

TECHNICAL DESCRIPTION

PRE-TRADE RISK CHECKS ON THE FX MARKET FOR SPONSORED MARKET ACCESS LOGINS ON THE MOSCOW EXCHANGE

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:	Set via:
1.	Deviation of price level from current market price	SMA_ID, SMA_ID – Instrument, or USERGROUP (group of ID's)	MOEX trade currency, ASTS bridge
2.	Maximum volume of order (in number of lots, or in Roubles)		
3.	Maximum sum of orders in a single trading day (in Roubles)		
4.	Maximum number of transactions per second	SMA_ID, or USERGROUP (group of ID's)	
5.	List of permitted trading modes		
6.	List of permitted instruments		
7.	Maximum GROSS position long or short in quantity or in Roubles	SMA_ID and/or USERGROUP (group of ID's)	
8.	Maximum NET position long or short in quantity or in Roubles, in aggregate or in a specific instrument		

1.1 Deviation of price level from current market price

The deviation of the price is calculated from the price of the last transaction in pips.

For SMA_ID and / or for SMA_ID - INSTRUMENT, the type of the base indicative price is selected and either the value of the permissible deviation of the price in the order from the base indicative price up and down in percent with an accuracy of two decimal places is set, or the value of this base indicative price with an accuracy of 4 or 6 characters (depending on the instrument). If the price in the order exceeds the permissible deviation value or if the price in the order is higher / lower than the maximum / minimum value of the base indicative price, the order is rejected by the order processing subsystem.

In case of equality of prices in the order and the base indicative price, in accordance with such an order, an application can be submitted to the trading system. When deviation values are set simultaneously for SMA_ID and for the combination SMA_ID - INSTRUMENT, the order is rejected if the smallest of the two values of the permissible price deviation in the order exceeds the current price for SMA_ID or for SMA_ID - INSTRUMENT.

The value of the base indicative price for which the deviation in% is set is determined for transactions on the main board (CETS). If the value of the base indicative price is not defined, then the order is rejected with the error: "The limit on the maximum / minimum price of the order is exceeded, because The basic indicative price has not been determined."

For market orders, this restriction is not checked.

The restriction is not checked for TRAN, TRAD, FIXS, FIXN, WAPS, WAPN, LICU modes.

Restrictions on both the deviation up and the deviation down - more than or equal to 0, less than or equal to 100%.

Example: 1% for CNYRUB_TOM of the current weighted average price.

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

For SMA_ID and / or for SMA_ID - INSTRUMENT, the maximum number of lots for the instrument specified in the order is set. If the number of lots specified in the order is exceeded, the order is rejected by the order processing subsystem. When deflection values are set simultaneously for SMA_ID and for the combination SMA_ID - INSTRUMENT, the order is rejected if the smallest of the two values for SMA_ID or for SMA_ID is INSTRUMENT.

The restriction is not checked for TRAN, TRAD modes.

The limit on the set maximum order volume in lots for an instrument is a non-negative integer.

Example: 1000 lots for instrument CNYRUB_TOM.

For an order without specifying a price (for example, a market price), the maximum order amount is checked in the following order: at 1) the price of the last transaction, 2) at the current weighted average, 3) at the weighted average of the previous trading day. In this case, in the absence of a value of 1, the check is carried out at a value of 2, in the absence of a value of 1 and 2, verification is carried out at a value of 3.

For instruments FIX0 and WAP0, sell and buy orders are checked at the central (forward) rate. The check does not take into account the value of a possible revolving commission.

The maximum amount of the order may be 0. In this case, this SMA_ID cannot submit any orders.

The restriction is not checked for TRAN, TRAD modes.

The limit on the maximum order amount is greater than or equal to 0.

Example: 1,000,000 rub. for CNYRUB_TOM.

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

For SMA_ID and / or for SMA_ID - INSTRUMENT, the maximum amount of orders in Roubles for purchase and sale submitted at the beginning of the trading day is set, after which the order is rejected by the order processing subsystem.

For the purpose of checking orders for compliance with this restriction, the total amount of all orders submitted in all trading modes and the sum of all orders submitted during the trading day with the INSTRUMENT tool in all trading modes are calculated on an cumulative basis (if the check is set for the combination SMA_ID - INSTRUMENT).

