

# NZX DARK

ANONYMOUS. CONTROLLED. FUNCTIONAL.

## EXAMPLES

*24 June 2024*



# Table of Contents

<i>Overview</i>	3
<i>Example 1: Time Priority Execution in NZX Dark</i>	4
<i>Example 2: Loss of Time Priority in NZX Dark</i>	6
<i>Example 3: NZX Dark Half Tick Price</i>	8
<i>Example 4: Sweep Order</i>	10
<i>Example 5: Sweep Order at Half Tick</i>	12
<i>Example 6: MEQ - Partial Execution</i>	14
<i>Example 7: MEQ – Order Priority</i>	16
<i>Example 8: MEQ - Full Execution</i>	18
<i>Example 9: MEQ – No Match</i>	20
<i>Example 10: Price Outside of Midpoint Execution Limit (Greater Than Limit)</i>	22
<i>Example 11: Trade on Central moves Midpoint which results in Midpoint orders executing.</i>	24

## Overview

This document has been developed for the purpose of providing NZX Trading Participants, Vendors and their clients' examples of NZX Dark functionality and assist in familiarisation with the NZX Dark product.

NZX Dark is an exchange-managed hidden and anonymous mid-point order book which is only able to match orders at the current mid-point price of the central limit order book. Investors and NZX Participants have no visibility of orders in this book. This type of order book is commonly referred to as a "dark" market.

For more information on NZX Dark please refer to the NZX Dark Functionality Overview available on the [NZX Dark webpage](#).

The following section has been designed to provide examples of NZX Dark including:

- NZX Dark order placement.
- NZX Dark order matching priority.
- Relationship between NZX Dark and the midpoint price of NZX Central.
- Sweep order functionality.

Please note

- For all examples NZX Dark depth is visible. This will not be the case when entering orders in NZX Dark as order depth is not visible.
- NZ RegCo Surveillance is responsible for defining the midpoint deviation limits.

## Example 1: Time Priority Execution in NZX Dark

### Market Conditions:

Security: ABC								
NZX Central:	NZX Central Price Tick:	NZX Central Price Decimals:	Last Traded Price:	Midpoint Price:	NZX Dark:	NZX Dark Price Tick:	NZX Dark Price Decimals:	Midpoint Deviation Limit:
Available	\$0.01	2	\$10.00	\$10.00	Available	\$0.005	3	10%

### Resting Orderbook:

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:10	100	\$9.90	\$10.10	100	13:15

NZX Dark								Midpoint Price = \$10.00	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
-	-	-	-	-	-	-	-		

### Order Activity:

- At 13:47, Trader A places a NZX Dark buy order with a limit price of \$9 and quantity of 1,000 with no MEQ
- At 13:48, Trader B places a NZX Dark buy order with a limit price of \$10 and quantity of 1,200 with no MEQ
- At 13:49, Trader C places a NZX Dark buy order with a limit price of \$11 and quantity of 1,300 with no MEQ
- At 13:50, Trader D places a NZX Dark sell order, with a limit price of \$10 and quantity of 2,000 with no MEQ

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:10	100	\$9.90	\$10.10	100	13:15
-	-	-	-	-	-
-	-	-	-	-	-

NZX Dark								Midpoint Price = \$10.00	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
13:47	1,000	0	\$9.00	\$10.00	0	2,000	13:50		
13:48	1,200	0	\$10.00	-	-	-	-		
13:49	1,300	0	\$11.00	-	-	-	-		

## Expected Results:

- Upon Trader D entering the NZX Dark sell order, the following trades are executed in NZX Dark:
  - Trade at \$10 for a quantity of 1,200 against Trader B's buy order
  - Trade at \$10 for a quantity of 800 against the Trader C's buy order

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:10	100	\$9:90	\$10.10	100	13:15
-	-	-	-	-	-

NZX Dark								Midpoint Price = \$10.00	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
13:47	1,000	0	\$9.00	-	-	-	-		
13:49	500	0	\$11.00	-	-	-	-		

**Note:** Even though Trader A's order was entered first, Trader B's order matched first because Traders A's order was at a price lower than the NZX Dark Price and Trader B's order was entered before Trader C's order.

