

Introduction of Call Auction in Pre-Open Session - Updates

Pursuant to our notice (Notice no 20101001-24) issued on October 1, 2010 regarding introduction of Call Auction trading in the Pre-open Session in BSE's Equity segment with effect from **Monday, October 18, 2010**, and the mock trading session held on 9th October, 2010, we have received some queries from trading members on certain points.

We are herewith providing clarifications in the form of an updated notice. This updated notice retains the guidelines mentioned in the notice issued on October 1, 2010 in addition to the clarification points. To help identify the updated content, we have highlighted the additions by underlining them. All trading members are requested to note the guidelines given below on the introduction of call auction in the pre-open session in the Equity segment.

1. The Call auction trading mechanism will be applicable for the pre-open session only, to determine the opening price of the stocks and execute trades for all executable orders at the single determined opening price.
2. The pre-open session will be introduced initially for the SENSEX and NIFTY components (Annexure 1). In case of any change in composition of the Index, the incoming stock(s) will be incorporated for computation of the market opening price in the pre-open session. The outgoing stock(s) will continue to be part of the pre-open session.
3. The pre-open session shall be conducted for duration of 15 minutes, i.e. from 9:00am 9:15 am. The pre-open session schedule will be as follows -

Session	Time	Action
Order Entry Period	9:00am - 9:07/08am	<p>∅ Order Addition/Modification/Cancellation</p> <ul style="list-style-type: none">• <i>Random stoppage between 7th and 8th minute</i> <p>∅ No trades are executed</p> <p>∅ Dissemination of Indicative Price, Matchable Quantity at the Indicative Price & Indicative Index</p>

Order Matching & Confirmation Period	9:08am – 9:12am	∅ No Order Addition/Modification/Cancellation ∅ Opening price determination, order matching and trade confirmation
Buffer Period	9:12am - 9:15am	∅ To facilitate transition between pre-open and continuous trading session

4. Other trading session timings

- The continuous trading session for all the stocks will commence only after the pre-open session ends at 9:15am. The continuous trading session will end at 3:30pm. The two trading sessions, continuous and pre-open sessions will not run concurrently.
- Stocks that are not eligible to participate in the pre-open session (in other words, stocks not covered under point 2 above) will be available for trading from 9:15 am – 3:30pm
- Trading in BSE’s Derivatives segment will be from 9:15am – 3:30pm
- The block deal trading window will be available for duration of 35 minutes from 9:15am – 9:50am.

5. Only market orders and limit orders will be permitted during the pre-open session. Both order types will be considered for the computation of the opening price. No iceberg or displayed quantity orders are allowed, i.e. orders should be revealed in full quantity.

6. Order Execution

All orders entered in the system for a particular stock during the pre-open session, which are executable into trades, will match at a single price i.e. the market opening price. Matching of orders will happen in the following sequence -

- All Eligible limit orders will be matched with eligible limit orders
- Residual eligible limit orders will be matched with market orders
- Residual market orders will be matched with market order

If there are only market orders in the order book then the market orders will be matched at the previous day’s closing price.

7. Determination of Market Opening Price

The market opening price will be determined through a volume maximization logic as described below -

- i. Price at which maximum quantity is tradable
 - If there is more than one price that meets the above criterion, then we go to the next step
- ii. Price at which absolute order imbalance (difference in cumulative buy & cumulative sell quantity at that price) is minimum
 - If there is more than one price having same absolute order imbalance quantity, then we go to the next step
- iii. Price which is closest to the previous day's closing price. In case the previous day's closing price is the mid-value of pair of prices which are closest to it, then the previous day's closing price itself will be taken as the market opening price.

8. Unexecuted orders

- All orders that remain unexecuted at the end of the pre-open session will be shifted to the order book of the continuous trading session retaining the original time stamp. Limit orders will be moved to the continuous session at the limit and market orders will be moved as limit orders at the opening price.
- If the opening price has not been discovered, then all the orders will be shifted to the order book of the continuous trading session following price time priority. The price of the first trade in the continuous trading session will be the opening price for the stock.

