



Nasdaq Dubai Trading Manual Equities

Version 4.4



Contents

1. INTRODUCTION	3
2. TRADING	3
2.1 Trading Platform Interface	
2.2 Trading Model	
2.3 Classifications of securities into Boards	
2.4 Market Timing and Trading Phases	4
2.5 Order Types	7
2.6 Execution Conditions	8
2.7 Order Validity	g
2.8 Order Book Matching	9
2.9 Off-Order Book	10
2.10 Block Trades	10
2.11 Cross Trade	11
2.13 Tick Size	14
2.14 Safeguards	14
2.15 Security States	15
2.16 Investor Number Amendment	16
2.17 Trade Cancellation	16
Appendix 1: Calculation of Theoretical Auction Price (TAP)	18



1. INTRODUCTION

This Nasdaq Dubai Trading manual describes the model of trading on Nasdaq Dubai and the functionality of the Nasdaq Dubai trading platform. It addresses the order types and execution conditions available; the price determination rules for trading and the various trading phases on Nasdaq Dubai. It also addresses cancellation procedures, trading safeguards and other trading conditions.

2. TRADING

2.1 Trading Platform Interface

Currently Nasdaq Dubai has outsourced its trading functions for its Securities to Dubai Financial Market (DFM) to be traded on the DFM Matching Engine (ME) Trader Workstation (XW).

<u>DFM Matching Engine Trader Workstation:</u> The DFM ME XW is a Windows based application that must be installed on a PC with connectivity access to one of the Trading Engine (located Dubai). The DFM ME XW gives full trading access to the DFM ME and is fully equipped to support Members.

Broadcast Data feed Client Software Development Kit (SDK): The SDK contains the java client Application Programming Interface (API) to receive market data feed. The SDK is used by Members of the Exchange to develop software that will connect to the Trading Engine and receive feed. Members can use the SDK to develop their own in-house feed handler or alternatively can connect through one of our Independent Software Vendors.

<u>FIX Gateway:</u> FIX gateway for DFM Matching Engine trading platform supports FIX protocol version 5.0 SPI. The systems FIX Gateway allows the Members' order management system to connect and perform order management activity.

2.2 Trading Model

The Nasdaq Dubai trading model comprises of two order books (1) the Central Order Book (COB) and (2) the Off Order Book (OOB). The COB is the main order book into which orders are entered during the trading day. The OOB is a reporting service for reporting pre-negotiated deals and block trades between Nasdaq Dubai Members. Trade entered into the COB are considered On Exchange Transactions and affect the On-Market statistics (Price, Volume and Value) on the trading day they are entered.

2.3 Classifications of securities into Boards

Every Security belongs to an Instrument and every Instrument belongs to a Board. Securities that are traded on Nasdaq Dubai are categorized into Boards. Each Board has a particular trade parameter associated with it; the trade parameters indicate the type of orders that will be accepted as well as general rules and functions such as the trading schedule, trading hours or tick and lot sizes, etc. Trade parameters for a board are configured by Nasdaq Dubai.

Board '200' contains all the securities classified as US dollars (USD) currency denominated Equity Products. Board '210' contains all the securities classified as UAE Dirhams (AED) currency denominated Equity Products. Board '205' (Nasdaq Dubai Buy-In board) contains all the securities from both 200 and 210. This board is used for Buy-In session.

Instruments have a unique identifying code for the Instruments that the securities are associated with. There is currently only one Instrument that belongs to Boards '200', '210' and '205' labeled NDORDS.

The Equity securities that are available for trading on the Nasdaq Dubai all belong to the NDORDS Instrument.



2.4 Market Timing and Trading Phases

Nasdaq Dubai market will be open for trading from Monday to Friday. A list of business holidays will be available on the Nasdaq Dubai website.

	1
Market Timings	Trading Phases
08:00 - 09:30	Enquiry session (no order management)
09:30 – 09:55	Pre-opening Auction
09:55 – 10:00	Pre-opening adjustment (No Cancellation period)
10:00 – 14:45	Continuous trading
14:45 – 14:53	Pre-closing Auction
14:53 – 14:55	Pre-closing Adjustment (No Cancellation period)
14:55 – 14:55:20	Matching at TAP
14:55:20 – 15:00:20	Trading-At-Last
From 15:00:20	Post-trading (close)
15:15 – 15:30	Buy-In Optional Activation
15:30 – 15:45	Buy-In Offer Session
15:45	Buy-In Match
15:50	End of Day

Any change in the market timings or trading phases will be notified to Members by way of a Notice.

Enquiry (08:00 – 09:30)

- At start of Enquiry session orders are multi-day (Good Till Date, Good Till Cancel) orders are re-validated and loaded into the system.
- Members can view their orders and the order book during the Enquiry session. No order management activity is allowed during this session.

Pre-opening Auction (09:30 – 09:55)

- The pre-opening auction will be an order accumulation period during which all orders entered by Members are automatically recorded in the Central Order Book (COB) without being executed.
- Orders can be amended or cancelled during this session. Entry of new Limit orders, Market Orders, Hidden orders
 (Iceberg) is permitted. No Minimum Execution, Minimum Fill, AON, FOK, FAK will be allowed during this session.
 If any order with Minimum Execution, Minimum Fill, AON is entered during previous trading session then those
 orders will be removed from the COB during this session.
- The Theoretical Auction Price (TAP) is calculated each time a new order is entered or amended into the COB. At
 the end of pre-opening auction, order matching will happen at the TAP and will be considered as the opening price
 for the day.