## Example 2: Loss of Time Priority in NZX Dark

### Market Conditions:

Security: ABC								
NZX Central:	NZX Central Price Tick:	NZX Central Price Decimals:	Last Traded Price:	Midpoint Price:	NZX Dark:	NZX Dark Price Tick:	NZX Dark Price Decimals:	Midpoint Deviation Limit:
Available	\$0.01	2	\$10.00	\$10.00	Available	\$0.005	3	10%

### Resting Orderbook:

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:10	100	\$9.90	\$10.10	100	13:15

NZX Dark								Midpoint Price = \$10.00
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time	
-	-	-	-	-	-	-	-	

### Order Activity:

- At 13:47, Trader A places a NZX Dark buy order with a limit price of \$9 and quantity of 1,000 with no MEQ
- At 13:48, Trader B places a NZX Dark buy order with a limit price of \$10 and quantity of 1,200 with no MEQ
- At 13:49, Trader C places a NZX Dark buy order with a limit price of \$11 and quantity of 1,300 with no MEQ

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:10	100	\$9:90	\$10.10	100	13:15
-	-	-	-	-	-
-	-	-	-	-	-

NZX Dark								Midpoint Price = \$10.00
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time	
13:47	1,000	0	\$9.00	-	-	-	-	
13:48	1,200	0	\$10.00	-	-	-	-	
13:49	1,300	0	\$11.00	-	-	-	-	

- At 13:50, Trader B subsequently amends the quantity of their NZX Dark buy order to 1,500 with no MEQ

- At 13:51, Trader D places an NZX Dark sell order with a price of \$10 and quantity of 2,000 with no MEQ

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:10	100	\$9:90	\$10.10	100	13:15
-	-	-	-	-	-
-	-	-	-	-	-

NZX Dark								Midpoint Price = \$10.00
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time	
13:47	1,000	0	\$9.00	\$10.00	0	2,000	13:51	
13:49	1,300	0	\$11.00	-	-	-	-	
13:50	1,500	0	\$10.00	-	-	-	-	

## Expected Results:

- Upon Trader D entering the NZX Dark sell order, the following trades are produced in NZX Dark:
  - Trade at \$10 for a quantity of 1,300 against Trader C's buy order
  - Trade at \$10 for a quantity of 700 against Trader B's buy order

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:10	100	\$9:90	\$10.10	100	13:15
-	-	-	-	-	-

NZX Dark								Midpoint Price = \$10.00
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time	
13:47	1,000	0	\$9.00	-	-	-	-	
13:50	800	0	\$10.00	-	-	-	-	

① Note: Trader B's NZX Dark buy order is lower in matching priority than Trader C's order due to the amendment of its NZX Dark buy order, which resulted in a loss of time priority.

## Example 3: NZX Dark Half Tick Price

### Market Conditions:

Security: ABC								
NZX Central:	NZX Central Price Tick:	NZX Central Price Decimals:	Last Traded Price:	Midpoint Price:	NZX Dark:	NZX Dark Price Tick:	NZX Dark Price Decimals:	NZX Dark Deviation:
Available	\$0.01	2	\$10.00	\$10.025	Available	\$0.005	3	10%

### Resting Orderbook:

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.025
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	

### Order Activity:

- At 13:54, Trader A submits an NZX Dark sell order at a limit price of \$9.975 for a quantity of 1,000.

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.025
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time	
-	-	-	-	\$9.975	0	1,000	13:54	
-	-	-	-	-	-	-	-	



## Expected Results:

- Trader A's order is accepted and rests in NZX Dark at a price of \$9.975.
- This is because the order meets the NZX Dark price step and price decimal settings of Security ABC.

