



# ***STOP ORDER***

<b>Version</b>	<b>1.1</b>
<b>Language</b>	<b>English</b>
<b>Date</b>	<b>6 Nov 01</b>



## **DESCRIPTION OF THIS DOCUMENT**

This document describes the functionalities of Stop orders

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# STOP ORDER

## 1 DEFINITIONS

Stop Loss and Stop Limit orders are sometimes referred to as Stop orders. However, each has distinct characteristics that make them different.

A **stop-loss order**, also known as a **stop order**, is an instruction to buy or sell the full specified quantity of a financial instrument at the prevailing market price once the instrument has reached the trigger price specified by the client.

Once triggered, a stop-loss order becomes a must be filled or a “Market” order depending on the trading group.

A **stop-limit order**, is an instruction to buy or sell a quantity of financial instruments at the prevailing market price once the instrument has reached a trigger price specified by the client, but not below the sell limit or above the buy limit specified in the order.

Once triggered, a stop-limit order becomes a limit order.

## 2 REQUIREMENTS FOR ACCEPTANCE

Stop-loss orders and stop-limit orders can be entered during the pre-opening phase and during the continuous trading session. They can be used for securities traded continuously and for securities traded by call auction.

The **trigger price** for a buy order must be above the last traded price (in the pre-opening phase, above the previous close). A sell order's trigger price must be below the last traded price (in the pre-opening phase, below the previous close).

The limit specified in a stop-limit buy order must be greater than or equal to the trigger price.

The limit specified in a stop-limit sell order must be smaller than or equal to the trigger price.

An un-triggered stop-loss order or a stop-limit order can be changed and converted to an order without stops, i.e. a limit order, market order, or must-be-filled order. Similarly, an outstanding order without stops can be modified to a stop-loss order or a stop-limit order if the specific requirements are met, i.e. a buy (sell) trigger price above (below) the last traded price.

A stop-loss order or stop-limit order which has been triggered and partially executed can be transformed into a new stop-loss order or stop-limit order.

#### **Validity of stop-loss and stop-limit orders**

- A stop-loss order can specify any of the following validity:

Date, Default date (day) or Good Till Cancelled.

- A stop-limit order can specify any of the following validity:

Date, Default date (day), FAK, or Good Till Cancelled.

It should be noted that only stop-limit orders or stop-loss orders within a group designed to accept Market orders can specify a Fill And Kill validity, which can apply in the pre-opening phase as well as during the continuous trading session.

Where a FAK validity has been specified, the validity does not apply until the order is triggered.

An un-triggered stop-loss order or stop-limit order with a FAK validity has automatically a Good Till Cancelled validity (i.e. sliding validity).

A disclosed quantity can be specified for a stop-limit order and a stop-loss order of Market order type

A minimum quantity cannot be specified for either a stop-loss order or a stop-limit order.

### 3 ADVANTAGES

While stop-loss orders and stop-limit orders are particularly suited to investors who rely on technical analysis for their investment decisions, they are also useful to any investor seeking to limit losses in the markets.

For those with access to technical analysis of a security's price history, stop-loss orders provide a valued capability. Sell stop-loss orders can be positioned at lower levels where support might be broken, and buy stop orders can be positioned at upper levels where resistance might be broken. A buy stop-loss order gets the investor into a security at the beginning of a bullish trend.

### 4 PROCESSING IN THE PRE-OPENING PHASE

Stop-loss and stop-limit orders are registered in the trading system, time-stamped, and stored pending activation of the trigger.

Stop-loss and stop-limit orders that have been activated or triggered are taken into account when calculating the theoretical opening price.

To determine whether a stop-loss order or a stop-limit order is triggered, its stop price is compared with the theoretical opening price. Once a stop price is triggered, the theoretical opening price is recalculated to include the triggered stop orders.

Triggered stop-loss and stop-limit orders are not broadcasted if their activation would initiate the dissemination of a price range despite the existence of an equilibrium price (change the TOP calculation).