The TAP is established using the rules detailed in Appendix 1.

Pre-opening adjustment (No Cancellation Period) (09:55 – 10:00)

- The No Cancellation Period is a phase that occurs during the pre-opening auction where Members can enter new orders, however, modifying or withdrawing existing orders which lead to decreasing the order priority is not permitted. Entry of new Limit orders, Market Orders, Hidden orders (Iceberg) is permitted. No Minimum Execution, Minimum Fill, AON, FOK, FAK will be allowed during this session.
- Members cannot cancel or deactivate their pending orders or make the following amendments:
 - Order quantity decrease
 - o Price decrease for Buy order
 - o Price increase for Sell order

Main Trading Session/Continuous Trading (10:00 – 14:45)

If there are matching orders in the COB at the end of the Pre-opening auction, trades will take place at the theoretical opening price based on price/time priority. Once the pre-opening auction is completed, continuous trading in that security begins and orders can be entered, maintained, modified and deleted. All orders that are unexecuted at the pre-opening auction are forwarded into the main trading session. The Off Order Book will be available to report negotiated deals and block trades from the start of the main trading session at 10:00 until 14:20.

Pre-closing auction (14:45 -14:53)

- The pre-closing auction will be an order accumulation period during which all orders entered by Members are automatically recorded in the Central Order Book (COB) without being executed.
- Orders can be amended or cancelled during this session. Entry of new Limit orders, Market Orders, Hidden orders
 (Iceberg) is permitted. No Minimum Execution, Minimum Fill, AON, FOK, FAK will be allowed during this session.
 If any order with Minimum Execution, Minimum Fill, AON is entered during previous trading session then those
 orders will be removed from the COB during this session.
- The Theoretical Auction Price (TAP) is calculated each time a new order is entered or amended into the COB. At the end of the pre-closing auction at 14:53, order matching will happen at the TAP and will be considered as the Closing Price for the day.
- The TAP is established using the rules detailed in Appendix 1.

Pre-closing Adjustment (14:53 – 14:55)

The characteristics of the Pre-closing Adjustment session are similar to the Pre-opening Adjustment as set out below:

- The Pre-closing Adjustment session will be an order accumulation period during which all orders entered by Members are recorded on the Central Order Book without being executed.
- Entry of new Limit orders, Market Orders, Hidden orders (Iceberg) entry is permitted. No Minimum Execution, Minimum Fill, AON, FOK, FAK will be allowed during this session.
- Members cannot cancel or deactivate their pending orders or make the following amendments:
 - Order quantity decrease
 - o Price decrease for Buy order
 - o Price increase for Sell order
- At the end of the Pre-closing Adjustment session order matching will happen at TAP.
- The TAP at which matching is done would be considered as the Closing Price.



Trading-At-Last (14:55:20 - 15:00:20)

The characteristics of the Trading-At-Last session are as follows:

- New orders can be entered only at the last trade price for the day as determined in Pre-closing session or previous Closing Price if there are no trades for that symbol.
- The orders from Pre-closing session will be carried over in the system and their time priority will be maintained. During this session, Orders can be amended to a last trade price for the day as determined in Pre-closing session or previous close price if there are no trades for that symbol.
- Orders can be withdrawn
- Matching can happen only at the last trade price for the day or previous close price if there are no trades for that symbol
- No Market orders will be allowed during this session.
- This trading session will be shown as 'Trade-At-Last' on the trading platform and published market data.

Buy-In Session

- Securities settlement will be executed in Equator system, which may identify failed settlement and negative balances. Sell Trades that failed to settle will be selected for Buy-In session.
- Buy-In buy orders will be placed through the trading system in the Buy-In board (205) based on the failed sell trades, trade by trade. The Buy-In buy order will carry the reference of original failed trade order number and trade number.
- Failed Sell trades from S day to S+1 day will be placed as private orders (optional Buy-In) and failed trades on S+2 day will be placed as open order (mandatory Buy-In).
- During Buy-In activation session, traders can activate the private Buy-In buy orders (opening of optional Buy-In buy orders)
- During the Buy-In offer session, the order book will be made available for placing sell orders. Buy-In buy orders
 will be placed with mandatory Buy-In orders "oldest ticket number first" followed by optional Buy-In orders
 depending on activation time.
- Mandatory Buy-In buy orders cannot be amended or withdrawn.
- Buy-In offer session, market participants can place their offers (sell orders) within the price limits against the available Buy-In buy orders.
- Buy-In end session, uncrossing of the Buy-In order book and matching. Equator will receive the trades for closing the failed sell trade.

Buy-In Offer session

- Only Buy-In buy order with status Private can be activated and open for Buy-In Offer session.
- No order entry, amend and withdraw allowed for members.
- Sell orders can be placed in Buy-In offer session with the following attributes:
 - Limit order
 - Session duration
- Buy orders cannot be entered

Buy-In End session

- Buy-In session will end with crossing of order book and matching priority will be First In First Out.
 - Price
 - o Time



Buy-In Sell Order validation

- Reference price: once the main board is closed, the official close price will be determined. For Buy-In board the official close price of the symbol in the main board will be set as reference price for the symbol in the Buy-In board
- Price Limits: The limits at which the orders can be placed will be disseminated via feed and displayed in the XW as well. The limits will be based on the reference price of the symbol in Buy-In board.
- Sell position: When a sell order is placed in Buy-In board, the position check will be:
- The lower of Owned quantity or (Available Quantity –Unsettled buy)

Settlement of Buy-In Trades

 Equator will receive the trades executed in the Buy-In board having references to the original failing ticket number and order number

Refer to the Nasdaq Dubai Operating Procedures for Clearing, Settlement, and Risk available on the Nasdaq Dubai website for more details on Buy-In procedures.

