FREQUENTLY ASKED QUESTIONS: NASDAQ OMX BX Options

1. When will the BX Options market commence trading?
BX Options will launch on June 29, 2012.

2. What is the priority/execution model on BX Options?
BX Options will support more than one allocation method and priority model. Certain products will trade in price/time priority. Other products will be subject to a pro rata execution allocation with customer priority. The allocation model of a particular product will be listed on the BX Options System Settings webpage. All products will trade using the price/time priority model at launch. At a later date BX Options will file additional rules with the SEC prior to implementing the pro rata allocation model.

3. Can I use the same interface specifications for BX Options, PHLX and NOM?
Yes. NASDAQ OMX’s three U.S. options exchanges share the low latency INET technology architecture and provide customers with a common customer service experience, data input and output across the three exchanges. Common elements include:
   - SQF – Bulk quoting Market Making API that allows up to 200 quotes in one block message.
   - FIX interface – Common FIX Specification for NOM and BX Options.
   - Market Data:
     - Common Top of Book feed across all markets (BONO/TOPO/BX Top)
     - Common depth feed across NOM and BX Options (ITTO and BX Depth)
   - Shared customer and trade support services - +1 215 496-1571 or BXOptions@NASDAQOMX.com
   - NDAQOptions.com (formerly MyPHLX.com) – data portal providing billing and trade detail information.

4. What will be the hours of operation for BX Options?
The daily system timeline is as follows (all Eastern Time):
   7:30 a.m. – System begins accepting orders.
   9:25 a.m. – System begins disseminating imbalance and price information for the opening auction.
   9:30 a.m. – System begins executing orders.
   4:00 p.m. – System stops accepting and executing options orders for options with a “Normal” closing time. (Refer to the Options Closing Type in the symbol directory.)
   4:15 p.m. – System stops accepting and executing options orders with a “Late” closing time. (Refer to the Options Closing Type in the symbol directory.)

5. How will the BX Options Opening Auction work?
The BX Options Opening Auction will be identical to the NOM opening auction. The BX Options Opening Auction will collect all pre-market quotes and orders and match all eligible interest at the price at which any imbalance is minimized and matched contracts are maximized. Beginning at 9:25:00 a.m., ET, indicative prices, paired contract volume and imbalance contract volume will be disseminated every five seconds until the option opens for trading.

BX Options will open an option for trading after 9:30 a.m. in a given symbol if the Market for the Underlying Security has traded and two other options exchanges have quoted to OPRA.
If, however, after these two events occur there is still an imbalance in the BX Options opening auction, one additional imbalance message will be disseminated, giving participants further opportunity to offset any imbalance. The opening auction execution will occur at or within the NBBO.

5.a What will happen to marketable orders if they are not executed in the opening auction?
Once the auction occurs, orders that are marketable against the NBBO, but not executable in the opening auction, will be routed to better-priced away exchanges or posted on the BX Options book (depending on whether they are routable (SEEK or SRCH) or non-routable (Do Not Route – DNR orders).

5.b Why will BX Options wait for two other options exchanges to quote before opening?
BX Options will use the other options exchanges' quotes to build a National Best Bid and Offer (NBBO) on which to bound the opening prices, which provides customers with price protection. The BX Options opening price will not execute outside the NBBO at the time of the opening execution.

5.c What will happen if two other options exchanges never quote?
BX Options will use quotes from other exchanges to build an NBBO on which to set the opening auction prices. In the unlikely event that less than two options exchanges have quoted by 10:15 a.m., ET in a particular option, BX Options will open the market if there are no paired contracts in the auction. If there are paired contracts (i.e. a pending auction execution) and less than two options exchanges have quoted, BX Options will not open that option until there are no longer any paired contracts.

5.d How will BX Options determine the “Market for the Underlying Security”?
The proposed BX Options rules will allow BX Options to define the “Market for the Underlying Security” on an underlying by underlying basis as one of the following: the Primary Listing Market for the underlying, the primary volume market (defined as the market with the most liquidity in that underlying security for the previous two calendar months), or the first market to open the underlying security.

BX Options will use the Primary Listing Market as the “Market for the Underlying Security” for all options. Any changes to this setting will be posted on the BX Options System Settings webpage.

