

Moscow Exchange Colocation Procedures

These procedures can be amended at any time. The actual edition of the procedures is published on the Moscow Exchange web site: <http://moex.com>.

In addition to terms and definitions specified in the Rules of IT Services Provided by Public Joint Stock Company Moscow Exchange MICEX-RTS, the following terms and definitions are also used:

Dataspace DC - specially designed and built complex for the installation of computer systems and equipment, certified in accordance with international standard level of Uptime Institute TIER III, and which is located in a non-residential building at: Building 11/9, Sharikopodshipnikovskaya st, Moscow, Russia (hereinafter - the "datacenter");

Structured cable system, SCS - a set of cables and network equipment, used to organize local computer networks and x-connects. It includes cables between cabinets, patch cords, patch panels, mounting equipment, etc.;

Trade Network of the Exchange – a dedicated network that gives technical access to the trading, clearing and payments systems, as well as to depositary and auxiliary systems and services of entities within the Moscow Exchange Group.

1. Equipment requirements

1.1 Hardware requirements

- 1.1.1 Strictly the equipment that meets the following conditions is allowed for co-location:
- Certified in Russian Federation (meeting technical requirements of Customs Union or GOST R standard).
 - Rack-mount equipment supplied with standard mount kit (slides/rails/carriers) for 19" cabinets.
 - The equipment must be supplied with cooling system compatible with hot/cold aisle mode (front inlet, back exhaust).
 - Equipment must have power supply compatible with a voltage of 220V.
 - Equipment must be supplied with power cables with 0.5/0.75/1.0/1.5 sq. mm cross section, with ground wire. The electrical cable parameters should comply with the Electrical Code (PUE). The cable should have IEC C14 type outlet.
 - Equipment must be supplied with embedded or mounted power supply unit. Cables with power supply units on the plug are strictly forbidden.
- 1.1.2 At least two redundant power supply units are required. If an equipment is powered with only one power supply unit including outage of the backup power units, the Technical Center has the right to decline service requests with respect to that equipment and require that the Client remedy the outage.
- 1.1.3 For per-unit co-located equipment an independent remote administration system (HP ILO Advanced, IBM RSA, DELL DRAC, IPMI, etc.) is required. For per-cabinet colocation an independent remote administration system is recommended.
- 1.1.4 The following equipment is prohibited:
- with non-standard power supply jacks;
 - with traces of unauthorized modification, including power circuit modifications;

- with wireless modules/devices (any type);
- with sound/video recording devices/modules;
- damaged or inoperable equipment.

1.2 Equipment labeling

- 1.2.1 For each piece of equipment the Technical center assigns unique ID, hereinafter – MOEX ID. Stickers containing MOEX ID are provided by the Technical center and are stuck to 3 sides of the equipment (top, front and back panels) in order to ensure proper equipment identification within cabinet.
- 1.2.2 All equipment should have visible serial numbers for proper documentation.
- 1.2.3 Power on/off and reset buttons should be clearly marked.
- 1.2.4 Power supply units and network interfaces should be visibly numbered.
- 1.2.5 If pp. 1.2.2–1.2.4 requirements are not met, the Technical center reserves the right to refuse colocation services.
- 1.2.6 If the labels are damaged or the labelling is controversial for already collocated equipment, the Technical center reserves the right to refuse Remote hands service requests and ask the Client to remedy equipment labelling issues as soon as possible.

