



TRADING RULES FOR EQUITY SECURITIES

Version 2.0

BSE Trading Rules For Equity Securities Amendments	Version	Revision Date (NBFIRA Approval Date)
Initial Approval	1.0	26/07/2012
Amendment to allow Shareholder Approved Transactions to be Executed on Crossings Board	2.0	18/03/2020

TABLE OF CONTENTS

Page No:

CHAPTER 1	1
INTRODUCTION	1
1.1 TRADING BOARDS.....	1
1.2 TRADING AND SYSTEM OPERATION SESSIONS.....	2
1.2.1 Pre-trading Session.....	2
1.2.2 Open Auction Session, Interim Auction Session and Closing Auction Session	2
1.2.3 Regular Trading Sessions	3
1.2.4 Closing Price Publication Session	3
1.2.5 Closing Price Cross Session.....	3
1.2.6 Post-close and Market Close Sessions	3
1.3 ORDER ENTRY	4
1.4 TRADING.....	4
CHAPTER 2	6
TYPES OF TRANSACTIONS	6
2.2 LIMIT ORDERS.....	6
2.3 MARKET ORDERS.....	6
2.3.5.1 Touchline Price.....	7
2.3.5.2 Protection price.....	7
2.4 STOP AND STOP LIMIT ORDERS	8
2.5 ORDER ATTRIBUTES	11
2.5.1 Volume Qualifiers.....	11
2.5.2 Time in Force (TIF).....	12
2.5.3 Order Qualifiers for Auction Sessions	13
2.5.4 Minimum Fill Quantity.....	15
2.5.5 Disclosed Quantity (Iceberg Orders).....	15
2.5.6 Quotes.....	16
CHAPTER 3	17
TRADING PROCEDURE	17
3.1 ORDER VALIDATION	17
3.2 TRADING UNIT	17
3.3 ORDER EXECUTION.....	17
3.4 PRICE DISCOVERY OF NEW ISSUES.....	19
CHAPTER 4	20
TRADING SESSIONS	20
4.1 PRE-TRADING SESSION.....	20
4.2 AUCTION SESSIONS	20
4.2.9 Auction Algorithm.....	21

BSE Equity Trading Rules – Effective Date 26 July 2012

4.2.10	Order matching	27
4.3.	REGULAR TRADING	28
4.3.1	MATCHING OF ORDERS	28
4.3.1.2	<i>Visibility Criteria (Priority 2) – Relates only to Iceberg Orders</i>	28
4.3.2	<i>Cancellation and Amendment of Orders and its Impact on the Order Priority</i>	29
CHAPTER 5	31
5.4	AMENDMENTS	31
5.5	ORDER LIFE TIME	31
5.6	PRICE CONSTRAINTS.....	31
5.7	TRADING UNIT.....	31
5.8	VISIBILITY	31
5.9	STATISTICS	32
5.10	CLEARING THE ORDER BOOK.....	32
5.11	CLOSING PRICE CROSS (CPX) SESSION.....	32
CHAPTER 6	34
ALL OR NONE (AON) BOARDS	34
6.1	ALL OR NOTHING TRADES.....	34
6.2	PRICE DETERMINATION	34
6.3	MARKET OPERATIONS.....	35
6.4	REJECTION OF ORDERS SUBMITTED FOR AON TRANSACTIONS.....	36
CHAPTER 7	37
PRICE BANDS AND CIRCUIT BREAKERS	37
CHAPTER 8	38
TRADING HALTS	38
8.2	MARKET HALTS	38
8.3	SECURITY HALTS AND SECURITY PAUSES	39
8.4	SECURITY SUSPENSION	40
CHAPTER 9	42
CANCELLATION OF TRADES	42
CHAPTER 10	44
CLOSING PRICE FOR EQUITY SECURITIES	44
CHAPTER 11	45
GENERAL PROVISIONS	45

CHAPTER 1

INTRODUCTION

1.1 Trading Boards

- 1.1.1** The Automated Trading System (ATS) implemented by the BSE is designed to match buy and sell orders for securities input by stockbrokers (members of the BSE) into the ATS, based on criteria and conditions as specified in these rules.
- 1.1.2** The BSE has defined 3 Boards in the ATS for the purpose of matching orders. These are the Normal Lot Board, the Pre-Negotiated (Crossings) Board and the All or None Board (AON) Board.
- 1.1.3** In the Normal Lot Board, Buy (Bid) and Sell (ask) orders are entered into a central order book in the system where matching of orders and execution of trades take place based on specified rules.
- 1.1.4** In the Crossings Board Trades are reported as negotiated between one or two stockbrokers. Given that price discovery does not take place at the Exchange in respect of negotiated trades, price restrictions apply to such transactions.
- 1.1.5** The AON Board caters to the transaction of large parcels. A transaction on the AON Board will remain open for 3 market days at the end of which the AON transaction will be concluded.
- 1.1.6** Once trades have been executed, price and volume details of the completed transactions are communicated back to the relevant stockbrokers on a real time basis.

1.2 Trading and System Operation Sessions

The trading day at the BSE for equity securities is divided into the following trading and system operation sessions:

	Sessions	Time	Duration
(a)	Pre-trading Session	10:00hrs to 10:10hrs.	10 min
(b)	Open Auction Session	10:10hrs to 10:25hrs.	15 min
(c)	Regular Trading Session 1	10:25hrs to 11:55hrs	1hr 30 min
(d)	Interim Auction Session	11:55hrs to 12:05hrs	10 min
(e)	Regular Trading Session 2	12:05hrs to 13:20hrs	1hr 15 min
(f)	Closing Auction Session	13:20hrs to 13.30hrs.	10 min
(g)	Closing Price Publication Session	13:30hrs to 13:40hrs	10 min
(h)	Closing Price Cross Session	13:40hrs to 13:50hrs	10 min
(i)	Post-Close Session	13:50hrs to 14:00hrs	10 min
(j)	Market Close	14:00hrs.	

As detailed above, the trading sessions consist of auctions and continuous trading sessions. The purpose of having both auctions and continuous trading sessions is to cater to the different trading requirements and strategies of stockbrokers and investors in order to improve liquidity.

The BSE may at any time, as it deems fit, change the time for a prescribed session or the sequence of the sessions.

1.2.1 Pre-trading Session

During the pre-trading session stock brokers may cancel orders brought forward from the previous trading day but are not permitted to amend orders or input new orders into the ATS.

1.2.2 Open Auction Session, Interim Auction Session and Closing Auction Session

Stockbrokers are permitted to input new orders, amend or cancel orders during the auction sessions.

The order book is temporarily closed at the end of each auction session and orders are matched based on an algorithm that determines the auction price which maximizes the number of shares traded as the primary criteria. The purpose of the auction sessions is for the ATS to determine the opening prices and closing prices of securities and also to enable the

execution of trades in respect of less liquid securities.

1.2.3 Regular Trading Sessions

During these sessions order matching and execution of trades take place continuously on the Normal Lot Board based on the matching criteria defined in the ATS. The matching criteria as defined by the BSE, is "price, capacity and time". In order to get priority in the order book the basic rule that applies is to place "buy orders at a higher price and sell orders at a lower price" (Price criteria). Orders by stockbrokers get lower priority in the ATS than orders by investors (capacity criteria). If there is no difference between price and capacity, the time the order was entered dictates the priority in the order book on a first in first executed basis (time criteria). Unmatched orders are stored in the order book and carried forward to the next trading day or expired at the end of the day as determined by the order attributes and qualifiers when placing the order.

1.2.4 Closing Price Publication Session

This is not a session for entering or matching orders. The ATS computes the closing prices of listed Securities to be published on a pre-determined basis. The BSE has defined the methodology to be used to compute closing price in the following order. Primarily the ATS will compute closing price based on the closing auction, failing which the closing price will be determined using the volume weighted average price of trades executed during the trading day, failing which closing price will be defined as the previous closing price. If there is no history of past trades the reference price of the security at the point of listing will be defined as the closing price.