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark							
Midpoint Price = \$10.025							
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time
-	-	-	-	\$9.975	0	1,000	13:54
-	-	-	-	-	-	-	-

## Example 4: Sweep Order

### Market Conditions:

Security: ABC								
<b>NZX Central:</b>	NZX Central	NZX Central	Last Traded	Midpoint Price:	NZX Dark:	NZX Dark	NZX Dark	Midpoint
<b>Available</b>	Price Tick:	Price Decimals:	Price:	<b>\$10.515</b>	<b>Available</b>	Price Tick:	Price Decimals:	Deviation Limit:
	<b>\$0.01</b>	<b>2</b>	<b>\$10.50</b>			<b>\$0.005</b>	<b>3</b>	<b>10%</b>

### Resting Orderbook:

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.50	\$10.53	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.515	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
13:54	100	0	\$10.60	-	-	-	-		
-	-	-	-	-	-	-	-		

### Order Activity:

- At 13:55, Trader A submits a sweep sell order at a price of \$10.40 for a quantity of 1,000.

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.50	\$10.53	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.515	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
13:54	100	0	\$10.60	\$10.40	N/A	1,000	13:55		
-	-	-	-	-	-	-	-		

### Expected Results:

- Trader A's sweep order looks to fill in NZX Dark first. It matches with the NZX Dark buy order for 100 units at \$10.60.

- The resulting NZX Dark trade is 100 units at \$10.515
- Trader A's sweep order then routes to NZX Central. The routed sweep order is a NZX Central sell for 900 units at \$10.40
- Trader A's sweep order matches with the NZX Central resting buy order for 100 units at \$10.50.
  - The resulting NZX Central trade is 100 units at \$10.50
- Trader A's remaining quantity rests in the NZX Central as a sell order of 800 shares at \$10.40. NZX Central and NZX Dark appear as follows:

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:52	300	\$9.98	\$10.40	800	13:55
			\$10.53	200	13:49

NZX Dark								Midpoint Price = \$10.21	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-		

## Example 5: Sweep Order at Half Tick

### Market Conditions:

Security: ABC								
<b>NZX Central:</b>	NZX Central	NZX Central	Last Traded	Midpoint Price:	NZX Dark:	NZX Dark	NZX Dark	Midpoint
<b>Available</b>	Price Tick:	Price Decimals:	Price:	<b>\$10.515</b>	<b>Available</b>	Price Tick:	Price Decimals:	Deviation Limit:
	<b>\$0.01</b>	<b>2</b>	<b>\$10.50</b>			<b>\$0.005</b>	<b>3</b>	<b>10%</b>

### Resting Orderbook:

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.50	\$10.53	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.515
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	

### Order Activity:

- At 13:56, Trader A submits a sweep sell order at a price of \$10.405 for a quantity of 1,000

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.50	\$10.53	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.515
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time	
-	-	-	-	\$10.405	N/A	1,000	13:56	
-	-	-	-	-	-	-	-	

## Expected Results:

- Trader A's order is rejected as the price specified is not a valid price step for NZX Central.

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.50	\$10.53	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark							
Midpoint Price = \$10.515							
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

ⓘ Note: Trader A's sweep sell order meets the NZX Dark Price Decimals and Price Tick (3dp & \$0.005), however it does not meet NZ Central's Price Decimals requirements (2dp). Given that sweep orders are ultimately destined for NZX Central (unless fully executed in NZX Dark) the order rejects.

## Example 6: MEQ - Partial Execution

### Market Conditions:

Security: ABC								
<b>NZX Central:</b>	NZX Central Price Tick:	NZX Central Price Decimals:	Last Traded Price:	Midpoint Price:	NZX Dark:	NZX Dark Price Tick:	NZX Dark Price Decimals:	Midpoint Deviation Limit:
Available	\$0.01	2	\$10.00	\$10.025	Available	\$0.005	3	10%

### Resting Orderbook:

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.025
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time	
13:51	300	300	\$10.025	-	-	-	-	
13:52	600	600	\$10.025	-	-	-	-	

### Order Activity:

- At 13:55, Trader A submits an NZX Dark sell order at a price of \$10.025 for a quantity of 1,000, with a MEQ of 600

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.025
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time	
13:51	300	300	\$10.025	\$10.025	600	1,000	13:55	
13:52	600	600	\$10.025	-	-	-	-	

## Expected Results:

- Trader A's order is accepted and matches with the 13:52 NZX Dark buy of 600 shares at a price of \$10.025.
- Trader A's order then rests as a NZX Dark sell at a price of \$10.025 for a quantity of 400, with a MEQ of 400

