Technical description
Pre-Trade risk checks on the Equities market for Sponsored Market Access (SMA) ID's

1. Description of risk checks

Pre trade risk checks may be set individually for each SMA_ID. Instructions (and orders) submitted via a specified SMA_ID, are checked by the following criteria set on the relevant SMA_ID:

	Risk check parameter	Set at level:
1.	Deviation of price level from current market price	SMA_ID and/or SMA_ID – SECID
2.	Maximum volume of order (in number of lots, or in Roubles)	
3.	Maximum volume of market order (in number of lots, or in Roubles)	
4.	Maximum sum of orders in a single trading day (in Roubles)	
5.	Maximum number of transactions per second	SMA_ID
6.	List of permitted instruments (SECID)	
7.	List of permitted trading modes (BOARID)	SMA_ID and/or SMA_ID – SECID
8.	Maximum GROSS position long or short in lots or in Roubles	SMA_ID and/or SMA_ID – SECID –Trade account
9.	Maximum NET position long or short in lots or in Roubles, on a general sum or on a specific instrument	

1.1 Deviation of price level from current market price

- For SMA_ID and/or SMA_ID – SECID, a parameter is set, specifying the maximum deviation from the current market price as a percentage up or down, with an accuracy of up to 2 decimal places. If the price in the order exceeds this parameter then the order is rejected by the trading system. If the parameter is set simultaneously on the level of SMA_ID and SMA_ID – SECID, then the order will be rejected if it exceeds the minimum of the two.

- The current market price references the main trading mode (board). If there is no current market price then the following algorithm approached with priority mentioned below:

  1. The Last Price of the current trading day (Last)
  2. The Last Price of the previous trading day (PrevPrice)
  3. The order is rejected with the message "Maximum deviation from current market price is exceeded, as there is no specified current market price".

  If the currency of the trading board on which the order is placed, differs from the currency of the main trading board, then the maximum deviation from current market price is established as:

  <current market price in main trading mode>/<current exchange rate from Bank of Russia>*(100+<upward deviation from current market>/100)

  and the minimum deviation from current market price as:

  <current market price in main trading mode>/<current exchange rate from Bank of Russia>*(100-<downward deviation from current market>/100).

- For market orders this check does not apply.

- Does not apply to technical trading modes (TRAN, NADM, etc.).

- The parameter for maximum deviation up and down is set at a value greater than or equal to 0%, and less than 100%.

1.2 Maximum volume of order (in number of lots or in Roubles)

- For SMA_ID and/or SMA_ID – SECID, a parameter is set specifying the maximum volume of securities in a single order (specified in lots or in Roubles). If the volume of the order exceeds the parameter the order is rejected by the order processing system. If parameters are set in both SMA_ID and SMA_ID – SECID then the order will be rejected if it exceeds the minimum of the two.

- If the volume of the order is in a foreign currency (and if settlements occur in a foreign currency), then the volume of the order is calculated in Roubles according to the current exchange rate from the Bank of Russia to 4 decimal places. For orders without a specified price, then the last settlement price is used. The risk check takes into account accrued interest and does not take into account commission.

- The parameter for maximum volume may be set to 0. In that case the SMA_ID will not be able to submit orders.

- Does not apply to technical trading modes (TRAN, NADM, etc.).

- The parameter must be a non-negative integer.

1.3 Maximum volume of market order (in number of lots or in Roubles)

- Analogous to risk check 1.2, but for market orders.

1.4 Maximum sum of orders in a single trading day (in Roubles)

- For SMA_ID and/or SMA_ID – SECID, a parameter is set, specifying the maximum sum volume of orders in Roubles on buys and sells, beginning from the moment at least one of the risk checks 1-5 was set. If the parameter is exceeded, the order will be rejected.

- If the parameter is set at the level of SMA_ID, then it will apply to the cumulative sum of all orders submitted in all trading modes.

- If the parameter is set at the level of SMA_ID-SECID, then it will apply to the cumulative sum of all orders submitted in all trading modes with the specified SECID.

- If the volume of the order is in a foreign currency (and if settlements occur in a foreign currency), then the volume of the order is calculated in Roubles according to the current exchange rate from the Bank of Russia to 4 decimal places.

- For orders placed in the closing auction, the check occurs at the moment of the placing of the order. For orders with an activation date the check occurs at the moment of activation.
- If all risk checks from 1-5 are removed from the SMA_ID, then the calculated sum is reset. After one of the risk checks 1-5 is set again, the count will begin again from 0.

- If an order did not pass the risk checks/was removed by the trading system/was removed by the user then it will not be counted in the cumulative sum.

- Does not apply to technical trading modes (TRAN, NADM, etc.).

- The parameter must be a non-negative integer.

1.5 Maximum number of transactions per second

- Transactions are defined as any transaction which submits, changes or removes orders (anonymous or negotiated)

- A parameter is set on the level of SMA_ID, which restricts the maximum amount of transactions submitted in one second. If the parameter is exceeded, the transaction will be rejected by the order processing subsystem.

- The parameter must be a positive integer.

1.6 List of permitted instruments (SECID)

- The risk check is set at the level of SMA_ID.

- It is possible to set a list of SECID, which will act as exceptions to the risk check rule. If by default, trading with securities is not permitted, then it is possible to set a list of permitted SECID, and the reverse – if trading in securities by default is allowed, then it is possible to set a list of SECID that will not be permitted to trade.

