



# Delivery Vs Payment Mechanism

At Colombo Stock Exchange

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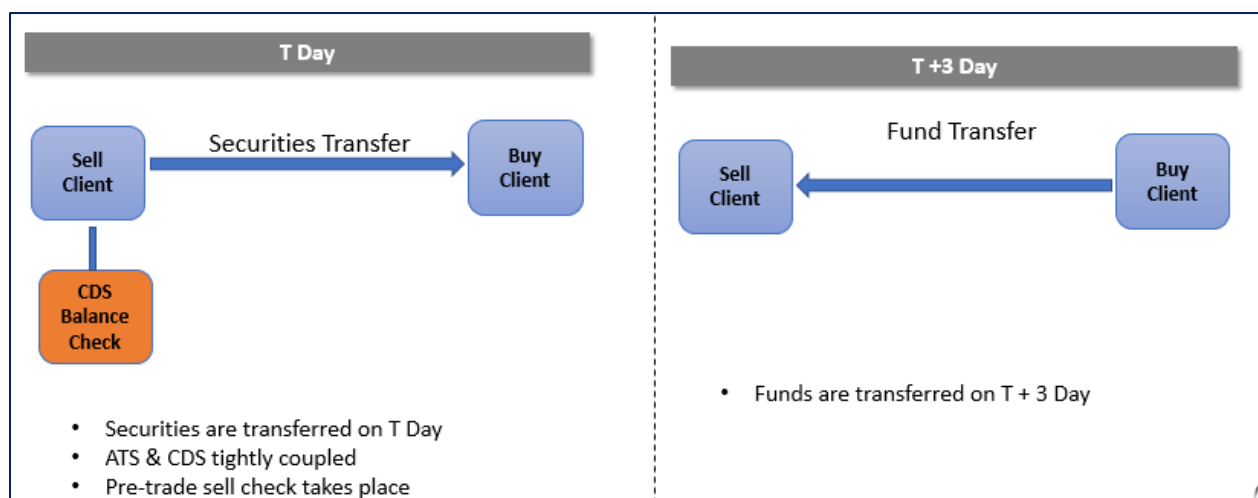
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# 1. INTRODUCTION TO DELIVERY VS PAYMENT

## 1.1 Current Clearing and Settlement structure

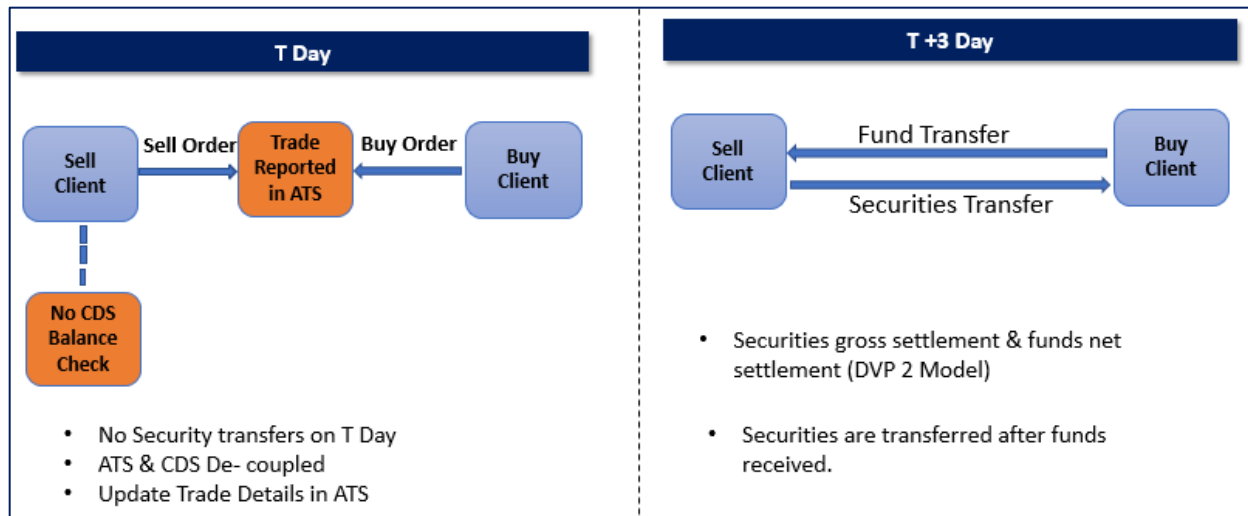
The CSE facilitates the trading of Equity & Debenture on the Automated Trading Platform (ATS) of the CSE. All Equity transactions carried out at the CSE are required to be settled on the 3rd market day from the trade date (T+ 3, T being the trade date). All Debenture transactions are settled on either T+1 or T+2 date. On the settlement day, all Buyers settle their obligations through their respective Broker Firms or their Custodian Banks for the purchases they carried out and similarly Sellers are paid the settlement proceeds through their respective Broker Firms or their Custodian Banks and shares will be transferred accordingly.