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.025	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
13:52	300	300	\$10.025	\$10.025	400	400	13:55		
-	-	-	-	-	-	-	-		

## Example 7: MEQ – Order Priority

### Market Conditions:

Security: ABC								
<b>NZX Central:</b>	NZX Central Price Tick:	NZX Central Price Decimals:	Last Traded Price:	Midpoint Price:	NZX Dark:	NZX Dark Price Tick:	NZX Dark Price Decimals:	Midpoint Deviation Limit:
Available	\$0.01	2	\$10.00	\$10.025	Available	\$0.005	3	10%

### Resting Orderbook:

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.025	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
13:51	5,000	1,500	\$10.025	-	-	-	-		
13:52	1,000	600	\$10.025	-	-	-	-		

### Order Activity:

- At 13:55, Trader A submits an NZX Dark sell order at a price of \$10.025 for a quantity of 600, with a MEQ of 600

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.025	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
13:51	5,000	1,500	\$10.025	\$10.025	600	600	13:55		
13:52	1,000	600	\$10.025	-	-	-	-		



## Expected Results:

- Trader A's order is accepted and matches with the 13:52 NZX Dark 1000 share buy order. It does not match against the 5,000 share order as Trader A's order size is smaller than the 5,000 share order's MEQ of 1,500 shares.
  - The resulting NZX Dark Trade is at \$10.025 for 600 units
- A NZX Dark buy order rests at \$10.025 for the remaining 400 units (with a MEQ of 400)
  - The MEQ will adjust to the quantity of the resting order where this quantity is less than the original MEQ.

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark							
Midpoint Price = \$10.025							
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time
13:51	5,000	1,500	\$10.025	-	-	-	-
13:52	400	400	\$10.025	-	-	-	-

## Example 8: MEQ - Full Execution

### Market Conditions:

Security: ABC								
<b>NZX Central:</b>	NZX Central Price Tick:	NZX Central Price Decimals:	Last Traded Price:	Midpoint Price:	NZX Dark:	NZX Dark Price Tick:	NZX Dark Price Decimals:	Midpoint Deviation Limit:
Available	\$0.01	2	\$10.00	\$10.025	Available	\$0.005	3	10%

### Resting Orderbook:

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.025	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
13:51	1000	300	\$10.025	-	-	-	-		
13:52	1000	600	\$10.025	-	-	-	-		

### Order Activity:

- At 13:55, Trader A submits an NZX Dark sell order at a price of \$10.025 for a quantity of 300, with a MEQ of 200

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.025	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
13:51	1000	300	\$10.025	\$10.025	200	300	13:55		
13:52	1000	600	\$10.025	-	-	-	-		

## Expected Results:

- Trader A's order is accepted and matches with the 13:51 NZX Dark buy order of 1,000 shares at a price of \$10.025 with an MEQ of 300 shares.
  - The resulting trade is a NZX Dark trade at \$10.025 for 300 units.
- The balance of this resting order remains with a balance of 700 shares at \$10.025, with a MEQ of 300.

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.025			
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time				
13:51	700	300	\$10.025	-	-	-	-				
13:52	1,000	600	\$10.025	-	-	-	-				

## Example 9: MEQ – No Match

### Market Conditions:

Security: ABC								
<b>NZX Central:</b>	NZX Central Price Tick:	NZX Central Price Decimals:	Last Traded Price:	Midpoint Price:	NZX Dark:	NZX Dark Price Tick:	NZX Dark Price Decimals:	Midpoint Deviation Limit:
Available	\$0.01	2	\$10.00	\$10.025	Available	\$0.005	3	10%

### Resting Orderbook:

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.025	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
13:51	300	300	\$10.025	-	-	-	-		
13:52	600	600	\$10.025	-	-	-	-		

### Order Activity:

- At 14:00, Trader A submits an NZX Dark sell order of 200 shares at a price of \$10.025, with an MEQ of 100.

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.025	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
13:51	300	300	\$10.025	\$10.025	100	200	14:00		
13:52	600	600	\$10.025	-	-	-	-		

## Expected Results:

- Trader A's order is accepted in NZX Dark and rests at a price of \$10.025 for a quantity of 200, with an MEQ of 100.
  - Of the two resting NZX Dark bids, the smallest MEQ at the midpoint price is 300 units. As Trader A's sell order does not meet this requirement, no trades are executed.

