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Chapter 1. Introduction

This document includes the following topics:

- The Principals of Trading;
- Trade Price Determination;
- How queue priority is determined;
- Types of orders;
- Market types;
- Clearing & Settlement Principles; and
- Market Control features.

1.1 Defining Business Rules

The Business Rules defined in this document are organised into an ordered set of areas. A Business Rule consists of a Term (i.e. All Or None) a definition and a set of rules.

By defining rules in a consistent manner it allows the users, the public, the Exchange, and EFA to maintain a similar understanding. Each section, which explains a rule or principle, may contain any of the following headings:

Defining Business Rules			
Term	The terms are clearly labeled to ensure the BSX, its members and the investing public uses the same terminology when describing certain concepts		
Definition	A short, concise definition of the rule area itself, rather than the definition of the rules that apply in the area. The definition may include a fact or the business need (use) of the term.		
Rules	The actual rules that apply to the Term and Defined meaning.		



Chapter 2. Electronic Trading Rules

2.1 Principles of Trading

Definitions

The principles of trading are the philosophies governing the intent of the trading rules. Each rule should be in accordance with the general principles of trading.

If a conflict arises, the Executive Management Committee determines if the rule and/or principle is correct as stated. An additional overriding principle is implemented if the rules do not satisfy the business and/or trading needs of the exchange.

- 1. Hours of operation The regular market is accessible from 8:30 a.m. to 4:30 p.m. on each business day.
- Business Day The BSX is open for trading on every business day from Monday to Friday inclusive, excluding statutory holidays.
- 3. **Determining the Aggressive Order** For every trade there is a designated "aggressive" order and a designated "passive" order(s) this rule does not apply to trades at the open. Aggressive orders receive the better trade price if a price imbalance exists. (*Please see the Determining the Aggressive Order section below for more details*).
- 4. Queue Priority by Price Best price principle affords an order the highest queue priority.
- 5. Queue Priority by Cross Priority Cross priority exists when a queued order(s) can trade with an aggressive order, and both orders are from the same investment house. Orders from the same investment house have higher fill priority compared to orders from another house. After Price priority, Cross priority has the next highest fill priority.
- Implicit Cross An implicit cross occurs when a match occurs between two orders from the same house due to cross priority.
- (Intentional) Cross Trade An intentional cross trade occurs when a trader receives an order to sell and an order to buy the same stock at the same price, the transaction can be entered using one order window as an (intentional) cross trade.
- 8. **Queue Priority by Source of the Order** At a single price level, priority is given to orders where the source of the order is a client when compared to professional orders regardless of the orders time of entry priority.



- 9. **Queue Priority by Regular Term over Special Terms** Orders with the least trading restrictions (regular term orders) are given priority over orders encumbered with trading restrictions (special term orders).
- 10. **Queue Priority by Time of Entry** Time of arrival of an order at the exchange is time stamped. The sequence of arrival, as reflected by this time stamp, may affect the sequence in which the order is considered for execution.
- 11. **Order History** The entire history of an order is traceable from initial order entry, any subsequent CFOs, partial fills and final fill or cancel.
- 12. **Changing Orders Characteristics** Changes made to orders affect the time stamp only if the change effectively advances the status of the order in the marketplace, for example in terms of potential volume. Changes that would not cause advancement would not be re-time stamped.
- Changing Orders Timestamp Time stamp changes should occur when the price, quantity or terms of the order change. The time stamp should not change due to trade execution needs. In principle, this allows for ease of following orders by the member and the BSX.
- 14. **Determining Valid Orders** Acceptability of an order in the current orderly market is determined when the order is posted to the Trading Engine. This is an interactive process. The trader receives a message the order was queued or rejected or filled. The trader is unable to continue trading until one of these messages is received.
- 15. **Statistical Rules** Statistical Rules define how trades affect statistics. Statistical Rules are not in this document (refer to the Index and Statistical Rules document for details of how statistics are affected by trades).
- 16. **Market Control** Market Control is responsible for the day-to-day operations of the exchange. Market control has the ability to halt symbols, symbol-markets, markets, and the entire exchange.

2.2 Glossary of Terms

The following list defines the principles used throughout this document:

- 1. All Or None An order which must be executed in its entirety at the same time.
- 2. Ask (Price) the lowest price of an order in the regular book (must be at least one board lot).
- BEST System The Bermuda Electronic Securities Trading (BEST) System combines the traditional principles of trading with state-of-the-art technology. Using computer terminals BEST traders can buy or sell securities. BEST encompasses the critical aspects of trading which includes the trading engine, scribes (database), message handling, market control, and trading workstation.
- 4. Best Market The best market is the highest Bid and the lowest Ask from the queued orders in the regular book.
- 5. Bid (Price) The highest price on an order in the regular book (must be at least one board lot).



- 6. **Board Lot -** A regular trading unit. The board lot size of a stock on the BSX is set at 100 shares in the regular market.
- 7. Book (Regular & Special Terms) A book is a file containing a list of committed orders. The BEST trading system has two books, a Regular Terms Book and a Special Terms Book for each market. The regular book includes all orders without any unique fill, or settlement conditions and the special terms book contains special fill and special delivery orders.
- 8. Cash Trade A trade that is settled on the current trading day, which is less than the default settlement.
- 9. Change Former Order (CFO) An order which changes the attributes of a previously entered order.
- 10. **Contingent Orders** Contingent Orders include Stop buy and Stop loss order types. Contingent orders are stored in the systems memory however, they are not queued until their trigger price is satisfied. A Contingent order is queued to the appropriate book depending whether the order has any special terms, or if the order does not have any special attributes.
- 11. Delayed Delivery A settlement term which is outside the default settlement.
- 12. Equities Common and preferred stocks, which represent a share in the ownership of a company.
- 13. **Front Running** Whenever a member trades ahead of a client order in the same or related market for the purpose of profiting from, or otherwise taking advantage of, knowledge of undisclosed material information concerning an imminent transaction.
- 14. Index A statistical measure of the state of the stock market or economy, based on the performance of stocks.
- 15. **Interlisted -** A stock which is listed on the BSX and one or more other exchanges (the Hong Kong Stock Exchange, New York Stock Exchange, etc.).
- 16. Jitney (Trade As) A member who is acting for another (non) member in a trade on the Exchange.
- 17. **Market Order & Price Protection -** A market order is given a limit price equal to the prevailing best market plus/minus price protection, this is to limit the amount of movement on market orders.
- 18. **Market Control -** Market Control is responsible for the day-to-day operations on BEST. Market Control has the authority to halt trading, enter corrected trades, enter trades, cancel trades and send bulletins.
- 19. **Mixed Lot -** An order with a volume that is a combination of any number of board lots and an odd lot. Mixed Lot orders are not allowed.
- 20. Odd Lot Any volume less than one board lot or a certificate stating on its Face Value that it is an odd lot.



- 21. **Outstanding Orders (Booked) -** Orders that do not trade immediately upon entry are said to be booked. These orders are also known as outstanding orders.
- 22. **Price Imbalance** A price imbalance exists when the Bid price is higher than the Ask price the exact trade price is determined using Trade Price Determination rules see the section below.
- 23. Primary Market Each symbol type must have a designated primary market. The BSX determines a Symbol's Primary Market when the symbol is listed on the exchange. A symbols primary market is used to determine some of the symbols exchange statistics and it is also is used to calculate the symbols affect on the index. A symbol must have a primary market assigned because it can reside in multiple markets simultaneously (i.e. odd lot market, negotiated deal market, regular market, etc.).
- 24. **Regular Limit Order** A Limit order does not have any special fill, special delivery or contingent terms attached to it. A regular limit order has a specified, price, and volume. A Regular Limit order is queued in the regular terms book.
- 25. Special Fill Terms Special Fill Term Orders include Minimum Fill (MF), Minimum Block (MB), All Or None (AON), Whole Or None (WON) and Lots OF (LOF) fill term orders. These orders will only trade if their volume restrictions are satisfied.
- 26. **Special Delivery Terms -** Special Delivery Term orders are orders which are not the default settlement terms for the specific market.

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BEST Automated Trading Rules

2.3 Defining a Typical Order

To accommodate each order entry scenario an order may contain the following information:





2.4 Determining the Aggressive Order

Definition

The BSX trading model designates an aggressive order and a passive order for each trade. Typically, the aggressive order triggers the trade and receives the best possible trade price and the passive order is the queued order established in the market.

