

October 31, 2024
146/2024-PRE

CIRCULAR LETTER

Listed B3 Participants

Re.: **LiNe Clearing - Market Risk for Trades (RMKTN) Metric: Go Live and Inclusion in the Monitoring of Limits Assigned in LiNe**

As foreseen in External Communication 058/2024-VNC, dated October 15, 2024, B3 hereby informs you that as of **December 9, 2024**, the aggregate metric of Market Risk for Trades (RMKTN) in the LiNe Clearing system will go into the operating production format.

To allow market participants to validate the behavior of the new metric, the RMKTN will be available in the parallel production format as of the **November 9, 2024** Mock Trading Session.

The RMKTN metric will be calculated during this parallel production period and its results will be available for consultation in the LiNe Clearing system on the same screens in production, but violation of the assigned limits will not trigger the protected mode or have any subsequent effect.

Furthermore, the limits assigned to the RMKT metric will be automatically replicated for RMKTN at the start of the parallel production period. These limits may be changed during parallel production at the discretion of the participant and will be maintained for operating production after the launch of the metric.

146/2024-PRE

The technical specifications of the RMKTN metric are available in Annex I hereto.

As of the go-live, the assignment of limits for the RMKTN metric will be mandatory and the managed limits will be assessed, with new order rejections allowed and with the Protected Mode triggered when the limits are violated. Also as of December 9, 2024, the RMKTN will be part of the metrics assessed in B3 monitoring of limits that participants assign to the aggregated risk metrics of their customers in LiNe.

As of that date, therefore, the limits assigned in the RMKTN will be part of the computation of the residual risk violation, as already occurs with the other LiNe Clearing aggregate metrics. The modeling of the limits assigned at LiNe Clearing from the inclusion of this new metric is available in Annex II hereto.

More details on how RMKTN works and on B3's monitoring of the assigned limits are available in the Concept Guide and in the "Technical Note – Monitoring Limits in LiNe", at www.b3.com.br/en_us/, Solutions, Platforms, Risk Management, LINE 5.0, Specification.

The subjects set out in the technical workshops for the new metric, held on October 24, 2024 (Portuguese) and October 25, 2024 (English), are also available at TV B3 (www.tvb3.com.br) and at the B3 Clients website (<https://clientes.b3.com.br/en/>), Roadmap, New Line Clearing Metrics: Market Risk for Trades (RMKTN).

146/2024-PRE



Further information can be obtained from the Risk Services Center by telephone on +55 11 2565-5030 or by email at gmr@b3.com.br.

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Annex I to CIRCULAR LETTER 146/2024-PRE

1. Technical Specifications of the Market Risk for Trades (RMKTN)

The purpose of RMKTN is to mitigate the incremental risk generated by the total number of trades executed over the day in comparison with the opening portfolio risk of a determined customer.

The assignment of limits to this new metric will be mandatory at the document level (CPF Individual Taxpayer No., CPNJ Corporate Taxpayer No. or CVM code for nonresident investors) and its configuration is the responsibility of the trading participant (PN), full trading participant (PNP) or settlement participant (PL) responsible for it. Breaching the metric, or failure to define a limit, will trigger the protected mode and cancel all open orders in the book.

The following will be considered for calculation:

- all contracts in the derivatives segment
- OTC derivatives contracts (swaps, forwards and flexible options) are also considered as trades in the opening portfolio and are duly considered in the opening risk
- option exercises will be included within the underlying asset (paper) (only if the market of the underlying asset is being considered)
- user-defined strategies (UDS) and B3 exchange-defined strategies (EDS) are assessed considering the strategy as a single instrument
- instruments traded at their closing price plus a spread will subject to a specific procedure – Trade at Settlement in DI1 Futures (DI1 TAS) will be assessed as though it were a DI1 futures contract in a corresponding contract month
- test instruments for both segments will be disregarded.

