

**SPONSORED ACCESS
MOSCOW EXCHANGE**

Moscow 2017

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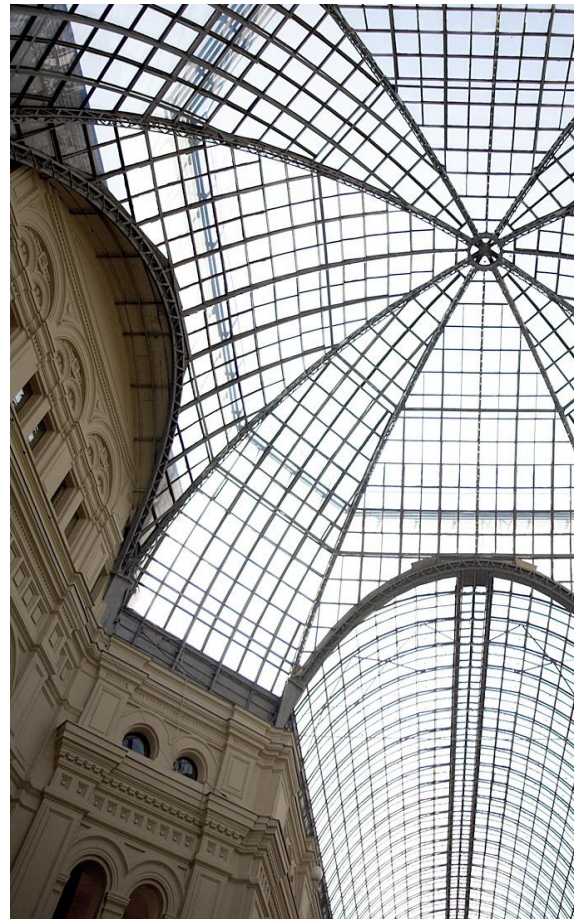
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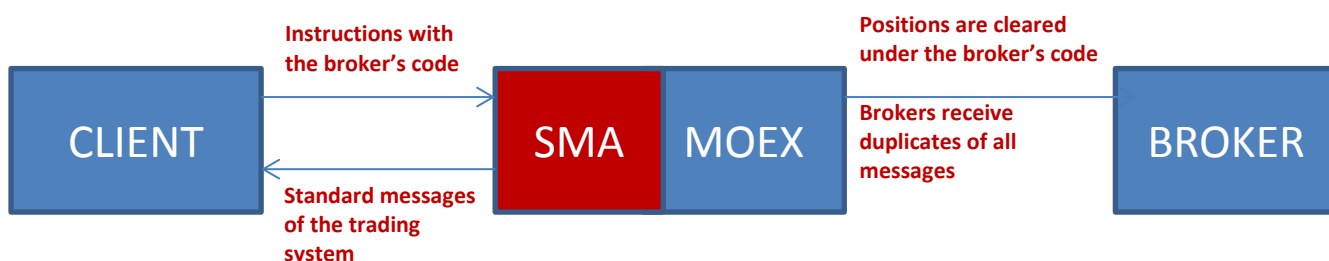
OVERVIEW

Sponsored Access is a method of giving clients of member firms technical access to sub-systems of the Moscow Exchange trading system. A client will be able to give instructions to a member firm (the "sponsoring firm") to be executed on the market directly through the trading system.

To avoid erroneous orders in the trading system, the Moscow Exchange (the "Exchange") provides sponsoring firms with risk management tools.

This document gives an overview of the functionality provided via Sponsored Access, as well as the procedure of obtaining the service. It also provides a description of how the Sponsored Access service is used on Moscow Exchange's Equity & Bond Market and FX Market. It is subject to updates as other markets are added.

Regulations governing the Sponsored Access service is available on the Exchange's website at <https://moex.com> and the Bank of Russia's website at <http://cbr.ru/> (Regulation No. 437-P "On activities of market operators").



DEFINITIONS

Member Firm means a legal entity admitted to trading on the Exchange subject to the successful completion of eligibility checks.

Client of a member firm (Client) means a legal entity or individual registered in accordance with the Moscow Exchange Admission Rules and initiating instructions which the member firm enters into the trading system and executes trades in accordance with the trading rules of the relevant market.

Instruction means an electronic message signed by a Client with the electronic equivalent of the handwritten signature and containing a request for an operation to be made on the Exchange.

Order means an electronic message signed by a Member Firm with the electronic equivalent of the handwritten signature and containing a bid or offer to other Member Firms to execute a trade.

SMA_ID means an identifier (user_id) used by a Client to log in to the trading system and place its instructions.

MASTER_ID means an identifier used by a Member Firm to log in to the trading system to submit and monitor its orders.