2.5 Order Types

Market Orders

Market orders can only be entered into the DFM ME trading platform during the main trading session, pre-opening and pre-closing session and do not stipulate a price. A market order will try to execute as much quantity as possible up to the trading safeguard (defined below) until it is completely filled. If a market order is only partially filled then it is converted into a limit order at the last trade price. Consequently, the existence of a matching order is essential. If no matching order is available the order is rejected by the DFM ME trading platform.

If Market-At-Best option is selected for Market Orders, it will execute only the top of the book and then partially filled order will be converted to a limit order.

If there are no orders on the other side, then Market Order will be expired

Limit Orders

Limit orders stipulate a maximum purchase price or minimum selling price. Limit orders entered during the main trading session are executed either fully or partially, as market conditions permit. If the execution of a limit order is not immediately possible, it is logged in the order book in descending buy-price order or ascending sell-price order (the price priority principle) and joins the queue of orders having the same price (the time priority principle).

Trigger Order

A Trigger Order (also sometimes referred as Stop Loss) is an order that is activated when the price of the security reaches specified price from a specific side, either declining or rising. Orders are activated and put into order book based on the price of the security reaching the trigger criteria.

Hidden Orders (Ice berg)

Hidden orders allow the submission of an order while only disclosing a portion of the entire quantity; the minimum exposed quantity is 10%; disclosed quantities are only refreshed from the hidden quantity after full execution of the previous disclosed one and it loses is priority in the order book.



2.6 Execution Conditions

Execution conditions order can be placed only during continuous trading session. If there are any execution condition orders entered during previous trading session, it will be removed during transition of continuous trading session.

All Or None (AON)

Order will execute if the matching is for full quantity or it will remain in the order book.

Minimum Execution (ME)

Shares are traded in specific blocks (groups), provided the quantity is above the "Minimum Execution" quantity. If the balance quantity is less than the minimum requirement, the order is removed.

Minimum Fill (MF)

A minimum number of shares must be executed before it is possible to trade the order. It is possible to have more than one corresponding-order for every partial trade. Following execution of the minimum fill or more, the minimum fill requirement is rescinded and the order is treated like other regular orders.

Fill-and-Kill (FAK)

Fill-and-Kill (FAK) orders can only be placed during the main trading session. A FAK order may be filled in full or in part depending on market conditions at the time it is entered, and at the specified price or better (which could be a limit price or at market). The remaining part of any FAK order that is not executed immediately and in full is cancelled.

Fill or Kill (FOK)

Fill-or-Kill (FOK) orders, can only be placed during the main trading session. A FOK order can only be executed in full depending on market conditions at the time it is entered into and at the specified price or better (which could be a limit price or at market). If a FOK cannot be immediately executed, the order will immediately expire.

Matrix	Trading Phases						
Order type & condition	Pre-Opening Auction	No Cancellation Period	Continuous Trading	Pre - Closing	Pre-close Adjustment		
Market	Yes	Yes	Yes	No	No		
Limit	Yes	Yes	Yes	Yes	Yes		
Hidden	Yes	Yes	Yes	Yes	Yes		
Minimum Fill	No	No	Yes	No	No		
Minimum Execution	No	No	Yes	No	No		
All Or None	No	No	Yes	No	No		
Fill-and-Kill	No	No	Yes	No	No		
Fill-or-Kill	No	No	Yes	No	No		



Special Order Types

Short Sell Order

Orders can be flagged as Short sell indicating that the originating client is placing sell orders without having the holdings. Short Sell orders are subjected to Tick Rules.

Private Order

Orders may be stored as private orders and selected for placement into the market at a later time

Market Maker Order

Orders entered by Market Maker participant as identified as MM orders which is then used to check the MM obligations.

2.7 Order Validity

There are 3 types of validity constraints for orders entered on the Nasdaq Dubai trading platform:

- 1. **Day:** A Day order is the default validity and is only good for the current trading day. All outstanding orders with Day validity that have not been fully executed at the end of the trading day will automatically expire.
- 2. **Good Till Cancelled (GTC):** Orders with a validity period of 365 days: these orders remain in the order book for 365 days, unless they are fully executed or the user cancels the order or the price at which these orders were placed is no longer within the daily price limits.
- 3. **Good Till Date (GTD):** These are valid orders till a specified expiry date. The expiry date can be up to a maximum of 365 days in the future unless it's fully executed or the user cancels the order or the price at which these orders were placed is no longer within the daily price limits.

2.8 Order Book Matching

- 1. **Matching is FIFO**: 'First In First Out' order allocation where each order is allocated as much volume as possible before any volume is allocated to the next order in the price/timestamp sequence.
- 2. **Pre-validation of Orders at Matching:** At the time of matching, orders will be again pre-validated for the following:

Trading Limit

Participants can place the orders until the Daily Trading Limit is positive. At the time of matching, the orders will be validated against current available trading limit to ensure there is no breach of trading limit. If the execution will create a breach then the order will not matched and converted into a private order.