6. Which Time-in-Forces (TIFs) will be accepted on BX Options?
TIFs of Immediate-or-Cancel (IOC), Day, and Good-Til-Cancelled (GTC) will be accepted on BX Options depending on the order type.

7. Will BX Options support All-or-None (AON) orders?
Yes. BX Options will treat AON orders as IOC regardless of the TIF on the order. However, firms may choose to have BX Options reject AON orders with TIFs other than IOC. Please contact NASDAQ OMX Subscriber Services to request AON order rejection.

8. Will BX Options allow a cancel/replace of an order from DAY to GTC?
Yes. BX Options will allow firms to cancel/replace Day orders to GTC orders.

9. Will BX Options support price improvement?
Yes. BX Options will offer Price Improving Orders which are priced within the MPV of an option.

10. How will Price Improving Orders work?
Price Improving Orders are orders entered into the system which are priced within the displayable quote spread. These orders will be placed on the BX Options book at their actual price and represented to the Options Price Reporting Agency (OPRA) and on BX Options market data feeds at the allowable quote.
Incoming orders will receive the price of the resting Price Improving Order when executed. There will be no special instructions needed to enter a Price Improving Order — firms will simply need to price their orders inside the Minimum Price Variation.

Example (non-penny pilot option):
- OPRA display: Bid: 1.00 Offer: 1.05; Size: 10x10
- An order to buy 10 contracts at 1.03 is received by BX Options.
- BX Options places order on the book at 1.03 and displays it at 1.00.
- New OPRA display: Bid: 1.00 Offer: 1.05; Size: 20x10
- An order to sell 10 contracts at 1.00 is received.
- BX Options executes the sell order against the Price Improving Order at 1.03. The seller receives price improvement immediately and automatically.

11. What participants are eligible to receive price improvement?
Price improvement will be available to all participants on BX Options.

12. How will BX Options handle orders it receives that would lock or cross the BX Options book or the National Best Bid and Offer (NBBO)?
If BX Options receives an order that would lock or cross a quote or order on the BX Options book, it will immediately execute. If the order would not lock or cross BX Options, but would lock or cross another exchange, BX Options will route the order to that exchange. If BX Options receives an order that would lock or cross the NBBO and it is marked Do Not Route (DNR), BX Options will place the order on the book at the locking price and display it at the next allowable Minimum Price Variation (MPV).

13. What is Order Price Protection (“Fat Finger”)?
Order Price Protection (“Fat Finger”) provides protection for orders that are egregiously mis-priced. If an order is received and it is priced through the NBBO by a defined percentage upon receipt, the order will be rejected.

14. What are the Order Price Protection settings on BX Options?
The BX Options Order Price Protection settings will be identical to the NOM and PHLX Order Price Protection settings:

<table>
<thead>
<tr>
<th>Order Type</th>
<th>NBO Value (for buys) or NBB Value (for sells)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy Limit</td>
<td>(100% * NBO) + NBO</td>
</tr>
<tr>
<td>Sell Limit</td>
<td>No Threshold</td>
</tr>
</tbody>
</table>

15. What is Acceptable Trade Range (ATR)?
Acceptable Trade Range (ATR) places a limit on the range of prices at which an order can execute. When an ATR is reached, the order will be posted at the ATR price for a limited period of time. Once that time has passed, the order will execute further to the next ATR level. Firms have the option of having their orders cancelled after an order has reached an ATR limit.

16. What are the ATR settings?
Please refer to the System Settings document posted on the BX Options webpage.
17. Will BX Options offer self trade prevention?
Yes. BX Options will offer AIQ which is a self trade prevention mechanism for Market Makers. When a Market Maker sends an SQF Sweep, it will never trade against a resting quote for the same Market Maker. Instead, the resting quote will be purged.

18. Will risk protection functionality be available?
Yes, BX Options will offer the same Rapid Fire Risk Monitor Mechanism that is offered on the PHLX and NOM trading systems. Rapid Fire and Purge will be available for all market making interest entered over SQF based on a firm’s participant ID.

19. Will BX Options offer order routing?
Yes. BX Options orders may be marked as Do Not Route (NSDQ or DNR), SEEK, or SRCH.

