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**Circular Name: Guidelines for Brokers regarding Calculation of Initial Margins for Clients**

NCEL Initial Margin regime is based on Value-at-Risk (VaR) methodology and is designed to calculate the optimal margin to cover the risks faced by the clearinghouse. All brokers and their clients are treated equally at NCEL and charged the same level of initial margin. Initial margins for gold are based on a 99% confidence interval over a 1-day time horizon. NCEL can use a 1-day time horizon because of daily mark-to-market under a T+0 settlement cycle. This T+0 settlement cycle is made possible by the use of real-time 24/7 funds transfer facilities provided by MCB Virtual Banking Interface which means that Brokers have the means to transfer funds online.

When obtaining initial margins from clients, it is most likely that normal banking channels will result in a 1-3 days processing time for cleared funds to arrive in the broker's account. In this case, brokers may choose to ask for higher initial margins from clients. NCEL does not prescribe any specific level of additional margins that brokers may charge from their clients. However, in the interest of educating all market participants, brokers are advised to base client margin on VaR. There is a very clear trade-off between excessive margining and reduction in trading activity. Client margins should be based on analytical reasoning such that they cover the risk of the broker for the number of days it would take them to receive cash margins from clients. Any excessive margining may deter trading interest from clients

The statistical method under VaR margining used to scale-up 1-day VaR is based on the formula:  $VaR \text{ for } n\text{-days} = (VaR \text{ for } 1\text{-day}) \times \sqrt{n}$ , where n is the number of trading days. An example table of scaled up VaR margins is shown below:

1 Day	2 Days	3 Days	5 Days	7 Days	10 Days
3.00%	4.24%	5.20%	6.71%	7.94%	9.49%
3.50%	4.95%	6.06%	7.83%	9.26%	11.07%
4.00%	5.66%	6.93%	8.94%	10.58%	12.65%
4.50%	6.36%	7.79%	10.06%	11.91%	14.23%
5.50%	7.78%	9.53%	12.30%	14.55%	17.39%
6.00%	8.49%	10.39%	13.42%	15.87%	18.97%

Brokers have an additional cushion from the fact that banks are open on Saturdays as well, while trading is open only Monday to Friday. The ideal margin level for any client is the number of days the broker thinks is needed to receive margins from particular customers.

In order to further reduce risk and margins, Brokers may find it useful to encourage their clients to open accounts at MCB and use the Virtual Banking Interface. This will help Brokers as well as clients in reducing cost of doing business.