For every trade an aggressive order must be determined because the aggressive order receives the better price if one is available - thus the better price rule (*please see Trade Price Determination section for more details of the better price rule*).

Please see the rules below for more details of how aggressive orders are determined:

- 1. If a match between two or more orders is found, the aggressive order is the one that caused the trade to occur, normally the incoming order. The passive order(s) is the one previously queued.
- 2. During the opening allocation, the concept of an aggressive order and passive order does not exist because the open is based on an arithmetic algorithm.
- 3. During the opening allocation there is an Allocation side and Least Remaining Volume side (*please see the Open Trading section of this document for more details*).
- 4. Special Fill term orders can only be aggressive when they enter the system once they are queued they can not be termed an aggressive order.
- 5. If a regular book order exists in the market and a contingent/special fill order is queued into the regular book, determining which order is the aggressive order depends on which side of the market the orders exist on:
- 6. If the existing order(s) and the contingent/special fill term order(s) are on opposite sides, the existing order in the market has lower priority than the recently queued contingent order. This ensures the symbol will trade at the established best market price. Therefore, the recently queued contingent order is classified as the aggressive order and the existing order is the passive order.
- 7. If the existing order(s) and the contingent order/special fill term order(s) are on the same side of the market, the existing order has queue priority.
- If a quote enters the market, it is the aggressive order by default. However, the buy side is considered the
 aggressive order. After the buy side has been exhausted the sell side is considered to be the aggressive order.
 Once the sell side is exhausted the entire market is analyzed to identify any other possible aggressive orders.



9. For the purposes of cross priority, the member number for the aggressive order is used to select the order from the opposite side of the market with the same member number which will have "cross priority" for trading within each price level (assuming cross priority is set to high).

2.5 Trade Price Determination (Better Price Rule)

Definition

Once a match in the market is found we must determine the exact trade price. If a price imbalance occurs, the aggressive order receives the better price. However, the exact trade price may vary if a current best market exists on both sides or one side of the market.

The current best market is the existing market before the aggressive order entered the market (*Please see the rules below for more details of how the trade price is determined*).

- 1. Only Regular book orders, established before the aggressive order entered the system, are used to determine the current best market.
- 2. If a best market only exists on the passive side, where an aggressive order initiates trading through a range of prices, the aggressive order trades at each price level of the passive side, not at the specified limit price of the aggressive order.
- 3. If a best market exists on both sides, the trade price is the passive side's established price unless a price imbalance occurs.
- 4. If a price imbalance exists (e.g. sell price lower than buy side) the trade price is dependent on whether an order(s) exists on the same side of the aggressive order or not.
- 5. If there are no existing orders on the same side of the aggressive order the trade price is the passive sides established price (same as rule # 2 above).
- 6. If a market exists in the regular book on the same side of the aggressive order the trade price is determined at 1 (one) tick better than the best price of all the regular book orders on the aggressive side.
- 7. An exception to this rule occurs if the aggressive order and the passive order have cross priority (assuming cross priority is set on high). In this scenario the trade can occur at or between the best market established before the aggressive order entered the market.
- 8. Therefore, the aggressive order trades at a better price if a price imbalance occurs this is known as the better price rule.



2.6 Improved Special Term Trading Model

Definition

The automated system can maximise the possible trading matches by attempting to trade special term orders which have a price which is better than the best market.

After each time an incoming order loses its aggressiveness, the system attempts to identify other orders, in particular previously queued special term orders, which can trade.

- 1. After every trade, special term order(s) better than the current best market attempts to trade.
- 2. The priority in which orders attempt to trade is based on their price. The best-priced order is chosen first, then the next best price, etc.
- 3. When a special term order(s) only exists on the buy side, the aggressive special term order is chosen based on:
 - The best-priced order(s) are activated one at a time to see if they can trade.
 - The best-priced order on the buy side is the highest bid(s) above the regular book best market. If multiple order exist at the same price level FIFO priority is used
 - After the highest bid is attempted, it either trades or does not trade; the next highest is attempted. This continues until the price level is equal to the regular market best bid
 - The first order in the regular book is then attempted. Only the first order in the regular book is attempted because any other orders behind in the regular book can not be traded until the first order is traded FIFO priority
 - If no regular book orders exist the remainder of the special term orders are attempted (C)
- 4. When a special term orders only exists on the sell side, the aggressive special term order is chosen based on the following:
 - The best-priced order(s) are attempted one at a time to see if they can trade.
 - The best-priced order on the sell side is the lowest offer(s) below the regular book best market. If multiple orders exist at the same price level FIFO priority is used to determine which order to attempt
 - After the lowest offer is attempted, it either trades or does not trade; the next lowest is attempted. This continues until the price level is equal to the regular market best bid
 - The first order in the regular book is then attempted. Only the first order in the regular book is attempted because any other orders behind in the regular book can not be traded until the first order is traded FIFO priority
 - If no regular book orders exist the remainder of the special term orders are attempted (C)



5. If special term orders exist on both sides of the market - the aggressive order is chosen by FIFO **priority** between the best-priced order(s) on the buy side compared to the best-priced order(s) on the sell side.



Diagram - How to determine the Aggressive Order after a Trade



Chapter 3. Factors Affecting Priority

3.1 Factors Affecting Queue Priority

Definition

Orders that can not be immediately executed are queued in a specific order based on queue priority principles.

Rules

- 1. A valid order arriving at the exchange can either be entirely rejected, immediately executed in full, partially executed with any remaining volume queued, partially executed with any remaining volume rejected, or totally queued.
- 2. An order being queued will be given a relative position in the order queue based on a queue priority.
- 3. The factors used to determine the queue priority in order of consideration are:
 - Queue priority by Price
 - Queue priority by Time of Entry within a book
- 4. **Queue Priority by Price Priority** Orders with the best price are given the highest queue priority- they are queued at the top of the queue.
- Queue Priority by Time of Entry in a Book If multiple orders exist at a single price level, they are queued in FIFO priority. The special term orders are queued in the special term book in time priority and the regular term orders are queued in the regular terms book.

3.2 Factors Affecting Fill Priority

Definition

If an incoming order can be filled by more than one order, the order is filled by the counterpart which has the highest fill priority.

- 1. The factors used to determine the fill priority in order of consideration are:
 - Fill priority by Price



- Fill priority by Cross Priority
- Fill priority by Regular Book before Special Terms book
- Fill priority by Time of Entry
- 2. **Fill Priority by Price Priority P**rice is the primary priority factor when determining fill priority. If multiple orders can trade, the order with the best price is filled first.
- 3. **Fill Priority by Cross Priority** At a single price level, if multiple orders may be filled, priority is given to orders where the member (house) is on both sides of the trade this is implicit cross priority, which is different than an intentional cross trade (*please see the Intentional Cross Trade section for a comparison*)
- 4. Fill Priority by Regular Book orders before Special Terms orders Orders with special terms are treated with a lower priority than similar orders without special terms. Special Fill terms include minimum fill, minimum block, and All Or None order volume restrictions.
- 5. At a single price level, the least restricted order(s) must be filled before any special terms orders are filled (assuming cross priority is not in present). Such priority does not extend to price, as it would be unfair to not trade at the best possible price, provided the terms of the special condition can be met.
- 6. **Fill Priority by Time of Entry** At a single price level, time of entry of an order governs its fill priority on a first in, first out (FIFO) basis.
- 7. During the Pre-Open the allocation is based on Shared Equal Allocation, FIFO rules still apply in that time of entry is used to govern which order(s) gets any uneven amounts of volume.
- 8. The actual time of entry is considered to be the time of arrival at the exchange. In actual operation, an effective time of entry is used.

3.3 Fill Priority by Price

Definition

The price of an order determines its priority for execution and queue position. An order can be specified with a limit or market price.

- 1. The priority of buy orders and sell orders are considered separately.
- 2. A buy order at a higher price will take priority over other buy orders at a lower price.
- 3. A sell order at a lower price will take priority over other sell orders at a higher price.



4. A market order being queued at a limit price will be treated the same as if it had been entered as a limit order at that price.

3.4 Fill Priority by Cross Priority

Definition

On entry of a new order, priority for filling the order is given to the entering member's own orders at the same price on the opposite side of the market.