When setting the maximum order amount in Roubles per trading day for both SMA_ID and for the combination SMA_ID - INSTRUMENT, the order is rejected if the smallest of the two values is exceeded. When indicating the amount of the order in foreign currency (if settlements in the trading mode are carried out in foreign currency, for example, in the case of EUR / USD), for verification purposes, the amount of the order in conjugate currency is converted into Roubles at the exchange rate of the Bank of Russia on the day of trading.

For an order without specifying a price (for example, market), the maximum order amount is checked at 1) the price of the last transaction, 2) at the current weighted average, 3) at the weighted average of the previous day. For instruments FIX0 and WAP0, sales and purchase orders are checked at the upper price limit established at the date of the order submission; in the absence of these prices, the order is rejected with the error: "The limit on the maximum / minimum price of the order is exceeded, because the current

price has not been determined. " etc.). The audit does not take into account the value of a possible revolving commission.

If all restrictions on the order parameters for SMA_ID are removed, then the calculated amount is reset. With the subsequent restriction, the amount will begin to be calculated from 0.

If all restrictions on the order parameters for a specific instrument SMA_ID-INSTRUMENT are removed, then the calculated amount for this instrument is zeroed. With the subsequent restriction, the amount will begin to be calculated from 0.

If the order did not pass the check / was withdrawn by the user / the order was withdrawn by the system, then it is not involved in calculating the maximum amount of orders for the trading day.

The restriction is not checked for TRAN, TRAD modes.

The limit on the maximum order amount in Roubles per trading day is greater than or equal to 0

Example: 1,000,000 rub. for CNYRUB_TOM.

1.4 Maximum number of transactions per second

Trading transactions are understood to mean the participant's instructions to enter, modify or withdraw orders in all modes for any instruments.

For SMA_ID, the maximum number of transactions submitted within a second (during the day) is set, after which the next transaction submitted with SMA_ID is rejected by the order processing subsystem. For the purpose of verifying transactions against this restriction, a progressive total is calculated for the number of all transactions submitted within a second (during the day) with SMA_ID.

The limit on the maximum number of transactions per second (per day) is a positive integer.

Example: no more than 1 transaction per second and no more than 1000 per day.

1.5 List of permitted trading modes

For SMA_ID and / or for SMA_ID - INSTRUMENT, a list of BOARIDs is set, which can be specified in the order. If the submitted order contains a BOARID that is not listed, the order is rejected by the order processing subsystem. When establishing a valid BOARID list for both SMA_ID and for the combination SMA_ID - INSTRUMENT, the order is rejected if the BOARID specified in it is not in at least one list of allowed BOARIDs. By setting a special flag, the restriction can be extended to all instruments traded in the selected mode.

For address modes in which address transactions are concluded, as well as normal transactions of the "Everyone" type (CNGD, FUTN, FIXN, WAPN, LICU), it is possible to provide for the implementation of a strict / non-strict prohibition on concluding transactions in these modes.

The restriction is valid until canceled.

Example: CNGD, FUTS, FUTN is prohibited. Allowed CETS, FIXS, FIXN.

1.6 List of permitted instruments

For SMA_ID, permission is established for transactions on certain instruments at the auction.

White list and Black list:

It is possible to set the list of INSTRUMENTS, which are exceptions, from the specified rule. That is, if by default trading is allowed, then you can specify a list of INSTRUMENTS with which trading will be prohibited, and vice versa - if trading with instruments is prohibited by default, set a list of INSTRUMENTS with which trading is allowed for SMA_ID. By setting a special flag, the restriction can be extended to all modes in which this instrument is traded.

The restriction is valid until canceled.

Prohibition / permission example: CNY0000000TOD - allowed, CNYRUB_TOM - prohibited, etc.

1.7 Maximum GROSS position long or short, in quantity or in Roubles

For SMA_ID - INSTRUMENT - SA2 (settlement account of the second level) or clientcode, a restriction is set in Roubles or quantity for buying and / or selling. For each combination of SMA_ID - INSTRUMENT - SA2 (second-level settlement account) or clientcode, the amount of currency / Roubles in purchase orders and the amount of currency / Roubles in sell orders are calculated on an accrual basis during the trading day. Upon receipt of an order to withdraw the order, the corresponding counter for the buy or sell decreases.

