National stock exchange

Trading System

◆ NSE operates on the 'National Exchange for Automated Trading' (NEAT) system, a fully automated screen based trading system, which adopts the principle of an order driven market. NSE consciously opted in favour of an order driven system as opposed to a quote driven system. This has helped reduce jobbing spreads not only on NSE but in other exchanges as well, thus reducing transaction costs.

Market Types

Order Books

Order Matching Rules

Order Conditions

Trading System - Market Types The NEAT system has four types of market. They are:

Normal Market Odd Lot Market Auction Market Spot Market

♦ Normal Market

All orders which are of regular lot size or multiples thereof are traded in the Normal Market. For shares that are traded in the compulsory dematerialised mode the market lot of these shares is one. Normal market consists of various book types wherein orders are segregated as Regular lot orders, Special Term orders, Negotiated Trade Orders and Stop Loss orders depending on their order attributes.

ODD LOT MARKET

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Auction market:

- ◆ In the Auction Market, auctions are initiated by the Exchange on behalf of trading members for settlement related reasons. There are 3 participants in this market.
- ◆ Initiator the party who initiates the auction process is called an initiator
- ◆ Competitor the party who enters orders on the same side as of the initiator
- Solicitor the party who enters orders on the opposite side as of the initiator

Spot orders

◆ Spot orders are similar to the normal market orders except that spot orders have different settlement periods vis-à-vis normal market. These orders do not have any special terms attributes attached to them. Currently the Spot Market is not in use.

Trading System - Order Books

- ◆ Order Books The NSE trading system provides complete flexibility to members in the kinds of orders that can be placed by them. Orders are first numbered and time-stamped on receipt and then immediately processed for potential match. Every order has a distinctive order number and a unique time stamp on it. If a match is not found, then the orders are stored in different 'books'. Orders are stored in price-time priority in various books in the following sequence:
 - -Best Price
 - -Within Price, by time priority.

Price priority means that if two orders are entered into the system, the order having the best price gets the higher priority. Time priority means if two orders having the same price are entered, the order that is entered first gets the higher priority.

The Equities segment has following types of books

- **♦** Regular Lot Book
- **♦** Special Terms Book
- **♦** Negotiated Trade Book
- **♦** Stop-Loss Book
- ♦ Odd Lot Book
- ♦ Spot Book
- **♦** Auction Book

- ◆ The Regular Lot Book contains all regular lot orders that have none of the following attributes attached to them.
 - All or None (AON)
 - Minimum Fill (MF)
 - Stop Loss (SL)

Special Terms Book

- ◆ The Special Terms book contains all orders that have either of the following terms attached:
 - All or None (AON)
 - Minimum Fill (MF)

Note: Currently, special term orders i.e. AON and MF are not available on the system as per the SEBI directives

Negotiated Trade Book

◆ The Negotiated Trade book contains all negotiated order entries captured by the system before they have been matched against their counterparty trade entries. These entries are matched with identical counterparty entries only. It is to be noted that these entries contain a counterparty code in addition to other order details.

Stop-Loss Book

Stop Loss orders are stored in this book till the trigger price specified in the order is reached or surpassed. When the trigger price is reached or surpassed, the order is released in the Regular lot book.

The stop loss condition is met under the following circumstances:

Sell order - A sell order in the Stop Loss book gets triggered when the last traded price in the normal market reaches or falls below the trigger price of the order.

Buy order - A buy order in the Stop Loss book gets triggered when the last traded price in the normal market reaches or exceeds the trigger price of the order.

Odd Lot Book

◆ The Odd lot book contains all odd lot orders (orders with quantity less than marketable lot) in the system. The system attempts to match an active odd lot order against passive orders in the book. Currently, pursuant to a SEBI directive, the Odd Lot Market is being used for orders that have quantity less than or equal to 500 viz. the Limited Physical Market.

Spot Book

◆ The Spot lot book contains all spot orders (orders having only the settlement period different) in the system. The system attempts to match an active spot lot order against the passive orders in the book. Currently the Spot Market book type is not in use

Auction Book

◆ This book contains orders that are entered for all auctions. The matching process for auction orders in this book is initiated only at the end of the solicitor period.

Trading System - Order Matching Rules

- ◆ The best buy order is matched with the best sell order.
- ◆ An order may match partially with another order resulting in multiple trades. For order matching, the best buy order is the one with the highest price and the best sell order is the one with the lowest price.
- ◆ This is because the system views all buy orders available from the point of view of a seller and all sell orders from the point of view of the buyers in the market.
- ◆ So, of all buy orders available in the market at any point of time, a seller would obviously like to sell at the highest possible buy price that is offered.
- ◆ Hence, the best buy order is the order with the highest price and the best sell order is the order with the lowest price.
 - Members can proactively enter orders in the system, which will be displayed in the system till the full quantity is matched by one or more of counter-orders and result into trade(s) or is cancelled by the member
- ◆ Alternatively, members may be reactive and put in orders that match with existing orders in the system.
- Orders lying unmatched in the system are 'passive' orders and orders that come in to match the existing orders are called 'active' orders. Orders are always matched at the passive order price. This ensures that the earlier orders get priority over the orders that come in later.