Rules

- 1. At each price, priority is given to the member's pre-existing orders over the normal queue priority.
- 2. Special term orders whose fill conditions can be met in the cross, the special term order will be automatically traded using cross priority ahead of regular book orders of other houses (members) at the price level.
- 3. After cross priority orders have been matched, trading continues following normal trading rules.
- 4. Cross priority within a firm is in affect during the Open.
- 5. Market orders which have cross priority follow the same price protection rules which apply to regular market orders.

3.4.1 Cross Priority Settings

Definition

An intentional *cross trade* occurs when a trader enters a cross trade explicitly. When a trader receives a buy and a sell order from the same house for the same security, he/she enters the orders into the system as an intentional cross trade.

This differs from an *implicit* cross trade priority, where a separate buy/sell order currently in the market trades with an incoming sell/buy order from the same house due to cross priority.

Settings

Implicit Cross priority can be set to one of three fill priority settings: high, low or normal. The BSX can identify a unique cross priority setting for each market which exists on the exchange.

The BSX enforces a High Cross Priority Setting - please see the table below for more details:



Cross Priority Settings	Implicit Cross Priority	Intentional Cross Trades
During Pre-Open	Buy and sell orders from the same house have the <i>highest</i> fill priority at a given price level regardless of their relative position in the queue.	Intentional Cross Trades are not allowed during pre-open.
During Continuous Trading	Buy and sell orders from the same house have the <i>highest</i> fill priority at a given price level regardless of their relative positon in the queue.	Can trade at or between the market only.

3.5 Fill Priority by Special Fill Terms

Definition

Special terms attached to an order affect the orders fill priority. Special Fill terms include: All or None, Minimum fill, and Minimum Block order attributes. Special Fill terms are used by investors who want to have a minimum amount of volume to be filled or no volume filled.

- 1. Special Fill term orders are removed from the normal time priority and given last fill priority within a single limit price.
- 2. Multiple special term orders at a single limit price are treated in time priority amongst themselves.
- 3. There is no distinction made between types of Special Fill Orders in terms of Queue priority
- 4. When an order eligible to match multiple Special Terms, a match will be attempted with the first order in the queue. If its terms cannot be fulfilled, the second Special Terms order in the queue will be attempted, etc.
- 5. Time in Force terms are **not** considered special terms in that they do not affect the order priority and they do not result in the order being labeled as a special term.
- 6. Undisclosed volume orders are not considered a special terms order in that they do not affect the order priority and they do not result in the order being labeled as a special term.
- 7. Special "fill" term orders are automatically matched to orders in the regular book as long as their terms can be met. The terms that allow for automatic matching are minimum fill (MF), minimum block (MB) and All or None



(AON). The matching takes place after all other regular market orders are matched; that is, attaching a special terms result in a lower priority than similar orders entered later without the special terms.

3.6 Fill Priority by Time of Entry

Definition

Typically, an orders time of entry is the time recorded when the order entered the system - orders with the earliest time stamp have the highest fill priority.

- 1. Orders entering the system are given a time stamp noting their date and time of entry.
- 2. The effective timestamp or time of entry is the time the trading engine receives the order and responds.
- 3. Single Price Limit: at a single price, the earliest time of entry takes priority in the queue (FIFO).
- 4. **Cross Trade Priority:** supersedes FIFO priority within each price level. However, if multiple order can be filled with cross priority they are filled in FIFO order.
- 5. **Special Term Orders:** are removed from the normal time priority and are given last priority within a single limit price. Multiple special term orders within a single limit price are treated in FIFO priority among themselves.
- 6. **Inter-Day:** An order entered prior to the current day is given priority in the queue over orders entered today for trades that take place after the open.
- 7. **Pre-Open:** All new orders entered in the current day during Pre-Open are given a unique timestamp and any uneven board lots are distributed in FIFO priority. If any portion of the order(s) remains after the Open Algorithm, these orders will be a time priority based on their actual time of entry during the pre-open.
- 8. **Disclosed/Undisclosed:** Orders with Undisclosed volume are given a new effective time stamp when Undisclosed Volume is rolled in to the disclosed *volume (See the Disclosed and Undisclosed Volume section of this document for more details).*
- 9. **CFO:** CFO'ing an order may result in a new effective time stamp and may change the relative priority position of the order in the queue. Whether or not a new time stamp is assigned depends on the nature of the change to the order (See the Change Former Order (CFO) section of this document for more details).
- 10. **Partial Fill**: An order that participates in a fill that does not entirely deplete the current disclosed volume will retain it's effective time of entry and it's position in the queue.



Chapter 4. Types of Orders

4.1 Limit Order

Definition

A limit order is an order to buy or sell a stated number of shares at a specified price, or better.

Rules

- 1. Limit orders must be entered in defined tick sizes within a price range.
- 2. Contingent Limit order must be entered in defined tick sizes within a price range.
- 3. Changes to the limit price will cause an order's effective time stamp to be changed in accordance with the rules set out for Change Former Order (CFO).
- 4. Other order changes that can also cause effective time stamp changes are also defined there. Changes to the effective time stamp can have an effect on the sequence in which orders are executed and displayed, particularly if queue priority is governed (in part) by time of entry.

Tick Sizes for Securities

Table 1 – Tick Size for all types of Common & Preferred Stock, Rights, Warrants			
Price \$	Tick Size \$		
Under 1.00	0.01		
At 1.00 and under 100	0.05		
At 100 and above	1.00		



Table 2 – Tick Size for Fixed Income Securities		
Price \$	Tick Size \$	
All Prices	Par to 4 decimal places [100.0000]	

4.2 Market Order

Definition

A market order is an order which has the MKT price specified in the price field when it is entered. A market order is given a limit price which is equal to the best market plus price protection.

- 1. If a Market Order is entered and there are orders on the opposite side of the market, the market order has a limit price equal to the opposite side best market price plus/minus price protection.
- 2. If a Market Order is entered and there are no orders on the opposite side of the market, the market order has a limit price equal to the best market price on the same side of the market plus price protection.
- 3. If no orders exist in the market, a Market Order is rejected.
- 4. Price protection is determined by multiplying the tick size by the number of ticks of price protection, see table below for the value amount of price protection in the regular and odd lot markets:

Price Range \$	Ticket Size \$	Number of ticks of price protection	\$ Amount of movement
Under 1.00	0.01	5	0.05
At 1.00 and under 100	0.05	2	0.10
At 100 and above	1.00	1	1.00



- 5. Market orders entered during the pre-open do not have price protection limits applied to them at the open.
- 6. If price protection is applied and the value is not a valid tick size the price is rounded to the nearest valid tick size. For example, and order may be given a price of 1.09 which would be rounded up to 1.10.

4.3 Unpriced Orders

Definition

An unpriced order is an order which does not have a specified price when it is posted for execution but becomes a limit order once it enters the market. An unpriced order is a hybrid order with characteristics of a market and limit order.

The difference between an unpriced order and a limit order is that the limit order has a specified price when it is posted for execution - and an unpriced order does not.

Rules

- 1. An Unpriced order assumes an initial price limit value normally based on the best price of the opposing market.
- 2. If there is no opposing best market price, an Unpriced order assumes the best price of the same side of the market as the order.
- 3. If there is no market, an Unpriced order is rejected.
- 4. An Unpriced order can not trade through a range of orders if the price is not equal to or better than the best market price at the instance the order was entered.

4.4 Take Order Entry

Definition

A Take order is an order to buy the total volume available at the best market price. The order is essentially a limit buy order to purchase all of the volume available at the best market price. A take order is useful for traders because it allows them to not only see the best market for a certain symbol but also execute the order within the same order entry window. The trader can modify characteristics of the order such as volume, symbol, clearing and price before they submit the order.

The volume displayed by a Take order does not include any special term order volumes, even if the special term order has a better price. However, if the Take order can be filled with a special terms order at a price better than the regular book, the system automatically fills the order at the best price.



For example, if the best market price in the regular book is an asking price of \$5.00 for 2000 shares and the best market in the special terms book is an All or None order at \$4.00 for 1000 shares. The Take order would display the price of \$5.00 and a volume of 2000 shares. If the order was executed the system would buy 1,000 shares at \$4.00 because it is a better price and the remaining 1,000 shares is filled at \$5.00.