20. How will the “SEEK” routing strategy work?
If an order is marketable upon entry (i.e. it is priced at or more aggressively than the prevailing NBBO), the order will check the BX Options book at the price of the NBBO. If the order is not fully executed it will route to other exchanges at the NBBO. Once the order posts on the BX Options book at its limit price, it will not be re-routed.

21. How will the “SRCH” routing strategy work?
If an order is marketable upon entry (i.e. it is priced at or more aggressively than the prevailing NBBO), the order will check the BX Options book at the price of the NBBO. If the order is not fully executed it will route to other exchanges at the NBBO. Once the order posts on the BX Options book at its limit price, if an away exchange locks or crosses its price, it will re-route to the exchange locking or crossing its price.

22. Will BX Options have a complex order book?
No. BX Options will not support complex orders.

23. Can firms that are not Market Makers enter orders on both sides of the market?
Yes. All BX Options members will be allowed to enter orders on both sides of the market (i.e. simultaneous buys and sells).

24. What are the Customer order exposure requirements on BX Options?
Firms must expose customer orders for one second before trading against them, as described in the proposed BX Options rules. Firms will be able to use the “WAIT” order type to facilitate this exposure period. The firm must enter both the customer order and the firm/Market Maker order separately and simultaneously and mark the firm/Market Maker order as a “WAIT” order. The system will hold the firm/Market Maker order for one second before sending it to the matching engine. If the customer order is not already executed and there are no other orders with higher priority, the firm/Market Maker order will execute against the customer order. The “WAIT” modifier is not intended to be used on the customer side of the transaction. See FAQ #31 for instructions on how to enter a WAIT order.

25. How will firms reconcile open Good-Til-Cancelled (GTC) orders on a daily basis?
A daily open order report will be available to firms for reconciliation of open GTC orders. The report is available in the same format as the NOM Open Order report.

26. What interface will be used for order entry?
Order Entry Firms will use the FIX interface to send orders to BX Options.

27. What interfaces will be used for market making?

© Copyright 2012, The NASDAQ OMX Group, Inc. All rights reserved. Updated June 28, 2012.
Market Making firms may use SQF, a highly efficient bulk quoting interface that allows Market Makers to enter up to 200 quotes in one message.

28. How will firms mark their orders as “Do Not Route?”
Order Entry Firms using FIX that want to mark an order as “Do Not Route” should populate the “ExecBroker” field (Tag 76) with “DNR”. SQF sweeps are never routable.

29. How will firms mark their orders as routable?
Firms should populate the “ExecBroker” field (FIX Tag 76) with “SEEK” or “SRCH” if they want their order to be routed when/if there are better prices available on other exchanges.

SQF sweeps cannot be routed. Market Makers who wish to take advantage of the BX Options routing functionality must use the FIX interface.

30. What interfaces will support Order Price Protection?
The FIX order entry interface supports Order Price Protection. Refer to question #13.

31. How will a firm designate an order as “WAIT?”
Firms should populate the “ExecBroker” field (FIX tag 76) with “WAIT”.

32. How should my firm populate the participant type (FIX Tag 47 Rule 80A/OrderCapacity) on FIX orders?
Firms must populate FIX Tag 47 Rule 80A/OrderCapacity properly. Below is a table of the current values. Please refer to the FIX spec:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>OCC Clearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Public Customer i.e. Non-professional, non-broker-dealer</td>
<td>Clears as Customer</td>
</tr>
<tr>
<td>B</td>
<td>Broker-Dealer Order</td>
<td>Clears as Customer</td>
</tr>
<tr>
<td>F</td>
<td>Firm – OCC member Broker-Dealer Proprietary</td>
<td>Clears as Firm</td>
</tr>
<tr>
<td>M</td>
<td>NOM Registered Market Maker</td>
<td>Clears as Market Maker</td>
</tr>
<tr>
<td>O</td>
<td>Away Exchange Registered Market Maker</td>
<td>Clears as Market Maker</td>
</tr>
<tr>
<td>P</td>
<td>Professional, non-broker-dealer</td>
<td>Clears as Customer</td>
</tr>
</tbody>
</table>

33. What interfaces will be available to clearing firms for drop copy / clearing information?
BX Options will offer Drop Copies and the Clearing Trade Interface.