146/2024-PRE

Calculation of the RMKTN metric

Definitive account

$$RMKTN_{DfAcct} = - \min \left\{ \min \left[\min_{\forall c} \left(CO_{(1,c)} + \sum_{\forall i} (C_i - V_i) \times RU_{(i,c)} \right) + \sum_{i_{CPM}} RMKTN_{i_{CPM}} ; 0 \right] - \min[\min_{\forall c} CO_{(1,c)}; 0]; 0 \right\}$$

Transitory account

$$RMKTN_{TrAcct} = - \min \left\{ \min \left[\min_{\forall c} \left(CO_{(1,c)} + \sum_{\forall i} \left[\begin{array}{l} \min(C_i \times RU_{(i,c)}; 0) \\ \min(-V_i \times RU_{(i,c)}; 0) \end{array} \right] \right) + \sum_{i_{CPM}} RMKTN_{i_{CPM}} ; 0 \right] - \min[\min_{\forall c} CO_{(1,c)}; 0]; 0 \right\}$$

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$$RMKTN_{Inv} = - \min \left\{ \min \left[\min_{\forall c} \left(\sum_{\forall CtD} CO_{(1,c)} + \sum_{\forall i} \left[\begin{array}{l} \sum_{\forall CtD} (C_i - V_i) \times RU_{(i,c)} \\ + \\ \sum_{\forall CtT} \left[\begin{array}{l} \min(C_i \times RU_{(i,c)}; 0) \\ \min(-V_i \times RU_{(i,c)}; 0) \end{array} \right] \end{array} \right] \right) + \sum_{i_{CPM}} RMKTN_{i_{CPM}} ; 0 \right] - \min \left[\min_{\forall c} \left(\sum_{\forall CtD} CO_{(1,c)} \right) + \sum_{i_{CPM0}} RMKTN_{i_{CPM0}} ; 0 \right]; 0 \right\}$$

146/2024-PRE

Where:

$RMKTN_{DfAcct}$ = RMKTN metric for a definitive account

$RMKTN_{TrAcct}$ = RMKTN metric for a transitory account

$RMKTN_{Inv}$ = RMKTN metric for an investor

$RMKTN_{i_{CPM}}$ = RMKTN metric of the Copom option i_{CPM} for the account or document being assessed

$RMKTN_{i_{CPM_0}}$ = RMKTN metric of the Copom option i_{CPM_0} for the account or document being assessed

C = each existing scenario

i = each instrument traded, except Copom options

i_{CPM} = each Copom option traded, considering the opening portfolio and trades executed during the day

i_{CPM_0} = each Copom option traded, considering only the opening portfolio

$C0_{(1,c)}$ = one-dimensional matrix [1 x c] of the opening portfolio risks on the day

$RU_{(i,c)}$ = two-dimensional matrix [i x c] of the unit risks for each instrument in each scenario

C_i = balance (in number of contracts) of the buy transactions executed for instrument i

V_i = balance (in number of contracts) of the sell transactions executed for the instrument

Annex II to CIRCULAR LETTER 146/2024-PRE

Monitoring of Limits Assigned in LiNe as of the RMKTN Metric's Go-Live

The start of operating production means that the client's Settlement Risk and Execution Risk will be ascertained by equations (1) and (2), respectively:

$$RL_{P,Func,doc} = \max \left(LRMKT_{P,Func,doc}; LRMKTN_{P,doc,ct}; 0.25 \times LSDP_{P,Func,doc}; LSFDP_{P,Func,doc}; \right. \\ \left. \times LSPDA_{P,Func,doc}; 0.25 \times LSPTA_{P,Func,doc}; 0.25 \times LSPVD_{P,Func,doc} \right) \quad (1)$$

$$RE_{P,doc} = \max_{ct} \left(0.35 \right. \\ \left. \times \max \left(LRMKT_{P,doc,ct}; LRMKTN_{P,doc,ct}; 0.25 \times LSDP_{P,doc,ct}; 0.25 \right. \right. \\ \left. \left. \times LSPVD_{P,doc,ct}; LSFDP_{P,doc,ct} \right) \right) \quad (2)$$

Where:

$LMA_{P,Func,doc}$ = is the associated risk of the customer **doc** under the responsibility of PNP/PL **P** acting in the function **Func** (**D. Rep** or **PNP**) for the aggregated risk metric MA, with MA being the same as RMKT, RMKTN, SDP, SFD, SPDA, SPTA or SPVD.

At the participant's request, B3 may assess the monitoring model of the RMKTN and RMKT, conditional on the use of additional controls determined by B3.