1.2.5 Closing Price Cross Session

The ATS has functionality to execute transactions between investors at the closing price as determined in the closing price publication session. This session caters exclusively to this functionality and transactions cannot be carried out at other prices.

1.2.6 Post-close and Market Close Sessions

These are system operation sessions in which order entry and trade executions do not take place.

1.3 Order Entry

- 1.3.1** The ATS is integrated with the Central Securities Depository System (CSD). The pre requisite to enter orders into the ATS on account of investors wishing to buy or sell securities is that the relevant investor should have an account in the CSD opened through the relevant participant of the Central Securities Depository Company of Botswana Limited (CSDB), i.e. through a stockbroker or custodian bank. Orders for and on behalf of investors are entered by stockbrokers into the ATS using an ATS terminal and quoting the investors CSD account number. Orders with incorrect CSD account numbers will be rejected. Amendments and cancellation of orders can also be carried out through the ATS terminals provided that such orders have not been executed. Amendments to orders may result in a loss of time priority.
- 1.3.2** The ATS trading terminals provide functionality to enter orders and receive market data including orders that have been executed.
- 1.3.3** The ATS provides functionality to input orders with different attributes such as limit orders (orders with price limits), market orders (where the price limit is determined by the ATS based on programmed parameters), orders with time qualifiers (where an unexecuted order will remain valid for a pre-determined period), orders active only in certain sessions (orders that are specifically meant for the auction sessions) etc.
- 1.3.4** Prior to executing orders, the ATS has functionality to check if the order is technically valid or not. For example, if a sell order is submitted, the ATS will check on the availability of the security in the investors account prior to its execution. Similar checks will be carried out in respect of foreign holding limits. Technically invalid orders are rejected with an appropriate comment.
- 1.3.5** The BSE operates two markets, i.e. the equity market and the bond market. The ATS has functionality to trade equity, debt securities and Contracts for Difference CFDs. These rules address the trading of equities.

1.4 Trading

- a) The trading of securities in the Normal Lot Board takes place using a lot size of one (1).

- b) The stock market is open from Monday to Friday of each week, except on public holidays or days declared as trading holidays by BSE.
- c) The operating hours of the ATS are from 10:30hrs to 13:30hrs as detailed in Section 1.2. The operating hours may be changed by the BSE at its discretion if market conditions or a technical problem in the ATS so warrant.

1.5 The Exchange disseminates corporate announcements in respect of entitlements and market related information, as follows;

- (i) Trade related information is disseminated to the Stockbroker on a real time basis via the announcement system of the ATS.
- (ii) At the close of each market day, the official closing price including other final trading results for the given market day is published in the Daily Market Report.

1.6 The ATS Rules as detailed herein provide for the trading of equity securities using the ATS. Equity securities if any traded outside the ATS, will continue to be subject to the manual trading rules of the BSE.

CHAPTER 2

TYPES OF TRANSACTIONS

2.1 There are three (3) types of orders that can be placed in the ATS:

- a) Limit orders.
- b) Market orders.
- c) Stop and Stop Limit orders

2.2 Limit Orders

A Limit Order is defined as an order in which the maximum buying price or minimum selling price is specified.

2.3 Market Orders

2.3.1 A market order is defined as an order to buy or sell a security at the best price or prices as determined by the ATS, prevailing in the market at that point in time.

2.3.2 To prevent market orders being executed at extreme prices due to the presence of existing orders it is necessary to protect market orders by having a "protection price". A "protection price" (see Section 2.3.5.2 Protection Price) is calculated by the ATS each time a market order is placed. The protection price is calculated on a fixed percentage of the "touchline" price (see Section 2.3.5.1 Touchline).

2.3.3 For market buy orders, protection will be applied to the touchline ask price, and for market sell orders protection will be applied to touchline bid price. After attaching the protection price to the market order, the order will be executed similar to any other limit order.

2.3.4 If a market order cannot be executed immediately during the regular trading sessions, it will expire. During the auction sessions, market orders will not expire immediately. Any market order not executed during the auction sessions will be expired when the ATS moves into a regular trading session. If a market order is partially executed the balance unexecuted quantity of the order, if any, will be expired immediately. Market orders do not appear in the order book during regular trading sessions but will be included in the order book during the auction sessions.

2.3.5 Market orders will get priority over limit orders in the open auction.

2.3.5.1 Touchline Price

The touchline bid is the highest bid price and the touchline ask is the lowest ask price in the market available at that point in time. If bids or asks are unavailable for the day, the touchline is defined as the previous closing price. For the first day of trading of an IPO the touchline is defined as the reference or the issue price of the security at the point of listing.

Example

Table 1 represents the order book for security ABC.

Table 1

Bid Order	Price	Ask Order
	100.00	100
	97.00	100
	95.00	300
	90.00	200
400	88.00	
100 +200	87.50	
300+100	87.00	

As per the above example, the touchline bid price is P88 and the ask price is P90

2.3.5.2 Protection price

a) The protection price is the touchline price plus or minus the allowed percentage variation. The percentage variation allowed on the touchline price is a configurable percentage applicable to equity securities traded on the ATS. The BSE has set the protection parameter at 10%. The protection price limits the possible price at which market orders can be executed.

b) For a sell market order the protection price is calculated in the following manner:

$$\text{Protection Price (sell market order)} = \text{Touchline Bid Price} \times (1 - \text{Protection \%})$$

c) For a buy market order the protection price is

calculated in the following manner:

$$\text{Protection Price (buy market order)} = \text{Touchline Ask Price} \times (1 + \text{Protection}\%)$$

Example:

Broker X places a market order for buying 1000 ABC shares. The touchline while placing the order is P90 (ask) and P88 (bid) - see Table 1 in Rule 2.3.5.1

The protection percentage is set at 10%. In this case the protection price will be P99 i.e. (P90 x (1+10%))

The order book at the point broker X placed the order is as follows:

Table 2

Price Markers	Price	Ask	
		Orders	Broker
	100.00	100	Z
Protection 99 (bid)			
	97.00	100	Y
	95.00	300	B
Touchline 90 (ask)	90.00	200	A
Touchline 88 (bid)			
Protection 79.20 (ask)			

Broker X's market buy order would thus get executed with;

1. 200 @ 90 sell order from Broker A
2. 300@ 95 sell order from Broker B
3. 100 @97 sell order from Broker Y

Since the order for sale from Broker Z has a higher price than the protection price, Broker X's order will not be matched against Broker Z order. The balance unexecuted order quantity of 400 will be cancelled since it cannot be executed immediately.

2.4 Stop and Stop Limit Orders

2.4.1 A stop order is a market order that will remain unelected, i.e. does not enter the order book. A stop order is elected to the order book when the last traded price is equal to or better than the specified stop price. Once a stop order is elected to the order book, it will be treated in a similar manner as a new market order. A stop

order does not contain a price. However, a stop order must be submitted with a stop price.

- 2.4.2** A stop limit order is a limit order that will remain unelected, i.e. does not enter the order book. A stop limit order is elected to the order book when the last traded price is equal to or better than the specified stop price. Once a stop order is elected to the order book, it will be treated in a similar manner as a new limit order. A stop limit order must contain both a stop price and a limit price.
- 2.4.3** Stop and Stop limit orders will only be elected to the order book during the regular trading session.
- 2.4.4** If a change in the last traded price causes multiple stop and stop limit orders to be elected to the order book, the election priority will be based on the stop price value, capacity of the investor and time of entry. Stop and stop limit orders at the same stop price are elected based on capacity of the investor and time of entry.

Examples: Stop and Stop Limit orders

Assume the following:

The last traded price of ABC shares is P25.00. The market is currently in the regular trading session. Broker 1 submits a buy stop order (Order ID X) of 200 ABC shares with a stop price of P30.00. The current state of the order book is set out in the following Table:

ABC Order Book					
Bid Orders			Ask Orders		
ID	Qty	Price	Price	Qty	ID
A	200	30.00	31.00	300	E
B	300	29.00	32.00	200	F
C	100	28.00	33.00	200	G
D	200	27.00			

The stop order is not elected to the order book as the last traded price is less than the stop price of Order X.