**CTI** – BX Options offers the same Clearing Trade Interface (CTI) that is offered on NOM and PHLX, which provides firms with a copy of executions that contain information similar to what is sent to the OCC for clearing. CTI messages include all details necessary to determine the fee or rebate incurred on the transaction.
DROP Copies – BX Options will provide drop copies of all executions that occur on BX Options. The drop copies will be provided via a flexible configuration — per clearing member number, by participant MPID or by participant port.

34. How can firms associate BX Options executions with the OCC Trade Capture Report output? The "Token" field in a BX Options execution message will equate to the "Order-Token" field provided on the order when it was originally submitted to BX Options ("ClOrdID" in FIX, Order ID in CTI).

This field is passed through to the OCC in the “ClOrdID” field of the OCC trade record and can be used to identify executions associated with particular orders submitted to BX Options.

35. Which field should be used if the entering firm would like to use a CMTA to clear the trade to a different clearing firm? The CMTA clearing number can be entered in the “ClearingFirm” field (FIX tag 439).

36. Which FIX Field corresponds to “Sub Account/Position Account” on the OCC Trade Record? “Sub Account/Position Account” is sometimes referred to as “Market Maker ID” or “Badge #” and is usually a three-character alpha-numeric acronym. The “Clearing Account” field (FIX Tag 440) corresponds to the OCC “Sub Account/Position Account” field.

37. How can firms perform post-trade allocations or transfers for trades executed on BX Options? BX Options offers the Options Maintenance Tool to firms that need to perform post-trade allocations or transfers. Firms can subscribe to the Options Maintenance Tool by completing the NASDAQ OMX Front-End Access Order Form and faxing it to NASDAQ OMX Subscriber Services at +1 212 231 5426 or by calling +1 212 231 5180, option 3.

38. Where will I be able to get a summary of my firm’s billing? This feature is coming soon. The NDAQOptions.com website will provide firm-specific execution and invoice data. Historical information will include accounting reports such as billing invoices and invoice charge details. Please contact NDAQOptions@nasdaqomx.com to gain access.

39. What are the Market Maker requirements on BX Options? Market Makers should refer to Chapter VII of the proposed BX Options rules for Market Maker obligations. In summary, Market Makers have several obligations:

- Provide continuous two-sided liquidity for options overlying the securities for which the market maker is registered.
  - Provide a two-sided quote in 60% of the series in options in which a Market Maker is registered.
  - In a given series, provide a two-sided quote 90% of the time.
  - Except: Market Makers are not required to provide two-sided quotes in options with an expiration that is greater than nine months away, quarterly options, or options with a non-standard contract
  - Maximum quote width of $5.
- Participate in the BX Options open.
- Ensure that at least 75% of the Market Maker’s trading activity on BX Options is in options in which they are registered as a MM on BX Options each quarter.

40. Can BX Options Market Makers register by series? No. BX Options Market Makers will register by underlying.
41. Is the requirement to quote at least 60% of the series in which a Market Maker is registered per underlying or aggregate?
The requirement is aggregate across all underlyings.

42. Will Market Makers have a maximum quote width requirement at the open?
Yes, the $5 maximum quote width requirement will apply at all times. Quotes with a width wider than $5 will not be considered valid quotes and do not satisfy quoting obligations. Quotes with a width wider than $5 will not be rejected.

43. Will there be any volume restrictions for Market Makers on BX Options?
At least 75% of a Market Maker’s volume must be in options in which they are registered. Please review Chapter VII of the proposed BX Options rules which discusses Market Maker obligations and requirements.

44. Can a Market Maker or specialist on another exchange send BX Options orders with a capacity of “M”?
Away exchange registered Market Makers (i.e. not BX Options Market Makers) who send orders to BX Options must populate FIX Tag 47 (Rule80A/OrderCapacity) with “O”.

Additionally, Market Maker firms should be sure to populate the “Clearing Account” field with their Market Maker sub-account ID (sometimes referred to as “Badge #” or “Market Maker ID”).

45. What risk protection functionality will be available?
BX Options will offer the same Rapid Fire Risk Monitor Mechanism that is offered on the PHLX and NOM trading systems. The Rapid Fire Risk Monitor Mechanism cancels (purges) all market making interest entered over SQF, for a given participant ID, if/when certain execution thresholds are met for that participant.