Rules

- 1. The total volume in a Take order only includes volume from regular book orders only. Special terms order volumes are not included.
- 2. If the best market changes and the order is no longer valid, the order will not be executed and is rejected. A take order is essentially a Limit Fill or Kill order.
- 3. The trader can change any of the features (volume, symbol, price, clearing) of the Take order and the order will still be executed if the changes still allow for the trade to be executed.
- 4. A Take order has the same rules that are used for Limit orders and Fill or Kill orders. Please see the Limit order and the Fill or Kill rules in this document for more details.
- 5. If a take order is executed and all or part of the volume can be filled with a special terms order at a better price, the system automatically fills the order with a special terms order.

4.5 Hit Order Entry

Definition

A Hit order is an order to sell the total volume available at the best market price. The order is essentially a limit sell order to sell all the volume available at the best bid market price. The trader can modify characteristics of the order such as volume, symbol, clearing and price before they submit the order.

The volume displayed by a Hit order does not include any special term order volumes, even if the special terms order has a better price. However, if the Hit order can be filled with a special terms order at a price than the regular book, the system automatically fills the order at the best price.

For example, if the best market price in the regular book is a bid of \$10.00 for 5000 shares and the best market in the special terms book is an All or None order at \$11.00 for 3000 shares. The Hit order would display the price of \$10.00 and a volume of 5000 shares. If the order was executed the system would sell 3000 shares at \$11.00, and the remaining 2000 shares is filled at \$10.00. BEST ensures the trader receives the best possible price.

Rules

1. The total volume in a Hit order only includes volume from regular book orders only. Special terms order volumes are not included.



- 2. If the best market changes and the order is no longer valid, the order will not be executed and is rejected. A Hit order is essentially a Limit Fill or Kill order.
- 3. The trader can change any of the features (volume, symbol, price, clearing) of the Hit order and the order will still be executed if the changes still allow for the trade to be executed.
- 4. A Hit order has the same rules that are used for Limit orders and Fill or Kill orders. Please see the Limit order and the Fill or Kill rules in this document for more details.
- 5. If a Hit order is executed and all or part of the volume can be filled with a special terms order at a better price, the system automatically fills the order with a special terms order.

4.6 Match Order Entry

Definition

A Match order is an order used to create an opposing (matching) order to an existing order. This feature was originally designed to allow a trader to view any special terms in detail.

Match orders can also be used to create an opposing order for regular orders.

Rules

- 1. The trader can choose to match any of the features (volume, symbol, price, clearing) of the opposing order to execute a trade.
- 2. The trader can change any of the features (volume, symbol, price, clearing) of the opposing order and the order will still be executed if the changes still allow for the trade to be executed.
- 3. If the market changes and the order is not matched and filled, the order will not be executed but the order *will* enter and queue in the market.
- 4. A match order can trade through multiple price ranges.

4.7 Intentional Cross Trade (Explicit)

Definition

An intentional *cross trade* occurs when a trader enters a cross trade explicitly. When a trader receives a buy and a sell order from the same house for the same security, he/she enters the orders into the system as an intentional cross trade - this trade only has only order number.



This differs from an *implicit* cross trade, where a separate buy/sell order currently in the market trades with an incoming sell/buy order from the same house due to cross priority - this trade has two order numbers.

Rules

- 1. An intentional cross is the recording of a trade where both the buyer and seller originate in the same member firm. A single order is entered to record the cross.
- 2. An implicit cross may also occur where separate buy and sell orders are entered from the same firm that then trade with each other. Such implicit crosses are affected by any cross priority in effect. For additional details see Queue Priority by Cross Priority
- 3. A cross trade is allowed within a price range. The price range is relative to the current best Buy and current best Sell at the time the cross is entered.
- 4. The allowable price range for an intentional cross trade is "at" or "between" the market.
- 5. A cross trade is not allowed if, prior to trade execution, the market has fluctuated and the cross trade order price is no longer within the allowed price range.
- 6. An intentional cross trade is not allowed if there is a one-sided market or no market.
- 7. An intentional cross trade may not be entered during the pre-opening period as it is impossible to validate the entry price until after the open has occurred.
- 8. An intentional cross trade entered at or between the best markets is not subject to interference.
- 9. An intentional cross trade cannot be entered as a market order a limit price must be specified.
- 10. Contingent (e.g. stop loss) Intentional Cross order are not allowed.

4.8 Cancel Order

Definition

A trader would use a Cancel Order to purge a specific order from the system.

Rules

1. Cancel Order can only cancel an outstanding order. If an order is cancelled it is no longer accessible to a trader- it is removed from the system.



- 2. If a trader Cancels an order which has already traded, a message is sent stating "Order has traded", and the trader can not cancel the order.
- 3. If order number entered does not exist, a message will be sent to the terminal saying "Order not found".
- 4. If you cancel an order which has been partially filled, before confirmation, a secondary confirmation is needed to cancel the remaining volume of the order.

4.9 Cancel Orders Globally (COG)

Definition

Cancel Order Globally is used to cancel one or more orders from the system. Traders COG orders when they no longer want them in the system.

Rules

- 1. Traders may COG orders using the following filters:
 - By Market Regular Market, Buy-In
 - Book Special Terms, Regular Terms
 - By Symbol Symbol Code
 - By Trader All traders in house, One trader in house, All traders On Exchange
 - **By Type of Order:** Stop Loss, Regular Order, Square Up
 - Clearing Cash, T+2
 - Source Client, Pro,
 - By Price Mode Limit or Market Order
 - **Time In Force** For a specific day, or all active TIF orders, Good till Day, Good Till Month, Good Till Week, Open, Fill or Kill.
- 2. When the COG is used, orders are cancelled following Price then FIFO priority.
- 3. COG purges orders from the system.

4.10 Suspend/(Resume) Order

Definition

A trader would use a Suspend Order to remove a specific order from the book however; the order is still in the system as a suspended order. This differs from a cancel order, because the cancel order purges the order from the system.



Rules

- 1. A Suspend Order can only be used to suspend an outstanding order.
- 2. Suspended orders are queued into the Suspended Order inquiry.
- 3. A trader may CFO a Suspended order- if a trader CFO's a suspended order it is not re-queued (i.e. given a new time stamp) in the Suspended Inquiry.
- 4. A trader may Cancel a Suspended order.
- 5. A trader may Cancel Order Globally a Suspended Order.
- 6. Suspended orders may not trade.
- 7. A suspended order may be re-entered into the book using a Resume Order or Globally Resume Order.
- 8. If an order is resumed it is treated as a regular order entering the system, in that it is given a new time stamp.

4.11 Globally Suspend/Reinstate Order

Definition

Globally Suspend/Reinstate Orders is used to Suspend/Resume one or more orders from/to the book. A Trader may Globally Suspend Orders when they no longer want them in the book, but they still want them in the system.

- 1. Traders may Suspend/Resume orders using the following filters:
 - By Market Regular Market, Buy-In
 - **Book** Special Terms, Regular Terms
 - By Symbol Symbol Code
 - By Trader All traders in house, One trader in house, All traders On Exchange
 - By Type of Order: Stop Loss, Regular Order, Square Up
 - Clearing Cash, T+2
 - Source Client, Pro,
 - By Price Mode Limit or Market Order
 - **Time In Force** For a specific day, or all active TIF orders, Good till Day, Good Till Month, Good Till Week, Open, Fill or Kill.
- 2. When the Globally Suspend/Reinstate Orders is used, orders are Suspended/Resumed one at a time following Price then FIFO priority.

- 3. If a trader suspends an order or group of orders they are removed from the book, but remain in the system as a suspended order.
- 4. Suspended orders may not trade.
- 5. Suspended orders are queued into the Suspended Order inquiry.
- 6. A trader may CFO a Suspended order- if a trader CFO's a suspended order it is not re-queued (i.e. given a new time stamp) in the Suspended Inquiry.
- 7. A trader may Cancel a Suspended order.
- 8. A Suspended order may be re-entered into the book using a Resume Order or Globally Resume Order.
- 9. If an order(s) is Resumed it is treated as a regular order entering the system, in that it is given a new time stamp.

4.12 Change Former Order (CFO)

Definition

A CFO is used to change a component (e.g. volume) and/or attribute (e.g. Time In Force) of an existing order in the system.