Ownership Limit

Participants can place the orders up to the available ownership room without blocking the actual ownership. At the time of matching, the orders will be validated against current actual ownership to ensure there is no breach of ownership limit. If the execution will create a breach then the order will not matched and converted into a private order

If the order fails validation, then that order will be removed from the order book and the next best order will be considered for matching.



2.9 Off-Order Book

The Off-Order Book is a reporting service for Block Trades, OTC transactions and Cross Trades entered outside the Central Order Book (COB), but still on the Nasdaq Dubai exchange. These transactions will not affect the Market statistics including the day's Closing Price, Volume, Value, High & Low prices, and 52-week High & Low prices.

All Negotiated Deals will be published under "Off-Order Book Transactions" in the Market Watch page and in the "Trading" tab in the main menu on Nasdaq Dubai website.

Members can report Off Order Book Transactions by sending the details of the trade in the prescribed form (Form T1 –Trade Reporting Form) available under Procedures on Nasdaq Dubai website, signed by authorized signatory(ies) to trading@nasdaqdubai.com.

2.10 Block Trades

Block Trades shall mean Off-Order Book Transactions that are equal to or exceed in size the following thresholds defined as "Normal Block Amount" (NBA).

Lower Limit (Mil) USD	ADTV of a security	Upper Limit (Mil) USD	NBA (Mil) USD
10,000,000	>=	∞	750,000
3,000,000	>=<	10,000,000	500,000
0	<	3,000,000	100,000

Average Daily Traded Value (ADTV) and NBA of securities listed on Nasdaq Dubai will be reviewed on an annual basis and published under "Off-Order Book Transactions" page on Nasdaq Dubai website and by way of circular.

NBA of Initial Public Offerings ("IPOs") will be set separately and published by way of a Circular.

Permitted Execution Price

Block Trade range	Price Variation affected around the LTP
Block Trade Value >= NBA and < 3 times the NBA	=< 10 % (+/-)
Block Trade Value >= 3 times the NBA and < 5 times NBA	=< 20 % (+/-)
Block Trade Value >= 5 times the NBA or 5% of Security Market Capitalization	=< 25 % (+/-)

- 1. At a price less than or equal to (=<) 10% around the last traded price (LTP) if the amount of the Block Trade is greater than or equal to (>=) the NBA and less than (<) 3 times the NBA.
- 2. At a price less than or equal to (=<) 20% around the last traded price (LTP) if the amount of the Block Trade is greater than or equal (>=) 3 times the NBA and less than (<) 5 times the NBA
- 3. At a price less than or equal to (=<) 25% around the last traded price (LTP) if the amount of the Block Trade is equal to or greater than (>=) 5 times NBA or 5% of the security's market capitalization.

Nasdaq Dubai shall have the discretion to allow or reject Off-Order Transactions outside the above specified ranges, after considering prevailing market and liquidity conditions.



For Illiquid Securities and IPOs, members may submit exceptional requests to execute a Negotiated Deal at a price outside the above set parameters. Further to reviewing the request, Nasdaq Dubai will have the sole discretion to approve or reject the request.

Publication of Block Trades

Block Trades request in which the Member does not act as a principal shall be reported to Nasdaq Dubai immediately upon execution. Nasdaq Dubai will publish such trades immediately upon receiving the request.

Block Trades in which the Member acts as a principal with an amount equal to or greater than (>=) 5% of market capitalization, may defer sending Block trade request until the opening of the continuous trading session on the following business day, as appropriate.

Request of Principal Block Trades shall be sent to Nasdaq Dubai,

- 1. Within 60 minutes after execution in principal's books if the amount of the Block Trade is less than (<) 5 times the relevant NBA; or
- 2. Within 120 minutes after execution in principal's books if the amount of the Block Trade is equal to or greater than (>=) 5 times the relevant NBA.
- 3. Deferred until the beginning of the following business day after execution in principal's books took place outside the main trading session, which shall become the trade date of the transaction.

2.11 Cross Trade

An automatic execution through the Central Order Book (COB) of a buy and sell order from a single Member for its underlying clients is permitted by the trading platform during continuous trading. Cross orders must be limited at a price within the Best Bid-Offer (BBO). A cross order at the BBO is only allowed at a volume higher than the volume available in the order book at the Best Bid-Offer price.

- ° If there is no tradable price within the market's Best Bid-Offer at the time of entry, the trade can be crossed at either the Best Bid or Offer.
- If there are no quotes in the Central Order Book at the time of entry, the trade can be crossed at or around the previous closing price where the trade price will be subject to reference safeguard limits.

Members who are unable to report a cross trade directly in their trading system or through their own Order Management System using FIX protocol, for any reason that Nasdaq Dubai sees valid, they can send a cross trade request to Nasdaq Dubai by filling out the "<u>Trade Reporting Form</u>", get it signed by authorized signatory, then email it to trading@nasdaqdubai.com,

In a situation where a Cross Trade is reported but, between the time of reporting and the time of registering the trade on the market by the Nasdaq Trading Team, the trade no longer meets the Nasdaq Dubai crossing rules, Nasdaq Dubai may, at its sole discretion, allow for the Cross Trade to be executed.

