

The background of the slide is a photograph of the New York Stock Exchange building. The image shows the grand neoclassical facade with its prominent portico supported by tall, fluted columns. Three American flags are flying on poles in front of the columns. The text is overlaid on this image.

Market Making on NYSE Arca, NYSE American, NYSE National and/or NYSE

April 2023

This Orientation is to be completed by individuals applying for MT registration and employed by a NYSE Arca ETP Holder, NYSE American ETP Holder, NYSE National ETP Holder, or NYSE member organization (each, a “Member Firm”).

NYSE Arca, Inc. (“NYSE Arca”), NYSE American LLC (“NYSE American”), NYSE National, Inc. (“NYSE National”), New York Stock Exchange LLC (“NYSE”) (each, an "Exchange" and collectively, the “Exchanges”)



PART 1: MARKET MAKER ACCESS,
OBLIGATIONS AND REQUIREMENTS

BECOMING PART OF THE MARKETPLACE

- The NYSE is synonymous with global finance. It's the world's most trusted equities exchange, with a market model designed to deliver optimal market quality to large corporates and investors. The NYSE is the only exchange with a unique model which combines state-of-the-art technology with a human being at the point of sale — which together delivers the lowest levels of volatility and deepest pool of liquidity. During global events, turmoil and volatility, investors turn to the NYSE.
- Both the fully-electronic NYSE Arca and NYSE National trade more than 8,000 exchange-listed equity securities—including listings on Nasdaq and Bats. Traders that use the open, direct, anonymous NYSE Arca Equities platform will make rapid, efficient, electronic executions in multiple U.S. market centers. NYSE Arca's distinct market structure provides significant transparency, tremendous speed, and both displayed and dark liquidity. NYSE Arca and NYSE National Member Firms also get access to innovative order types, aggressive pricing, ultra-low-latency and opening and closing auctions.
- NYSE American is a competitively priced venue that blends unique features derived from the NYSE, such as electronic Designated Market Makers (e-DMMs) with quoting obligations for each NYSE American-listed company, with NYSE Arca's fully electronic price/time priority execution model.

MARKET MAKER OBLIGATIONS

Market Makers must maintain continuous, two-sided quotes for each security in which the firm is registered as set forth by the parameters in NYSE Rule 7.23, NYSE American Rule 7.23E, NYSE Arca Rule 7.23-E, or NYSE National Rule 7.23 (as applicable)

- NYSE Arca Lead Market Makers must also meet minimum performance requirements which include a BBO requirement, minimum displayed size, minimum quoted spread and participation requirements for opening and closing auctions
 - Performance requirements will be determined by NYSE Arca and detailed in the LMM Requirements document.
https://www.nyse.com/publicdocs/nyse/products/etp-funds/LMM_Requirements.pdf

Market Makers may apply to the Exchange(s) to withdraw temporarily from its Market Maker status

- Request must be based on demonstrated legal or regulatory requirements that necessitate temporary withdrawal
- Inform NYSE Regulation by emailing: mmquoterelief@ice.com

INFORMATION BARRIER PROCEDURES

- Member Firms may engage in other business activities, or they may be affiliated with a broker-dealer that does, only if there is an Information Barrier between the market making activities and the other business activities
- Every Member Firm must establish, maintain, and enforce written policies and procedures reasonably designed to prevent the misuse of material, non-public information by such Member Firm or persons associated with such Member Firm
- Any Member Firm or associated person who becomes aware of a possible misuse of material, non-public information must promptly notify regulatory-nyse-surveillancedevelopment@ice.com.

SECURITY TERMINATION AND SUSPENSION

- The Exchange(s) may terminate a Market Maker's registration in a security if the Market Maker fails to enter quotations in the security within five business days after registration becomes effective
- The Exchange(s) may suspend or terminate the Market Maker's registration in a security or securities whenever, in the Exchange(s)'s judgment, required Market Maker obligations are not met
- A Market Maker may voluntarily terminate its registration in a security by providing the Exchange(s) with a one-day written notice

ABOUT MMATS

- A Market Maker Authorized Trader (MMAT) is an Authorized Trader that performs market making activities in accordance with NYSE Rule 7, NYSE American Rule 7E, NYSE Arca Rule 7-E, or NYSE National Rule 7, as applicable
- Must be an officer, partner, employee, or another associated person of a Market Maker, who is properly qualified to perform market making activities and has been trained and certified in the use of the Exchange(s) systems
- Must be Series 57 registered or be approved for a waiver of the Series 57
- May only submit orders for the account of its own Market Maker
- The Exchange(s) may suspend the registration of an MMAT for failure to comply with Exchange(s) and/or SEC Rules
- The Market Maker may withdraw the registration of an MMAT upon written request to the Exchange(s) and a filing of a U5 via FINRA's Web CRD

- Symbol additions and/or removals should be requested via email to crs@nyse.com.
- Please include the symbol list as an Excel attachment, or column within the email. No spaces, commas, or other delimiters.