Rules

An order may be changed only in the manner defined and authorised by the member. However, the following changes cannot be made using CFO. The order must be cancelled and re-entered if the trader wants to change the:

- 1. Symbol;
- 2. Market;
- 3. Order Action (e.g. Buy, Sell, Cross, Match, etc.);
- 4. Order Type (e.g. Market If Touched, Regular Order, etc.).

The following changes cause a **new effective time stamp:**

- 1. Change in Price
- 2. Increase in Volume disclosed to the public
- 3. Add/Removal of a Special Terms description





4. Changes that cause an order to move between books (special term book to regular book and vise versa).

The following changes will *not* cause a new effective time stamp to be given to the order:

- 1. Decrease in Disclosed Volume
- 2. Increase or decrease in Undisclosed Volume
- 3. Changes in the Time In Force description
- 4. Changes in the Special Terms description (e.g. MF to MB)

The change of any other component of an order and not mentioned above will not cause a new effective time stamp to be given to the order.

Note: If a non-queued Contingent order is CFO'd the same CFO rules apply - e.g. the order will lose its relative position in the queue in relation to other non-queued contingent order if the orders volume is increased.

Change Facility

Upon the first edit phase of the CFO entry, the order is not removed from the Exchange Order Book, thereby allowing trading of the order to occur in the background. If any status or volume of the order has changed due to trading in the background between the time of the first edit phase and the completion of the CFO second edit phase, the trader is notified and must re-confirm they still want to CFO order.

Note: if the confirm key is used to enter the CFO the order is performed in one step, thus if the market changes the trader does not have to re-confirm.

4.13 Order Features

4.13.1 Disclosed and Undisclosed Volume

Definition

An order has undisclosed volume when the order enters the market and only discloses a portion of the total volume requested to the public.

Rules

1. A disclosed volume may be entered for an order. The disclosed volume may not exceed the total volume. For an order where disclosed volume is not specified, it is implicitly equal to the total volume.



- 2. Undisclosed Volume amounts are private; they are only seen by the trader or house entering the order. All others will see an indication that Undisclosed Volume is present. The indicator is presently an "u". When fills have reduced an order to the point where there is no remaining Undisclosed Volume, the indicator will no longer appear.
- 3. Total volume must be a round lot; Odd Lots are not allowed.
- 4. Disclosed volume must be a round lot.
- 5. If an order can be filled on initial entry, it will be filled to the extent of the total volume of the order. A partial fill will result in the remaining order volume being posted with the full original disclosed volume provided sufficient volume remains.
- 6. Minimum Total Volume with Undisclosed: must be greater than or equal to 10,000 shares.
- 7. Disclosed Volume as a Percentage of Total Remaining Volume: disclosed volume must be no greater than 50% of the total remaining volume. This rule is enforced when an order is queued, not at execution (partial fill of order may take place between entry and posting to queue reducing the remaining volume to below the 50% level).
- 8. The disclosed quantity acts as the roll-in quantity upon the original order entry. Roll-in quantity cannot be changed except by CFO'ing the disclosed quantity. A change in the disclosed volume will not change the total or remaining volume. Whenever the disclosed quantity is increased or decreased, the 50% rule must be maintained, if it cannot be met, the total remaining volume will be disclosed.
- 9. An increase in disclosed volume will cause a new time stamp and change in queue priority.
- 10. A decrease in disclosed volume will not cause a new time stamp.
- 11. Partial fill diminishes current volume without replenishment from Undisclosed Volume unless there are no further orders behind at the current price level. Where no orders exist behind the traded order, the disclosed quantity will be automatically rolled up to the full disclosed amount.
- 12. When there are orders behind, the total disclosed volume must be traded before a new roll-in quantity is brought in. Once the total disclosed volume trades the results will be a new effective time stamp, the movement of the order to the end of the orders for the price level in addition to the roll-in.
- 13. Once remaining volume of an order has diminished to an amount where the 50% or less rule can no longer hold true, the total remaining volume will be rolled in and disclosed.
- 14. Undisclosed Volume is taken into account in any calculation of the opening price. See the Opening section for more details.



15. **Dissemination:** Only disclosed volume is public. Only currently disclosed volumes are included in dissemination statistics. For orders with undisclosed volume, an indicator is displayed to the public - which represents Undisclosed Volume is attached to the order.

4.13.2 Time In Force Restrictions

Definition

Orders can have restrictions which limit the period of time the order is valid to trade. BEST provides

mechanisms to ensure time restrictions are not exceeded. The system automatically removes the orders after the close of the day and/or time stipulated.

- 1. There is no preference given in the trading rules based on time restrictions.
- 2. Terms allowed include:
 - Day
 - Good Till Canceled (GTC) (i.e. open)
 - Good to Date (Month-Day-Year) (GTD)
 - Good for Week (GTW)
 - Good for Month (GTM)
 - Good Till Time (available in combination with all other time in force terms e.g. Good Till Week and at 12:00 on the final day)
 - Fill or Kill (FOK)
- 3. A Day order is valid until the close of the trading day the order is entered- the order is automatically purged from the system at the end of the current trading day.
- 4. A GTC order is valid until the order is canceled, and is not automatically canceled by the system. The trader must cancel their outstanding GTC orders if they are not filled and they want to remove them from the system.
- A GTD order is valid until the close of the date specified the order is automatically purged from the system at the end of the date specified. GTD orders are only accepted if the date is a valid calendar day (i.e. September 33, 1997 can not be entered - but September 28, 1997 a Sunday (non-trading day) can be entered).
- 6. A GTW order is valid until the end of the current week the order is automatically purged from the system at the end of the current trading week.
- 7. A GTM order is valid until the end of the current month the order is automatically purged from the system at the end of the current trading month.



- 8. Fill or Kill is an order that has a time restriction where the order cannot be queued. If the order can be matched immediately, in whole or in part, it will be executed. If no match for all or part is possible, then the order is not posted on the market; it is automatically canceled with appropriate notification of any fills and the final cancel, if any.
- 9. Fill or Kill can be combined with other special terms.
- 10. With **both** Fill or Kill (FOK) **and** All or None (AON) specified on an order, the order must be filled completely at the time of entry or not at all.
- 11. With **both** Fill or Kill (FOK) **and** Minimum Fill (MF) specified on an order, at least the specified fill amount must be able to be satisfied at the time of entry or the order will be immediately canceled. If at least the minimum fill can be immediately satisfied, any remaining volume will then be canceled.
- 12. A Fill or Kill order may be entered in the pre-opening period. In this case, the order will only exist until the symbol is opened. The order may participate in the open to whatever extent possible. Any remaining volume after the open will be canceled.
- 13. If no Time In Force Time is entered, the order is good until the time the market is closed on the specified date.
- 14. If no Time In Force Date is entered the order is good until the market is closed on the day the order was entered.

4.14 Special Order Attributes & Types

Definition

A Special Fill type order is an order which specifies an amount of volume which must be traded. The terms are such that the order is not shown as part of the normal, Regular Terms order book but are maintained in a Special Terms order book that can be viewed separately from the Regular Terms order book.

The Special Fill order may eventually be queued in the Regular Terms book in some instances (see the table below). The types of special fill terms and their definition are as follows:

Special Fill Terms	Code	Description
All or None	AON	The total volume of the order must be traded in entirety, or not at all. An AON order may be filled by multiple orders.



Special Fill Terms	Code	Description
		The minimum volume of shares must be filled in entirety, before the total remaining volume of the order is queued to the regular book.
Minimum Fill	MF	Once the order has been queued to the regular book the order can trade in its entirety or in partial increments. This can be thought of as a "minimum initial fill." No facility is available to ensure that each successive fill of an order is of at least a minimum size
Minimum Block	МВ	The order trades in amounts of the minimum block or greater and remains a special terms order. After each trade, an additional block of shares will be available with either the original minimum block volume or the remaining volume for the order,
		Any remaining volume (less than the minimum block amount) is flagged to trade All or None.
Whole or None	WON	The total volume of the order must be traded in entirety, or not at all and the order must only be filled by one order.
Lots of	LOF	The order may only trade in the exact lot size amount or multiples of that amount and each lot size may only be filled by one order.