2.12 Price Determination

1. Opening Price

Opening Price is the Theoretical Auction Price calculated in accordance with Appendix 1. If such Theoretical Auction Price cannot be determined for lack of activity in auction period, the first trade on a security determines the opening price of that security.



2. Closing Price

On each business day, Nasdaq Dubai will determine the closing price during pre-closing auction. If such closing price cannot be determined in pre-closing auction, the closing price shall be the last traded price of the security during the same business day.

If there are no trades on the same business day, then the previous day's closing price shall be the closing price.

For dual listed illiquid securities, the closing price will be determined by the closing price of the security in the primary market.

Nasdaq Dubai reserves the right to set a closing price other than in accordance with this policy if it believes such action is required to maintain a fair and orderly market.

For **REIT securities** admitted to trading on Nasdaq Dubai:

Nasdaq Dubai has introduced a minimum value per Order which will impact the price during continuous trading session and closing auction.

Effectively, where the value of an Order that is executed is less than the minimum value, the price at which the Order was traded will not set the last traded price of the security either during continuous trading session or set the closing price at closing auction.

If during a trading day, only Orders smaller than the minimum value are executed in a security, the closing price of the security for that trading day will be the closing price of the last trading day.

The minimum value per Order has been set at three thousand United States Dollars (USD3,000). This minimum value per Order will apply to only REIT securities admitted to trading on Nasdaq Dubai.

The implementation of the minimum value per Order will not affect the ability to trade smaller value or the automated Order matching on the basis of price and time priority.

3. Reference Price

The Reference price is used for 'order reasonability' checks, where there is no Bid/Offer. The

Reference Price of a security is either the opening price of the security or the previous close price of the security if there is no opening price, unless explicitly set by Nasdag Dubai.

4. Price during continuous trading

Each new incoming order is immediately checked for execution against orders on the other side of the order book. Orders can be executed in full, partially, or not at all. Thus, each new incoming order may generate none, or several executions. Orders in the order book will be executed according to the price/time priority principle. Orders, or parts thereof which have not been executed, are sorted in the order book according to price/time priority.

Price determination in continuous trading is carried out according to the following rules in addition to the price/time priority:



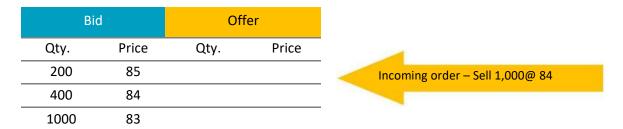
Rule 1:

If an incoming market order or limit order meets an order book in which there are limit orders on the other side, the highest bid limit or lowest ask limit in the order book determines the price for the executable volume of the incoming order. The next limit order determines the price of any remaining volume, and so on until no volume remains.

Example: The following order book has only limit orders on the bid side. A Sell 100 @ Market order is entered.



Result: The sell order will execute against the highest bid limit resulting in the following execution: Sold 100 @ 85.



Result: Sold 200 @ 85 and 400 @ 84, with the remaining 400 placed on the Sell Side @ 84.

Rule 2:

If an incoming market order or limit order meets an order book in which there are not enough limit orders on the other side to fully execute the Market Order, the highest bid limit or lowest ask limit in the order book determines the price for the executable volume of the incoming order. After the Market Order is partially executed and no more volume remains on the other side of the COB, the Market Order will be converted into a limit order at the price of the last execution.

Example: The following order book has only limit orders on the bid side. A Sell 2,000 @ Market order is entered.



Result: Sold 200@85, Sold 400@84, Sold 1,000@83; once there is no longer any volume available for execution, the Market Order will then automatically convert the remaining 400 shares to a limit sell order of 400 @ 83.



2.13 Tick Size

The tick size table for Equities, Structured Products, and Equity Derivatives Markets will follow the schedule below:

AED Price Range	Tick Size
Below AED 1.00	0.001
From AED 1.00 to AED 10.00	0.01
Above AED 10.00	0.05
USD Price Range	Tick Size
Below US\$ 2.00	0.001
From US\$ 2.00 to US\$ 10.00	0.005
Above US\$ 10.00	

Example:

- The next price step for a security trading at 0.250 will be 0.251.
- The next price step for a security trading at 2.000 will be 2.005.
- The next price step for a security trading at 10.00 will be 10.01

2.14 Safeguards

1. Reference Safeguard

In the following situation, the Reference Safeguard will prevent the order from being entered into DFM ME trading platform:

For AED denominated Securities Reference Safeguard is 15% up / 10% down.

Price Range	Below < Limit UP/ Down > Above
Less than US\$ 0.100	< ± 50 % > from previous closing price
From US\$ 0.100 to 0.249	< ± 20 % > from previous closing price
From US\$ 0.250 to 0.499	< ± 15 % > from previous closing price
Above US\$ 0.500	< ± 10 % > from previous closing price

Example:

Below < -	40.00	Previous Closing	100/	Above >
10%	-10 %	Price	+10 %	+10%
Rejected	US\$ 0.675	US\$ 0.750	US\$ 0.825	Rejected



Nasdaq Dubai reserves the right to redefine and modify the safeguard ranges intraday depending on market situations including but not exclusive to re-instatement of a security following a halt or suspension of trading, acquisitions, significant corporate news or extraordinary corporate actions.