The ATS is currently coupled with Central Depository System (CDS) where every sell order is pre-checked with the CDS prior to submission. Hence, all investors are required to have an adequate cleared balance in their CDS account prior to placing a sell order.



## 1.2 Delivery vs. Payment (DVP)

The CSE has proposed to implement the Delivery Vs Payment clearing and settlement mechanism in settlement for Equity Securities from July 2021. The CSE will adopt DVP2 mechanism where the Securities are settled on gross basis and the funds are settled on net basis on the settlement date. Accordingly, the CDS will be decoupled from the ATS and shares will be transferred to the Buyers account on the settlement date (T+3) from the Seller's account subsequent to the confirmation of receipt of funds from the Buyer through their respective Settlement Banks.



## 2. DEFAULT HANDLING PROCESS

The CSE has identified two instances where a default may occur during the settlement process. A Fund Default by a Buyer on the settlement date where he has not produced sufficient funds for the purchases he made and Securities Default by a Seller on the settlement date where adequate cleared balance is not available in the CDS account. The following process shall be adopted in both instances.

### 2.1 Fund Default Handling

In the event a Participant fails to make a fund settlement, the respective participant has to notify the CDS by T+2 evening at latest by 3:00 P.M.

Once the participant notifies the CDS about the specific transaction/s which are going to be defaulted;

- The CSE will isolate those transactions and re-run the settlement schedule.
- The amended settlement schedule will be sent to the participants for the settlement.
- The fund settlement of the other trades will be carried out as usual on the settlement day.
- Isolated transactions will be treated as failed transactions and there will be no securities movement from the Seller's account to the Buyer.
- The CSE will charge the compensation from the defaulting party
- Sellers will be compensated for the 3-day price loss and opportunity loss as per the manner prescribed by the CSE.

#### **Compensation Payment Procedure (Buyer Default)**

The original Seller has to be compensated for the 3-day price risk and the opportunity loss. The following formula can be used to do the computation;

$$\text{Compensation amount} = \text{Max (0, P)} * Q + X\%$$

Where,

$P$  = Sale price - lowest trade price between the trade date and the settlement date

$Q$  = Quantity of defaulted securities

$X$  = A fixed percentage to cover the Brokerage loss of the broker (Initially this value will be 0.8%, but may change from time to time as the CSE board decides)

## 2.2 Securities Shortage Handling

No short selling will be allowed with the DVP. The Central Depository Systems (CDS) and the Automated Trading System (ATS) will be de-coupled with the implementation of the DVP. Hence, a sell check (validation of the securities in the sellers CDS account) will not be carried out by the CDS when placing a sell order. However, broker's order management systems shall validate the investors' available balance when placing a sell order. If the brokers have any short position at the end of the trade day, a processing fee will be charged from such brokers. Enforcement actions will also be taken against such brokers.

A Buy-In Board will be introduced as a mechanism to handle the securities short positions if any. The CDS accounts which carry a short position at the end of the day are mandatorily directed to the Buy-In Board to cover their short positions on T+1 and T+2.

Buy-In Board will operate as an auction for a specific period (e.g. 2.00 P.M. to 2:45 P.M.) for the day. There will be three sessions to the auction as Auction Initiation session, Auction Call session and Auction Execution session.

The CSE will generate a report at end of the day each day to identify the short positions of each client security-wise. The report will be communicated to the respective participant each day. Accordingly, participants may place orders in the Buy-in board on T+1 or T+2 to cover their short positions.

### **Features of the Buy-In Board are as follows;**

- The initiating orders (Buy orders) will be placed by the Brokers at the order initiation price during the auction Initiation session, for their client accounts who are in a short position.
- The CSE will publish the order initiation price (Buy-In Price) for each security and the Buy-In quantities at a pre-defined time to the Participants through ATS as it will give more

transparency to the market. The order initiation price will be determined based on the Volume Weighted Average Price (VWAP) of each security at the cut-off time.

- If brokers submit prices other than the price published by CSE, CSE will manually cancel such orders in the Auction Initiation Session. A processing fee will be charged on such orders.
- Sell orders can be placed during the Auction Call session upon the expiry of the Auction Initiation session. There will be a price band applicable for sell orders from the order initiation price. Sell orders can only be placed by the clients who have a cleared balance in the CDS account.
- Upon the expiration of such time window, the CSE will check for the unauthorized buy orders (buy orders placed for the clients who do not have any short positions) and unauthorized sell orders (sell orders placed by the clients who do not have a cleared balance for the settlement). Such orders will be cancelled by the CSE without any notifications to the clients. A processing fee will be charged on such orders.
- Once all the unauthorized orders are cancelled, CSE will execute the Buy-In auction.
- The auction method will be the American auction model where the auction execution will happen at each sell order price regardless of the price indicated on the buy order.
- At the auction execution buy orders will be given priority based on entry time (time priority – first in first out) and no priority will be given for the clients who have earlier settlement dates. The sell orders will be executed based on the price-time priority.
- Any unexecuted quantities of both buy/sell orders will be expired at the Auction Execution Session.
- Only one Buy-In auction will be carried out for the day. The Exchange will not operate the Buy-In Board if there are no possible Buy-In Board orders on a respective day
- Settlement for transactions on the Buy-In Board shall be on T+1.

