



NEW ZEALAND'S EXCHANGE
TE PAEHOKO O AOTEAROA

NZX Dark

Consultation Paper

September 2023

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This Consultation Paper has been issued by NZX as a response to the submissions received through NZX's consultation on the Mid-Point Order Book conducted in October 2019 and 2021. The proposals set out in this paper reflect NZX's current views of settings for NZX Dark. Capitalised terms which are not defined in this Consultation Paper have the same meaning given to them in the NZX Participant Rules.



Background

The Central Limit Order Book (**NZX Central**) is currently the only trading venue for the NZX Main Board. NZX Participants are also able to conduct Off-Market Trades which must be reported to the Trading System in the manner required by the NZX Participant Rules (**Rules**).

NZX is proposing to introduce an anonymous, 'unlit' order book on which trades will execute at the mid-point of the current spread of the buy and sell orders on NZX Central. In 2019, and 2021, NZX consulted on the introduction of this trading venue, previously known as the Mid-Point Order Book and now known as NZX Dark.

The principal objective of introducing NZX Dark, is to provide an alternative venue for investors to execute sizeable transactions with price improvement. The anonymity of NZX Dark is an important feature that will attract large, typically 'institutional', Orders that are currently often executed as Off-Market Trades. The attraction of these types of Orders into an exchange-delivered platform will provide the opportunity for wider investor participation, including for retail investors, and improve market integrity by reducing the potential for information leakage.

In October 2019, NZX commenced consultation with the market on the proposed introduction and features of NZX Dark. While submitters generally supported the introduction of the new trading venue, submitters did not support some of the proposed settings. Most of the submissions focused on NZX Dark's proposed contingent matching criteria (including the proposed volume/time priority settings). In response to that feedback NZX actively engaged with key stakeholders and conducted additional comparative analysis by further engaging with international providers of similar Dark-pool trading venues.

In 2021, NZX again consulted with the market, setting out NZX's reasons as to why the volume/time priority setting remained NZX's preference for the new venue, noting the alignment of this setting with the objectives for the venue. However, NZX again received strong submission feedback from the market opposing the proposed volume/time priority setting on the basis that it was inconsistent with the settings adopted by ASX for the ASX Centrepoin venue (which could cause additional compliance costs for NZX Participants) and differed from the NZX Central priority setting (which could make it more difficult for NZX Participants to explain NZX Dark to their Clients). Submitters also opposed the volume/time priority setting on the basis that it would discourage retail participation because it would allow large 'institutional' style Orders to take priority over smaller retail Orders.

As a result of the strong views expressed by submitters, NZX has changed its position, and now proposes that NZX Dark will operate using a time priority setting. As indicated in the 2021 consultation paper, NZX is now also looking to consult on amendments to the Trading Conduct Guidance Note (**Guidance Note**) to support the introduction of NZX Dark, along with the revised Rule settings that reflect the changes to the priority requirements and the additional features of NZX Dark.



Introduction

The introduction of NZX Dark to New Zealand's capital market represents one of the largest changes to NZX's markets, and is on a similar scale to the introduction of electronic trading in the 1990's and the clearing house in the 2000's. As such NZX is committed to its success and recognizes that its settings are key to its performance and the delivery of its objectives. NZX will continue to monitor the performance of the NZX Dark following its launch to ensure its settings deliver the best outcomes for investors in New Zealand's equities markets.

This Final Consultation Paper sets out detail of the revised settings for NZX Dark, given the robust feedback that NZX received during the 2019 and 2021 consultations, and also provides an opportunity for submitters to comment on the proposed changes to the Rules and Guidance Note that will support the introduction of NZX Dark.