Nasdaq Dubai will notify the market when any change to the threshold is made intraday.

For **REIT securities** admitted to trading on Nasdaq Dubai:

Nasdaq Dubai has introduced, in addition to static limits, dynamic limits within its trading safeguards limits. Dynamic limits apply to all REIT securities admitted to trading on Nasdaq Dubai market.

Dynamic limits are safeguards calculated using the last expected trade price as the reference and therefore they reference changes as new trades are executed and the dynamic limits recalibrate around the new reference price.

A table setting out the trading safeguards limits for REIT securities admitted to trading on Nasdaq Dubai market is set out below:

Price Range	Static Limit	Dynamic Limit
Less than US\$ 0.100	< + 50 % > from previous closing price	< + 25 % > from last trade
Less than 035 0.100	< - 5 % > from previous closing price	< - 2.5 % > from last trade
From US\$ 0.100 to 0.249	< + 20 % > from previous closing price	< + 10 % > from last trade
F10111 05\$ 0.100 to 0.249	< - 5 % > from previous closing price	< - 2.5 % > from last trade
From US\$ 0.250 to 0.499	< + 15 % > from previous closing price	< + 7.5 % > from last trade
F10111 05\$ 0.250 to 0.499	< - 5 % > from previous closing price	< - 2.5 % > from last trade
Above US\$ 0.500	< + 10 % > from previous closing price	< + 5 % > from last trade
Above 03\$ 0.500	< - 5 % > from previous closing price	< - 2.5 % > from last trade

Example of how the dynamic limit works is provided below:

Below -2.5%	-2.5%	Last Trade	+7.5%	Above 7.5%
Rejected	0.2925	0.3	0.3225	Rejected

If the trade executes at 0.3225, that becomes the last trade price and the dynamic limits recalculate around that price until the static price limits are reached.

2. Order Size

The maximum allowed order volume is 10,000,000 shares per order.

The maximum allowed order value (quantity X price) is USD\$ 20,000,000 (AED 73,000,000) per order.

Any order placed with a volume above 10,000,000 shares or with value above US\$ 20,000,000 (AED 73,000,000) will be rejected by the trading system.

2.15 Security States

Normally, the state of all securities will be active and trading will occur as set out in the timetable of the Board to which they belong. In certain circumstances, however, securities may be subject to other states. When changes occur in the status of a security an information message is disseminated via the Nasdaq Dubai Trading Platform.



Securities on Nasdaq Dubai can be in the following states:

Active: Securities in this state are available for trading. Members can enter new orders, amend existing orders, and cancel orders. Securities in an Active state will be represented by the letter "A" in the Security Status Indicator of that Security.

Suspended: Securities in a Suspended state are not available for trading. Members cannot enter new orders, amend or cancel any pending orders on these securities. Securities in a suspended state will be represented by the letter "**S**" in the security status indicator of that security.

2.16 Investor Number Amendment

On trading day, members will send correction request for their trade error through email attachment letter signed by an authorized signatory(ies) addressing Clearing@nasdaqdubai.com & trading@nasdaqdubai.com, no later than 14:30 same day.

Once the trade error correction takes place on the trading system, a confirmation message sent to the member through the same trading system.

2.17 Trade Cancellation

Members cannot cancel or modify any trades matched on Nasdaq Dubai. However, in the case of a material error by a Member which was notified to Nasdaq Dubai within **fifteen (15) minutes** of the transaction being executed, Nasdaq Dubai may, but shall not be obliged to, cancel all securities transactions affected as a consequence of such error. Nasdaq Dubai may also cancel any and all securities transactions which in its reasonable judgment do not comply with its Rules, DFSA Rules, applicable laws or regulations.

These cancellation rules do not apply if the following conditions are true:

Trader errors such as the following are not considered to be grounds for cancelling a trade unless a situation occurs where a cancellation would be in the best interest of maintaining a fair and orderly market:

- Entering a sell order instead of a buy order.
- Entering an incorrect price where the price that the trade occurred at is not significantly away from the current Best Bid Offer (BBO) or the Last Traded Price (LTP) where no BBO exists.
- Entering a higher or lower quantity than intended where it can easily be reversed. (Bids and offers are readily available at reasonable prices for that instrument).
- The reversal of the error would result in a total loss of less than USD 1,000 or equivalent.

If a request for cancellation was received within a reasonable time, Nasdaq Dubai will deal with such request on a case by case basis and apply the above guidelines as far as is practicable. Nasdaq Dubai at its sole discretion will decide if a trade cancellation is required.

Time for a request for cancellation

A Trading Member wishing to cancel a transaction shall submit the cancellation request via phone (+971 4 305 5472/5474/5439) followed by an email to trading@nasdaqdubai.com no later than **fifteen (15) minutes** from the time the trade took place with details of the request.



Procedures:

When a Nasdaq Dubai Trading Member has submitted a request for cancellation, Nasdaq Dubai will assess whether the prerequisites for cancellation are present. If the prerequisites for the cancellation request are satisfied, Nasdaq Dubai shall advise the other Nasdaq Dubai Trading Members involved in the transaction as soon as possible that the trade will be cancelled.

Trade cancellations at the request of a member will not be entitled to a reversal of trading fees.

Trade cancellation will be published by way of circular.

Exchange initiated Trade Cancellations:

Nasdaq Dubai may, where required, cancel a trade to ensure the integrity of the market and that the market is operating in a fair and orderly manner.