1.3 Cabinet mounting and power

- 1.3.1 The equipment specifications should meet power consumption and heat release limits:
- Per cabinet colocation – 6 KW and 20472 BTU/hour per one cabinet, or 7 KW and 23885 BTU/hour per cabinet depending on the service ordered;
 - For per-unit colocation, the Technical Center reserves corresponding space in cabinet based on the size of ordered services but not more than 20 RU (units) in height and 6KW/20472 BTU/hour per power supply unit specification.
- 1.3.2 Equipment should be connected to different power inputs in the cabinet (two different PDUs).
- 1.3.3 If the equipment has a ground terminal, it should be connected to the grounding wire (cabinet copper ground bus) in accordance with GOST 12.1.030-81.
- 1.3.4 Top 3 (three) units #46-48 in the cabinet as well as 3(three) units #24-26 are reserved for the Technical Center network equipment and/or its patch panels. Equipment mounting including for the x-connects purposes in these units is prohibited.
- 1.3.5 Storage of any goods and possessions, including repair kits, hot-swap components, unmounted equipment, packaging or other materials in spare room of unused units within a cabinet as well as on the top of the cabinet and on the floor within the cabinet is prohibited.
- 1.3.6 The Client is prohibited from performing network cabling (copper, fiber, or any other cable types) between the cabinets including between two cabinets both used by the Client.
- 1.3.7 Equipment connection to PDUs located in other cabinets is strictly prohibited.
- 1.3.8 The Client is prohibited from installing his own UPS systems into his cabinet. Installation of ATS (Automatic Transfer Switch) systems is also strictly prohibited.
- 1.3.9 The Client is prohibited from installing his own PDUs. Installation of power splitters is prohibited.
- 1.3.10 The use of liquid cooling systems equipment is permitted after the Technical Center approval, and is only allowed for per-cabinet colocation.

1.4 Storage facility

- 1.4.1 The Client may order the service to store its property including repair kits, hot-swap components and equipment.
- 1.4.2 The Client is provided with a safe box of 699x450x1000 in size.
- 1.4.3 It is prohibited to store:
- Substances of biological nature, food or living organisms;
 - Flammable, explosive or toxic substances;

- Any substance that emit strong smells and items requiring special storage conditions (regarding temperature and humidity);
 - Items and things prohibited for storage under the Russian law.
- 1.4.4 The Client's representatives may access the Client's box during the maintenance hours in presence of a Technical Center official.
- 1.4.5 Access to the storage box outside the maintenance hours requires special approval of the Technical Center.

2. Network connectivity

2.1 Connection of Client equipment to Trade Network services

- 2.1.1 The Technical center provides separate private range /24 networks for each Client for internal use (RFC 1918) which should be used for specific services.
- 2.1.2 IP addresses for Client's equipment are provided by the Technical Center as part of the relevant connection services. To receive IP addresses and network configuration, the Client should fill out IP address allocation request as shown in Appendix #9. When issuing IP addresses the Technical Center provides necessary information required to configure the VLANs, subnet masks, broadcast network addresses (if applicable).

2.2 Provision of structured cable systems

- 2.2.1 Provision of cross-connections between the Client equipment and authorized network service provider equipment.
- 2.2.1.1 Connections of the client equipment located in colocation facility to network service provider equipment are organized by the Technical Center per the Client request for the corresponding service. The service is a subject of confirmation from the network service provider.
- 2.2.1.2 Authorized network service provider equipment is installed within special telco dedicated cabinets within colocation facility (MMR).
- 2.2.1.3 The Technical center provides the list of authorized network service providers having presence within Co-location Facility.
- 2.2.1.4 To arrange a x-connect to the authorized network service provider equipment the Client should order corresponding service under the colocation contract and submit a x-connect request in the form specified in Appendix #6. The x-connect request should contain sufficient information to identify the Client equipment and port on it to terminate the x-connect into.
- 2.2.1.5 The Technical center provides the x-connect between the Client equipment and the authorized network service provider after receiving proper LOA containing equipment identification details and specific port to terminate the x-connect into as well as additional information: cable type, bandwidth, etc.
- 2.2.1.6 The Technical center, at its own discretion, provides the x-connect between the Client equipment and the authorized network service provider using its own technical means including patch cords, cables, patch panels, cable trays, etc.
- 2.2.1.7 Fiber connection lines are done with duplex multimode fiber cables with LC-LC connectors.
- 2.2.1.8 Copper connection lines are done with copper UTP Cat5e/Cat6 cables with RJ45 connectors.
- 2.2.2 Cross-connect provision between 2 pieces of the Client equipment (not including cases when both pieces are located within the same Client cabinet) could be one of the following:
- Between two pieces of the Client equipment located in different Client's cabinets;
 - Between two pieces of the Client equipment one of which is located within the shared cabinet;
 - Between two pieces of the Client equipment both of which are located within the shared cabinet.
- 2.2.2.1 Connections between pieces of the Client equipment are organized by the Technical Center as per the Client request of the corresponding service.

