: BX BBO Version 2.00

- The BX BBO Specification was updated to reflect the following changes:
 - Added Enhanced Symbol Directory
 - Added Market-Wide Circuit Breaker (MWCB) Messaging
 - MWCB Decline Level Message
 - MWCB Status Message
 - Addition of an internal tracking number to multiple messages
 - Addition of 'C' to the Financial Status Indicator field in the Symbol Directory Message

March 11, 2013: BX BBO Version 1.10

NASDAQ OMX added the following Trading Action Reason Code for LULD to reflect when the National Best Bid is below the lower price band and/or the National Best Offer is above than the upper price band and the NMS Stock is not in a Limit State.

• LUDS - Volatility Trading Pause – Straddle Condition

January 9, 2013: BX BBO Version 1.10

- NASDAQ OMX added the following Trading Action Reason Code:
 - MWC0 Market Wide Circuit Breaker Halt Carry over from previous day

January 8, 2013: BX BBO Version 1.10

NASDAQ OMX removed the Trading Action State, "P", from the Stock Trading Message.

November 6, 2012: BX BBO Version 1.10

Released a new version of the BX BBO documentation to support the following changes:

- Added the "P" value to the Trading State in the Stock Trading Message.
- Modified the values for the Trading Action Reason Codes. Added the following codes:
 - LUDP Volatility Trading Pause
 - MWC1 Market Wide Circuit Breaker Halt Level 1
 - \circ $\ \ \,$ MWC2 Market Wide Circuit Breaker Halt Level 2
 - MWC3 Market Wide Circuit Breaker Halt Level 3
 - MWCQ Market Wide Circuit Breaker Resumption
- Removed the Trading State, "V", related to the Volatility Guard Program.

November 1, 2011: BX BBO Version 1.10

NASDAQ OMX updated the Market Category message to include the code Z'' for BATS-listed securities.

July 14, 2010: BX BBO Version 1.10

NASDAQ OMX added a new Regulation SHO Short Sale Price Test Restricted Indicator message format to be introduced in the fourth quarter of 2010.

July 2, 2010: BX BBO Version 1.10

NASDAQ OMX added a new Trading State code value of "V" to the Stock Trading Action message to denote a NASDAQ Volatility Guard trading pause.

May 25, 2010: BX BBO Version 1.10

NASDAQ added two new Trading Action Reason code values (T5 and T7) for single security trading pause situations.

January 26, 2010: BX BBO Version 1.10

Released a new version of the BX BBO documentation to support the following changes:

- Increased length of the symbol field from 6 characters to 8 characters in support of the equity symbology initiative.
- Modified the values for the Market Category / Security Class fields to delineate among NYSE-, NYSE MKT- and NYSE Arca-listed issues.
- Added note to Appendix B to reflect that NASDAQ OMX is reviewing its stock symbol conventions to determine if changes are needed.