Trade cancellations initiated by Nasdaq Dubai may be the result of:

- An indisputable error or mistake which is caused by a technical or manual error entering an incorrect price where the price that the trade occurred is significantly away from the current BBO, or the LTP where no BBO exists.
- Breach of a material provision of law, regulation, or rule.
- Technical disruptions in the trading and/or clearing systems beyond the Trading Member's control.
- Trades that result in a misrepresentation of the market price.

Nasdaq Dubai will have discretion to levy a trade cancellation fee on the party initiating the cancellation. If a trade cancellation is a result of an error on Nasdaq Dubai's part, then the fees of the cancelled trade will be waived for the members involved.

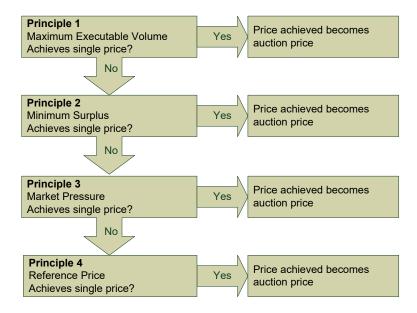


Appendix 1: Calculation of Theoretical Auction Price (TAP)

Calculation Steps:

There are four Principles in determining the TAP. If a price cannot be determined after the first principle, the model progresses to the second principle, and if a price cannot be determined after the second principle, the model progresses to the third principle, and if necessary, to the fourth.

These principles are applied in the following order:



Principle 1: Maximum Executable Volume (MEV)

This principle establishes the price(s) at which the maximum number of securities will be executed. There are two stages involved in applying this rule.

- 1. The first stage adds together all the bids (Cumulative Bid]) and all the asks (Cumulative Ask). The Cumulative Bid is calculated by taking the quantity of securities from the highest bid price and adding to this the quantity of securities from the second highest bid price and then the third highest bid and so on. The Cumulative Ask is calculated by taking the quantity of securities to from the lowest ask price and adding to this the quantity of securities from the second lowest ask price, then the third lowest and so on.
- 2. The second stage establishes the Maximum executable volume based on the Cumulative Bid and Cumulative Ask at each price level.

In **Example 1** below there is a Cumulative Bid of 180 securities at a price of \$0.81 that match with a Cumulative Ask of 180 securities at the same price of \$0.81. In this example, the purchase orders of 50 at \$0.83 and 70 at \$0.82 were also executed at the lower price of \$0.81. On the other side, the sale orders of 100 at \$0.79 and 60 and \$0.80 were also executed at the higher price of \$0.81.



Example 1 – TAP identified as Single Price:

Bid Quantity (limit orders)	Cumulative buy quantity	Surplus	Price	Surplus	Cumulative sell quantity	Ask Quantity (limit orders)
50	50		0.83	130	180	
70	120		0.82	60	180	
60	180	0	0.81	0	180	20
	180	20	0.80		160	60
	180	80	0.79		100	100

In the order book situation displayed above, the TAP will be **\$0.81** according to the Maximum executable Volume.

Example 2 – TAP multiple prices identified: Establish Maximum Executable Volume (MEV) at each eligible price.

In this example, the maximum quantity of shares that will be traded is 180. Hence, had it been only one price at which the maximum quantity of shares that may be traded, that price would be the official auction price.

Bid Quantity (limit orders)	Cumulative buy quantity	Price	Cumulative Sell quantity	Ask Quantity (limit orders)	Maximum Executable Vol. (MEV)
50	50	0.83	300	50	50
130	180	0.82	250	40	180
0	180	0.81	210	30	180
30	210	0.80	180	0	180
0	210	0.79	180	0	180
40	250	0.78	180	60	180
40	290	0.77	120	50	120
40	330	0.76	70	70	70

The Maximum Executable Volume (MEV) is minimum of the Cumulative Buy and Cumulative Sell quantities at that price.

The MEV occurred at prices 0.78, 0.79, 0.80, 0.81 and 0.82. Therefore, at the completion of Principle 1, the potential auction price would be any of these prices.

The algorithm has eliminated prices 0.83, 0.77 and 0.76 to further narrow the choices for an auction price. Hence, System moves to Principle 2 to determine the Minimum Surplus level.

Principle 2: Minimum Surplus

If there is more than one price at which there is a Maximum Executable Volume (MEV), the price with the minimum surplus (the fewest unexecuted securities) will be chosen as the TAP.

Example 1: The Maximum Executable Volume (MEV) is 80 being the total number of securities that make up the Cumulative Ask which can be executed at three prices of \$0.80, \$0.81 and \$0.82. In this example the TAP is \$0.82



because the Maximum Executable Volume (MEV) of 80 can be executed against a Cumulative Bid of 90 securities at a price of \$0.82 with a Minimum Surplus (MS) of 10; i.e. leaving just 10 securities unexecuted.

Example 1 TAP identified as Single Price:

Bid Quantity (limit orders)	Cumulative buy quantity	Price	Cumulative Sell quantity	Ask Quantity (limit orders)	Maximum Executable Vol. (MEV)	Minimum Surplus (MS)
50	50	0.83	80		50	30
40	90	0.82	80		80	10
10	100	0.81	80		80	20
	100	0.80	80	30	80	20
	100	0.79	50	50	50	50

The Minimum Surplus (MS) at each price level is equal to the Cumulative Buy Quantity less the Cumulative Sell Quantity.

