Background

The Nigerian Stock Exchange (“The Exchange” or “NSE”) Fixed Income market provides access to both retail and institutional investors to trade fixed income instruments listed by the Federal Government, States, Corporates and Supranational issuers on its platform. It adopts an integrated straight-through trading and settlement process using best in class market infrastructure without trade failures.

It provides access to one of the most liquid and transparent bond markets in Sub-Saharan Africa through our vast network of dealers and integrated trading platform. Fixed Income trades can be executed on the NSE through the Central Order Book or Cross Deal Window.

In a bid to further enhance price discovery, the Exchange recently launched the Indicative Bond Pricing Framework to address the liquidity and price discovery issues on fixed income by aggregating the prices of fixed income securities from traders across the market.

Market Model

The NSE Fixed Income Market comprises of the Central Order Book (COB) and Cross Deal Window. The COB is the main order book into which orders are entered during the trading day. Dealing Members that act as principal or agents, as well as Market Makers are participants in the COB. The Cross Deal Window is a service for executing deals from clients under the same brokerage firm. All trades entered into the COB and Cross Deal Window are considered as On-Exchange Transactions since they affect the market statistics on the trading day that they are entered.

Trading Sessions

The NSE Fixed Income market will be open for trading from Monday to Friday. A list of business holidays will be available on the NSE website. The trading sessions’ hours of operation are as follows:

<table>
<thead>
<tr>
<th>SESSION</th>
<th>TIME</th>
<th>ORDER TYPE</th>
<th>ACTIVITIES</th>
<th>ORDER DURATION</th>
<th>PRICE LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous Trading</td>
<td>10:00</td>
<td>Limit Market Crossing Negotiated Private FAK FOK AON Quotes</td>
<td>Order Entry/Amendment/Matching</td>
<td>Immediate Day Good Till Date Pre-Close</td>
<td>No Limit</td>
</tr>
<tr>
<td>Close</td>
<td>14:30</td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>End Of Day</td>
<td>15:00</td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

i. Continuous Trading
- The market opens at 10am commencing with continuous trading in all securities
- Orders can be entered, maintained, modified and cancelled.
- All good till date orders unexecuted from previous date will be available to trade.
In continuous trading, each new incoming Order is immediately checked for execution against Orders on the opposite side of the Order Book.

Orders can be executed in full or partially in one or more steps.

Orders are individually displayed in the COB.

Displayed portions of COB orders are given trading priority based on price/cross/time priority

At a given price, orders will be processed in the following sequence:
  i. Broker Preference (Cross) amongst displayed portions (in time priority if multiple matches exist).
  ii. Displayed portions of all other orders (in time priority if multiple matches exist).
  iii. Un-displayed portions of icebergs (in time priority if multiple matches). There is no broker referencing amongst un-displayed portions of icebergs.

ii. **Market Close**

  - Price determination takes place based on last traded price
  - End of day reports will be sent out

Any change in market timings or trading sessions will be notified to Dealing Members by way of a notice circulated to the market.

**Execution Channels**

i. **Central Order Book**: For orders entered into the central order book, order priority will be configured according to price, time, and cross. A change in the price of the order will cause the order to lose its priority and be queued according to the new price/time priority. A change in price and quantity will cause the order to be treated as a fresh order and will be queued according to the new priority parameters.

  a. **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 until it is completely filled. If a market order is only
partially filled, then it is converted into a limit order at the best bid price (for sell orders) or best ask price (for buy orders).

b. 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. 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 from the same house (the cross priority principle) and then joins the queue of orders having the same price (the time priority principle).

ii. Cross Deal: This is for the execution of orders from clients under the same brokerage firm.

Price Determination

Opening Price: The opening price is the previous day’s closing price

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, one, or several executions. Orders, or parts thereof are sorted in the order book according to price/cross/time priority. In addition to the price/cross/time priority, execution price during continuous trading in scenarios stated below is as follows:

Scenario 1: If an incoming market order or limit order enters 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.