Trading System - Order Conditions

- ◆ A Trading Member can enter various types of orders depending upon his/her requirements. These conditions are broadly classified into three categories:
- time related conditions,
- price-related conditions
- quantity related conditions.

Time Conditions

◆ DAY - A Day order, as the name suggests, is an order which is valid for the day on which it is entered. If the order is not matched during the day, the order gets cancelled automatically at the end of the trading day.

IOC - An Immediate or Cancel (IOC) order allows a Trading Member to buy or sell a security as soon as the order is released into the market, failing which the order will be removed from the market. Partial match is possible for the order, and the unmatched portion of the order is cancelled immediately.

Price Conditions

Limit Price/Order – An order that allows the price to be specified while entering the order into the system. Market Price/Order – An order to buy or sell securities at the best price obtainable at the time of entering the order. Stop Loss (SL) Price/Order – The one that allows the Trading Member to place an order which gets activated only when the market price of the relevant security reaches or crosses a threshold price. Until then the order does not enter the market.

A sell order in the Stop Loss book gets triggered when the last traded price in the normal market reaches or falls below the trigger price of the order. A buy order in the Stop Loss book gets triggered when the last traded price in the normal market reaches or exceeds the trigger price of the order.

E.g. If for stop loss buy order, the trigger is 93.00, the limit price is 95.00 and the market (last traded) price is 90.00, then this order is released into the system once the market price reaches or exceeds 93.00. This order is added to the regular lot book with time of triggering as the time stamp, as a limit order of 95.00

Quantity Conditions

◆ **Disclosed Quantity (DQ)-** An order with a DQ condition allows the Trading Member to disclose only a part of the order quantity to the market. For example, an order of 1000 with a disclosed quantity condition of 200 will mean that 200 is displayed to the market at a time. After this is traded, another 200 is automatically released and so on till the full order is executed. The Exchange may set a minimum disclosed quantity criteria from time to time.

MF - Minimum Fill (MF) orders allow the Trading Member to specify the minimum quantity by which an order should be filled. For example, an order of 1000 units with minimum fill 200 will require that each trade be for at least 200 units. In other words there will be a maximum of 5 trades of 200 each or a single trade of 1000. The Exchange may lay down norms of MF from time to time.

AON - All or None orders allow a Trading Member to impose the condition that only the full order should be matched against. This may be by way of multiple trades. If the full order is not matched it will stay in the books till matched or cancelled.

Note: Currently, AON and MF orders are not available on the system as per SEBI directives.

Market Segments

- ◆ Market Segments The Exchange operates the following sub-segments in the Equities segment:
- ◆ Rolling Settlement
- ◆ Limited Physical Market
- ◆ Institutional Segment
- ◆ Trade for Trade Segment

Salient Features of the Institutional segment

Rolling Settlement

♦ Rolling Settlement

In a rolling settlement, each trading day is considered as a trading period and trades executed during the day are settled based on the net obligations for the day.

At NSE, trades in rolling settlement are settled on a T+2 basis i.e. on the 2nd working day. For arriving at the settlement day all intervening holidays, which include bank holidays, NSE holidays, Saturdays and Sundays are excluded. Typically trades taking place on Monday are settled on Wednesday, Tuesday's trades settled on Thursday and so on.

Limited Physical Market

Pursuant to the directive of SEBI to provide an exit route for small investors holding physical shares in securities mandated for compulsory dematerialised settlement, the Exchange has provided a facility for such trading in physical shares not exceeding 500 shares. This market segment is referred to as 'Limited Physical Market' (small window). The Limited Physical Market was introduced on June 7, 1999

◆ Salient Features of the Limited Physical Market

Limited Physical Market - Salient Features

Trading is conducted in the Odd Lot market (market type 'O') with Book Type 'OL' and series 'BT'. Order quantities should not exceed 500 shares.

The base price and price bands applicable in the Limited Physical Market are same as those applicable for the corresponding Normal Market on that day.

Trading hours are the same as that of the normal market and order entry during the pre-open and post-close sessions are not allowed.

Settlement for all trades would be done on a trade-for-trade basis and delivery obligations arise out of each trade. Orders get matched when both the price and the quantity match in the buy and sell order. Orders with the same price and quantity match on time priority i.e. orders which have come into the system before will get matched first

All Good-till-cancelled (GTC)/Good-till-date (GTD) orders placed and remaining as outstanding orders in this segment at the close of market hours shall remain available for next trading day. All orders in this segment, including GTC/GTD orders, will be purged on the last day of the settlement.