Another broker (Broker 2) submits a sell limit order (Order ID Y) of 500 ABC shares at a price of P30.00. This order will partially execute against order A (200 shares) on the buy side.

Buyer ID	Seller ID	Qty	Price
A	Y	200	30.00

Since the last traded price is now P30.00, the buy stop order will be

elected to the order book. The order book will then look as follows:-

ABC Order Book					
Bid Orders			Ask Orders		
ID	Qty	Price	Price	Qty	ID
X	200	MKT	30.00	300	Y
B	300	29.00	31.00	300	E
C	100	28.00	32.00	200	F
D	200	27.00	33.00	200	G

The market order will be fully executed against the remainder of the sell order submitted earlier.

Buyer ID	Seller ID	Qty	Price
X	Y	200	30.00

Assume that another Broker (Broker 3) submits a sell stop order (Order ID P) of 300 ABC shares with a stop price of P29.00. This will not be elected to the order book as the sell stop price (P29.00) is less than the last traded price (P30.00). The order book will be as follows:

ABC Order Book					
Bid Orders			Ask Orders		
ID	Qty	Price	Price	Qty	ID
B	300	29.00	30.00	100	Y
C	100	28.00	31.00	300	E
D	200	27.00	32.00	200	F
			33.00	200	G

A Broker (Broker 4) submits a sell limit order (Order ID Q) of 100 ABC shares with a price of P29.00. This will be fully executed against the order B on the buy side.

Buyer ID	Seller ID	Qty	Price
B	Q	100	29.00

Since the last traded price of ABC share is P29.00, it allows the sell stop order to be elected to the order book. The order book will be as follows:

ABC Order Book					
Bid Orders			Ask Orders		
ID	Qty	Price	Price	Qty	ID
B	200	29.00	MKT	300	P
C	100	28.00	30.00	100	Y
D	200	27.00	31.00	300	E
			32.00	200	F
			33.00	200	G

This stop order will execute partially against the contra side order.

Buyer ID	Seller ID	Qty	Price
B	P	200	29.00

The remainder of the stop order will expire.

The election of stop limit orders will be the same except for the fact that such orders will contain a price. Therefore, the position of an elected stop limit order will depend on the price points in the order book and the time the order was placed.

Example 1: If a buy stop limit order is elected to the order book with a limit price of P30.00 and there already exist two limit buy orders in the order book with a price of P30.00. The elected stop limit order will be at the bottom of the price point of P30.00 (time criteria).

Example 2: There are 2 buy stop orders with stop prices of P35.00 and P36.00 respectively. There is also one buy stop limit order with a stop price of P34.00 and a limit price of P38.00. The last traded price is P30.00

A sudden shift in the market causes a trade to occur at the price of P37.00. This causes all three orders to be elected to the order book. The stop limit order will be set at a price point of P38.00. The 2 stop orders will be elected to the order book as market orders. The stop order which was submitted first would be the first to get elected to the contra side of the order book.

2.5 Order Attributes

Orders can have the following attributes.

- a) Volume Qualifiers
- b) Time in force
- c) Qualifiers for auction sessions
- d) Minimum fill quantity
- e) Disclosed quantity
- f) Quotes

These attributes can be used by the brokers' to tune the execution strategy of an order.

2.5.1 Volume Qualifiers

Volume qualifiers modify the execution conditions of an order based on volume constraints.

2.5.1.1 No volume qualifiers

Orders with this attribute will be executed at a specified price or better. If a partial execution occurs the remainder of the order will be added to the order book and will remain in the order book till executed, cancelled, or expired.

2.5.1.2 Fill or Kill (FOK)

FOK orders require the immediate purchase or sale of the specified order quantity, at a given price or better. If the whole order cannot be filled immediately, it is expired. (These orders do not get entered into the order book).

FOK orders cannot be entered during the auction sessions.

2.5.1.3 Immediate or Cancel (IOC)

IOC orders require immediate purchase or sale of a specified quantity at a specified price or better, for all or part of the order. If no immediate execution occurs the order is expired. If an immediate partial execution occurs the remainder is immediately expired.

IOC orders cannot be entered during auction sessions.

2.5.2 Time in Force (TIF)

Orders with a TIF attribute limits the lifetime of an order in the book to a period not exceeding the maximum allowable TIF Period. If an order does not indicate a time condition, it is only valid for the market day on which it is input.

The maximum TIF attribute allowed by the BSE is ten (10) market days. The following are order types with TIF attributes

2.5.2.1 Good till cancel (GTC)

GTC orders remain valid for a maximum of ten (10) market days or till cancelled. This parameter is set by the BSE.

2.5.2.2 Good till day (GTD)

GTD orders provide the functionality to determine the validity of

the order for a pre determined maximum number of days. The BSE has set the maximum number of days of order validity to ten (10) market days.

2.5.2.3 Good till time (GTT)

GTT orders are expired at the end of the specified time during a market day if unexecuted. The TIF attribute for GTT orders is one (1) market day.

2.5.2.4 Day Orders (DAY)

Day orders will remain valid for a maximum of 1 (one) market day. Unexecuted Day orders will be expired at the end of the market day.

2.5.2.5 Crossings at the Closing Price Cross Session (CPX)

CPX orders are directed at the Closing Price Cross session. They may be entered during other sessions that accept orders but they stay parked in the order queue until the Closing Price Cross session starts. Refer to Section 5.11.

2.5.3 Order Qualifiers for Auction Sessions

Orders can be specifically placed to execute only at auction sessions by using an Auction Qualifier i.e. during the open auction, interim auction, re-open auction and closing auction sessions.

Orders with an Auction Qualifier cannot be stop or stop limit orders.

There are three (3) Order qualifiers that can be specifically used for placing orders to be executed during auctions. They are Open Auction (OPG), Closing Auction (ATC) and Good for Auction (GFA)

Iceberg orders (refer to Section 2.5.5) with auction qualifiers will be permitted. However, in such event the quantity applicable for the auction will be limited to the disclosed quantity of the Iceberg order.

2.5.3.1 Open Auction (OPG)

- (a) OPG orders will only take part in the open auction and should be placed prior to the opening auction. OPG

orders will not qualify for any other trading session.

- (b) If OPG orders are not executed in full or in part in the opening auction, the remainder will be expired at the conclusion of the open auction.

2.5.3.2 Closing Auction (ATC)

- (a) ATC orders will only take part in the closing auction. ATC order will not qualify for any other trading session.
- (b) ATC orders may be entered to the ATS during other sessions but will not be elected to the order book in any session other than the closing auction session.
- (c) If ATC orders are not executed in full or in part in the closing auction, the remainder will be expired at the conclusion of the closing auction.

2.5.3.3 Good for Auction (GFA)

- (a) GFA orders are directed at any auction session.
- (b) GFA orders may be entered to the ATS during the other sessions but will not be elected to the order book in any session other than an auction session.
- (c) If a GFA order is not executed in full or in part in an auction session, the remainder will be elected to the order book at the next auction session provided such auction session is not the closing auction for the day.
- (d) GFA orders may not be carried forward to the next market day. Unexecuted GFA orders will be expired at the end of the closing auction call subject to the following exceptions;
 - (i) If the session is moved from the closing auction session to a Halt, Halt and Close or Pause session prior to the end of the closing auction, unexecuted GFA orders will not be expired. If the session is moved from Halt, Halt and Close or Pause session to an auction session, unexecuted GFA orders will qualify to be executed in such auction session. However, all unexecuted GFA orders will be expired at the

close of the trading day.

(ii) If the session is moved from the closing auction session to another auction session prior to the end of the closing auction unexecuted GFA orders will not be expired. GFA orders will qualify to be executed in such auction session. However, all unexecuted GFA orders will be expired at the close of the trading day.