In any other case, triggered stop orders are broadcasted in the market data feed.

### 5 PROCESSING AT THE OPENING

- A stop-loss order that has been triggered becomes a must be filled or "Market" order and behaves like a must be filled or "Market" order thereafter.
- A stop-limit order that has been triggered becomes a limit order and behaves like a limit order thereafter.

As a limit order, it is fully executed if its buy (sell) limit is above (below) the opening price (with iceberg orders taken into account).

Where several stop-loss orders and/or stop-limit orders are outstanding at the same trigger price, priority is determined on a first-come/first-served basis according to the orders' timestamps.

## 6 PROCESSING DURING THE CONTINUOUS TRADING SESSION

Un-triggered stop-loss orders and stop-limit orders are not broadcasted by the system.

Stop-limit orders are broadcasted only after having been triggered and partially executed.

Whether specified as a stop-loss order or stop-limit order, the order is triggered only when the trigger price has been reached as a traded price. In both cases, when the trigger price is reached, one of two situations can occur:

- Stop-loss orders ( on groups designated to accept Must Be Filled) – Either the order is traded or it triggers a freeze, either because of a price above an upper threshold or below a lower threshold or because quantities are not sufficient to fill the order in the case of a must be filled.
- Stop-loss orders ( on groups designated to accept Market orders) – Either the order is traded or it triggers a freeze, because of a price above an upper threshold or below a lower threshold, or it remains in the order book without a price.
- Stop-limit orders – The order is traded if its limit is compatible with opposing orders in the order book (including all or none orders). Otherwise, it is displayed in the order book (unless FAK validity is specified) at its limit price.

Once an incoming order causes the quotation of a price equal to the trigger price, the system fills the incoming order.

The triggered stop-loss or stop-limit order is only taken into account by the system once the incoming order has been entirely processed.

### **See Example 2**

Where several stop-loss orders and/or stop-limit orders are outstanding at the same trigger price, the rule of price and time priority determines which of the orders are to be triggered.

The rule of price priority is applied on the basis of trigger price, not limit price.

**NOTE:** In all cases where a stop-loss order or stop-limit order would trigger execution at a price above (below) the upper (lower) thresholds, the security is frozen.

## 7 SPECIAL PROCESSING DURING A “FREEZE”

In the case where several stop-loss or stop-limit orders are positioned at the same trigger price, and one of them triggers a freeze followed by a reservation period ordered by the Market Operations Department, the orders at that trigger price are brought into the order book and broadcasted as regular orders with nothing to identify them as stop orders.

The order that caused the freeze is either rejected and must be re-entered by the trader or accepted

## 8 PROCESSING AT THE CLOSE

If the trigger price of a stop-loss order or stop-limit order is reached at the close, the order must be traded if its limit is compatible with outstanding orders in the order book before the session can be closed for the specified security.

If the triggered stop order causes the quotation of a price that triggers a freeze on the security at the close, the security remains frozen and the stop order will not be processed.

## 9 EXAMPLES

### a) Example 1

Activation of a stop order in the pre-opening phase and recalculation of the theoretical opening price (TOP)

#### Phase: Pre-opening

- Entry of an order to buy 200 shares 75 stop 75 limit.

Last traded price: 70

BID		ASK		STOP ORDERS				
Quantity	Limit	Limit	Quantity	Buy/Sell	Tot. Qty	Disc. Qty	Stop	Limit
50	75	75	60	B	200	200	75	75

The initial theoretical opening price (without the stop order) is 75.

This TOP triggers the stop order, and implies a TOP recalculation.

The new TOP is still 75.