Format as follows:

MMID	MM Type	Symbol
------	---------	--------

- Symbol add/remove requests should be submitted prior to 5pm Eastern and will be effective for the next trading day.



PART 2: ORDER TYPES AND ORDER PROCESSING

ORDER TYPES

Order Types and Modifiers

- https://www.nyse.com/publicdocs/NYSE_Pillar_Binary_Gateway_Order_Type_Matrix.pdf
- NYSE - <https://nyseguide.srorules.com/rules/356006167dad100084e2000d3a8abb4e01>
- NYSE American - <https://nyseamericaguide.srorules.com/rules/619b0c167cb91000a15090b11c18cbab041>
- NYSE Arca - <https://nysearcaguide.srorules.com/rules/b44a1e347ccd1000af3290b11c2ac4f10258>
- NYSE National - <https://nysenationalguide.srorules.com/rules/2e3576107d0710009d9490b11c18c902023>
- NYSE Chicago - <https://nysechicagoguide.srorules.com/rules/9695fab87d6b1000a534005056885db603>

Order Types Executed Usage

- https://www.nyse.com/publicdocs/nyse/NYSE_Group_Executed_Order_Type_Usage.xlsx

NYSE Auctions

- Opening Auction
 - <https://nyseguide.srorules.com/rules/356006347dad1000a15d000d3a8abb4e02>
- Closing Auction
 - <https://nyseguide.srorules.com/rules/9f1695867d5110008049005056881d2303>

NYSE Arca Auctions

- Opening and Closing Auction
 - <https://nysearcaguide.srorules.com/rules/b44a1e847ccd1000908090b11c2ac4f1025c>

NYSE American Auctions

- Opening and Closing Auction
 - <https://nyseamericanguide.srorules.com/rules/619b0c5c7cb91000a50d90b11c18cbab045>

Order Ranking and Display (NYSE Rule 7.36, NYSE American Rule 7.36E, NYSE Arca Rule 7.36-E, and/or NYSE National Rule 7.36)

Order Ranking

- "Display Price" means the price at which a Limit Order is displayed, which may be different from the limit price or working price of the order
- "Limit Price" means the highest (lowest) specified price at which a Limit Order to buy (sell) is eligible to trade
- "Working Price" means the price at which an order is eligible to trade at any given time, which may be different from the limit price or display price of the order
- "Working Time" means the effective time sequence assigned to an order for purposes of determining its priority ranking
- "Aggressing Order" means a buy (sell) order that is or becomes marketable against sell (buy) interest on the Exchange Book or NYSE Arca Book (as applicable) or NYSE Arca Book (as applicable). A resting order may become an Aggressing Order if its working price changes, if the PBBO or NBBO is updated, because of changes to other orders on the Exchange Book or NYSE Arca Book (as applicable) or NYSE Arca Book (as applicable), or when processing inbound messages.

NYSE Only

- “Discretionary price” means the undisplayed price at which a D Order would trade if it exercises discretion.
- “Participant” means, for purposes of parity allocation, a Floor broker trading license (each, a “Floor Broker Participant”), the DMM assigned to the security (“DMM Participant”), or orders collectively represented in the Exchange Book or NYSE Arca Book (as applicable) that have not been entered by a Floor broker or DMM (“Book Participant”). An order entered by a Floor broker is eligible to be included in the Floor Broker Participant if:
 - such order is entered by a Floor broker while on the Trading Floor;
 - such order is not entered for the account of the member organization, the account of an associated person, or an account with respect to which the member, member organization, or an associated person exercises investment discretion, unless such order is entered pursuant to Rule 134(d) – (j); and
 - the member organization with which such Floor broker is associated engages in a Floor broker business in Exchange-listed securities.