Special Fill Terms can be entered in the following Markets			
Market Types	AON	MF/MB	
Odd Lot Market	Yes – allowed	No – not allowed	
All other markets	Yes – allowed	Yes - allowed	



4.14.1 Special Fill Types

- 1. Special Fill term orders are removed from the normal time priority and given last priority within a single limit price.
- 2. Special terms can be categorized as Special Fill Term and Special Delivery term orders.
- 3. At a single price limit, all regular book orders (i.e. unrestricted orders), must be satisfied before any Special Fill Term order(s) can trade (unless cross priority is in effect).
- 4. No automatic fill between the regular book and the special terms book is possible for special settlement terms.
- 5. Special Fill Term order(s) are automatically traded using cross priority ahead of regular market orders of other members at the same price level (assuming cross priority is set to High).
- 6. When an incoming order trades through a price range, Special Fill Term Order(s) retain their price priority and will be filled if their restrictions can be met by the available balance of the incoming order.
- 7. Multiple Special Fill Term orders at a single limit price are treated in time priority amongst themselves.
- 8. There is no distinction made between types of Special Fill Terms in queue priority (e.g. between MF, AON, MB, LOF, and WON).
- 9. When an order eligible to match with multiple Special Fill Terms, a match will be attempted with the first order in the queue. If it's terms cannot be fulfilled, the second Special Terms order in the queue will be attempted, etc.
- 10. Time in Force terms are **not c**onsidered Special Fill Terms in that they do not affect the order priority and they do not result in the term being placed in the "special term book".
- 11. Special "fill" term orders will be automatically matched to orders in the regular book as long as their terms can be met. The terms that allow for automatic matching are MF, AON, MB, LOF, and WON.
- 12. Best Market Dissemination no regular book order(s) exist: If no regular book order(s) exist, Special Fill Term Order(s) does not establish the best market. However, if no regular book orders exist, a special terms book order(s) may be displayed in some inquiries with an asterisk denoting the order is not from the regular book.
- 13. A Special Fill terms order(s) volume is **not** included in the size disseminated in the Best Market. However, if no regular book orders exist, a special terms book order(s) may be displayed in some inquiries with an asterisk denoting the order is not from the regular book.
- 14. Contingent Special Fill Terms orders are allowed they follow the same rules as the special fill terms rules once they are queued (e.g. they are queued to the special terms book).



15. Special term orders do not trade at the open.

16. Special term orders are not taken into consideration when determining the opening price and opening allocation.

4.14.2 Contingent Order Types

A contingent order is an order that is triggered by a trade in the market. A contingent order defines both a trigger price and queued price. The queued price can be a limit or market price.

Contingent orders are not activated (queued) until the orders trigger price is satisfied. The types of contingent orders available are:

Stop Loss (Market) Order

A Stop Loss is an order to sell, which is activated (queued) when the stock price declines to, or below, a stated trigger price. The purpose of a Stop Loss is to reduce the amount of loss that might occur or to protect a profit. A Stop Loss becomes a market order when the price of a board lot declines to or below the stated trigger price.

Stop Buy (Market) Order

A Stop Buy is an order to buy, which is activated (queued) when the stock price rises to, or above a certain trigger price. The purpose of a Stop Buy is to protect investors who have sold a security short and are attempting to reduce loss or protect a profit should the price rise unexpectedly. This order becomes a market order when the price of a board lot rises to or above the stated trigger price.

Stop Limit Order

A Stop-Limit Order is a contingent order to buy or sell, which is activated (queued) when the market for a particular listing reaches the specific trigger price. A stop-limit order to buy becomes a limit order when the listing trades at or above the stop-limit trigger price. A stop-limit order to sell becomes a limit order when the listing trades at or below the stop-limit trigger price.

Market If Touched Order

A Market If Touched (MIT) order is a contingent order to buy or sell when the market for a particular listing reaches a specific price. An MIT order to buy becomes a market order when the underlying security trades at or below the order trigger price.

An MIT is used by someone who wants to establish a long position or to cover a short position when the market declines to a specific level; usually that "specific" price level is lower than the current market. For example, an investor who has shorted a stock at \$5.00 may have a break even price of \$4.80, the investor can enter an MIT with a trigger of \$4.80 and limit of \$4.60 to cover the short. The benefit of using a MIT to the short seller is that they do not disclose their buy order until the trigger price is satisfied.



An MIT order to sell becomes a market order when the underlying security trades at or above the order trigger price. An MIT order to sell is used to establish a short position or to liquidate a long position when the market advances to a certain level. A MIT market order to sell, ensures the investor of being filled if the market trades to their trigger price (assuming a market exists). This person does not want to take the chance of not being able to sell, as could happen with a limit order when the broker is unable to execute the order at or above the limit price.

Limit If Touched Order

A Limit If Touched Order is a contingent order to buy or sell when the market for a particular listing reaches a specific price. A Limit If Touched order to buy is queued at the orders limit price when the underlying security trades at or below the order trigger price. A Limit If Touched order to sell is queued at the orders limit price order when the underlying security trades at or above the order trigger price.

Differences between Stop Orders and MIT orders

Stop orders differ from MIT's principally in their relationships to prevailing price levels. Typically, Stop orders to buy are entered above the current market, stop loss orders are entered below. MIT's are entered in an opposite manner. This reversal between Stop and MIT orders is illustrated in the Figure below:



4.14.3 General Contingent Order Rules

There are four main scenarios, which are important to consider when analysing the trading rules for Contingent Orders:

- 1. When are stop loss orders queued?
- 2. When multiple contingent orders are activated at the same time how do we determine queue priority?
- 3. Which order is the aggressive order, the existing order in the market or a contingent order which has just been queued (activated)?
- 4. How do we determine the price to trade at if a price imbalance occurs?



Rules for all Contingent Orders

- 1. There are three ways to trigger a contingent order:
 - A match occurs with an aggressive order on one side of the market and a passive order on the other, satisfying the trigger price;
 - A cross trade occurs satisfying the trigger price;
 - A trade is entered by market control satisfying the trigger price Market Control can flag the order so it does not trigger any contingent orders and statistics.
- 2. A Contingent order's time of entry, before being queued, is recorded in the systems memory until they are activated.
- 3. Triggered contingent orders are queued into the market immediately **after** the aggressive order is completely traded or exhausted regardless of which side of the market the contingent order is on.
- 4. Only one contingent order is queued into the market at a time, the order trades completely (or loses its aggressiveness) then the next triggered contingent order with the earliest time stamp and the same or worse trigger price is queued, etc.
- 5. Every trade can trigger a contingent order or group of contingent orders. For each group, the contingent orders are queued into the book using the following principles:
 - Trigger Price;
 - If multiple contingent orders are triggered at the same time the contingent order with the furthest trigger price (in absolute value \$) from the trade which triggered them is queued first.
 - For example, two stop loss orders are triggered by a trade at 1.00 one order has a trigger of 1.30 and the second order has a trigger of 1.20. The order with a trigger of 1.30 is queued first regardless of FIFO priority into the exchange.
- 6. If multiple contingent orders are triggered, and if one (or more) contingent order is queued and it trades, trigging subsequent contingent orders, the formerly triggered contingent orders must all be queued before the subsequent contingent orders this is regardless of FIFO priority into the exchange.
- 7. Contingent orders are **not** considered special terms in that they do not result in the order being placed in the "special term book". Before they are activated they are placed in the systems memory and only the owner (and market control) can see their own non-queued contingent orders.
- 8. Delayed Delivery term trades do not trigger contingent orders even if the trade price is at (or better than) the trigger price.
- 9. Cash trades do not trigger contingent orders even if the trade price is at (or better than) the trigger price.



- 10. If a cross trade or a trade entered by market control triggers a Contingent Order, the Contingent Order enters the queue immediately after the trade is accepted by system.
- 11. After a contingent order is queued the order follows the same queue priority rules mentioned in the Queue Priority section of this document.
- 12. Contingent special terms orders are allowed they follow the same rules as the special fill terms orders once they are queued.
- 13. Contingent Intentional Cross orders are not allowed.
- 14. When Contingent Market Orders are queued, they follow the same rules as regular market orders .for when a best market exists, a single-sided market on the opposite side exists, single-sided market on the same side exists, and when no market exits.
- 15. Price protection for contingent market orders is based off of the current best market when the order is queued, not when it is triggered.
- 16. Contingent Orders triggered at the Opening price are queued immediately after the open and can trade immediately after.
- 17. CFO'ing a Contingent gives the order a new timestamp with respect to all other non-triggered Contingent orders on the same side at the same price level.
- 18. If a special fill terms order trades (e.g. minimum fill) and triggers a contingent order, the special fill terms order may have its fill condition removed. The minimum fill is queued ahead of any contingent orders it triggered (at the same price level).
- 19. If an undisclosed volume order activates a contingent order, the undisclosed volume order rolls in the roll-in amount and has queue priority over the contingent order (at the same price level).