2.5.4 Minimum Fill Quantity

2.5.4.1 The ATS allows a minimum fill quantity to be entered for orders. A minimum fill order seeks to execute a stated minimum quantity of securities on entry, failing which the order will be expired. If the minimum quantity is executed, then the remainder will be treated as a regular order (i.e. minimum quantity will no longer apply).

2.5.4.2 All order types (i.e. Market, Limit, Stop, and Stop Limit orders) can be submitted with a minimum fill quantity specified. If a TIF (Time-In-Force) is submitted for a minimum fill order, the TIF will only apply on the remainder of the order, after the minimum quantity is executed.

Example:

A buy limit order of 500 shares with a minimum quantity of 100 and a TIF of GTD is submitted to the order book. It executes the minimum quantity against the contra side order and the remaining quantity of 400 will be added to the order book with the GTD qualifier applied.

2.5.4.3 If a minimum fill order is submitted with a FOK order qualifier, it will be treated as a FOK order and not as a minimum fill order.

2.5.5 Disclosed Quantity (Iceberg Orders)

2.5.5.1 Iceberg orders are orders where a defined quantity is made visible (disclosed quantity), in the order book. The remainder of the order remains hidden from the order book until the disclosed quantity is fully executed.

2.5.5.2 The order size in an Iceberg order will be revealed as the disclosed quantity and not as the full order quantity.

2.5.5.3 The disclosed quantity will cause the executions to occur in blocks of the disclosed quantity if possible. If not possible the execution will occur on the residual quantity which will be less than the disclosed quantity. E.g. If an iceberg order is placed for 1000 shares with a disclosed quantity of 30%, the order will be executed in 3 blocks of 300 shares each with the residual 100 shares being executed last. The time priority for the hidden quantity in Iceberg orders changes each time the disclosed quantity is replenished from the hidden quantity.

2.5.5.4 Disclosed quantities must be greater than 20% of the order size

2.5.5.5 When the total quantity for an incoming iceberg order is matched to an existing order in the order book, the incoming order's hidden quantity is ignored as it will not be visible to the market at the time of execution.

2.5.5.6 Orders with a specified disclosed quantity that appear in the order book, and hence have market visibility, will be executed in blocks of disclosed quantity in the manner specified above.

2.5.5.7 Iceberg orders will be allowed during all auction sessions depending on the order attributes. However, only the disclosed quantity will be considered for execution at the auction sessions. Orders with a disclosed quantity can be submitted with volume and time qualifiers IOC, FOK, GTC, GTT, GTD, DAY, OPG, ATC and GFA.

2.5.6 Quotes

2.5.6.1 The ATS has functionality for stock brokers and market makers to submit orders in the form of quotes.

2.5.6.2 Orders in the form of a quote will include both a buy order and a sell order. A quote for only a buy order or a sell order will not be permitted if this attribute is used.

2.5.6.3 Quotes may be submitted for different quantities at different prices in respect of buy and sell orders.

2.5.6.4 Quotes will be treated as firm orders and have the potential of being executed against any contra order.

2.5.6.5 Quotes will require to be submitted as Limit orders. Quotes cannot be submitted as Market orders, Stop orders or Stop Limit orders.

2.5.6.6 Quotes may be submitted with volume Qualifiers and Time in Force qualifiers. Quotes shall not be submitted with minimum fill quantity and disclosed quantity qualifiers.

CHAPTER 3

TRADING PROCEDURE

3.1 Order Validation

3.1.1 Input orders are validated for accuracy prior to inclusion in the order book. The following checks will be run on an order to validate the same:

- a) If there is a valid security code
- b) If trading is permitted on the security (i.e. is the security de-listed, suspended etc.)
- c) If the order price exceeds the baseline price \pm the set parameter. Refer to Chapter 7 on Price Bands and Circuit Breakers.
- d) If the price of the order is compatible with the tick (price change) of the security. The minimum tick size for a security shall be one (1) Thebe for all equity securities.
- e) If the order contains a valid investor ID/broker ID combination as detailed in the investors CSD account.
- f) If the order volume is within the specified foreign limit rules.
- g) If the seller holds the required number of securities in his account. If not, the rules applicable to short selling as specified in the CSD Rules will apply.

3.1.2 An order that passes the validation checks is accepted by the ATS. Accepted orders will contain an Exchange allocated order ID, which is used for all future references to the order. If the order fails validation then it is rejected. Until an order has been accepted by the ATS it is not valid.

3.2 Trading Unit

The lot size of equity securities traded on the ATS is specified as one (1) share.

3.3 Order Execution

3.3.1 All equity trades that occur on the Exchange are executed on the ATS unless otherwise specified by the BSE.

3.3.2 Only listed securities deposited in the CSD shall be traded through the ATS.

- 3.3.3** The ATS is integrated with the CSD system. The ATS will upload information from the CSD at the start of the trading day and as and when changes to the investor account balances occur as a result of deposits, withdrawals and transfers. The trades taking place on the ATS will similarly update the account balances in CSD on a real time basis.
- 3.3.4** Member firms have the facility of querying their client's holding for a specified security from their trading terminals. However, custodian account positions are not visible to brokers.
- 3.3.5** When a Broker Firm inputs an order through the ATS trading terminal, the order is forwarded to the ATS. Within the ATS the state of the order is tracked allowing the current status to be determined and the transaction history from the initial submission to be viewed.
- 3.3.6** Orders will be executed in the Normal Lot board using Price, Visibility Capacity and Time to determine priority in the regular trading sessions as detailed in Section 4.3.1 of these rules. The visibility criteria will apply to Iceberg Orders. In addition to the Normal Lot Board the ATS has functionality for a Crossings Board and an All or Non (AON) Board the rules of which are detailed in Chapters 5 and 6 of these ATS Rules.
- 3.3.7** Orders lying in the order book are defined as 'Passive Orders'. Orders input to the order book to execute against a passive order are defined as 'Aggressive Orders'.

For an execution of a trade to take place in the ATS during continuous trading (regular trading session), an aggressive order has to match with a passive order.

- 3.3.8** No execution of an order can take place through the matching of 2 (two) passive orders during continuous trading (regular trading sessions).
- 3.3.9** The price at which a trade takes place in the ATS between an aggressive order and a passive order during the continuous trading sessions will be determined to the advantage of the aggressive order, e.g.: if a passive sell order for 1000 shares of a company at a price of P10 is in the order book and an aggressive buy order is input at P12, the price at which the trade will be executed will be P10.
- 3.3.10** In addition to regular trading sessions, the ATS provides for an open

auction, interim auction, closing auction, and Closing Price Cross (CPX) sessions. Trade matching in the auction sessions and CPX session will take place as specified in Sections 4.2 and 5.11 of these rules.

3.3.11 Stockbrokers shall indicate the Client Account number in CSD at the time of input of an order.

3.3.12 Stockbrokers may combine orders from multiple clients to constitute a bulk order. In this case the stockbroker may enter the securities account number of his house account to input the order. Following the execution of the bulk order, shares may be allocated to the respective individual clients through post-trade transfers in CSD as provided for in the CSD Rules.

3.3.13 The instrument list in the ATS will indicate the market status of the listed securities as active, halted or suspended.

3.4 Price discovery of New Issues

3.4.1 Due to the possibility of large price swings for a new issue, and in order to allow for large premiums on IPO's, price discovery for new listings is completely based upon the market rather than issue price.

3.4.2 The BSE at its discretion may set or reset Price Bands and Circuit Breakers to facilitate price swings in respect of new listings. Refer to Chapter 7.

CHAPTER 4

TRADING SESSIONS

4.1 PRE-TRADING SESSION

- 4.1.1 During the pre-trading session new orders cannot be entered into the ATS and brought forward orders cannot be amended. However, brought forward orders from the previous trading day may be cancelled.
- 4.1.2 Orders during this period are held in the order book but not forwarded to the trade execution engine.
- 4.1.3 The market status in the ATS (venue state) will be displayed as 'pre trading'.