Example 2 – TAP multiple price identified: Establish Minimum Surplus (MS) at each eligible price.

Bid Quantity (limit orders)	Cumulative buy quantity	Price	Cumulative Sell quantity	Ask Quantity (limit orders)	Maximum Executable Vol. (MEV)	Minimum Surplus (MS)
50	50	0.83	300	50	50	*
130	180	0.82	250	40	180	70
0	180	0.81	210	30	180	30
30	210	0.80	180	0	180	30
0	210	0.79	180	0	180	30
40	250	0.78	180	60	180	70
40	290	0.77	120	50	120	*
40	330	0.76	70	70	70	*

^{*}Price eliminated by Principle 1.

Ignoring the positive and negative signs, the lowest number in the MS column is 30. Had it been only one price at which this occurs, that price would be the official auction price.

In this example, the MS occurs at prices 0.79, 0.80 and 0.81. Therefore, at the completion of Principle 2, the potential auction price would be any of these prices.

The algorithm has further eliminated 0.82 and 0.78 as auction price to further narrow the choices for an auction price. Hence the system moves to Principle 3 to determine Market Pressure.



Principle 3: Market Pressure

This principle determines where the Market Pressure of the potential auction prices exists – on the buy or the sell side. A positive sign (+) indicates a surplus will remain on the buy side, demonstrating buy side pressure at the conclusion of the auction. A negative sign (-) indicates a surplus will remain on the sell side, demonstrating sell side pressure at the conclusion of the auction

If the Market pressure is on the buy side (positive sign of unmatched quantity) then the highest of the potential auction prices is used.

If the Market pressure is on the sell side (negative sign of unmatched quantity) then the lowest of the potential auction prices is used.

If Market pressure exists on both the buy side and the sell side, or the MS is "0" the algorithm will proceed to Principle 4.

Bid Quantity (limit orders)	Cumulative buy quantity	Price	Cumulative Sell quantity	Ask Quantity (limit orders)	Maximum Executable Vol. (MEV)	Minimum Surplus (MS)
50	50	0.83	300	50	50	*
130	180	0.82	250	40	180	*
0	180	0.81	210	30	180	-30
30	210	0.80	180	0	180	30
0	210	0.79	180	0	180	30
40	250	0.78	180	60	180	*
40	290	0.77	120	50	120	*
40	330	0.76	70	70	70	*

^{*}Price eliminated by Principle 1 and Principle 2

In the above example it is not yet possible to calculate an auction price, since the surpluses at 821, 822 and 823 are identical in magnitude but different in sign

At the potential auction prices of 0.79 and 0.80, the surplus is positive (+30), indicating that Market Pressure is on the buy side. At 0.81 the surplus is negative, indicating that Market Pressure is on the sell side. If the market opens at 0.79 or 0.80, a surplus of +30 signifies that after the market opens 30 shares will remain unfilled on the buy side at 0.79 or 0.80, while if the market opens at 0.81 a surplus of -30 indicates that 30 shares will remain unfilled on the sell side at 0.81.

Buy pressure is likely to cause the price to rise after the opening. If surpluses are all positive, the algorithm chooses the highest of the potential prices and this becomes the official auction price.

Sell pressure is likely to cause the price to fall after the opening. If the surpluses are all negative then the algorithm will opt for the lowest of the potential prices as the official auction price.

As the surpluses at 0.79, 0.80 and 0.81 are equal in size but opposite in direction, the algorithm continues to the fourth and final principle to establish an auction price.



Principle 4: Consulting Reference Price

This principle determines an auction price from the range of prices, established in Principle 3, on the basis of their proximity to a reference price.

Generally, the reference price is the last automatically matched traded price. Where an automatically matched trade has occurred on the current trading day, the reference price will be the price of the latest trade executed on that day. If, during the current trading day, an automatically matched trade has not occurred, the reference price will be carried over from the previous trading day (adjusted for corporate actions, if any).

This principle follows two steps to get the auction price depending upon the condition of the reference price.

Step1: Narrowing the options of potential auction prices to two within the entire range of possible auction prices.

- a- If the result of Principle 3 is a combination of positive and negative MS, then the algorithm marks the two prices where the sign changes,
 - i.e. in the table above, the MS sign for prices 0.79 and 0.80 is positive (30,30) and changes to negative (-30) at price 0.81; hence, the algorithm chooses 0.80 and 0.81 as potential auction prices to be applied.
- b- If the Minimum Surplus for all possible auction prices is zero, and then the algorithm marks the highest and lowest prices within that range as the potential auction prices to be applied i.e. 0.79 and 0.81.

Step 2: Determine the relationship between the reference price and the final auction price.

- a- If reference price is equal to or greater than the higher of the two possible prices established in Step 1, then the higher price becomes the auction price
- b- If reference price is equal to or less than the lower of the two possible prices established in Step 1, then the lower price becomes the auction price
- c- If reference price lies between the two possible prices established in Step 1, then the price closest to the reference price itself becomes the auction price. If the reference price is equally distant from these two possible prices, then the higher of the two prices becomes the auction price.

If reference price does not exist, for example, in the cases of an Initial Public Offering, new listing or the first day of trading a security on a reconstructed basis, the auction price becomes the lower of the two possible prices established in step 1.