- Opening of the security trades are the following:
  - 50 shares at 75
  - 10 shares at 75 (from the stop order)
  - The order book is as follows after the opening:

BID	
Quantity	Limit
190	75

ASK	
Limit	Quantity

**b) Example 2**

Phase: Continuous trading session

Traded at a price below the limit of the triggered stop-limit order

Scenario:

Last traded price : 26.50

- The following sell orders with stop-limits are entered when the order book appears as below:
  - sell 50 shares 25 stop 22 limit (FAK)
  - sell 50 shares 23 stop 21 limit, disclosed quantity of 10

BID	
Quantity	Limit
100	26
50	25
25	23
20	20
15	19

ASK	
Limit	Quantity
27	30
29	25
32	75
33	125
33.50	250

STOP ORDERS				
Buy/Sell	Tot. Qty	Dis. Qty	Stop	Limit
S	50	50	25	22
S	50	10	23	21

- Entry of an order to sell 160 shares at 23.
  - Trades:
    - 100 shares at 26
    - 50 shares at 25
    - 10 shares at 23
  - Activation of sell orders with stop-limits
    - 15 shares traded on the first stop-limit order triggered and deletion of the remaining quantity since the order stipulated a FAK validity.
    - The second stop-limit order enters the order book and is positioned at the best ask. Only the disclosed quantity is displayed.

The order book appears as follows after the stop-limit orders are triggered.

BID		ASK		TRADES	
Quantity	Limit	Limit	Quantity	Price	Quantity
20	20	21	10 (50)	23	15
15	19	27	30	23	10
		29	25	25	50
		32	75	26	100
		33	125		
		33.50	250		

**c) Example 3**

Phase: continuous trading session

Simultaneous activation of a buy stop-limit order and a sell stop-limit order.

An All or none (AON) order is traded for its total quantity after the stop-limit orders are triggered

Last traded price : 465

- Entry of an order to buy 80 shares at 466.

BID		ASK		STOP ORDERS					
Quantity	Limit	Limit	Quantity	Buy/Sell	Tot. Qty	Dis. Qty	Nat	Stop	Limit
60	463	464	10	B	100	10	L	466	466
100	460	465	40	S	20	20	L	464	462
		466	30						
		467	50						
		468	50						

BID (AON)	
Quantity	Limit
20	462

ASK (AON)	
Limit	Quantity
463	100

- Trades:
  - 10 shares at 464
  - 40 shares at 465
  - 30 shares at 466
  
- The sell stop-limit order is triggered (stop at 464) and executed at 462 for 20 shares against the AON order with a limit at 462
- The buy stop-limit order is triggered (stop at 466)
- The buy stop-limit order is executed at 466 for 100 shares against the AON sell order with a limit at 463

The order book appears as follows after the simultaneous activation of the stop-limit orders:

BID	
Quantity	Limit
60	463
100	460

ASK	
Limit	Quantity
467	50
468	50

TRADES	
Price	Quantity
466	100
462	20
466	30
465	40
464	10

BID (AON)	
Quantity	Limit

ASK (AON)	
Limit	Quantity

**d) Example 4**

Phase: continuous trading session

Activation of stop orders causing a freeze

Last traded price : 470

Upper reservation threshold = 493.5

Lower reservation threshold = 465

- The order book appears as follows:

BID	
Quantity	Limit
100	472
100	460

ASK	
Limit	Quantity
475	25
494	350

STOP ORDERS				
Buy/Sell	Qty	Stop	Limit	
B	100	472		No.1
B	50	472	494	No.2
B	100	472		No.3

- Entry of an order to sell 50 shares at 472

➤ Trades:

50 shares at 472

Stop orders are triggered

The first stop order triggered — stipulated Must be filled — causes a freeze since its 100-share quantity can be traded only at a price of 494, which is above the upper reservation threshold.

- Upper reservation of the security

The instrument is reserved with rejection. The triggered stop orders (No. 2 and No. 3) are displayed in the order book, although the triggered stop order that caused the freeze is rejected.

After the instrument has been reserved, the order book appears as follows:

BID	
Quantity	Limit
100	MX
50	494
50	472
100	460

ASK	
Limit	Quantity
475	25
494	350