4.2 Auction Sessions

- 4.2.1 The ATS has functionality for open auction, interim auction, re-opening auction and closing auction sessions.
- 4.2.2 During the auction sessions, orders can be entered, amended or cancelled.
- 4.2.3 Orders which are entered with FOK or IOC qualifiers will not be accepted during the auction sessions.
- 4.2.4 The continuous matching of orders as applicable in the regular trading sessions will not apply to the matching of orders in the auction sessions. These rules will be applicable for the execution of trades in the auction sessions.
- 4.2.5 Matching of orders and the execution of trades during the auction sessions will take place at the end of each auction session, at one price as determined by the auction algorithm. The objective of the auction algorithm is to determine the price that will maximize the number of shares traded and execute orders at such price.
- 4.2.6 The price at which orders are matched and trades executed in the opening auction will determine the opening price of the relevant securities. If there are no trades executed at the open auction session, in respect of one or more securities, the opening

price of such security/securities will be the price of the first trade to take place in any of the subsequent trading sessions. If no trades take place the opening price of the security will be undetermined.

4.2.7 The interim auction takes place to enable the matching of orders and execution of trades through an auction process and is an alternative to the regular trading session.

4.2.8 The price at which orders are matched and trades executed in the closing auction will be the primary determinant of the closing price of the relevant securities. If there are no trades executed at the closing auction session in respect of one or more securities, the closing price of such security/securities will be determined using the following levels of priority.

Priority 1

Closing price will be the volume weighted average price of trades executed on the trading day with the exception of trades executed through crossings and the AON Board.

Priority 2

Failing priority 1, the closing price will be determined by the closing price of the security/securities of the previous day.

Priority 3

Failing Priority 2, the closing price will be determined by the reference price of the security/securities at the point of listing.

4.2.9 Auction Algorithm

4.2.9.1 The primary rule to determine the price of a security at any of the auction sessions is "volume maximization".

- (a) The system will compute the volume of the securities that will be traded at each price point in the order book.
- (b) The auction price will be determined as the price point at which the volume of shares traded is maximized. i.e. The price at which the largest number of securities can be traded. This is subject to there being only 1 volume maximizing price point.

4.2.9.2 If there are multiple volume maximizing price points, the secondary rule to determine the price of a security is minimization of the order imbalance.

In such event the auction price will be determined as the price at which the order imbalance is minimized. The order imbalance is defined as the difference between the total cumulative Bids (purchase orders) and the total cumulative asks (sell orders) which can be executed at the price points at which the volume of shares traded is maximized.

4.2.9.3 In the event there are multiple price points at which volume is maximized and the order imbalance is equal at all such price points, the following rules will apply.

- a) If the order imbalances are only on the buy side (if the total cumulative bids is greater than the total cumulative asks) at all volume maximizing price points, the highest price at which volume is maximized will be the auction price.
- b) If the order imbalances are only on the sell side (if the total cumulative asks is greater than the total cumulative bids) at all volume maximizing price points, the lowest price at which volume is maximized will be the auction price.
- c) If there are order imbalances in both buy and sell sides at the volume maximizing price points, the highest price with a buy imbalance or the lowest price with a sell imbalance nearest to the immediate previous auction price or failing which the previous closing price of the security will be the auction price.
- d) In the event the difference between the immediate previous auction price or failing which the previous closing price and the highest price with a buy imbalance and the difference between the immediate previous auction price or failing which the previous closing price and lowest price with a sell imbalance as computed in (c) is both the same in absolute terms, the higher of the price points will be the auction price.

Example: Auction Sessions

(a) Volume maximized at a single Price Point.

The order book at the end of the relevant auction session is set out below:

Order Book - XYZ.N.0000				
Cumulative	Bids	Price	Asks	Cumulative Asks
1000	1000	MKT BUY		
1000		14.80	300	7500
2000	1000	14.50	200	7200
4000	2000	14.20	1000	7000
5000	1000	14.00	2000	6000
7000	2000	13.60	2000	4000
8000	1000	13.30	1000	2000
8100	100	13.00		1000
8500	400	12.00		1000
		MKT SELL	1000	1000

The tradable quantity at each price point is set out below

Price	Executa ble
14.20	4000
14.00	5000
13.60	4000
13.30	2000

The price as determined by the auction will be P14.00 as this is the price at which volume is maximized.

(b) Multiple volume maximizing prices – The price as determined by the auction is the price that minimizes the imbalance.

The order book at the end of the relevant auction session is set out below:

Order Book - XYZ.N.0000				
Cumulative	Bids	Price	Asks	Cumulative Asks
1000	1000	MKT BUY		
1000		14.80	300	7500
1000		14.50	200	7200
3000	2000	14.20	1000	7000
4000	1000	14.00	2000	6000
5000	1000	13.60	2000	4000
6000	1000	13.30	1000	2000
6100	100	13.00		1000
6500	400	12.00		1000
		MKT SELL	1000	1000

The tradable quantity and the imbalance at each price point are set out below:

Price	Executable	Executable	Executable	Order Imbalan
14.20	3000	3000	7000	4000 (SELL)
14.00	4000	4000	6000	2000 (SELL)
13.60	4000	5000	4000	1000 (BUY)
13.30	2000	6000	2000	4000 (BUY)

Volume is maximized at P14.00 and P13.60. Therefore the order imbalances are considered at these two price points. The Auction Price will be P13.60 as this is the price at which volume is maximized and the order imbalance is minimized.

(c) Multiple volume maximizing prices with the same order imbalance -

1) All Imbalances at volume maximising prices are on the Buy side:

The order book at the end of the relevant auction session is set out below:

Order Book - XYZ.N.0000				
Cumulative Bids	Bids	Price	Asks	Cumulative
1000	1000	MKT BUY		
1000		14.80	300	5500
1000		14.50	200	5200
7000	6000	14.20		5000
7000		14.00	1000	5000
11000	4000	13.60	1000	4000
12000	1000	13.30	2000	3000
12100	100	13.00		1000

12400	300	12.50		1000
		MKT SELL	1000	1000

The tradable quantity and Imbalance at each price point is set out below:

Price	Executa ble	Executa ble	Executa ble	Order Imbalan
14.20	5000	7000	5000	2000 (BUY)
14.00	5000	7000	5000	2000 (BUY)
13.60	4000	11000	4000	7000 (BUY)
13.30	3000	12000	3000	9000 (BUY)

Volume is maximized at P14.20 and P14.00 and the order imbalance at both these price points is the same and is in the Buy side. When all the order imbalances at volume maximizing price points are on the buy side the price as determined by the auction is taken as the highest price which is P14.20.

2) All Imbalances at volume maximising prices are on the Sell side:

The order book at the end of the relevant auction session is set out below:

Order Book - XYZ.N.0000				
Cumulative	Bids	Price	Asks	Cumulative
1000	1000	MKT BUY		
1000		14.80	300	9500
1000		14.50	200	9200
2000	1000	14.20	2000	9000
3000	1000	14.00		7000
3000		13.60	5000	7000
4000	1000	13.30	1000	2000
4100	100	13.00		1000
4400	300	12.50		1000
		MKT SELL	1000	1000

The tradable quantity and imbalance at each price point is set out below:

Price	Executa ble	Executa ble	Executa ble	Order Imbalan
14.20	2000	2000	9000	7000 (SELL)
14.00	3000	3000	7000	4000 (SELL)
13.60	3000	3000	7000	4000 (SELL)
13.30	2000	4000	2000	2000 (BUY)

Volume is maximized at P14.00 and P13.60 and the order imbalance at both these price points is the same and is on the Sell side. When all the order imbalances are on the sell side the price

as determined by the auction is taken as the lowest price, which is P13.60.