Trading Members are required to ensure that shares are duly registered in the name of the investor(s) before entering orders on their behalf on a trade date.

Limited Physical Market

Institutional Segment

- ◆ The Reserve Bank of India had vide a press release on October 21, 1999, clarified that inter-foreign-institutional-investor (inter-FII) transactions do not require prior approval or post-facto confirmation of the Reserve Bank of India, since such transactions do not affect the percentage of overall FII holdings in Indian companies.
- (Inter FII transactions are however not permitted in securities where the FII holdings have already crossed the overall limit due to any reason).
- ◆ To facilitate execution of such Inter-Institutional deals in companies where the cut-off limit of FII investment has been reached, the Exchange introduced a new market segment on December 27, 1999.
- ◆ The securities where FII investors and FII holding has reached the cut-off limit as specified by RBI (2% lower than the ceiling specified by RBI) from time to time would be available for trading in this market type for exclusive selling by FII clients.

The cut off limits for companies with 24% ceiling is 22%, for companies with 30% ceiling, is 28% and for companies with 40% ceiling is 38%. Similarly, the cut off limit for public sector banks (including State Bank of India) is 18% whose ceiling is 20%.

The list of securities eligible / become ineligible for trading in this market type would be notified to members from time to time.

Trade for Trade Segment

◆ The securities in Trade for Trade segment are made available for trading under BE or BT series. The settlement of securities available in this segment is done on a trade for trade basis and no netting off is

allowed.

The surveillance action whereby securities are transferred for trading and settlement on a trade-to-trade basis under BE series is reviewed at periodic intervals viz fortnightly and quarterly. The criteria for shifting securities to/from Trade for Trade segment are decided jointly by the stock exchanges in consultation with SEBI and reviewed periodically. Securities on which derivatives products are available or securities included in indices on which derivatives products are available shall not be transferred to Trade for Trade segment.

Institutional Segment - Salient Features

Trading in this market segment is available for institutional investors only. In order to ensure that the overall FII ceiling limits are not violated, trading members shall be allowed to enter sell orders in this market segment only for their FII clients. However, members can enter buy orders on behalf of FII/FI clients.

◆ Trading takes place under series type 'IL' under market type 'N'

The minimum tradable quantity in this market is 1.

Trading shall be done on T+2 rolling settlement basis only. Settlement of transactions shall be on dematerialised mode only

The base price and the price bands applicable for this segment are the same as those applicable for the corresponding normal market on that day.

In case of buy/sell orders, members shall be required to enter the custodial participant code at the time of order entry. Members shall not be allowed the facility of trade warehousing for the IL Market segment. All Good-till-cancelled (GTC)/Good-till-date (GTD) orders placed and remaining as outstanding orders in this segment at the close of market hours shall be automatically cancelled by the system at the end of the day.

The members are also requested to fax a copy of contract note issued to the clients for the deal executed on this segment to the Exchange latest by 4:00 p.m. on the next working day at the following fax number: 6598155

Settlement Cycle

- ◆ The important settlement types are as follows
- ◆ dematerialized mode
- ◆ Normal segment (N)
- ◆ Trade for trade Surveillance (W)
- ◆ Retail Debt Market (D)
- ◆ Auction normal (A)
- physical form
- ◆ Limited Physical market (O)
- ◆ Non cleared TT deals (Z)
- ◆ Trades in the settlement type N, W, D and A are settled in <u>dematerialized mode</u>. Trades under settlement type O are settled in <u>physical form</u>. Trades under settlement type Z are settled directly between the members and may be settled either in physical or dematerialized mode.

Details of the two modes of settlement are as under:

a. Dematerialised settlement

NSCCL follows a T+2 rolling settlement cycle. For all trades executed on the T day, NSCCL determines the cumulative obligations of each member on the T+1 day and electronically transfers the data to Clearing Members (CMs). All trades concluded during a particular trading date are settled on a designated settlement day i.e. T+2 day. In case of short deliveries on the T+2 day in the normal segment, NSCCL conducts a buy –in auction on the T+2 day itself and the settlement for the same is completed on the T+3 day, whereas in case of W segment there is a direct close out. For arriving at the settlement day all intervening holidays, which include bank holidays, NSE holidays, Saturdays and Sundays are excluded. The settlement schedule for all the settlement types in the manner explained above is communicated to the market participants vide circular issued during the previous month

Settlement Cycle

settlement

♦ b. Physical settlement

1. Limited physical Market: To provide an exit route for small investors holding physical shares in securities the Exchange has provided a facility for such trading in physical shares not exceeding 500 shares