- 2.2.2.2 To arrange a x-connect the Client should order corresponding service under the colocation contract and submit a x-connect request in the form specified in Appendix #3. The x-connect request should contain sufficient information to identify the Client equipment and port on it to terminate the x-connect into.
- 2.2.2.3 The Technical center, at its own discretion, provides the x-connect using its own technical means including patch cords, cables, patch panels, cable trays, etc.
- 2.2.3 Provision of cross-connections between different clients' equipment.
 - 2.2.3.1 Cross-connections between Client's equipment (Client who initiates the connection) and another Client equipment (Client who accepts the connection) are done by the Technical Center as per the corresponding service request by the Client who initiates the connection and after the corresponding consent is received from the Client who accepts the connection.
 - 2.2.3.2 To arrange a x-connect the Client who initiates the connection should order corresponding service under the colocation contract and submit a x-connect request in the form specified in Appendix #4. The x-connect request should contain sufficient information to identify the Client equipment and port on it to terminate the x-connect into.
 - 2.2.3.3 The Technical Center provides the cross-connect between the Client who initiates the connection and the Client who accepts the connection as soon as the corresponding consent is received from the Client who accepts the connection in accordance with the form specified in Appendix #5. The x-connect consent should contain sufficient information to identify the Client equipment and port on it to terminate the x-connect into.
 - 2.2.3.4 The Technical center, at its own discretion, provides the x-connect using its own technical means including patch cords, cables, patch panels, cable trays, etc.
 - 2.2.3.5 Fiber connection lines are established with duplex multimode fiber cables with LC-LC connectors.
 - 2.2.3.6 Copper connection lines are established with copper UTP Cat5e/Cat6 cables with RJ45 connectors.
- 2.2.4 Connection of the Client's equipment to the Client's receiving devices of global positioning systems (GPS, GLONASS, etc., the "Receiving Device") on the DC's antenna site
 - 2.2.4.1 Cross-connects between the Client's equipment and the Client's Receiving Device are established by the Technical Center upon the Client's request as part of the service ordered by the Client.
 - 2.2.4.2 To have a cross-connect established, the Client must order the appropriate service and then submit the form set out in Appendix #7 hereto. The form shall specify details sufficient to identify the Client's equipment and the port chosen by the Client for the cross-connect.
 - 2.2.4.3 Cables and other things necessary to connect the receiving device are provided by the Client. The Client must obtain prior approval of the cable characteristics from the Technical Center.
 - 2.2.4.4 The Technical center, at its own discretion, provides the x-connect using its own technical means including patch cords, cables, patch panels, cable trays, etc.
 - 2.2.4.5 Receiving devices, cables and other items provided by the Client must be certified in the Russian Federation (comply with the regulation of the Customs Union or the Russian National Standard.
 - 2.2.4.6 The sum of the device width, length and height must not exceed 1,000 mm.

3. Works and maintenance in Colocation Facility

3.1 Works with equipment in Colocation Facility

- 3.1.1 If possible, all equipment maintenance in colocation facility should be done remotely using network access or remote hardware administration systems.
- 3.1.2 If remote maintenance is not possible, physical access to equipment should be planned to take minimum time.
- 3.1.3 If planned maintenance requires a long time/large scope of jobs (exceeding 4 hours) with physical access to equipment, the equipment should be demounted and taken out of the colocation facility and returned and installed into the cabinet once the maintenance is complete.

3.2 Physical access to equipment

- 3.2.1 For colocation in dedicated cabinet(s), the client representatives are allowed to access the cabinet(s) in colocation facility (no more than 3 representatives at a time) accompanied by the Technical Center engineer on duty.
- 3.2.2 For colocation in a shared cabinet (per-unit colocation) direct cabinet access into colocation facility is restricted and access to the client equipment is provided in the Client Room.