3) When there are imbalances on both Buy and Sell sides

The order book at the end of the relevant auction session is set out below:

Order Book - XYZ.N.0000				
Cumulative	Bids	Price	Asks	Cumulative
1000	1000	MKT BUY		
1000		14.80	300	7500
2000	1000	14.50	200	7200
3000	1000	14.20	1000	7000
4000	1000	14.00	2000	6000
6000	2000	13.60	1000	4000
7000	1000	13.30	2000	3000
7100	100	13.00		1000
7400	300	12.50		1000
		MKT SELL	1000	1000

The tradable quantity and imbalance at each price point is set out below;

Price	Executable	Executable	Executable Sells	Order Imbalance
14.20	3000	3000	7000	4000 (SELL)
14.00	4000	4000	6000	2000 (SELL)
13.60	4000	6000	4000	2000 (BUY)
13.30	3000	7000	3000	4000 (BUY)

Volume is maximized at P14.00 and P13.60 and the order imbalance at both these price points is the same. In this scenario the order imbalances are on both sides of the order book, i.e. the Buy side and the Sell side. In order to calculate the price determined by the auction the following two (2) prices are considered.

- The highest price with a buy imbalance – P13.60 in this case
- The lowest price with a sell imbalance – P14.00 in this case

Out of the above two price points, the price nearer to the immediate previous auction price or failing which the previous closing price is taken as the price determined by the auction.

Assuming that the previous auction price was P13.50, the price determined by the auction will be P13.60.

- d) *If both price points are equally near to the Closing price when there are imbalances on both Buy and Sell sides.*

Example: In the order book given in Example (C)3 above, if the previous auction price was P13.80, both the price points (P14.00 and P13.60) would be equally near to the immediate previous auction price of P13.80. Therefore, P14.00 will be the price determined by the auction since it is the higher out of the two price points.

4.2.10 Order matching

4.2.10.1 Matching of orders and execution of trades will take place at the auction price with the priority of order matching determined as follows;

- a) Matching will commence from the side of the market with the lower or shorter quantity of securities that qualify to be executed at the auction price.

For example: If the total cumulate bids (purchase orders) at the auction price are less than the total cumulative asks (sell orders) at the auction price, order matching will commence from the bid side. This is so since given the imbalance all bid side orders qualifying to be traded at the auction price can be matched with orders from the contra side (sell orders).

- b) Orders that qualify on the contra side as defined in (a) will be matched at the auction price based on capacity and time priority. This is so since all orders that qualify on the contra side will not be able to be matched if there is an imbalance in the orders that qualify.
- c) If there is no imbalance between the cumulative buy orders and cumulative ask orders at the auction price, all qualifying orders on both sides will be executed.

4.2.10.2 All unmatched orders that qualify to be traded during the regular trading sessions will be migrated to the order book when the market opens for regular trading. These orders will be stored in the order book taking into account price and time priority.

4.3. REGULAR TRADING

4.3.1 Matching of Orders

The priority for execution in the Normal Lot Board during the regular trading sessions will be determined on price, visibility (applicable only to Iceberg orders) capacity and time criteria, as follows:

4.3.1.1 Price Criteria (Priority 1)

Buy orders with a higher price and sell orders with a lower price in comparison to other buy and sell orders are assigned a higher priority.

4.3.1.2 Visibility Criteria (Priority 2) – Relates only to Iceberg Orders

The disclosed order quantity has priority over the hidden order quantity in respect of Iceberg orders as detailed in Section 2.5.5.

4.3.1.3 Capacity Criteria (Priority 3)

For a given price, Agency orders have higher priority over Principal orders, i.e. orders placed on account of investors will have preference over orders placed for the brokers' house accounts.

4.3.1.4 Time Criteria (Priority 4)

An order that entered the order book first has a higher priority over an order that was entered later provided that the priority assigned in price, visibility and capacity criteria remains the same. Note that when a parked order (stop, stop limit, GFA, ATC, and CPX orders) is injected into the order book, the time priority is considered based on the order injection time of such order into the order book by the ATS and not based on the original submission time of the order by the stockbroker.

Regular Trading Example;

An example of a multi-stage matching process based on a new incoming order is as follows:

Security ABC		
Price Increment (Tick Size) P0.10		
Purchase Quantity per	Price	Sale Quantity
500	98.00	
200	98.50	
	99.00	400
	99.50	200+300

A purchase order for 700 securities at P99.50 arrives. Matching starts with the order to sell 400 securities at P99.00. The price is determined by the sell limit order.

First trade: 400 securities at P99.00

300 securities remain from the new order. They are matched against the next order – sell 200 securities at P99.50. Since there are two orders at P99.50, they are ranked in order of entry. The order of 200 securities is older and hence has priority over the 300 security order.

Second trade: 200 securities at 99.50

The remaining 100 securities are now matched to the sell order of 300 securities at P99.50.

Third trade: 100 securities at P99.50

The newly arrived purchase order (700 at P99.50) is then executed as detailed above. The order book now looks as follows:

Table 5

Purchase Quantity	Price	Sale Quantity
500	98.00	
200	98.50	
	99.50	200
Reference price (i.e. Last trade price):		

4.3.2 Cancellation and Amendment of Orders and its Impact on the Order Priority

4.3.2.1 Amendments to orders by stockbrokers are

permitted in respect of the price and/or the quantity input prior to execution. In the event of the orders being partially executed, stockbrokers may amend the balance of such orders. Unexecuted orders may also be cancelled by the stockbroker.

4.3.2.2 In the event of an amendment being made to the price, the time priority assigned to the original order will change to the time of the amendment.

4.3.2.3 In the event of an amendment being made to quantity, the time priority assigned to the original order will change only if the amended quantity is greater than the original quantity input. If the amended quantity is less than the original quantity input, there will be no change to the assigned time priority.

CHAPTER 5

CROSSINGS BOARD

- 5.1** A crossing is a negotiated transaction;
- (i) entered into between two or more clients of a single Fund Manager through one or two stockbrokers and reported to the BSE via the Crossings Board.
 - (ii) approved by Shareholders at a general meeting and reported to the BSE via the Crossings Board.

All Crossings must be pre-approved in advance by the BSE.

- 5.2** A crossing will be entered by specifying the security, client, contra broker ID, Trade ID and price. The crossing is deemed to be entered when the stockbroker(s) has (have) completed the entry. The crossing will be executed at the input price. The crossing will be rejected if there is a mismatch in quantity and/or price of the two entered orders.
- 5.3** If the seller does not have an adequate balance of shares in the CSD and has failed to obtain the approval of the CSDB for a short sale the crossing transaction will be rejected.

5.4 Amendments

A crossing order can be amended or cancelled by the broker prior to it being executed with the contra order.

5.5 Order life time

Unmatched crossings will expire at the end of the trading day.

5.6 Price constraints

A crossing shall not take place at a price which is $\pm 5\%$ of the reference price for that equity security. In exceptional situations, the BSEL may, subject to the approval of the Board, waive the requirement to comply with this requirement, provided that there is likely to be no distortion of the market, nor any prejudice caused to shareholders.

5.7 Trading unit

There is no minimum requirement for the size of the parcel.

5.8 Visibility

Orders placed on the crossing board will not be visible in the normal market data displays and hence will not put price pressure on other trading. The trade will be displayed after execution.

5.9 Statistics

Crossings on Equity securities will not update the indices, reference price (last traded price) and closing price.

5.10 Clearing the Order Book

Crossings are not required to clear the order book.

5.11 CLOSING PRICE CROSS (CPX) SESSION

5.11.1 Subsequent to the determination of the closing price of securities for a given trading day at the Closing Price Publication session, the ATS will accommodate trading in the form of transactions to be carried out exclusively at the closing price during the Closing Price Cross session.

5.11.2 Only orders entered with the CPX time qualifier will qualify for trading during this session.

5.11.3 The ATS system will accept CPX orders during other trading sessions but such orders will only qualify to be executed during the CPX session.