Scenario 2: If an incoming market order or limit order enters 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 first execution.

Closing Price: The closing price is determined by the last trade price for the day by the close of market.

Pricing Convention

Orders will be quoted on a price or yield basis. Limit prices inputted will populate the corresponding yield in the “limit yield” field and limit yields inputted will populate the corresponding price in the “limit price” field. Price and yields will be decimalized and quoted to two decimal places.

All prices entered for trades must be entered as ‘clean’ prices, i.e., exclusive of accrued interest. Bond prices are quoted on a 'clean' basis. This means that the price showing does not include any accrued interest. However, settlement is done on a 'dirty' price basis which is the clean price plus the accrued interest.

Accrued Interest
As order book trades will be executed on a ‘clean’ basis, the trading system will calculate accrued interest for these electronic transactions. Accrued interest will be applied based on ACTUAL/ACTUAL day count conventions.

Accrued interest = (accrued days / days in current coupon period) * coupon / 2

(The coupon amount in the above accrued interest formula is divided by 2 because coupon payments on bonds are made semi-annually. The relevant amount when calculating the accrued interest is therefore the amount paid for the six-month period in question and not the annual interest rate).

Accrued days = days between previous coupon payment date and trade settlement date

Annual basis = actual days in coupon period.

Market Spreads

The Exchange will set spreads for “market makers” and/or “dealers” who are eligible to trade via two-way quotes in any segment of its Fixed Income market.

Tick Size

Prices will change in one kobo increments (₦0.01) and yields will change in one basis point increments (0.01%). Consequently, for a price or yield to assume priority in the order book, the price must change by one kobo for prices, or one basis point for yields.

Order sizes

1 units (or applicable market value) are permissible for orders entered into the central order book.

Order Priority

For orders entered into the central order book, order priority will be configured according to price, time, and cross. A change in the price of the order will cause the order to lose its priority and be queued according to the new price/time priority. A change in price and quantity will cause the order to be treated as a fresh order and will be queued according to the new priority parameters.

Daily Price/Yield Limits

There are no daily limits applicable to this market. The index circuit breaker also does not apply.

Trading Fees

The Fixed income market fee is as set out on the NSE Website or as amended from time to time.

- Clearing Arrangements

All transactions executed are reported to The Central Securities Clearing System (CSCS) Plc for clearing and settlement. The Fixed Income Market operates a T+2 settlement cycle and below is the process flow:
Settlement Process

### Day T
- Trading occurs at the Exchange
- Market Participants (MP) are notified of their Financial Net Obligations, including charges (3.30p.m)
- Settlement Banks (SB) are notified of Market Participants Financial Net Obligations. *(Marked “for your information only”)*

### Day T + 1
- SB notifies NSE & CSCS of Market Participants that may not settle trades of Day T by 12 noon.
- CSCS transmits the final Financial Net Obligations of Market Participants to Settlement Banks & NIBSS by 3.00p.m & 5.00p.m respectively.

### Day T + 2
- NIBSS applies the settlement advise by 8.00 a.m against the SB Central Bank account
- SB equally credits or debits her members on the same day (latest by 12 noon).
- MP are expected to pay their clients on the same day.

- Cross Market Settlement

**Scenario 1: Transfer from Dealer On S4 to CSCS Clients**
Scenario 2 - Transfer from CSCS Clients to Dealer on S4

Dealer initiates DvF Delivery Order on S4

SBF instructs CSCS to Receive Order on S4

CSCS Pairs Order (Receive) on S4

No

CSCS Clients account Credited

Yes

Bonds Available

SBF/Investor’s account is credited with Bond

CSCS Pairs Order (Receive) on S4

S4

SBF/Investor’s account is Debited

No

CSCS Clients account Debited

Yes

Bonds not Available

SBF/Investor’s account is Debited with Bond

SBF instructs CSCS to Deliver Order to Counter party on S4

Stock Broking Firm (SBF)

Online portal

CSCS initiates DvF Delivery Order on S4