There are four sections in this paper:

- Section 1 - Market conditions: describes the conditions that are prevalent in NZX's market and provides important context for the introduction of NZX Dark.
- Section 2 – Proposed features of NZX Dark: provides a description of NZX Dark's revised features, and the changes to the Rules that are necessary for the introduction of the features of NZX Dark. Examples demonstrating the manner in which NZX Dark operates are included as a Schedule to this paper.
- Section 3 – Proposed obligations for using NZX Dark: provides a description of the proposed conduct obligations relating to the use of NZX Dark, and the changes to the Rules that are necessary to introduce these requirements.
- Section 4 – Proposed Guidance: summarizes the changes to the Guidance Note that NZX intends to publish to support the implementation of NZX Dark.

The following exposure drafts accompany this consultation paper:

- proposed amendments to the Rules for NZX Dark,
- proposed amendments to the Rules for NZX Dark and Booking Purposes Only Transaction (**BPOT**) functionality¹, and
- proposed amendments to the Guidance Note.

The Self Match Prevention Practice Note that was recently consulted on in relation to the introduction of BPOT will be updated for the introduction of NZX Dark in due course.

¹ NZX is also currently consulting on proposed changes to the Rules relating to the introduction of BPOT functionality for the voluntary Self Match Prevention tool. As some of the Rules that will need to be amended to introduce BPOT will be affected by the introduction of NZX Dark, a composite mark-up of the proposed amendments for BPOT and NZX Dark also accompanies this paper.

Consultation Process

As noted above, NZX has undertaken significant work in relation to the design of NZX Dark, including two rounds of formal consultation in 2019, and 2021.

NZX is now interested in the final views of submitters as to the proposed Rule and Guidance Note amendments, after which NZX will apply to the FMA for approval of the amendments to the Rules to facilitate the introduction of NZX Dark for New Zealand's capital markets.

We therefore invite interested parties to provide their views on the proposed amendments to the Rules and Guidance Note by emailing a written submission to policy@nzx.com, or by contacting us, in order to make a verbal submission.

The closing date for submissions is **Monday, 16 October 2023**.

NZX may publish any submissions it receives, so please clearly indicate if you do not wish your comments to be published, or identify any part of your response that contains confidential information. If you have any queries in relation to the proposals raised in this paper, please contact:

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Section 1: Market conditions

The proposed features of NZX Dark (on which NZX consulted in 2019 and again in 2021), including its anonymity feature, is designed to attract the significant amount of Off-Market Trading activity that occurs in New Zealand's markets into an exchange operated venue. Structured 'unlit' or 'Dark' venues are common features of sophisticated markets internationally.

Off-market liquidity in New Zealand is significant, with most value traded via large blocks by institutional investors. Even though more than half of the value traded off-market is related to the ten most liquid securities, the relative importance of off-market liquidity grows as overall liquidity in a security diminishes, to the point that equity securities outside of the S&P/NZX 50 Index and debt instruments are predominantly traded off-market.

There is the potential for significant off-market activity to adversely affect price-discovery where institutional investors build a segregated liquidity pool that is inaccessible to the broader market.

NZX is committed to delivering on its strategy of improving liquidity and integrity for New Zealand's market, by increasing on-screen trading levels to enable a greater opportunity for a broader range of investors to gain access to trade flow. Over recent years NZX has made changes to pricing, rule settings and simplified the ability to connect to NZX's markets – all of



which have been designed to deliver the objectives of increasing the liquidity and integrity of NZX's markets.

The addition of an anonymous mid-point order book, NZX Dark, is the next step.

Section 2: Proposed features of NZX Dark

As noted in the background to this paper, NZX has previously consulted on the settings for NZX Dark, through consultations that were conducted in 2019 and 2021. As a result of strong feedback from submitters, NZX is proposing to amend the priority setting for NZX Dark from volume/time to a time setting. NZX has carefully considered the effect of the change in the priority setting for NZX Dark to the other features of NZX Dark that were proposed in the earlier consultations.

We wish to ensure that the settings for NZX Dark operate in a holistic manner, to deliver the objectives for NZX Dark, which are to:

- provide price improvement to both buyer and seller (as NZX Dark transactions execute at the midpoint of the NZX Central spread),
- enable equal access for all types of investors, as an alternative to off-market broker-facilitated execution,
- fully integrate NZX Dark with NZX Central providing seamless access for all NZX Participants, enabling interaction with the entire market,
- enable completely anonymous order placement and enhanced controls, to manage Order visibility within an NZX Participant, to reduce the risk of information leakage, and
- deliver a high level of execution control through the choice of trading venue, along with the choice of Order duration, and contingencies.