- The amount of SECID exceptions for one SMA_ID must not exceed 100.

1.7 List of permitted trading modes (BOARID)

- For SMA_ID and/or SMA_ID-SECID, a list of permitted BOARIDS may be set. If an order is submitted specifying a BOARID that is not in the permitted list, the order is rejected by the order processing system. If this risk check is set simultaneously for SMA_ID and SMA_ID-SECID, then the order is rejected if the specified BOARID in the order does not appear in at least one of the permitted lists.

1.8 Maximum GROSS position long or short in lots or in Roubles

- A parameter is set at the level of SMA_ID – SECID – Trade account, which set the maximum amount of long contracts and/or short contracts for a specific instrument opened in a single trading day. That is, a cumulative counter for all long contracts, and a cumulative counter for all short contracts.

- Cancel orders reduce the respective counter for the respective contract position.

- Trading instructions which lead to the maximum position in long and/or short being exceeded are rejected by the order processing subsystem.

- If a trading instruction did not pass the risk checks of the system/was removed by the system/was removed the by the user, it will not add to the counter for the maximum position.

- Orders in REPO and orders submitted in technical trading modes (TRAN, NCC transfers, etc) do not add to the counter.

- Matching of orders does not additionally affect the counter in any way – only the initial order is counted. For example, in the case of a partial fill followed by removal of the rest of the order, the partial fill is considered a successful order and adds to the count, whereas the rest of the order (that was removed) does not.

- Positions at the beginning of the day are not counted.

- For orders placed in the closing auction, the check occurs at the moment of the placing of the order. For orders with an activation date, the check occurs at the moment of activation.

- The risk check must be set as a non-negative integer.

1.9 Maximum NET position long or short in lots or in Roubles, on a general sum or on a specific instrument

- The algorithm is as follows:

  For maximum short position, a parameter C1 is defined as = total volume of all sell deals in lots – total volume of all purchase deals in lots + total volume of all active orders to sell in lots

  For maximum long position, a parameter C2 is defined as = total volume of all purchase deals in lots – total volume of all sell deals in lots + total volume of all purchase orders to sell in lots

- SS = Maximum short position limit (opened in a single trading day) defined by user in lots

- SB = Maximum long position limit (opened in a single trading day) defined by user in lots

- Orders in REPO and orders submitted in technical trading modes (TRAN, NCC transfers, etc.) do not add to the counter.

- An order has passed the check if:
  C1<=SS
  C2<=SB

- SS, SB is set in one of the following ways:
  o Gateway
  o MICEX Trade SE
  o Personal account of the participant

- SS, SB is set for a specific SMA-user and TCA (similar to the existing position check for money)

- SS, SB must be set as a non-negative parameter with accuracy up to 2 decimal places.

2. Setting, removing and changing parameters of SMA pre-trade risk checks in MICEX Trade SE terminal (through MICEX Bridge gateway)

Setting of SMA pre-trade risk check parameters through the MICEX Trade SE terminal is available only from an ID that is not an SMA_ID.

SMA_ID's do not have the ability to remove or change pre-trade risk parameters set on their login.

To set parameters of SMA pre-trade risk checks, the ID needs to have trading permissions.

Risk check parameters come into force from the moment they are set or changed.

When setting the flag 'for SMA', the trading member chooses an ID/group of SMA_IDs, a list of permitted trading modes and instruments. If the trading participant wants to set a restriction on the whole SMA_ID, then the fields 'trading mode' and 'instrument' can be left blank.

3. User Groups

It is possible to group IDs into User Groups.

One SMA ID can be included in only one User Group.

It is possible to set checks on the User Group that matches the checks set on a SMA ID. The corresponding checks for the User Group are set in the same way as the checks for the SMA ID.

When submitting an order using a SMA ID, it is checked both for compliance with the restrictions established for this SMA ID and for compliance with the restrictions established for the User Group, which includes the SMA ID. If the order does not pass any of these checks, it is rejected.

Checking the order for compliance with the restrictions established for the User Group is carried out similarly to checking for compliance with the restrictions established for the SMA ID, but taking into account the total values of the numerical indicators established for all SMA IDs included in the User Group. That is, if the order passes the check for the restriction for the SMA ID, but when it is submitted, the total value of the monitored indicator for all SMA IDs goes beyond the limit set for this indicator in the User Group restrictions, such an order is rejected with a corresponding error about exceeding the limits, installed for User Group.

Consolidation of SMA IDs in the User Group is carried out similarly to the unification of UserID in the User Group.

If the indicator value is exceeded at the User Group, then orders from all SMA IDs included in this User Group are not accepted.

An example of the operation of restrictions on the net position:

The client has 3 SMA IDs, and no transactions.

On SMA ID1 there is a check (at the SMA ID level) for the maximum net position for a purchase of 500,000 Roubles.

On SMA ID2 there is a check (at the SMA ID level) for the maximum net position for a purchase of 100,000 Roubles.

On SMA ID3 there is a check (at the SMA ID level) for the maximum net purchase position at 700,000 Roubles.

And the User Group, consisting of SMA ID1, SMA ID2 and SMA ID3, has to check for a maximum net position for a purchase of 600,000 Roubles.

Then
SMA ID1 can trade up to 500,000 Roubles (given no other trading).
SMA ID2 can trade up to 100,000 Roubles (given no other trading).
SMA ID3 can trade up to 600,000 Roubles (given no other trading).