3.3 Equipment mounting/demounting and cabling

- 3.3.1 For colocation in dedicated cabinet(s), all mounting/demounting of the client equipment and network cabling within the cabinet is done by the Client's representatives or the Technical Center engineer upon the Client's request. The Technical center reserves the right to refuse specific mounting/demounting operations without Client's representatives' presence in case proper equipment cabling/installation diagram is not provided by the Client and/or Client's cables are improper.
- 3.3.2 For colocation in a shared cabinet (per-unit colocation), all mounting/demounting as well as network cabling of the client equipment is done by the Technical Center engineer upon the Client's request.
- 3.3.3 For colocation in dedicated cabinet(s) the Client is obligated to keep the cabling/installation map of his equipment in its actual state.
- 3.3.4 In case the liquid cooling equipment is used the Client should provide its complete specification to the Technical center for approval beforehand and in case the approval is received, the Client must abide installation and Technical conditions of equipment operation provided by the Technical Centre.
- 3.3.5 For colocation in dedicated cabinet(s) the Client should notify the Technical Center about any changes in equipment location within the Client's cabinet after the maintenance is completed.
- 3.3.6 Equipment connection to PDUs, including connection to ground/neutral ground buses is performed by the Technical Center representatives only.
- 3.3.7 Organization, transfer or termination of cross-connects with any Technical Center equipment, including patch panels, as well as organization, transfer or termination of any cross-connects outside of the Client cabinets are performed by the Technical Center representatives only.

3.4 Access to equipment in the Client Room

- 3.4.1 In order to access the Client equipment, the Client should submit a request. The Technical Center engineer demount the equipment and moves it to the Client Room where it can be powered if necessary. The Client should specify preferred way to power off the equipment in its Datacenter visit request (as specified in Appendix 2). If preferred way to power off the equipment is not specified, the equipment is powered off at the discretion of the Technical Center Representative. The Client is fully responsible for any equipment malfunction/damage in this case.
- 3.4.2 In the Client Room, the following is provided: place for equipment, power supply, screen/keyboard and manual tools.
- 3.4.3 For equipment co-located in shared cabinets, once the maintenance is complete the Technical Center engineer places equipment into the cabinet, does necessary cabling and plugs the equipment into the PDU in accordance with the cabling setup used before the equipment has been demounted.
- 3.4.4 For equipment co-located in dedicated cabinets, once the maintenance is complete, per the Clients request the equipment is installed into the cabinet by the Client or his representatives, and is cabled and powered on by the Technical Center Representatives.

3.5 Timing of works

- 3.5.1 Moscow Exchange colocation facility sets the following time intervals:
- Trade hours (main trade session of the Moscow Exchange) — from 08:00 to 24:00 MSK on

workdays (trade days);

- Non-trade hours — from 00:00 to 08:00 MSK on workdays (trade days) and from 00:00 to 24:00 on weekends and holidays;
- Maintenance interval — from 10:00 to 18:00 MSK on weekends and holidays (non-trade days);

3.5.2 Any maintenance in the colocation facility that requires physical access to client equipment is prohibited during trade hours, excluding the following tasks executed by the Technical center representatives:

- Visual equipment checks;
- Powering on/off the equipment, hard resets;
- Connection/disconnection of prepared patch cords into the network interfaces;
- Connection/disconnection of IP-KVM interfaces.

When requesting maintenance repairs during the trade hours, the Client agrees that it accepts all risks associated with a fault in the operation of its equipment that may occur while maintenance activities are carried out.

3.5.3 Equipment demounting/mounting, network cabling, network configuration changes and other jobs that require physical access to equipment in the colocation facility should be scheduled for non-trade hours. It is highly recommended to plan such jobs to be started at the beginning of maintenance interval.

In case such jobs cannot be performed during the maintenance interval, it can be scheduled for additional time interval upon approval by the Technical Center.

3.5.4 Equipment setup and changes in the Technical Center network segments that do not require physical access to the Client equipment should be scheduled for non-trade hours.