46. How will NASDAQ OMX BX Options be represented by the Options Price Reporting Authority (OPRA)?
The OPRA Participant Code will be “T”. Please see the following link for full details:
http://www.opradata.com/specs/OMX_BX_032712.pdf

47. What is the blue sheet code for BX Options?
The blue sheet code will be “F” for BX Options.

48. Does BX Options have a Market Identifier Code (MIC)?
Yes, the BX Options MIC is XBXO.

49. Will BX Options offer market data products/feeds?
Yes, BX Options will offer the following proprietary data feeds:

**BX Options Top Of Market (BX Top)** – Disseminates the BX Options Best Bid and Offer information as well as BX Options last sale information — the same information BX Options will report to OPRA. By subscribing to BX Top directly from BX Options, participants can eliminate any extra transmission and processing latencies introduced by the securities information processor. BX Top is identical to the NOM and PHLX Top of Market data feeds.*

**BX Depth of Market (BX Depth)** – Designed to provide full order depth of BX Options using a series of order messages to track the life of an order. BX Depth will also support last sale information and Net
Order Imbalance data for the BX Options opening auction. BX Depth is identical to the NOM ITTO data feed.

**BX Options Glimpse** – A complement to BX Depth, this is a point to point data feed connection that provides direct data feed customers with the current state of the BX Options Book.

*Note: The new version of TOPO (v3) is identical to BONO and BX Top. The prior version of TOPO is formatted differently and will be retired this year.

There will be no initial distributor fees for BX Options Market Data.

50. **What testing opportunities are available?**

BX Options testing is available daily in the Options Test Facility.

In order to access the Test Facility, firms should complete the [BX Options Port Request Form](#) and submit it to NASDAQ OMX Subscriber Services via fax at +1 212 231 5426. Once the port is configured and connectivity is established, firms should contact [NASDAQ OMX Trading Services](#) at +1 212 231 5100 to coordinate the testing.

51. **What methods can a Participant use to submit Contrary Exercise Advice notices?**

A Contrary Exercise Advice (CEA) may be submitted by a Participant by using the Clearing Corporation’s ENCORE system, a CEA form of any other national securities exchange of which the firm is a Participant and where the option is listed, or by sending an email to [BXOptionsSurveillance@nasdaqomx.com](mailto:BXOptionsSurveillance@nasdaqomx.com).

Refer to Chapter VIII, Section 1 in the proposed BX Options rules for CEA cut-off times.

52. **How does a firm become a BX Options participant?**

The BX Options membership process will mirror current practices on The NASDAQ Stock Market and NOM. Firms wishing to participate on BX Options will need to follow the membership application guidelines below. All applications should be accompanied by a clearing Letter of Guarantee. Firms that are not Self-Clearing need to complete this Letter of Guarantee. Self-Clearing firms need to complete this Letter of Guarantee.

Please note: the Membership Department will be accepting membership applications immediately, but the rules of BX Options are subject to filing and approval by the SEC.

- **NASDAQ OMX BX equities exchange members**
  NASDAQ OMX BX members wishing to participate in the new BX Options market will be required to submit a [BX Options Participant Application and Agreement](#).

- **Broker-dealers who are members of FINRA or NASDAQ**
  Broker-dealers who are already members of FINRA and/or NASDAQ, but not NASDAQ OMX BX members, will qualify for the short form [NASDAQ OMX BX membership application](#).

- **Broker-dealers who are not members of NASDAQ OMX BX, FINRA, or NASDAQ**
  Applicants who are not already approved for membership with FINRA and/or NASDAQ will be required to submit a [full membership application](#). This is the same as the processes in place today for membership on NASDAQ and NOM.

Please submit applications to the NASDAQ OMX Membership Department:
ATTN: Deborah Siluk  
NASDAQ OMX BX  
Membership Department  
1735 K Street, NW  
Washington, DC 20006-1506

BX Membership Application Processing  
Fax: +1 202 728 8341  
Documents may also be submitted in PDF format via email to:  
Membership@nasdaqomx.com

53. Who can I contact for real time trade and technical support?  
BX Options Market Operations: +1 215 496-1571 or BXOptions@NASDAQOMX.com.

54. Where can I find additional information?  
For additional information:  
Visit the BX Options webpage: www.nasdaqomxtrader.com/bxoptions  
Contact Transaction Services, U.S. Market Sales via email or at +1 800 846 0477.