Display

- The Exchange(s) displays all non-marketable Limit Orders, unless the order or modifier instruction specifies that all or a portion of the order is not to be displayed.
- An order is considered displayed for ranking purposes if the price, side, and size of the order are disseminated via a market data feed. Odd-lot sized Limit Orders and the displayed portion of Reserve Orders are considered displayed for ranking purposes
- All non-marketable displayed Limit Orders will be displayed on an anonymous basis.
- For NYSE Arca, except as otherwise permitted by Rule 7.7-E, all non-marketable displayed Limit Orders will be displayed on an anonymous basis
- The best-ranked non-marketable displayed Limit Order(s) to buy and the best ranked non-marketable displayed Limit Order(s) to sell in the Exchange Book or NYSE Arca Book (as applicable) or NYSE Arca Book (as applicable) and the aggregate displayed size of such orders associated with such prices will be collected and made available to quotation vendors for dissemination pursuant to the requirements of Rule 602 of Regulation NMS under the Exchange Act. If non-marketable odd-lot sized orders at multiple price levels can be aggregated to equal at least a round lot, such odd-lot sized orders will be displayed as the best ranked displayed orders to sell (buy) at the least aggressive price at which such odd-lot sized orders can be aggregated to equal at least a round lot

Priority Categories

- At each price point, all orders are assigned a priority category. If at a price point there are no orders in a priority category, the next priority category has first priority.
- Priority 1 - Market Orders: Unexecuted Market Orders have priority over all other same-side orders with the same working price
- Priority 2 - Display Orders: Non-Marketable Limit Orders with a displayed working price have second priority
- Priority 3 - Non-Display Orders: Non-Marketable Limit Orders for which the working price is not displayed, including reserve interest of Reserve Orders, have third priority
- Priority 4 - Tracking Orders: Tracking Orders have fourth priority (NYSE Arca, NYSE American, and NYSE National only)
- Priority 4 – Yielding Orders Display: Yielding Orders have fourth priority (NYSE only)
- Priority 5 – CCO: CCOs have fifth priority (NYSE only)

Time

- Within each priority category, orders are ranked based on time priority.
- An order is assigned a working time based on its original entry time, which is the time when an order is first placed in the Exchange Book or NYSE Arca Book (as applicable)
- An order that is fully routed to an Away Market on arrival is not assigned a working time unless and until any unexecuted portion of the order returns to the Exchange Book or NYSE Arca Book (as applicable)
- For an order that is partially routed to an Away Market on arrival, the portion that is not routed is assigned a working time. Other than as provided for in NYSE Rule 7.36(f)(1)(B), NYSE American Rule 7.36E(f)(1)(B), NYSE Arca Rule 7.36-E(f)(1)(B), or NYSE National Rule 7.36(f)(1)(B), if any unexecuted portion of the order returns to the Exchange Book or NYSE Arca Book (as applicable) and joins any remaining resting portion of the original order, the returned portion of the order is assigned the same working time as the resting portion of the order. If the resting portion of the original order has already executed and any unexecuted portion of the order returns to the Exchange Book or NYSE Arca Book (as applicable), the returned portion of the order is assigned a new working time.

Time (Cont.)

- An order is assigned a new working time any time the working price of an order changes
- An order is assigned a new working time if the size of an order increases
- An order retains its working time if the size of the order decreases
- An order retains its working time if the order marking is changed from: (A) sell to sell short; (B) sell to sell short exempt; (C) sell short to sell; (D) sell short to sell short exempt; (E) sell short exempt to sell; and (F) sell short exempt to sell short

Ranking Restrictions

- The Exchange will enforce ranking restrictions applicable to specific order or modifier instructions as provided for in NYSE Rule 7.31, NYSE American Rule 7.31E, NYSE Arca Rule 7.31-E, or NYSE National Rule 7.31, as well as NYSE Rule 7.44 or NYSE Arca Rule 7.44-E relating to the Retail Liquidity Program.
- For NYSE Arca, within each priority category, orders are ranked based on time priority.

