



THE NEW NSE EQUITIES MARKET MICROSTRUCTURE

FREQUENTLY ASKED QUESTIONS

Following an assessment of the current Equities Market Microstructure, and in response to feedback from market participants/stakeholders, The Nigerian Stock Exchange (NSE) embarked on a functionality review in order to inform required changes to its Equities Market Structure. The goal is to continuously ensure an optimal market design that facilitates improved market depth and price efficiency.

1. What is the rationale for making changes to the Equities Market Microstructure?

- i. To boost market activity across all trading sessions.
- ii. To promote enhanced pricing efficiency in traded securities.
- iii. To ensure market protection against extreme volatility.
- iv. To promote fairness among all market participants.

2. What are the benefits of these changes for Market Participants?

- i. The new market structure provides an improved level playing field for all market participants and gives room for new trading strategies.
- ii. The new market structure will include regulatory and technological changes in order to drive a more competitive market.
- iii. The introduction of the opening and closing auctions with imbalance sessions will lead to a more efficient price setting mechanism.
- iv. The hybrid participation across all trading sessions further supports competitive pricing, reduced spreads and best execution.
- v. The Market Structure enhancements will facilitate Institutional and retail investors to enjoy lower intrinsic execution costs whilst issuers would benefit from potentially cheaper cost of capital.

3. What are the Major Changes being made to the Equities Market Structure?

Trading Session/Times	<ul style="list-style-type: none">▪ Pre-open auction time had been reduced by 10mins (to run from 9.30am to 10am).▪ All market participants can now take part in the auction sessions (i.e. both opening and closing auctions)
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	<ul style="list-style-type: none"> ▪ Continuous trading now starts from 10am and ends at 2.20pm (reduced by 4minutes from total trading time)
Imbalance Session	<ul style="list-style-type: none"> ▪ As part of the pre-open, a 5 minutes imbalance session is now included to address imbalances at the open and close auctions ▪ A buy/sell imbalance indicates the existence of more orders to buy/sell at the theoretical price to be filled relative to offsetting sell/buy orders ▪ An Imbalance order type is received during this session on the other side of the imbalance to add liquidity ▪ Imbalance orders are limit type orders and have the least priority during uncrossing ▪ The Theoretical Price/Volume and Imbalance indicators will be displayed from the beginning of imbalance session ▪ During IO (Imbalance Orders) session, existing orders can be amended but not deleted ▪ Order amendment is only allowed for orders on the side of the book which will address the order imbalance. ▪ The new price of an amended order can only be price at the TOP (Theoretical Opening Price) or better (Price Improvement) ▪ Imbalance orders can be priced at or better than theoretical price and can participate in determining theoretical price ▪ If auction book is empty/ there are no imbalance, imbalance order entry is not allowed
Participants	<ul style="list-style-type: none"> ▪ Agency traders and market makers can participate in all sessions. ▪ No market participant has prior view of order book ▪ Market makers no longer have sole view of adjust sessions to address imbalance
Minimum Trade Quantity	<ul style="list-style-type: none"> ▪ Size Test under the pricing methodology rule now applies across all sessions including auctions ▪ There must be at least one potential trade that meets the Minimum Market Trade Quantity threshold in order for the Theoretical Opening Price and Theoretical Opening Volume to be set during the auction.
Limit Up Limit Down (LULD)	<ul style="list-style-type: none"> ▪ 10% LULD rule now applies across market sessions <ul style="list-style-type: none"> • Maximum Daily Upward movement now 10% as against 10.25% in previous structure • Maximum Daily Downward Movement now 10% as against 9.75% in previous structure
Reference Price	<ul style="list-style-type: none"> ▪ Currently should an Open Price be set on the transition to Continuous Trading, the Reference Price is updated from Previous Close Price to that Open Price. This will no longer be the case. The