4.14.4 Clearing

Definition

The settlement date is the date on which the buyer must pay for the securities and the seller must deliver the securities. Settlement can be affected by the type of security traded, a special settlement term placed on an order, or because the buyer or seller failed to settle on the agreed upon time. The settlement terms and definitions are:



Settlement Types			
Settlements	Start	End	
T+2	Trade Date	T+2	
Spot – Cash	Transaction Day	End of Transaction day	

4.14.5 Clearing Rules

Definition

Settlement is the process of delivering the security after the original transaction has been executed. There are many ways that a trade can be settled and each of them are mutually exclusive. The settlement rules are:

- 1. Each security is classified as T+(2) Rolling settlement.
- 2. Rolling T(2) settlement is considered regular delivery for security.
- 3. **T2** settlement applies to all symbol types.
- 4. The exchange will set a settlement delivery calendar prior to the beginning of the trading month. Start, End, and Settlement dates may not always fall on their respective days due to holidays.
- 5. A holiday will adjust (forward) any one of the Start, End or Settlement dates (all dates following will move forward respectively).
- 6. **Spot/Cash settlement** is a condition of trading enforced by the Exchange for all orders for a security.
- 7. A Spot transaction is due for settlement the close of the working day the trade is executed.



Chapter 5. Secondary Market

5.1 Odd Lot Market

Definition

The Odd Lot Auction market contains orders which have a volume (number of shares) less than a board lot, or, an order with a size less than the minimum round lot number designated for a security.

- 1. Odd Lot orders are entered in a separate Odd Lot Market
- 2. An order may have a maximum volume of 99 shares in the odd lot market
- 3. The board lot size in the Odd Lit market is set at 1 (one) share
- 4. The Odd Lot market is open from 8:30 am to 4:30 p.m. each business day.
- 5. Odd Lot orders are posted and executed through a FIFO matching process
- 6. Odd Lot market orders are subject to price protection
- 7. The better price rule does not apply to the odd lot market
- 8. Odd Lot orders may participate as a cross trade but they are not subject to cross trade price restrictions of the regular market (e.g. odd lot cross orders do not have to trade at or between the regular market). However, the cross trade may only be made at or between the odd lot best market.
- 9. Odd Lot orders are included in the exchange statistics of volume traded, value traded and number of trades.
- 10. Odd Lot Trades do not affect the index.
- 11. Odd Lot market statistics are available for:
 - Number of symbols advancing;
 - Number of symbols declining;
 - Number of symbols unchanged;
 - Volume traded;
 - Number of Trades;
 - Value Traded; and



• Number of symbols traded.



Chapter 6. Market States

6.1 Pre - Open

Definition

Prior to the start of trading each day, there is a Pre-Opening period during which orders can be entered but are not immediately processed. The purpose of the Pre-Open Market State is to allow for price discovery of all existing orders.

Price discovery at the Pre-Open



At the open, an opening algorithm is run which initiates all possible trading. At the completion of this algorithm, the market is open for trading.

- 1. Orders entered during the pre-opening period are queued and not executed at the time of entry. As each order is queued (whether or not the symbol is expected to open) and the price at which it is expected to open is calculated.
- 2. A market imbalance can be created during the pre-opening period where the Buy price is higher than the best Sell. If a price imbalance exists, or if multiple possible opening prices exist the opening price chosen is based on the following criteria in order of priority:
 - Maximum volume of shares to be traded;
 - Minimum imbalance in share volume;
 - Least net change from last day's closing price; and
 - Highest share price.



6.1.1 Pre-Open to Open to Continuous Trading Transitions

When the range of prices spanned for the pre-opening orders crosses a price level transition, the opening price calculation takes into account any limitations or variations inherent in the transition.

For price tick transitions, the appropriate tick size is used to determine which price levels to use in the calculation of Buy volume, Sell volume, trading volume, minimum remaining volume, etc. Once the opening price is chosen, all trading takes place at that single, opening price. Therefore, no price level transition is possible.

6.2 Opening Price Calculation

The opening price is chosen as the price that causes the greatest number of shares to trade at the open. If the same number of shares can be traded at different price levels, the price level is chosen, which leaves the least number of shares remaining after the opening trading.

If more than one price has the same remaining amount of shares, the price level which results in the least net price change from the last trading day's closing price is chosen.

If more than one price has the same remaining volume, and same net change in price, the highest trade price level of the remaining alternatives is chosen as the opening price.

On a more technical basis, the actual calculation proceeds as follows:

Opening calculation

- 1. For all price levels, the maximum trade volume is calculated on the Buy side and Sell side separately. When determining the maximum possible amount which can trade at each price level the system takes into account the board lot size at each potential price level.
- 2. The Buy volume at each price level is the total volume which would trade assuming an infinite Sell volume at this level. Firstly, the system calculates the maximum amount of volume which would trade if the lowest Buy price was chosen as the open price.
- 3. Then system then calculates the total amount of volume which would trade at the next higher Buy price. At the next higher price level, the Buy volume is reduced by the volume of all Buy orders at a lower price.
- 4. This process is carried out for the entire Buy side price range.
- 5. For a given Buy price the potential total buy volume includes the volume at that specific price level and the volume of all other buy orders at higher price levels.
- 6. The Sell volume calculation is carried out in a similar fashion. First, the total amount of Sell volume which would trade at each price level is the total volume that would trade assuming an infinite Buy at this level.



- 7. At the highest Sell, the entire Sell volume could trade. At the next lower price level, the Sell volume is reduced by the volume of the Sells at the now higher price.
- 8. For a given sell price the potential total sell volume includes the volume at that specific price level and the volume of all other sell orders at lower price levels.
- 9. This process is carried out for the entire Sell side price range.
- 10. The potential trading volume is calculated for each price level. The trading volume is the minimum, of the Buy & Sell volume for a specific price level. The process looks for the price level (or levels) with the highest trade volume. If no trading is possible, this trade volume is zero (0).
- 11. If one, and only one, price level has the highest trade volume, that price level is used as the opening price. If more than one price level can trade the same, highest number of shares, other criteria is applied.
- 12. The least remaining volume is the next criteria checked. This is the number of shares that are left remaining on one side of the market if we were to trade the specified number of shares indicated by the trade volume. (By definition, the other side has the Least Remaining volume). This is calculated for each potential price level in the range of the prices with the same, highest trading volume. If there is a unique level with the least remaining volume, that price level is used as the opening price.
- 13. The net difference from the closing trade price recorded for the last trading day on which the symbol traded is the next criteria checked. It is irrelevant if the price has gone up or down. The price level that uniquely results in the least possible net change is used as the opening price.
- 14. When all other criteria fail to select a single, unique opening price, the highest price level of the available alternative prices is chosen.

6.2.1 Disclosed and Undisclosed Volume

The total volume of an order with Undisclosed Volume is taken into consideration when determining the opening price at the open. Any volume beyond the disclosed volume up to the total volume of the order may be traded in the open.

If an order in the open trades less than its current disclosed amount, it will leave the open with a disclosed amount equal to that disclosed amount less the volume traded. Therefore, it retains time priority for this remaining volume.

If an order in the open trades exactly its current disclosed amount or more, it will leave the open with a disclosed amount equal to the lesser of it original disclosed amount or the remaining volume of the order. It will be given a new queue time priority.

If multiple orders with Undisclosed Volume at the opening price are present at the open, they will be processed in order of queue priority.

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Opening Calculation Example

The illustration below demonstrates the possible opening price calculation scenarios:



6.2.2 Displaying Information (During the Pre - Open)

The actual price entered for limit orders entered in the pre-opening period which are at better than the current predicted opening price is considered private information - only the member entering the order and the BSX can see the actual limit price.

In the Market By Order (MBO) & Market By Price (MBP) displays, the member can view the actual price entered and be able to clearly see that the order is causing an "imbalance". Market Control can also see the actual price.



For all other members, the order is treated as if it had been entered at the currently predicted opening price. Absolute privacy of the fact that certain orders have been entered at a price better than the calculated opening price is not possible.