5.11.4 CPX orders can be input as limit orders, market to limit orders or market orders.

- 5.11.5** (i) CPX orders input as limit orders with better prices (prices higher than the closing price for buy orders and lower than the closing price for sell orders) will be amended by the system to the closing price and included in the order book for the CPX session.
- (ii) CPX orders input as limit orders with worse prices (prices lower than the closing price for buy orders and higher than the closing price for sell orders) will be expired and will not qualify for the CPX session.

(iii) CPX orders input as market orders will qualify for the CPX session and included in the order book for this session.

5.11.6 All unexecuted CPX orders will be expired at the end of the CPX session and such orders cannot be carried forward to the next trading day.

5.11.7 Stop and stop limit orders will not qualify for the CPX session.

5.11.8 CPX orders will not be included in the order book during the auction and regular trading sessions prior to the CPX session and consequently not disseminated in the market data feed.

5.11.9 Given that CPX orders will be accepted into the ATS at the closing price as determined, capacity and time criteria will be applied in the execution of trades.

5.11.10 CPX orders may be cancelled or amended prior to the CPX session.

5.11.11 Amendments to CPX orders where the order quantity is increased will result in a loss in time priority. Other amendments to CPX orders will not result in a loss of time priority.

CHAPTER 6

ALL OR NONE (AON) BOARDS

6.1 All or Nothing Trades

- 6.1.1** In addition to the facility to match orders in the regular order book using the price, visibility, capacity and time criteria and through crossings, the ATS provides functionality to execute orders on an AON basis as prescribed in this Section. The purpose of the AON Board is to facilitate the transaction of “large blocks of securities” on an “all or none” basis, i.e. on a basis where the parcel on offer cannot be factored into smaller lot sizes for the purpose of executing the trade. Therefore, the entire block of shares as input to the AON Board needs to be purchased or sold in one block.
- 6.1.2** For the purpose using the AON Board to transact trades, a large block of securities is defined as a transaction with a value exceeding P2 Mn. Orders that do not meet this minimum criterion will be rejected from being transacted on the AON Board.
- 6.1.3** Unlike regular trades which will be executed if and when the matching criteria is reached at any point in the trading day, trades on the AON Board will be executed at the expiry of a configurable number of trading days. The BSE has set the duration of this parameter to 2 market days in order to ensure that all stockbrokers get adequate time to match the initial order input to the AON A Board.

6.2 Price Determination

- 6.2.1** Transactions on the AON Board are not subject to price restrictions i.e. transactions can be executed at any price. Price bands and circuit breakers will not apply to AON transactions.
- 6.2.2** Only Good till cancel (GTC) limit orders will be accepted on the AON Board. Orders with other qualifiers or attributes will be rejected. Market orders cannot be submitted in respect of AON trades.
- 6.2.3** The first order entered into the AON Board, either a bid or offer sets the auction in motion and fixes the size of the block of securities to be transacted and the minimum or maximum price

depending on whether the transaction is an offer or a bid. The first bid or offer cannot be amended or cancelled by the broker.

- 6.2.4** After the first order is submitted, stockbrokers may compete for the trade by placing contra orders for a period of 2 market days. All contra orders shall be submitted at a price equal to or better than the price of the first order, i.e. if the first order is a sell order, then at a price equal to or higher than the price of the first order, if the first order is a buy order, then contra orders shall be placed at a price equal or lower than the price of the first order.
- 6.2.5** All orders submitted subsequent to the submission of the first order should be for the contra side. Orders for the same side as the first order will be rejected.
- 6.2.6** At any given point in time, there shall be no more than 2 active orders in the AON Board, one ask and one bid. If a better priced contra order (from the perspective of the first order) is received, the ATS will expire the previous contra order.
- 6.2.7** Any order submitted to the AON Board shall not be amended or cancelled by a stockbroker.
- 6.2.8** The BSE reserves the right to cancel orders if it is in the best interest of the market to do so.
- 6.2.9** The execution price of a transaction shall be the limit price of the active order on the contra side to the first order at the end of the second market day.
- 6.2.10** If no contra orders are received the AON transaction will be cancelled.

6.3 Market Operations

- 6.3.1** The BSE at its discretion may pause an AON auction.
- 6.3.2** No new orders may be submitted during a period of pause
- 6.3.3** The AON trade will not be concluded during a pause period.
- 6.3.4** If the AON Board is paused and the duration of 2 market days has been reached, the AON auction will be terminated with no trade taking place.
- 6.3.5** If the AON Board is paused and the end of day (not exceeding

2 market days) is reached, orders in the AON Board will remain and the AON auction will resume the following market day.

6.3.6 The BSE at its discretion may extend the AON Auction beyond the configured two (2) market days.

6.4 Rejection of Orders Submitted for AON Transactions

6.4.1 An AON order will be rejected if the specific instrument has not been configured for AON transactions and/or the duration for the validity of the AON transaction has not been specified for the instrument.

6.4.2 Orders submitted as quotes to the AON Board will be rejected.

6.4.3 Requests for quotes submitted to the AON Board will be rejected.

6.4.4 Invalid order types submitted to the AON Board will be rejected.

6.4.5 Orders with invalid Time in Force (TIF) attributes will be rejected.

6.4.6 Orders with minimum quantities will be rejected.

6.4.7 Orders that exceed the issued quantity of the security will be rejected.

6.4.8 Orders that do not adhere to the minimum size and/or value configuration will be rejected.

6.4.9 Contra orders with quantities greater or smaller than specified by the first order will be rejected.

6.4.10 Only one AON transaction for a specific security can be valid at any given point in time. Multiple AON transactions at the same time for the same security will not be permitted.

CHAPTER 7

PRICE BANDS AND CIRCUIT BREAKERS

- 7.1** Price Bands and Circuit Breakers will be set by the BSE to facilitate surveillance of the market.
- 7.2** Orders which exceed the price band will be rejected by the ATS
- 7.3** Price Bands and Circuit Breaker limits will be set as a \pm parameter percentage taking into account a baseline price defined for this purpose as;
 - 7.3.1** the Last Traded Price (LTP) or
 - 7.3.2** In the event there being no last traded price, the previous closing price
- 7.4** Trades will not be allowed at price levels which exceed the set circuit breaker limit.
- 7.5** A potential trade that exceed the circuit breaker limits will result in an automatic trading halt or pause of the security or securities. Refer to Section 8.3.2.
- 7.6** The BSE at its discretion may set or reset price bands and circuit breakers to facilitate price swings and/or in respect of facilitating price discovery on account of new listings.

CHAPTER 8

TRADING HALTS

8.1 The BSE at its discretion may halt trading of the market or a particular security or securities under circumstances that are detailed in this chapter.

8.1.1 There are three (3) types of trading halts that maybe imposed:

- (a) Market halt - Trading of all securities in the ATS will be suspended. The ATS has functionality for the BSE to selectively impose a market halt for either equity or debt securities.
- (b) Security halt - The trading of a particular security or securities is halted
- (c) Security Pause - The trading of a particular security or securities is paused

8.1.2 Trading halts may be imposed by the Exchange for a time period during a market day or may be extended beyond one market day.

8.1.3 The Exchange will inform the market of trading halts via the announcement system of the ATS.

8.2. Market Halts

8.2.1 A market halt can be imposed in the following circumstances:

- a) Upon the request of NBFIRA.
- b) Due to a technical failure of the ATS.
- c) In the event that a Stockbroker is unable to carry out its trading operations at its premises due to a network or technical failure. In such event the market will be halted for a maximum period of thirty (30) minutes to enable the affected broker to use the back-up facilities at the BSE.
- d) For any other reasons that are not adequately addressed in these rules which warrants a market halt in the view of the BSE.

8.2.2 When the market halt is lifted, the market will resume from a market session that the BSE will choose. This may be the market session at the point of imposing the market halt or another session as

determined by the BSE.

8.2.3 The trading hours of a market session or sessions may be shortened or extended at the discretion of the BSE, in the event of a market halt being imposed.

