

## Overview

Midpoint Discretionary Order (MDO) is a blended order type that incorporates the characteristics of Primary Peg, Midpoint Peg and Discretionary orders. Members can use MDOs to post displayed or non-displayed liquidity at the National Best Bid/National Best Offer for Buy/Sell orders with a discretionary range extending to and including the NBBO midpoint. MDOs do not execute at a price more aggressive than the NBBO midpoint.

## Behavior

- Displayed MDOs to Buy/Sell are displayed at and pegged to the NBB/NBO with a non-displayed discretionary component.
- Non-Displayed MDOs to Buy/Sell are non-displayed at and pegged to the NBB/NBO with a non-displayed discretionary component.
- MDOs can be entered with or without a limit price.
- MDOs have discretion to execute at prices ranging to and including the midpoint of the NBBO, consistent with their limit price.
  - If an MDO's limit price does not allow discretion to the midpoint of the NBBO, then the MDO will have discretion to its limit price.
- The discretionary range will only be used if necessary. Incoming contra side orders that cross the spread will execute at the MDO's NBB or NBO resting price.

## Pricing

MDOs are charged \$0.0003 per share when executed at the National Best Bid or Offer at the National Best Bid or Offer. MDOs are free for executions in the discretionary range.

MDO Execution	Fee Code	Fee
Adds/Removes liquidity at the discretionary range	DM, DT	Free
Adds/Removes liquidity at Displayed/Non-Displayed Price	DA, DR	\$0.0003

## Technical Details

Members may send an MDO on EDGA using either FIX or BOE, utilizing the following instructions:

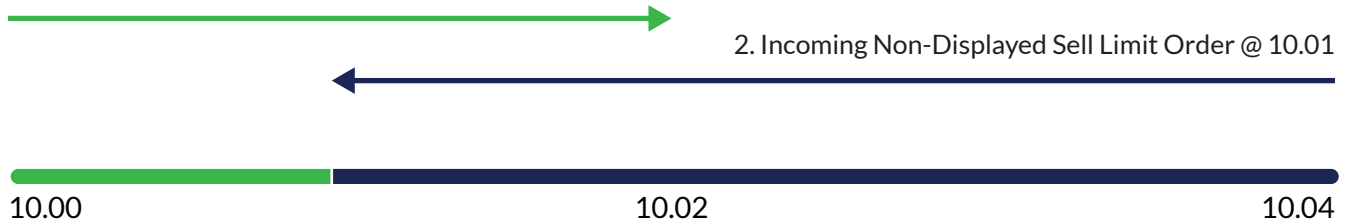
BOE Field	FIX Tag	Req'd	Comments
ExecInst	18	Y	d = Midpoint Discretionary Order
OrdType	40	Y	P = Peg
Display Indicator	9479	Y	v = Visible (Default)
			I = Invisible
RoutingInst	90303	Y	B = Book Only
Price	44	N	Optional Cap Price

Note: Time in Force using IOC or FOK instructions will be rejected.

## Examples

### Example 1: Non-Displayed MDO uses discretion against an incoming contra order

1. Resting Buy Non-Displayed MDO @ 10.03



2. Incoming Non-Displayed Sell Limit Order @ 10.01

1. Resting Buy Non-Displayed MDO with a limit price of 10.03 for 100 shares

2. Incoming Sell order with a limit price of 10.01 for 100 shares

The resting Buy Non-Displayed MDO is capped at 10.02 since MDO will never extend beyond the midpoint. The Buy MDO is hidden at 10.00 and has discretion up to and including 10.02. The Buy MDO will use discretion and execute at 10.01 with the incoming Sell order for 100 shares.

### Example 2: Order Priority for Displayed and Non-Displayed MDOs at the NBBO

1. Resting Buy Non-Displayed MDO @ 10.02



2. Resting Buy Displayed MDO @ 10.01

3. Incoming Non-Displayed Sell Limit Order @ 10.00

1. Resting Buy Non-Displayed MDO with a limit price of 10.02 for 100 shares

2. Resting Buy Displayed MDO with a limit price of 10.01 for 100 shares

3. Incoming Sell Limit at 10.00 for 150 shares

The incoming Sell Limit executes at 10.00 with the resting Buy Displayed MDO for 100 shares and then executes at 10.00 with the Buy Non-Displayed MDO for the remaining 50 shares. At the NBBO, Displayed MDOs have order priority that is the same as other displayed orders. Non-Displayed MDOs have priority that is the same as other hidden orders. Displayed order priority always supersedes Non-Displayed order priority.

## Examples, Cont.

### Example 3: Order Priority for Displayed and Non-Displayed MDOs in Discretionary Range

1. Resting Buy Non-Displayed MDO @ 10.02



2. Resting Buy Displayed MDO @ 10.01



3. Incoming Non-Displayed Sell Limit Order @ 10.01



1. Resting Buy Non-Displayed MDO with a limit price of 10.02 for 100 shares
2. Resting Buy Displayed MDO with a limit price of 10.01 for 100 shares
3. Incoming Sell Limit at 10.01 for 150 shares

The incoming Sell Limit executes at 10.01 with the resting Buy Non-Displayed MDO for 100 shares and then executes at 10.01 with the Buy Displayed MDO for the remaining 50 shares. In the discretionary range, Displayed and Non-Displayed MDOs share the same order priority and are ranked by time of order arrival.

### Example 4: Non-Displayed MDO executes against an incoming MDO

1. Resting Buy Non-Displayed MDO @ 10.02



2. Incoming Sell Displayed MDO @ 10.01



1. Resting Buy Non-Displayed MDO with a limit price of 10.02 for 100 shares
2. Incoming Sell Displayed MDO with a limit price of 10.01 for 150 shares

The Incoming Sell displayed MDO executes at 10.02 with the Resting Non-Displayed MDO for 100 shares. And the remaining 50 shares from order 2 are posted to the book. Two contra MDOs are only eligible to execute at the midpoint, since MDOs never extend beyond the midpoint.

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