### **DETERMINATION OF BASE MARGIN REQUIREMENT AND MARGIN METHODOLOGY**

The following mechanism will be used to determine the Based Margin Requirement and Daily Margin Requirement as highlighted in **CDS rules section 9** with a view to facilitate the implementation of the Delivery Versus Payment (DVP) settlement mechanism.

Each Participants are required to furnish margins for the exposure they created through Trading activities. There will be two margin requirement components need to be fulfilled by the Participant, that is;

- 1. Based Margin Requirement
- 2. Daily Margin Requirement

## 1. Base Margin Requirement Methodology

Base margin requirement is the minimum margin amount that a Participant has to maintain with CDS for a period of one quarter. The amount will be changed on a quarterly basis considering the Participant's preceding calendar quarter daily average purchase turnover.

Depending on the Participant's preceding calendar quarter daily average purchase turnover, it is recommended to categorize all the CDS participants into three categories as prescribed below;

Category	Preceding calendar Quarter daily average purchase turnover	Minimum Margin Amount
1	Daily average purchase turnover < Rs. 50 million	Rs. 3.5 million
2	Daily average purchase turnover between Rs. 50 million and Rs. 100 million	Rs. 5.0 million
3	Daily average purchase turnover > Rs. 100 million	Rs. 10.0 million

However, Participants may deposit any amount greater than the applicable base margin requirement to avoid additional exposure created on a daily basis.

### 2. Daily Margin Requirement

The total purchases and sales of the same security will be netted at the Participant level to compute the net open positions of each security. The Initial Margin will be calculated based on net open position of each security and the respective VAR margin of the security. The Variation Margin will also be calculated on the net open position compared to the average trade price and the closing price of the security.

# **Margin Methodology**

There will be two margin components in the margin;

- (i) Initial Margin
- (ii) Variation Margin

# **Initial Margin (IM)**

Initial margin will be calculated based on net open position of each security and the respective VAR margin of the security

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 (VM)

• Variation margin will be calculated on the net open position comparing the average trade price and closing price of the security.

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

The total VM for a client will be capped at zero and will not be set off against the initial margin.

Total Margin Requirement = Total IM + Total VM

#### Margins Applicable for the Sales

Any sales which arise from a cleared balance will not carry margins. Sell side margin is only applicable for the short sales. Short sales would be margined separately on a client wise. This margin will be applicable until the settlement of such trade though the client may cover it from the buy-in board later.

# **Initial Margin (IM)**

**Initial Margin –** Total short sales quantity of a security x Volume Weighted Average Sales Price x (VAR of the security + 10%)

# **Variation Margin (VM)**

**Variation Margin -** (Closing Price – Volume Weighted Average Sales Price ) x Total short sales quantity of a security

Note: As explained above previous month VaR values will be considered in the calculation

Upon the transactions executed on T day VM for Net purchases and Short Sales will re-compute at the end of each trading day until the settlement (i.e. T, T+1, T+2 day) for each client at the security level.

 $Total\ Margin\ Req.\ from\ Short\ Sales\ Side =\ Total\ IM + Total\ VM$ 

## **Daily Margin requirement**

Derived the Daily Margin Requirement for the Participant by sum-up the client wise Total Margin Requirement for the Purchase side and Total Margin Requirement for the Short Sales.

# Daily Margin Requirement

- = Total Margin Req. from Net Purchases
- + Total Margin Req. from Short Sales

In an event where, Base margin amount is less than the Daily margin requirements arising from the Trades executed by a Participant on a particular Trade Day, they have to bring an additional collateral to cover such additional exposure.