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	Reference Price will remain set to the Previous Close Price for the whole of the trading day																
Theoretical Information	<ul style="list-style-type: none"> ▪ TOP/TOV (Theoretical Opening Volume) will be calculated but not published during the Pre Open and Close Sessions ▪ TOP/TOV will be published from the beginning of the imbalance sessions till the end of the open and close auction 																
Opening and Closing Price	<ul style="list-style-type: none"> ▪ NSE is introducing the NSE Official Open/Close Price (NOOP/NOCP). The NOOP/NOCP is established from the opening/closing match, i.e. the Open/close Price is not set to the Previous Close Price/Last Sale Trade. This occurs when at least one trade at the TOP/TCP (Theoretical Closing Price) satisfies the Minimum Market Trade Quantity threshold during the opening/closing match. 																
Market Orders	<ul style="list-style-type: none"> ▪ During Pre-Open Auction Market Orders are not accepted ▪ During Pre-Close Market Orders are accepted 																
Auction Matching Priority	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">PRIORITY</th> <th style="text-align: left;">ORDER TYPE</th> <th style="text-align: left;">ALLOCATION</th> <th style="text-align: left;">PRIORITY</th> </tr> </thead> <tbody> <tr> <td>1st</td> <td>Market Orders*</td> <td>ORDER TYPE, PRICE, TIME</td> <td></td> </tr> <tr> <td>2nd</td> <td>Limit Orders</td> <td>ORDER TYPE, PRICE, TIME</td> <td></td> </tr> <tr> <td>3rd</td> <td>Imbalance Orders</td> <td>ORDER TYPE, PRICE, TIME</td> <td></td> </tr> </tbody> </table> <ul style="list-style-type: none"> - Market orders are not allowed during Pre-open - Matching priority during Continuous Trading will remain Price, Cross, Time. 	PRIORITY	ORDER TYPE	ALLOCATION	PRIORITY	1st	Market Orders*	ORDER TYPE, PRICE, TIME		2nd	Limit Orders	ORDER TYPE, PRICE, TIME		3rd	Imbalance Orders	ORDER TYPE, PRICE, TIME	
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Market Maker Quotes	<ul style="list-style-type: none"> ▪ Market Makers are no longer allowed to enter one-sided order except to address imbalances during imbalance session ▪ If a Market Maker buy or sell order fully executes then the Market Makers order on the other side of the book will be withdrawn ▪ If a Market Maker buy or sell order is withdrawn then the Market Makers order on the other side of the book will be withdrawn ▪ During the imbalance sessions, MMs are allowed one-sided order entries 																
Order Book Depth	<ul style="list-style-type: none"> ▪ Depth of order book during auction will no longer be visible to all market participants. 																



4. What will be the new Trading Schedule after Implementation?

SESSION	TIME	BOARDS	ORDER TYPE	ORDER DURATION	PRICE LIMIT
Pre-Open	9:30	EQTY ASeM Premium	Limit Quotes	Good Till Open Good Till Date Day	+/-10%
Pre-Open IO	9:55	EQTY ASEM Premium	Imbalance	Session	
Continuous Trading	10:00		Limit Market Crossing		
		EQTY ASeM Premium	Negotiated Private FAK FOK AON	Immediate Day Good Till Date	
			Quotes Pre-Close		
Pre-Close	14:20	EQTY ASeM Premium	Market Limit Quotes	Good Till Close Good Till Date Day	
Pre-Close IO	14:25	EQTY ASEM Premium	Imbalance	Session	
Close	14:30	EQTY ASeM Premium	-	-	

5. What are the Benefits of Introducing Opening and Closing Auctions?

- i. Auctions provide a consistent and reliable mechanism that allows participants to determine the price at which market opens or closes.
- ii. Bringing together many participants to determine a price is generally viewed as a fair way to value a stock.



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- iii. Institutional investors can use auctions as a way of trading large orders with minimal impact on the market.
- iv. Auctions have the ability to maintain stability by managing market volatility.
- v. As a transparent process, auctions allow investors to participate with the assurance that they can get a fair and accessible price.
- vi. The more investors can confidently enter and exit large positions at fair prices, the lower the risk premium associated with the investment decision. Ultimately, this results in lower cost of capital for listed companies.

6. What other Features will be available in the new market structure?

i. Pricing Methodology- Tick Sizes

The minimum pricing increments and minimum quantity traded for equity securities will no longer be the one-size-fits-all of One Kobo (N0.01k) which has been used in the market for all equity securities, but now re-standardized and stratified according to equity price groupings. The approved group structure is as follows:

Group	Tick Size	Share Price Band	Minimum Trade Units
A	Ten (10) Kobo	\geq NGN 100	Ten Thousand (10,000) units
B	Five (5) Kobo	NGN 5.00 < NGN 100	Fifty Thousand (50,000) units
C	One (1) Kobo	< NGN 5.00	One Hundred Thousand (100,000) units

ii. Minimum Price Floor

With the Par Value rule, the minimum market price of a unit of the share of any company listed on The Exchange will no longer be pegged at its Par Value of Fifty Kobo (N0.50). Affected listed securities can now be traded at a higher or lower price as may be determined by market dynamics.

The price floor of One Kobo (N0.01) will become operative as a minimum market price per unit of shares traded on the floor of The Exchange.

7. When will the New Market Structure be implemented?

The revised Equities Market Structure will be launch on July 2, 2018.



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NOTES:

1. The above information does not constitute professional investment or legal advice to anyone. Professional advice should be sought by stakeholders or potential investors where required.
2. For further information, please visit our website or send an e-mail to productmanagement@nse.com.ng; market_surveillance@nse.com.ng.
3. The Equities Trading Manual that will be available on the NSE website gives detailed information on the market microstructure and contains provisions for trading on the Exchange.
4. The Rules of The Exchange are also available on its website (www.nse.com.ng), for additional reference.