Order Execution and Routing (NYSE Rule 7.37, NYSE American Rule 7.37E, NYSE Arca Rule 7.31-E, NYSE National Rule 7.37)

Order Execution

- Subject to the following, on NYSE, an Aggressing Order will be matched for execution against contra-side orders in the Exchange Book as provided for in paragraph (b) of NYSE Rule 7.37(b), and on NYSE American, NYSE Arca, and NYSE National, an incoming marketable order will be matched for execution against contra-side orders in the Exchange Book or NYSE Arca Book (as applicable) according to the price-time priority ranking of the resting orders:
 - Orders that are routed to an Away Market on arrival will not be assigned a working time or matched for execution on the Exchange Book or NYSE Arca Book (as applicable)
 - Unless an order qualifies for an exception from the Order Protection Rule in Rule 611 of Regulation NMS, an order will not trade at prices that trade through a protected quotation
 - Limit Orders will be executed at prices that are equal to or better than the PBBO
 - Market Orders will be executed at prices that are equal to or better than the NBBO

Routing

- Unless an order has an instruction not to route, after being matched for execution with any contra-side orders in the Exchange Book or NYSE Arca Book (as applicable) pursuant to NYSE Rule 7.37(a), NYSE American Rule 7.37E(a), NYSE Arca Rule 7.37-E(a), or NYSE National Rule 7.37(a), marketable orders will be routed to Away Market(s).
- An order that cannot meet the pricing parameters of NYSE Rule 7.37(a), NYSE American Rule 7.37E(a), NYSE Arca Rule 7.37-E(a), or NYSE National Rule 7.37(a) may be routed to Away Market(s) before being matched for execution against contra-side orders in the Exchange Book or NYSE Arca Book (as applicable)
- If an order with an instruction not to route would trade through or lock or cross a protected quotation and is not eligible for an exception to Rule 610 or 611 of Regulation NMS, it will cancel, re-price, or be held undisplayed on the Exchange Book or NYSE Arca Book (as applicable), as provided for in NYSE Rule 7.31, NYSE American Rule 7.31E, NYSE Arca Rule 7.31-E, NYSE National Rule 7.31, or in NYSE Rule 7.44 or NYSE Arca Rule 7.44-E relating to the Retail Liquidity Program.
- For NYSE Arca and NYSE National, orders eligible to route, will be routed to all available Away Markets unless the order includes an instruction to bypass Away Markets that are not displaying protected quotations

Routing (Cont.)

- Limit Orders that are routed to Away Market(s) may be routed to more than one price level, up (down) to the limit price of an order to buy (sell)
- Except for orders routed to the primary listing market on arrival pursuant to NYSE Rule 7.34, NYSE American Rule 7.34E, NYSE Arca Rule 7.34-E, or NYSE National Rule 7.34 or designated to route to the primary listing market pursuant to NYSE Rule 7.31, NYSE American Rule 7.31E, NYSE Arca Rule 7.31-E, or NYSE National Rule 7.31, orders routed to Away Market(s) will be sent as IOC ISOs
- Any order or portion thereof that has been routed is not eligible to trade on the Exchange Book or NYSE Arca Book (as applicable) , unless all or a portion of the order returns unexecuted
- An order marked "short" when a short sale price test restriction is in effect will not be routed

ORDER EXECUTION AND ROUTING (CONT.)

Requests to cancel an order that has been routed will be processed as follows:

- For orders that are eligible to be matched for execution against orders in the Exchange Book or NYSE Arca Book (as applicable) , the request to cancel will not be processed unless and until all or a portion of the order returns unexecuted
- For orders routed to the primary listing market on arrival pursuant to NYSE Rule 7.34, NYSE American Rule 7.34E, NYSE Arca Rule 7.34-E, or NYSE National Rule 7.34 or designated to route to the primary listing market pursuant NYSE Rule 7.31, NYSE American Rule 7.31E, NYSE Arca Rule 7.31-E, or NYSE National Rule 7.31, the request to cancel will be routed to the primary listing market
- For MOC Orders or LOC Orders in NYSE-listed securities, requests to cancel or reduce in size that are electronically entered after the “Closing Auction Imbalance Freeze Time” specified in NYSE Rule 7.35(a)(7) will be rejected

TRADING SESSIONS

Early Trading Session

- NYSE (Tapes B & C), NYSE American, NYSE National: Will begin at 7:00 a.m. Eastern Time and conclude at the commencement of the Core Trading Session. Exchange will begin accepting orders 30 minutes before the Early Trading Session begins.
- NYSE Arca: Will begin at 4:00 a.m. ET and conclude at the commencement of the Core Trading Session. Exchange will begin accepting orders 90 minutes before the Early Trading Session begins. The Early Open Auction will begin the Early Trading Session.