An order, as a result of the execution of which, a position may exceed the established limit, i.e. may become greater than the maximum positive value (excess of a buy position) or less than the minimum negative value (excess of a sell position), rejected by the order processing subsystem.

If the order was verified in the order processing subsystem and then after signing the TSA broker it was transformed into an order, and then this order did not pass the verification and was rejected, or the order was already registered in the trading system was canceled by the trading system / was withdrawn by the user, then such an order does not participate calculating the maximum position. Also, orders registered in the TRAN, TRAD, etc. modes are not involved in the calculation.

The fact of the conclusion of a transaction on an order does not affect the calculation, the calculation is carried out only on orders that have not been rejected by the order processing subsystem or by the user.

All restrictions are integers greater than or equal to 0, for sells - all restrictions are integers less than or equal to 0.

Example: maximum position for SAclient1 RK2: -60 000 000 RUB.

1.8 Maximum NET position long or short in Roubles, in aggregate or for a specific instrument

For aggregate net long position:

Defined MB = parameter to be set for the maximum cash position to buy in Roubles.

Defined A1 = The sum of the volume of all transactions for the purchase in Roubles - The sum of the volume of all transactions for the sale in Roubles + The sum of all active orders for the purchase in Roubles. The transfer from currency to Roubles is carried out at the Central Bank rate on the date of the order submission.

For the order to pass the verification, it is necessary that $A1 \leq MB$ (a pre-set number)

MB is installed in one of the following ways:

1. Gateway
2. MOEX Trade Currency Terminal

MB is set for a specific SMA-user and TCA (trading clearing account) (similar to the existing cash position check) or for User Group.

MB - a number greater than or equal to 0 with an accuracy of 2 decimal places.

For aggregate net short position:

Defined by MS = parameter to be set for the maximum cash position to sell in Roubles.

Determined A2 = The sum of the volume of all transactions for sale in Roubles - The sum of the volume of all transactions for purchase in Roubles + The sum of all active bids for sale in Roubles.

The transfer from currency to Roubles is carried out at the Central Bank rate on the date of the order submission.

In order for the order to pass the verification, it is necessary that $A2 \leq MS$ (a predetermined number).

MS is installed in one of the following ways:

1. Gateway
2. MOEX Trade Currency Terminal

MS is installed for a specific SMA-user and TCA (trading clearing account) (similar to an existing check on the position of money) or for User Group.

MS - a number greater than or equal to 0 with an accuracy of 2 decimal places.

For net long position for a specific instrument:

Defined SB = parameter to be set for the maximum position for a specific instrument to buy in quantity.
 $C1 = \text{Total amount of all deals for the selected buy instrument in lots} - \text{Total amount of all deals for the selected sell instrument in lots} + \text{Total amount of all active orders for the specified buy instrument in lots}$
 is determined $C1 =$

For the order to pass verification, it is necessary that $C1 \leq SB$ (a pre-set number)

SB is installed in one of the following ways:

1. Gateway
2. MOEX Trade Currency Terminal

SB is set for specific SMA-user tools (INSTRUMENT) and TCA (trading clearing account), or for User Group.

SB is an integer greater than or equal to 0.

For net short position in a specific instrument:

It is determined $SS =$ parameter to be set for the maximum position for a specific instrument for sale in lots.

Determined $C2 = \text{The sum of the number of all transactions for the selected instrument for sale in lots} - \text{The sum of the number of all transactions for the selected instrument for sale in lots} + \text{The sum of the number of all active orders for the specified instrument for sale in lots}$

In order for the order to pass verification, it is necessary that $C2 \leq SS$ (a predetermined number).

SS is installed in one of the following ways:

1. Gateway
2. MOEX Trade Currency Terminal

SS is set for specific SMA-user tools (INSTRUMENT) and TCA (trading clearing account), or for User Group.

SS is an integer greater than or equal to 0.

2. Setting, removing and changing parameters of SMA pre-trade risk checks in MOEX Trade Currency terminal

Setting of SMA pre-trade risk check parameters through the MOEX Trade Currency 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.

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).