A Member Firm may use one MASTER_ID for multiple SMA_IDs.

DOCUMENTS

Member Firms

The Sponsored Access service is provided by the Exchange pursuant to the Trading Rules and associated integrated technological service agreements with Member Firms.

Application forms for Member Firms wishing to provide Sponsored Access are available on the Exchange's website at <http://moex.com/a1819>.

Member Firms are solely responsible for all trading activity carried out through Sponsored Access.

Clients

Technical connection services that enables a Client to connect to the Exchange's facility for submitting instructions are provided based on agreements between the Client and the Technical Center.

A Client is provided with a technical connection to the instruction processing sub-system via SMA_ID by the Member Firm through an agreement between them.

A Client is able to use market data as part of the Sponsored Access service subject to agreements between the Exchange and the Member Firm and/or the Exchange and the Client depending on the way such data is used.

PROCESSING OF INSTRUCTIONS SUBMITTED VIA SMA_ID

A Client connects to the message processing subsystem of the trading system via its SMA_ID received from the Member Firm. It sends instructing messages signed with its SMA_ID.

When an instructing message is received from a Client, it passes through the following validation checks provided by the Sponsored Access functionality incorporated into the trading system:

1. Compliance with basic risk parameters of the trading system;
2. Whether the Member Firm (MASTER_ID tied to SMA_ID) is actively connected; and
3. Compliance with restrictions established by the Member Firm.

CANCEL ON DISCONNECT FUNCTIONALITY

[The Cancel on Disconnect](#) functionality has been added to the trading system to provide an option for automatic cancellation of client orders upon exceeding the inactivity time limit, disconnection or a log out. To enable the functionality, a Member Firm should submit the relevant request to the Client Center. After a Member Firm has enabled Cancel on Disconnect for a SMA_ID, the COD service is activated upon every connection of the Client to the trading system.

Where a SMA_ID is COD-registered, active client orders are cancelled by the Exchange trading system in the following cases:

- if SMA_ID logs out (deregisters) from the trading system;
- if MASTER_ID logs out (deregisters) from the trading system;
- if the Member Firm sends a [USER_TRADE_SUSP](#) transaction with a "Order withdrawal" mark;
- if the transaction inactivity time limit is reached.

To deliver transactions in absence of any trading activity, the Client's software application must periodically send Heartbeat messages to the trading system.

A full health check process for software and requirements for clients' applications are available [here](#).

PRE-TRADE CONTROL FUNCTIONALITY

A Member Firm can set up additional risk controls in order to check its client's instructions in the instruction processing sub-system. The parameters of such controls are set via [ASTS Bridge](#) API (also via terminals, using the API), as well as via the Member Firm Account. Such parameters are set individually for every SMA_ID.

Instructions sent by the SMA_ID are rejected by the instruction processing sub-system if the conditions of at least one check are not fulfilled. The list of pre-trade risk checks is available in Appendix 1 of this document.

INTERFACES USED TO CONNECT TO THE TRADING SYSTEM

In order to send messages to the trading system:

Connectivity is available via either a full-fledged API ([ASTS Bridge](#) including Exchange terminals and products in which it is used) or the standard [FIX protocol](#).

For market data feeds:

The standard [FAST protocol](#) is used on a real time basis or a full-fledged API.

NETWORK CONNECTIVITY SOLUTIONS

Network connectivity to the trading system for sponsored clients can be established in one of the following ways:

1. [Co-location](#)
2. [Moscow Exchange Points of Presence](#)
3. [ConnectME](#)
4. [Universal scheme](#)
5. [Internet](#).

CONNECTION PROCESS

1. A Member Firm provides a client with software necessary to arrange a thread of messages to the Exchange's subsystem through sublicensing or with a service subject to the Member Firm's rights established in the relevant agreements and other regulations of the Exchange.
2. If the Client wishes to receive market data, they should contact Moscow Exchange (market data sales team: +7 495 3633232, data@moex.com) to enter into the agreement.
3. The Client should request network connectivity in one of the options 1-5 mentioned above by contacting Moscow Exchange technical sales team (+7 495 363 3232, ext. 10100, mbt@moex.com). He/she should also request technical service to get access to market data via FAST, if necessary.

4. If a leased line is needed to connect to the MOEX data center, a Client should purchase equipment that meets the Exchange's [technical requirements](#) and order communication lines at [authorised providers](#).
5. With support from specialists of the Exchange provider, the equipment is switched and a pool of IP addresses is provided by the Exchange. Please note that leased lines should be bought at the provider, they are not given by Moscow Exchange.
6. Layer 1 accessibility is tested.
7. Once the testing has been successfully completed, IT specialists of the Exchange and the provider configures the equipment.
8. The Client (or the software developer) undergoes a certification procedure regarding software to be connected to the trading system. If the software has been already certified by the Exchange without its SMA functionality, it must be certified again.
9. The Exchange and the Client sign final IT service and market data agreements.
10. The Client begins working in the production environment.