Core Trading Session

- Will begin for each security at 9:30 a.m. Eastern Time and end at the conclusion of Core Trading Hours or the Core Closing Auction (as applicable), whichever comes later. The Core Open Auction (as applicable) will begin the Core Trading Session.

Late Trading Session

- Will begin following the conclusion of the Core Trading Session and conclude at 8:00 p.m. Eastern Time. (NYSE Arca, NYSE American, and NYSE National only)

CLEARLY ERRONEOUS POLICY

Member Firms that receive an execution on the Exchange(s) that they consider to be erroneous may request a review of the transaction(s):

- Review requests must be submitted via the website “Customer Submission for Clearly Erroneous Execution Review” <https://www.nyse.com/cee>
- If the website is not accessible, Member Firms may submit a request via email to CEE@nyse.com
- The request must be submitted within thirty (30) minutes of the execution time
- Once the request has been received, a review of the execution(s) will be conducted and a determination will be made as to whether or not the execution(s) submitted for request are clearly erroneous pursuant to NYSE Rule 7.10, NYSE American Rule 7.10E, NYSE Arca Rule 7.10-E, or NYSE National Rule 7.10

TRADING AHEAD OF CUSTOMER LIMIT ORDERS

- No Member Firm may accept and hold an unexecuted limit order from its customer (whether its own customer or a customer of another Member Firm) and continue to trade the security on the Exchange(s) for its own account at prices that would satisfy the customer's limit order, without executing that limit order.
- A Member Firm may negotiate specific terms and conditions applicable to the acceptance of limit orders only with respect to limit orders that are for institutional customer accounts (10,000 shares or more, unless such orders are less than \$100,000 in value).

CLEARANCE AND SETTLEMENT

- Each Member Firm must be a clearing firm, clear transactions on the Exchange(s) through a clearing firm, or clear transactions through an entity duly authorized by the Exchange(s)
- Clearing firm must be a Member Firm
- A Member Firm must identify the clearing firm through which each transaction on the Exchange(s) will be cleared
- If there is a subsequent change in identity of the clearing firm through whom the transaction on the Exchange(s) will be cleared, the Member Firm shall report such change at least five (5) business days in advance to crs@nyse.com

COMMUNICATION, EQUIPMENT REQUIREMENTS AND RTO

- Every Member Firm must have reasonable procedures to ensure that it maintains the physical security of the equipment for accessing the Exchange(s)
- Member Firms must identify the means of connection as well as the intended use of the connection on the NYSE Pillar Connectivity Questionnaire (CQ)
- Member Firms registered as Market Makers must have adequate written policies and procedures and systems in place to ensure compliance with the quoting obligations set forth in NYSE Rule 7.23(a)(1)(B), NYSE American Rule 7.23E(a)(1)(B), NYSE Arca Rule 7.23-E(a)(1)(B), or NYSE National Rule 7.23(a)(1)(B). Failure to meet the quoting obligations set forth in the relevant rule may result in disciplinary action.

REGULATION

- Member Firms must include their Market Maker ID (MMID) in order for their market making interest to receive credit for satisfying the “Two-Sided Obligation” as set forth in NYSE Rule 7.23, NYSE American Rule 7.23E, NYSE Arca Rule 7.23-E, or NYSE National Rule 7.23
 - Market Makers that connect using NYSE Pillar Gateway FIX must include their MMID in FIX Tag 50.
(https://www.nyse.com/publicdocs/NYSE_Pillar_Gateway_FIX_Protocol_Specification.pdf)
 - Market Makers that connect using NYSE Pillar Gateway Binary must include the integer representation of their MMID in the “MMID” field.
(https://www.nyse.com/publicdocs/NYSE_Pillar_Gateway_Binary_Protocol_Specification.pdf)
- Member Firms registered as Market Makers should immediately inform NYSE Regulation of any issues that result in the inability to fulfill their obligations as Market Makers on the Exchange(s) (mmquoterelief@ice.com)

SIGNATURE PAGE

I, _____, confirm that I reviewed and that I understand the policies and procedures set forth in the Exchange's Market Maker Orientation Training Program.

Name (Sign)

CRD Number

Firm

Date

**Member Firm is responsible for maintaining a copy of this completed Market Maker Orientation.*