8.3 Security Halts and Security Pauses

8.3.1 With the objective of maintaining a fair, efficient and orderly securities trading environment, the Exchange may impose a trading halt or trading pause on one or more securities under the following circumstances:

- a) Upon the request of NBFIRA.
- b) To disseminate any price sensitive information in respect of the security or securities during trading sessions.
- c) To obtain a clarification from the company concerning a rumour or report regarding the company which has been brought to the attention of the Exchange and which may have an effect on the price of a listed security.
- d) When there are unusual market movements in the price or volume of a security. Eg: in case the price of a security reaches its permissible price limits during a trading session, without there being adequate reasons in the view of the BSE, to support same.

8.3.2 The BSE has set a circuit breaker for individual securities. When the price of a potential trade exceeds the circuit breaker limits, trading in the security is automatically halted. Refer to Chapter 7

8.3.3 Trading in the security will resume subsequent to the announcement or clarification from the company being disseminated to the market. A security halt or security pause may be imposed for a time period during a market day or may be extended beyond one market day for the purpose of disseminating information to the market.

8.3.4 The Exchange may determine if it should purge the orders in the order book at the time of halt and prior to commencing trading. During security halts, stockbrokers are permitted to cancel orders but amendments to orders will not be permitted. During security pauses Stockbrokers are permitted to amend or cancel orders.

8.3.5 When the security halt or pause is lifted, trading in the security or securities will resume from the market session that the BSE will choose. This may be the market session at the point of imposing

the market halt or another session as determined by the BSE. If the BSE decides to reopen the trading of the security through a re-opening auction the rules as detailed in Section 4.2 on auction sessions will apply.

8.3.6 The trading hours of a market session or sessions may be shortened or extended at the discretion of the BSE, in the event of a security halt or pause being imposed.

8.4 SECURITY SUSPENSION

8.4.1 The Exchange may suspend trading in one or more securities. A suspension may be imposed for a time period during a market day or may be extended beyond one market day. More generally a suspension of a security or securities will extend beyond one market day.

8.4.2 The Exchange will inform the market of the suspension and reasons for the same

8.4.3 A suspension of a listed security is likely to occur in the following circumstances:

- a) In the interests of maintaining an orderly, fair, efficient and transparent market.
- b) To protect investors' interests against disclosure of information about an event which may influence the market price of a security and/or investor's decision to buy or sell the security.
- c) As a punitive measure against the listed company for reasons detailed in the Listings Rules of the BSE.
- d) At the request of a listed company, which is subject to BSE's approval.

8.4.4 A stockbroker shall be prohibited from effecting transactions in the security or securities which have been suspended.

8.4.5 The Exchange may determine if it should purge the order book at the time of suspension. If the Exchange chooses not to purge the order book, stockbrokers may cancel their own orders during the period of suspension. No other changes to the order book are permitted during a suspension.

8.4.6 When the suspension is lifted, trading in the security or securities will resume from the market session that the BSE will choose. This may be the market session at the point of imposing the market halt or another session as determined by the BSE. If the BSE decides to reopen the trading of the security through a re-opening

auction the rules as detailed in Section 4.2 on auction sessions will apply.

8.4.7 The trading hours of a market session or sessions may be shortened or extended at the discretion of the BSE, in the event of a security suspension being imposed.

CHAPTER 9

CANCELLATION OF TRADES

- 9.1** Executed trades may be amended or cancelled based on mutual agreement between the stockbrokers who are parties to the trade and with the approval of the Exchange. The cancellation or amendment shall be effected on the market day on which the trade takes place.
- 9.2** A trade cancellation or amendment may be initiated by either the selling broker or the buying broker who is a party to the trade.
- 9.3** In case of a trade amendment only the volume of the trade may be amended to a lesser quantity.
- 9.4** A trade cannot be cancelled or amended if the buyer has subsequently sold the securities purchased during the same trading session.
- 9.5** Following agreement between the stockbrokers who are parties to the trade, a written request for trade cancellation or amendment as per the prescribed format in Section 9.7 should be signed and forwarded to the Exchange by both parties to the trade.
- 9.6** Upon receipt of the signed form and if deemed fit, the Exchange will approve the trade cancellation or amendment and make the necessary adjustment to the trade. Trades can be cancelled or amended only by the BSE. The stockbrokers involved in the trade and the market will be informed of the trade cancellation or amendment.
- 9.7** The prescribed format for the trade cancellation or amendment is as follows:

REQUEST FOR TRADE CANCELLATION/AMENDMENT

Date of Transaction: _____

Broker Requesting Cancellation/Amendment _____

of Trade: _____

Counter Party Broker: _____

Request made (tick as appropriate)

Trade amendment Trade Cancellation

Details of Trade to be Cancelled/Amended (tick as appropriate)

Buy Trade Sell Trade

BSE Security Code: _____

Number of Shares Transacted: _____

_____ Number of Shares after

Reasons for Cancellation

Brokers' affirmation of Client Consent (please tick as

appropriate) To be completed by Buying Broker:

Buyer's Consent obtained for the above detailed Cancellation/Amendment

Buyer was not informed of the Transaction that requires Cancellation/Amendment

To be completed by Selling Broker:

Seller's Consent obtained for the above detailed Cancellation/Amendment

Seller's was not informed of the Transaction that requires Cancellation/Amendment

Contracting Brokers' Consent

Name and Signature (Requesting Broker) Name and Signature (Counter Party Broker) Decision of the

BSE Authorised Signatory of BSE

CHAPTER 10

CLOSING PRICE FOR EQUITY SECURITIES

- 10.1** The closing price of equity securities traded on the ATS will be determined based on the following criteria:
- 10.1.1** Price of the security determined at the closing auction will be its closing price.
 - 10.1.2** If no price is determined at the closing auction, the Volume Weighted Average Price (VWAP) of trades executed during the market day for the security will be the closing price.
 - 10.1.3** If there are no trades executed during the market day, the previous closing price will be the closing price for the security
 - 10.1.4** If the security has not been traded since being listed, the reference price of the security at the point of listing will be the closing price for the security.
 - 10.1.5** Trades taking place on the Crossings Board and AON Board shall not be considered when determining the closing price of a security.

CHAPTER 11

GENERAL PROVISIONS

- 11.1 The Rules, and any Directives by the BSE, operate as a binding contract between the BSE and each Stockbroker of the BSE and between a Stockbroker and any other Stockbroker.
- 11.2 A Stockbroker or Participant's connection to the ATS for the purpose of trading of securities on the Exchange must be through an access terminal approved by the Exchange.
- 11.3 A Stockbroker or Participant shall at all times take all reasonable security measures to prevent unauthorised access to the ATS including establishing and maintaining such procedures for the administration and monitoring of access to the ATS.
- 11.4 The BSE its Directors, employees and agents are under no obligation nor liable to a Stockbroker, or any of its customers for any loss incurred by a person due to, but not limited to the following:
- (i) a technical failure of the ATS or due to a bona fide oversight in the operation of the ATS by the BSE, its employees and/or agents.
 - (ii) a Stockbroker's use of or inability to use the ATS;
 - (iii) any decision or ruling of the BSE Admissions and Disciplinary Committee exercising their powers.
- 11.5 In the event of the occurrence of a contingency in connection with a transaction not provided for in these rules, the BSE shall have the right to determine such matter which determination shall be final and binding on all parties.
- 11.6 Nothing contained in these rules shall be deemed to limit the powers of the BSE to those contained herein, and the BSE may at any time exercise any further powers granted to it in terms of the Securities Act. Where the BSE exercises its discretion in terms of these Trading Rules, it shall be its sole discretion and its rulings shall be final.

- 11.7 These Rules are interpreted, administered and enforced by the BSE. The decisions of the Exchange are conclusive and binding Stockbrokers.
- 11.8 These Rules may be amended by the Exchange from time to time, subject to approval by NBFIRA.