SOFTWARE TESTING AND CERTIFICATION

The certification aims to detect technical errors of a connection implementation to minimize possible damage to the trading system and/or other Member Firms and their Clients that may arise from malfunctioning off-site systems.

Certification is a mandatory procedure to connect your software to the Exchange's trading facility. If software including its Sponsored Access component has been already certified by the Exchange, no further certification is required.

To certify software, a customer should get access to the test environment attached to the relevant market.

To connect to the MOEX test environment, please apply at <http://moex.com/ru/forms/poll/questionnaire.aspx?id=03>.

Our IT specialists will provide test IDs and connection parameters within 2-3 days.

After a system has been successfully tested, the developer or the client developing the software on its own should send a request in any form to help@moex.com to initiate the certification process.

The basic framework of certification

1. The Exchange sets test scenarios and requirements for test results by markets/connectivity options.
2. The Exchange sets minimum functionality requirements for a client's system.
3. The Exchange may introduce logic functions that requires recertification of software already in production.
4. When announcing functions for a public test, the Exchange must specify whether the off-site software should be recertified. If it does not specify such requirement, recertification is not required to add the functions to the software.
5. The Exchange may disconnect off-site customer software from the trading system if it believes such software is harmful to other Member Firms and/or their Clients, or the Exchange itself.
6. The Exchange may request further certification if it has detected usage of uncertified functionality (i.e. functionality that had not been declared or new functionality that the Exchange considers necessary to be recertified), or a forced disconnection has taken place due to paragraph 6 hereof.
7. A certain software version should be certified. Changes introduced by the developer to any subversions are considered as certified by default if the developer does not request recertification.

8. The Exchange offers test scenarios for connecting off-site systems to SPECTRA and ASTS. Such scenarios are designed to check whether functions for communicating with the trading system are used properly.
9. Successful completion of the certification procedure does not guarantee that the customer software will operate correctly. To connect to the Exchange, any off-site system must also meet technical and communication recommendations applicable to that type of physical connection as well as comply with standards designed by Moscow Exchange for customer software and its connectivity with the MOEX software and hardware facilities.
10. The Exchange reserves the right to decline certification of customer software if it does not meet applicable requirements or other provisions of this guide.

[A full guide to certification process](#)
[Connectivity requirements for customer software](#)

Upon successful completion of the certification process, a Client's system may be connected to the MOEX trading system to enable trade messaging.

CUSTOMER SERVICE

Any requests and enquiries from customers are welcome on +7 (495) 7339507 or email: help@moex.com from 8am until midnight (Moscow time) on business days.

CONTACT US

For any queries, please contact:

Sales:

T +7 (495) 363 3232, ext. 10100

E mbt@moex.com

Technical support:

T +7 (495) 733 9507

E help@moex.com

APPENDIX 1. THE LIST OF PRE-TRADE RISK CHECKS ON EQUITIES MARKET

| | Checked parameter | Field | Set up via |
|-----|--|---------------------------------|---|
| 1. | Maximum deviation from Last Price | SMA_ID and/or SMA_ID – SECID | ASTS Bridge, MICEX Trade SE, MFA* |
| 2. | Maximum order value (instruments) | | |
| 3. | Maximum order value | | |
| 4. | Maximum value of orders per trading session | | |
| 5. | Maximum value of a market order | | |
| 6. | The list of available boards (BOARID) | SMA_ID | MFA |
| 7. | The list of available instruments (SECID) | | |
| 8. | Maximum quantity of transactions per second | SMA_ID – SECID – TCA** | ASTS Bridge, MICEX Trade SE, MFA |
| 9. | Maximum position in instruments (accumulated during trading session) | | |
| 10. | Maximum position (accumulated during trading session) | SMA_ID – TCA | |

**Member Firm Account **Trading and Clearing Account.*

Notes:

- Parameters entered via ASTS Bridge API come into effect in on-line mode. Parameters entered via Member Firm Account come into effect on the next day. If during a trading session both Member Firm Account and ASTS Bridge API were used, on the next day the parameters entered via Member Firm Account will be active.
- If both parameters SMA_ID and SMA_ID – SECID are enabled, an instruction is checked twice (essentially, the strictest parameter is being checked).
- If a client instruction is rejected, a notification is sent to the SMA_ID, which contains an error code corresponding to the risk check, which it did not pass.