9. Information dissemination: The following information will be disseminated to the market at regular intervals during the order entry period pre-open session –

- Indicative market opening price, populated in the 'LTP' field
- Matchable quantity at the indicative market opening price, populated in the 'LTQ' field

If the indicative opening price/matchable quantity at the indicative opening price is not available then the 'LTP'/'LTQ' field is left blank.

- Indicative values of SENSEX and other BSE indices
- Total buy /sell depth of the book will be populated in the 'Buy /Sell depth' fields
- Percentage change in the indicative price from the previous day's closing price
- High/ Low prices will be disseminated based on the indicative opening prices
- The 'open' field in the BOLT system will be populated only when the actual opening price has been determined in the order matching and confirmation period.

- The 'Close' field will display the previous day's closing price

The market depth would display:

- The indicative opening price + next best 4 bids and offers. If the indicative opening price is not determined, then the best bids and offers will be displayed
- The cumulative quantities at each of these price points
- Market order quantity will be added to the best available price point

Example of the market depth display

Order Book

Buy Quantity	Buy Price	Sell Price	Sell Quantity
100	ATO	91	100
100	96	91.5	100
150	95	93	100
50	93	95	100
100	91.5	96	200
100	91	97	50
100	90	98.5	50
		99	100

Demand Supply Schedule

Price Point	Cumulative Buy Quantity	Cumulative Sell Quantity	Tradable Quantity	Absolute Order Imbalance
99	100	800	100	700
98.5	100	700	100	600
97	100	650	100	550
96	200	600	200	400
95	350	400	350	50
93	400	300	300	100
91.5	500	200	200	300
91	600	100	100	500
90	700	0	0	700

Here the indicative opening price determined is 95.00 at which the tradable quantity is maximized based on the volume maximization logic.

The market depth display for the pre-open session will be as follows –

	Buy Quantity	Buy Price	Sell Price	Sell Quantity	
<i>Cumulative Buy Quantity</i>	350	95	95	400	<i>Cumulative Sell Quantity</i>
	400	93	96	600	
	500	91.5	97	650	
	600	91	98.5	700	
	700	90	99	800	

Indicative Opening Price

10. Risk Management

- Blocking of Upfront Margins: During the order entry period, upfront margins will be adjusted against the available collateral of members at the time of entering orders into the system. In case of cancellation of orders during this period, margins will be released immediately. During the order matching and confirmation period (i.e. from 9:08 onwards), all the order level blocked margins will be released and actual trade level margins will be blocked based on the trades generated as is applicable in the continuous trading session.
- Price Bands: A uniform price band of 20% will be applicable on all the participating stocks during the pre-open session.
- Index-based market-wide circuit breaker system: In the event SENSEX breaches its prescribed threshold limit upon calculation of the opening value of SENSEX at the closure of pre-open session, a trading halt will be triggered as per SEBI Circular Ref. No. SMDRPD/Policy/Cir-37 /2001 dated June 28, 2001 on index-based market-wide circuit breaker system. The trading halt shall be applicable at the start of the continuous trading session. The index breach will not impact the execution and confirmation of trades during the pre-open matching session.

Other details regarding the new version release of the BOLT TWS system as well as of IML regarding the pre-open session will be informed to all trading members in due course of time closer to the launch date.

For more information on the specifications related to the call auction trading mechanism in the pre-open session, please refer to BSE India website <http://www.bseindia.com/callauction/Introduction.aspx>

In addition to the pre-open trading session, we would like to inform all trading members that certain new features are being introduced in the BOLT TWS, given as below –

- In the Touchline, LTQ (Last Traded Quantity) has been enabled for profiling
- In the DLOAD, Pre-Open Call Auction scrips are available that can be directly loaded in the Touchline.
To download, go to DLOAD -> BOLT -> PREOPEN PROFILE -> PREOPEN.SPR

For any queries related to this notice, trading members may contact the following officials –

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This same notice is also attached herewith as Annexure 2 for ready reference of all trading members.

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