3.5.5 Additional time limits may be applied to maintenance works in the colocation facility due to the following reasons:

- Moscow Exchange performs trading on weekend or holidays;
- Moscow Exchange performs release, load or other testing (day of testing is equated to trade day);
- Moscow Exchange performs Trade System version updates or extensive maintenance of the Moscow Exchange network segment or of the colocation facility infrastructure – Moscow Exchange reserves the right to apply moratorium on any changes in the colocation area on the day of the event and several days prior to the event;
- State holidays;
- Any other reasons upon additional notification from colo@moex.com.

3.6 Requesting the services of the Technical Center

3.6.1 In order to submit the service request, the Client should contact the Technical Center using technical support public contacts.

3.6.2 When ordering jobs that require physical access of the Technical Center representatives to the Client equipment, in order to avoid any possibility of incorrect equipment identification, it is required to specify equipment unique ID (MOEX ID).

3.6.3 For specific service requests the Technical Center may require additional information including:

- Client representative's full name;
- Datacenter;
- Equipment model;
- Serial number;
- Equipment ports and interfaces numbers;
- Number(s) of rack(s) and/or unit(s);

- Telco provider name(s);
- Another client(s) name(s);
- Other information.

- 3.6.4 In order to avoid any possible mistakes, such information should be provided via an e-mail.
- 3.6.5 In order to provide technical service or provide specific confidential information, the Client representative submitting service request or visiting the Datacenter should be properly authorized by the Technical Center.
- 3.6.6 Detailed description of authentication and authorization methods is provided in paragraph 3.88 Client Authorization of the present Procedures.
- 3.6.7 Some specific works require confirmation from another party, including:
- "Client equipment connection to authorized telco provider equipment" service requires notification from the telco provider when the link is ready specifying equipment label and connection port(s) number(s) (LOA);
 - Cross-connection to another Client's equipment requires approval of the other party (official consent as specified in Appendix 5).
- 3.6.8 Typical recommended service request forms and authorization letters are given in Appendixes 2-8 to the present Procedures:
- Appendix 1. Client authorisation form
 - Appendix 2. Datacenter access request form
 - Appendix 3. Cross-connect between the Client's own equipment request form
 - Appendix 4. Cross-connect between different clients' equipment request form
 - Appendix 5. Consent form for cross-connect between different clients' equipment
 - Appendix 6. Connect to authorized network service provider equipment request form
 - Appendix 7. Receiving device connection request form
 - Appendix 8. Connection line removal request form
 - Appendix 9. IP address allocation request form
 - Appendix 10. IP-KVM request form

3.7 Datacenter visits

- 3.7.1 In order to perform the planned maintenance that requires the Datacenter visit during maintenance interval, the Client should submit a request using the form stated in Appendix 2 of the present Procedures before 16:00 MSK of current business day.
- 3.7.1.1 If the maintenance is planned for weekend or holiday – the datacenter visit request should be submitted no later than 16:00 MSK on penultimate business day before the weekend or holiday.
- 3.7.2 Maintenance schedule and scope as well as visit timing should be approved and confirmed by the Technical Center.
- 3.7.3 The Client is prohibited from opening/closing the cabinet locks, in which the maintenance is approved by the Technical Center.
- 3.7.4 It is strictly prohibited to access cabinets in which the maintenance has not been approved by the Technical Center.
- 3.7.5 Attempts to access the datacenter systems, such as fire extinguishing systems, air-conditioning, power supply, lighting are strictly prohibited.
- 3.7.6 Access below the data hall raised floor, into SCS trays, as well as equipment and SCS placed over the top of cabinets is strictly prohibited.
- 3.7.7 In order to access the Client's equipment, the Client representative should have authorization. Client representatives that do not have authorization should be accompanied and visually controlled by authorized Client representative.
- 3.7.8 Upon the Datacenter visit, the Client representative should submit his/her original official ID document with a photo.

- 3.7.9 If the Client needs to use stepladder, trolley, mobile desk, manual tools, power outlets, monitor/keyboard set, or Internet access, their reps should contact the Technical Center representative.
- 3.7.10 The Technical Center reserves the right to refuse the visit and/or interrupt the visit due to the breach of the accident prevention policy, non-compliance with internal DC regulations, unauthorized access attempts or other unauthorized actions by the Client representatives, which may endanger functioning and security of the Datacenter.