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.05	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark							
Midpoint Price = \$10.025							
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time
13:51	300	300	\$10.025	\$10.025	100	200	14:00
13:52	600	600	\$10.025	-	-	-	-

## Example 10: Price Outside of Midpoint Execution Limit (Greater Than Limit)

### Market Conditions:

Security: ABC								
NZX Central:	NZX Central Price Tick:	NZX Central Price Decimals:	Last Traded Price:	Midpoint Price:	NZX Dark:	NZX Dark Price Tick:	NZX Dark Price Decimals:	Midpoint Deviation Limit:
Available	\$0.01	2	\$10.00	\$11.25	Available	\$0.005	3	10%

### Resting Orderbook:

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.50	\$12	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = N/A
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	

### Order Activity:

- At 13:57, Trader A enters a NZX Dark buy order at \$11.30 for a quantity 200 with no MEQ
- At 13:59, Trader B enters a NZX Dark sell order at \$10.50 for a quantity of 300 with no MEQ

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.50	\$12	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = N/A
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time	
13:57	200	0	\$11.30	\$10.50	0	300	13:59	
-	-	-	-	-	-	-	-	

### Expected Results:

- Since the calculated midpoint price of \$11.25 is more than the midpoint deviation limit away from the last traded price (Last Traded Price (1+ Maximum Midpoint Deviation)), Nasdaq ME does not set a midpoint price for Security ABC in NZX Dark.
- Trader A and Trader B's orders are accepted into the orderbook but matching in NZX Dark cannot occur until the NZX Central last traded price moves into the range at which NZX Dark can again set a midpoint.
- Orders will continue to be able to be entered into NZX Dark for Security ABC however execution won't occur until the last traded price moves to within an acceptable range midpoint range.
- In the example above, if a trade were to occur on NZX Central at, for example, \$10.23 (with no change in the quotes outlined above), the midpoint price of \$11.25 would fall within the midpoint deviation limit, and NZX Dark would again set a midpoint price, of \$11.25, for this security at which trades can occur.

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.50	\$12	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark							
Midpoint Price = N/A							
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time
13:57	200	0	\$11:30	\$10.50	0	300	13:59
-	-	-	-	-	-	-	-

## Example 11: Trade on Central moves Midpoint which results in Midpoint orders executing.

### Market Conditions:

Security: ABC								
<b>NZX Central:</b>	NZX Central	NZX Central	Last Traded	Midpoint Price:	NZX Dark:	NZX Dark	NZX Dark	Midpoint
<b>Available</b>	Price Tick:	Price Decimals:	Price:	<b>\$10.50</b>	<b>Available</b>	Price Tick:	Price Decimals:	Deviation Limit:
	<b>\$0.01</b>	<b>2</b>	<b>\$10.00</b>			<b>\$0.005</b>	<b>3</b>	<b>10%</b>

### Resting Orderbook:

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$11.00	200	13:49
13:52	300	\$9.98	-	-	-

NZX Dark								Midpoint Price = \$10.50	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
13:50	700	100	\$10.40	\$10.40	250	700	13:52		
-	-	-	-	-	-	-	-		

### Order Activity:

- At 13:57, Trader A enters a NZX Central sell order at \$10.80 for a quantity 200.

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.80	200	13:57
13:52	300	\$9.98	\$11.00	200	13:49

NZX Dark								Midpoint Price = 10:40	
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time		
13:50	700	100	\$10.40	\$10.40	250	700	13:52		
-	-	-	-	-	-	-	-		



## Expected Results:

- The midpoint price moves from \$10.50 to \$10.40. This means that the bid and the ask of the dark book can now cross.

NZX Central					
Time	Bid Size	Bid	Ask	Ask Size	Time
13:50	100	\$10.00	\$10.80	200	13:57
13:52	300	\$9.98	\$11.00	<b>200</b>	13:49

NZX Dark								Midpoint Price = N/A
Time	Bid Size	MEQ	Bid	Ask	MEQ	Ask Size	Time	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	

# NZX DARK

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