2.1 Overview

We have summarized the key features of NZX Dark below, and included examples of how NZX Dark will operate under various scenarios in the Schedule to this paper. The features are captured in the exposure draft of the Rules, which accompany this Consultation Paper.

We are interested in submitters' views as to the operation of the proposed NZX Dark features, and the manner in which those features are reflected in the Rules (particularly Rule 10.13).

The key features of NZX Dark are that:

- it will function as an anonymous, unlit order book for fund and equity securities on the NZX Main Board, in the same way as other exchange-delivered dark pools,
- NZX Dark Orders will execute at the mid-point price (being the (best available Bid in NZX Central + best available Offer in NZX Central) ÷ 2). This provides a price improvement for both the buyer and seller, compared to the execution price available in NZX Central,
- Sweep Order functionality is available for NZX Dark that will allow Orders to flow through to NZX Central to the extent that they are not matched in NZX Dark. This feature



provides further flexibility for Participants who wish to use NZX Dark and NZX Central as complementary venues,

- there is no prescribed minimum Order size, however Orders (other than Sweep Orders) may be entered that include a minimum executable quantity (**MEQ**), and
- NZX may prescribe price movement limits to ensure that NZX Dark operates in an orderly manner, and NZX Dark Orders will not match in NZX Dark if they fall outside of any prescribed price movement limits.

2.2 Explanation of NZX Dark's proposed features

We now set out more detail in relation to the key aspects of each of the proposed features described above, to enable submitters to provide feedback as to the manner in which these settings have been captured within the Rules, particularly Rule 10.13. The Schedule to this paper contains examples of the treatment of Orders within NZX Dark.

Anonymous trading venue

NZX Dark functions as an unlit order book, matching Orders at a price that is the Mid-Point and allows resting Orders to remain until matched.

The anonymity of NZX Dark Orders at the NZX Participant level will be supported through the user group permission system within the Nasdaq Trader Workstation, and similar controls within third party ISVs. This allows NZX Participants to restrict who may view resting Orders within their firm. The user group permission system also allows NZX Participants to further control the anonymity of client Orders, including by restricting access between retail, 'institutional', electronic execution and proprietary desks.

Orders execute at the Mid-Point

As set out in proposed Rule 10.13.6, Orders on NZX Dark will execute at the Mid-Point, which is a price that is equal to the mid-point of the current spread on NZX Central, being the average of the best Bid and Offer available in NZX Central. This allows Orders to execute at a more favourable price than would be available if the Order was amended to match the current best resting Bid or Offer available in NZX Central.

Orders that execute through NZX Dark are reported to the market as having been executed via NZX Dark. These trades are reported as on-market Trades as both Orders are placed and matched through an anonymised order book and follow the price setting trade rules of NZX Central. Further, Trades meeting the price setting conditions will be printed as the last Traded price. This approach is common across other similar international venues.

Execution matching criteria

Orders in NZX Dark will be eligible for execution if they are placed in a manner that enables execution at a price that is equal to or better than the Mid-Point, as described above. Eligibility for execution is dependent on opposing orders achieving the further matching criteria of MEQ.

Minimum executable quantity

Participants are able to voluntarily elect to apply a MEQ to a NZX Dark Order (other than a Sweep Order). Orders that have been assigned a MEQ will only execute in NZX Dark to the extent there is an appropriate opposing Order with at least the volume of the MEQ.



Price Movement Limits

As set out in Rule 10.13.6, NZX may prescribe price movement limits to ensure that NZX Dark operates in an orderly manner, and NZX Dark Orders will not match in NZX Dark if they fall outside of any prescribed price movement limits.

Prioritisation

Under Rule 10.13.4, NZX Central prioritises Orders on the NZX Main Board based on the price and then the time at which the Order is placed.