As the opening price changes, the volume at the previously predicted opening price and the currently predicted opening price changes. It may be possible for an astute trader to "infer" some information (the true limit price) from this.

6.3 Open Allocation Principles

At the open, there is no concept of an aggressive and passive order(s). At the Open, there is an Allocation side and a Least Remaining volume side. The Least Remaining volume side is designated as the "balanced side"; that is, the side which is completely traded at the open.

The opening allocation is based on Shared Equal Allocation which is based on the allocation steps below.

When the Buy volume and the Sell volume are the same, both sides will be completely traded - therefore, determining an Allocation side and Least Remaining volume side is unnecessary.

Allocation Steps

- 1. Determine the volume available for allocation (A)
- 2. Determine the volume for full allocation at better than the opening price (B)
- 3. Determine the volume for equal allocation to the open price orders (C = A B)
- 4. Cross allocate (against orders of the same member) to open price orders to the maximum of volume (C)
- 5. Equally allocate any remaining volume with all possible orders from the regular book
- 6. Any volume that can not be distributed using equal allocation is distributed in a board lot size using FIFO rules
- 7. This volume is allocated as evenly as possible, in board lots, between the number of remaining orders on the opposite side. The allocation is done in order of the queue priority. If the volume cannot be evenly allocated to the orders, orders at the bottom of the queue are allocated a lesser volume than those at the top of the queue.
- 8. Where the number of remaining orders on the opposite side exceed the number of board lots remaining to be allocated, some orders may receive no allocation at all.



6.3.1 Shared Equal Allocation (with Ticket Consolidation)

Definition

Shared Equal allocation distributes equal board lot volumes to each order on the Allocation side in the queue. If the total volume can not be distributed equally, the remaining volume is allocated using FIFO allocation.

Rules

- 1. Shared Equal Allocation is done on an equal board lot basis.
- 2. Allocation on an equal basis results in the same allocation to each eligible order, regardless of the disclosed volume specified for orders. The volume allocated may exceed the disclosed volume but can never exceed the total volume of an order.
- 3. When allocation is used in the open where undisclosed amounts are present, both disclosed and Undisclosed Volumes are taken into account. For limit orders better than the chosen opening price, both the disclosed and Undisclosed Volumes are be traded in their entirety.
- 4. The allocation may not be exactly equal if the volume on the Least remaining volume side is not an exact multiple of the number of eligible orders on the Allocation side multiplied by the appropriate board lot size.
- 5. Inequalities in allocation should be distributed by Time of Entry Priority (FIFO). This is indicated by the actual timestamp, the time the order is queued. Successive allocated orders should net out to no greater or different allocation than if the entire volume had been present as one order.
- 6. If the volume cannot be evenly allocated, orders at the bottom of the queue receive less volume (equal to a maximum of one board lot) than those at the top of the queue.
- 7. If the number of remaining orders on the opposite side exceed the number of board lots to be allocated, some orders will not be allocated any share volume.

Note: Trading done at the open on the basis of cross priority does not effect the calculation of the trades for the shared allocation of any remaining volume. Shared allocation of remaining volume is done strictly on the basis of the number of orders on the opposite side of the market from the remaining volume on the designated Least Remaining volume side.

8. Each order participating in an allocation is given the same allocation under the equal allocation rules.

6.3.2 Undisclosed Volume Clean Up after Open

Once all possible trading at the open is carried out, a "cleanup" takes place. The clean up involves adjustment of rollin volumes and queue time priorities for orders with Undisclosed Volume that traded at the open



6.3.3 Special Term Orders at the Open

Special Fill term orders can be entered during the pre-open. However, these orders do not affect the selection of the opening price because they are not eligible to trade at the open.

Special Fill term orders that match (e.g. from both sides of the special term book) do not trade at the open. Once all trading between the regular book is completed, the engine checks for any trades that might remain between Special Fill term orders and regular book orders after the open. If such orders are found, they are automatically matched.

6.3.4 Frozen Trades at the Open

Market Control can define parameters that can cause any trade that violates them to be "frozen" so that it can be examined by Market Control before they decide to allow it or prevent it. This is based on such things as a drastic change in the trade price up/down and/or a high volume.

The monitoring that takes place during the trading day is also in affect during the open. Any trade that violates a Market Control freeze parameter at the open results in a freeze. All the trading done for the open of the current symbol is placed on hold until Market Control decides how to proceed. Only the specific symbol is frozen.

During the open, the trading engine continues to process all other symbols remaining during the time Market Control is deciding how to resolve the freeze on the specific symbol.

6.3.5 Ticket Generation

Once the entire allocation process is carried out, including allocation at better than the opening price, cross priority at the opening price or better and shared allocation at the opening price, the actual trade fills are calculated. This minimises the number of "tickets" generated by the open.

Note: the system will display tickets for trades which involve cross priority trades before those of trades made with orders with a better than opening price - even though the orders with a better than opening price are executed first.

6.3.6 Time Priority for Orders at the Pre-Open

All orders entered during the pre-opening have a time priority based on the actual time of entry. For orders not completely filled at the open, this time priority is maintained thereafter during the trading day and for subsequent trading days.

Orders carried over from previous trading days have FIFO priority over orders entered during the pre-opening for the purpose of opening. Limit orders entered during the pre-opening period are subject to the same rules that govern their entry during the trading day.



6.3.7 Intentional Cross Trades at the Open

Intentional Cross trades cannot be executed at the open and, therefore, cannot be entered during the pre-opening period. However cross priority is in effect in the open. Orders have cross priority with: regular, special terms and undisclosed volume orders from the same house at the open when cross priority is set at high.

6.3.8 Fill Or Kill Orders entered during Pre-open

Fill Or Kill Orders entered during the pre-open are killed immediately after the pre-open if they are not completely filled.

6.4 Market Close

Definition

At the close, the BSX does not allow orders to be entered, processed or matched. Time restricted orders are automatically purged by the system. Any orders which are Good Till a Later date/time are automatically carried over to the next trading session.

The closing price of a security listed at the BSX depends on the last trade in the symbol's primary market. Symbols that do not trade on a particular day use their last traded price from their primary market as their closing price.



Chapter 7. Market Control

7.1 Halts

Definition

Trading of a stock, bond, option or future contract can be halted by the BSX. Typically, halts are initiated by the request of the issuer while news is being broadcast about the security.

Suspension of a symbol is initiated by the exchange because the issuing company has failed to comply with listing and/or disclosure regulations.

- 1. A halt can be instituted for a symbol at any time during the trading day
- 2. The symbol can be halted in all of the markets it exists within, or it can be halted in a specific symbol- market combination.
- 3. A symbol can be halted in one, or many, or all of the markets it exists within
- 4. Once halted, no further trading in the symbol will take place in the specific market
- 5. All orders are canceled globally by the exchange (discretion of the exchange)
- 6. Cancellation messages are forwarded to the traders
- 7. Prior to the resumption of trading following a halt, a pre-opening period will be held for the halted symbol in the specific market or markets it was halted in
- 8. Order entry or reinstatement may take place during this period
- 9. Altered orders and new orders will have priority assigned after Halt Open according to normal Open specifications.
- 10. This approach removes any possibility that the orders would inadvertently remain in the market against the intent of the trader



7.2 Cancel Trade Request

Definition

A trader may request that a trade be cancelled should it be determined that an error has occurred with the execution of an order

- 1. Market Control may only cancel a trade upon agreement by both parties.
- 2. Once a trade is settled, it cannot be canceled.
- 3. A Cancel Trade Request must specify that the entire trade is to be canceled.
- 4. At the sole discretion of The BSX, trades can be canceled during the same trading day or early the next day for errors discovered in back office processing overnight.
- 5. To affect a partial cancellation of a trade, Market Control cancels the entire trade and re-enters the partial amount requested.
- 6. Cancel Trade Requests are sent via the Trading Workstation to Market Control (e-mail). Their format is a test format only where the trader will enter their ticket confirmation number to identify the trade they wish to cancel.
- 7. Market Control cancels the trade on behalf of both parties.
- 8. Following the cancellation of a trade, the participants may re-enter the order in the Exchange Book. They may request of Market Control that their queue priority be changed back to its former position which Market Control will be able to do and administer as they see fit (Maintenance Release).



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