- If the defaulted parties do not submit any orders the respective transaction will proceed as a cash close-out.
- In a securities shortfall, if the buy-in partially filled, and there are insufficient securities to deliver, that part would be settled in cash for the price difference on the original settlement date (T+3) with an adequate compensation to the buyer

### **Compensation Payment Procedure (Seller Default)**

The original Buyer has to be compensated for the 3-day price risk and the opportunity loss.

Following formula can be used to do the computation;

$$\text{Compensation amount} = \text{Max (0, P)} * Q + X\%$$

Where,

P = Highest trade price between the trade date and the settlement date – Purchase price

Q = Quantity of defaulted securities

X = A fixed percentage to cover the Brokerage loss of the broker (Initially this value will be 0.8%, but may change time to time as the CSE Board decides)

## **2.3 Handling of Corporate Action Defaults**

In the event of a default, where a corporate action falls on the particular security, the benefit of the corporate action will be given in cash for the aggrieved party based on a mechanism prescribed by the CSE depend on the applicable corporate action.

A separate default schedule will be run daily to facilitate the payment of the compensation.



## 3. RISK MANAGEMENT

### 3.1 Margin Methodology

All the purchases and short sales (if any) are subject to be margined. This will be based on the netting of securities at the broker level and net purchase position of each security for the broker. Thus, the margin will only be applied after deducting any sales for the security on the same day. Thereafter, the total margin requirement for each security will be summed to the broker level to arrive at the total margin requirement of the Broker. There will be two margin components; Initial Margin and Variation Margin. All Participants will be applicable for Margin computation including the Custodian Banks. Participants may collect margins from the clients accordingly

#### **Initial Margin**

Initial Margin (IM) = - (Total Purchase quantity of a security (broker wise) - Total Sales Quantity of a Security) x Volume Weighted Average Purchase Price x (VAR of the security +2.5%)

#### **Variation Margin**

Variation Margin (VM) = (Volume Weighted Average Purchase Price – Closing Price) x Net Quantity (Total Purchase quantity of a security (broker wise) - Total Sales Quantity of a Security)

Upon the transactions executed on T day VM loss for purchase will be computed at the end of each trading day until the settlement (i.e. T, T+1, T+2 day) at the broker level.

#### **Margin of unauthorized short positions**

The CSE will identify the short sales position for each client for each security. There will be two margin components for the unauthorized short position; Initial Margin and Variation Margin.

The CSE will calculate the Initial Margin for each client in the following manner;

**Initial Margin (IM) = Sales quantity x Selling Price x (VAR of the security +10%)**

The CSE will calculate Variation Margin (VM) for the unauthorized sales position. This will be capped at zero and no VM gains on unauthorized sales position will be given.

**Variation Margin** = (Closing Price - Selling Price ) x Sales quantity

### 3.2 Collateral Management

- Participants have to furnish the minimum collateral requirement prescribes according to rules to the CSE. The daily margin requirement on T+1 should be placed by day at 10:30 A.M

## 4. TREATMENT OF HIGH VALUE TRANSACTIONS

For any trade which the value exceeds Rs.100Mn (this value could be change and should be able to parameterize), the participants are given the opportunity of settling the particular trade on a gross basis.

If the participants are opted for this facility, upon the execution of the trade, the Stockbroker for the trade representing both the Buyer and the Seller will be required to send a request to the CDS before end of trading on T+2, to settle the trade on a gross basis, confirming that the trade will settle separately with the agreement of both clients. Upon receiving the said confirmation, the CDS will check whether the selling client has adequate shares in his CDS account at the end of the trade day.

The CDS will flag the transactions in the system and move out the relevant transaction from the normal settlement. A separate settlement file will be sent to the two participants with regard to the flagged transaction.

Once the trades are flagged for the gross settlement, such trades will be excluded from the margin computation and no margins will be charged. If the Buyer defaults on the trade on the settlement date, the Seller has to bear whatever the loss occurred from the trade. No compensations will be paid to the Seller and securities will remain in the Seller's account. However, a processing fee will be charged by the CDS from the Purchasing side.

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## 5. PROCESSING FEES CHARGED BY THE CSE

The CSE will charge following additional fees from the participants.

1. Defaulted trades – A processing will be charged from the Participant for every defaulted trade arising due to fund or securities shortage.
2. Unauthorized Buy-in orders – A processing fee will be charged by the CSE for unauthorized Buy-in orders in instances where unauthorized buy orders are placed for clients who does not have a short position and any sell orders placed without cleared balances.
3. Non-compliance with margin requirement – The CSE will charge processing for the any non-compliances with margin requirements by a participant.

These fees will be collected separately from the Participant on regular basis (e.g. Monthly etc.) and not be included in the normal transaction fee.