Issued this 18th day of June, 2018

Definition of Terms

Hybrid Market	Hybrid market is a market where there is an interaction between quote and order driven systems in the Central Order Book of The Exchange.
Uncrossing	Uncrossing takes place when matchable orders are executed following an auction session.
Imbalance Order	An Imbalance order is a limit type orders received at the imbalance sessions to add liquidity during auction. They have the least priority during opening/closing match.
Theoretical Price (TCP/TOP)	The TOP/TCP is the indicative auction price that helps to better gauge the price at which traders will execute in an auction. It is the price at which the share would trade if the auction was run immediately and market opens/close.
Theoretical Volume (TOV/TCV)	The TOV/TCV is the indicative volume which requires that at least one potential trade meets the Minimum Market Trade Quantity threshold during the auction before it can be set. It is calculated during the Pre-Open and Pre-Close Sessions but only displayed from the beginning of imbalance session.
Reference Price	The Reference Price of a security set as the previous close price of the security (unless explicitly set by the NSE) is used for 'order



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reasonability' checks. This implies that the daily price limits are based on the reference price.

Limit Up Limit Down (LULD)

The LULD is based on the reference price of individual securities on any given Trading day. This serves as a safeguard to validate the price of orders entered into the central order book.

Market Maker

A Market Maker is liquidity provider that quotes both a buy and a sell price on a security, with a view to making profit on the bid-offer spread.

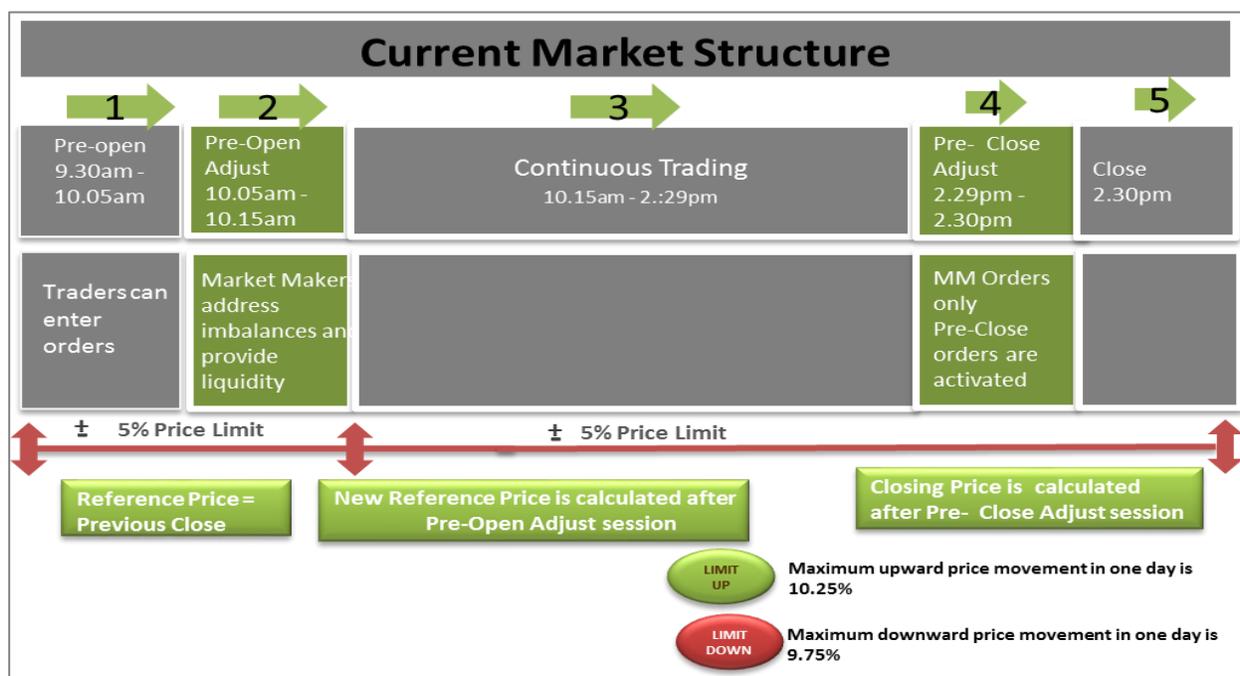
Market Orders

Market orders can only be entered into the NSE X-Stream trading platform during the continuous trading session and do not stipulate a price. A market order will try to execute as much quantity as possible up to the daily limits until it is completely filled.

Limit Orders

Limit orders stipulate a maximum purchase price or minimum selling price. Limit orders entered during the continuous trading session are executed either fully or partially, as market conditions permit.

Appendix





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