In comparison, it is proposed that a new Rule 10.13.4(b) is introduced that will enable NZX Dark to prioritise Orders based on the time at which a NZX Dark Order is entered. This setting has been changed from the original proposal to apply a volume/time priority setting, as a result of submitters feedback through the earlier consultations. NZX considers that the anonymity features of NZX Dark will appropriately incentivize the placement of large, typically 'institutional', Orders, that are currently executed off-market and for which NZX Dark is primarily designed.

Once Orders have been prioritised, their eligibility for execution will be determined by whether the Order is at a price that is equal to, or better than, the Mid-Point, within any Price Movement Limits specified by NZX, and where a MEQ is specified whether there is an opposing Order that can satisfy the MEQ.

Sweep Orders

A Sweep Order is a type of NZX Dark Order which actively looks for available liquidity in NZX Dark before moving into the NZX Central. Sweep Orders match within NZX Dark against the highest priority resting NZX Dark Order that satisfies the relevant contingent matching criteria of the Sweep Order, where both Orders are priced at, or better, than the Mid-Point. For example: if an opposing Order had been entered with a MEQ, the Sweep Order would need to satisfy the MEQ condition before being executed.

MEQs cannot be specified for Sweep Orders. NZX Participants will need to elect to either apply a MEQ to an Order for NZX Dark, where protection against information leakage is a priority for a Client, or to place a Sweep Order where the NZX Participant wishes to obtain greater execution certainty by testing whether there is a suitable resting Order in NZX Dark.

Sweep Orders are able to partially execute, with the un-executed component then sweeping into the NZX Central, where it will be prioritised in accordance with NZX Central's price/time prioritisation methodology.

Session States

As set out in section 11 of the proposed Rules, NZX Dark Orders may be entered and amended during the Normal Trading Session, and may be withdrawn within any Session State of the NZX Main Board (other than during the Enquiry Session).

Price Steps

NZX will specify price steps for NZX Dark that will be half the size of price steps for NZX Central, to allow NZX Dark trades to execute at the midpoint.



NZX is proposing to update Rule 11.9.1 (and Rule 22.7.9) to refer to NZX specifying applicable price steps from time to time. NZX intends to publish any applicable price steps on nzx.com. This proposed change will enable greater flexibility should NZX wish to prescribe alternative price steps for either NZX Central, or NZX Dark, in the future.

Section 3: Proposed obligations for using NZX Dark

NZX Dark will be available to all Market Participants for trading on the NZX Main Board, for use on a voluntary basis.

NZX has carefully considered the conduct expectations for trading on NZX Dark.

NZX is proposing that a Client Advising Participant discloses whether or not it offers access to NZX Dark in its Client Agreement (refer to proposed Rule 9.10.1(d)).

NZX is also proposing that while no express instruction is required from a Client in Order for a NZX Firm to facilitate the placement of an Order into NZX Dark through the Participant's Client Agreement, that to the extent an express instruction is given by a Client that an Order is to be placed as a NZX Dark Order that this is recorded as part of the Participant's Order Records (refer to Rule 15.12.2(m)).

Section 4: Proposed Guidance

An Exposure Draft of the proposed amendments to the Guidance Note accompanies this consultation paper.

The proposed amendments include a discussion as to how Participants should comply with their obligations to ensure that their conduct helps to maintain an orderly market under Rule 8.8, in relation to the use of Sweep Orders.

NZX is also proposing changes to recommend that a Participant includes the manner in which user permissions are applied for NZX Dark, in the Participant's conflict management arrangements, and the record keeping arrangements for client instructions relating to Orders for NZX Dark.



Schedule: Operation of NZX Dark

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: Sweep Order

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	\$10.50	\$10.515	Available	\$0.005	3	10%

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.

Example 3: MEQ - Partial Execution

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	\$10.025	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	-	-	-	-	

Example 4: MEQ - Full Execution

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	\$10.025	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, still with an MEQ of 300 shares.

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	-	-	-	-	-