3.8 Client authorization

- 3.8.1 In order to request technical service, receive confidential information or material assets (equipment) as well as access equipment to perform planned or emergency maintenance, client representatives should be authorized.
- 3.8.2 Client's and its reps' personal Data used for authentication, as well as the powers of attorney of the Client representatives are specified in the Client Authorization form (in the form of power of attorney), as specified in Appendix 1 to the present Procedures which should be signed by authorized Client representative in accordance with the law and the company constituent documents. The hard copy of Client Authorization Form is provided to the Technical Center.
- 3.8.3 The Client Authorization Form shall be deemed accepted by the Technical Centre for use in client authentication and his trustees since it has been received by the Technical Center.
- 3.8.4 Client Authorization Forms are assigned unique numbers and can be executed at any time during the contract term, in this case, once the new Client Authorization Form version is signed by the Client and submitted to the Technical Center, the previous Client Authorization Form becomes void.
- 3.8.5 The Technical Center accepts the following authorization methods:
- Requests received from the email address specified in the agreement as contact regarding common issues;
 - Requests from the person authorized by the Client acting in accordance with the Client Authorization Form (in power of attorney form) stated in Appendix 1 of the present Procedures - for actions to which the representative has been authorized by the Client.
- 3.8.6 In case of the authorized person's dismissal or addition of a new authorized person by the Client, as well as in case of any change of Client information stated in the Client Authorization form, the Client is obliged to inform the Technical Center immediately by contacting technical support and then no later than in 3 (three) calendar days send an hard copy to the Technical Center to revoke the current Client Authorization Form and, if necessary, sign a new Client Authorization Form.
- 3.8.7 The Technical Center interacts with the Client on the following questions:
- Organizational matters;
 - Technical questions/issues, requests for technical service;
 - DC visits requests, requests for passes into the DC;
 - Physical access to equipment;
 - Bringing equipment into the DC;
 - Equipment takeout from the DC.

Appendix 1. Client Authorization Form

Client Authorization Form No. _____
(power of attorney form)

Moscow

Client	
Technical Center	Moscow Exchange
Operator	MOEX Information Security
Agreement with the Technical Center	No. _____ dated ____ 20__
Agreement with the Operator	No. _____ dated ____ 20__

1. Client emergency contact details

Email address for emergency text messages	
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2. Power of attorney

By signing this form the Client authorizes the following person(-s) to perform the following actions on behalf of the Client:

Full name		
Passport number and validity dates		
Email		
Telephone number		
Scope of actions	Moscow Exchange	MOEX Information Security
Communication with the Technical Center/ Operator regarding the organizational matters with the right to sign the service/service change requests, termination notices re the agreement, other documents set out in the Rules and Regulations	<input type="checkbox"/>	<input type="checkbox"/>
Communication with the Technical Center/Operator regarding technical matters with the right to submit requests to fix service issues	<input type="checkbox"/>	<input type="checkbox"/>
DC visit requests	<input type="checkbox"/>	
Bringing the Client equipment into the DC	<input type="checkbox"/>	
Physical access to the equipment	<input type="checkbox"/>	
Taking the equipment out of the DC	<input type="checkbox"/>	

(to be completed individually for every person)

3. Period of validity

This Client Authorization Form (power of attorney) is valid for 3 (three) years since the date of signature.

On the date of this Authorization Form signature, the previous Authorization Form #____ dated _____ 20____, including its power of attorney is revoked and becomes void.

In witness thereof, this Client Authorization Form is signed by the authorized representative of the Client (the head of the legal entity or any other person duly authorized to do so in accordance with the law and the company's constituent documents)*.

By the Client:

Signed Full name

_____ 20__

** If the signatory is acting on the basis of the power of attorney **with the right of substitution**, the following documents shall also be submitted:*

- the original or a notarized copy of the power of attorney confirming the powers of the person to sign the form;*
- the document confirming the powers of the person who issued the power of attorney or the notarized copy thereof, or the extract therefrom certified with the signature of the authorized person and the seal (if any).*

Appendix 2. Datacenter visit request form

Datacenter visit request

Please review and approve the scope of equipment maintenance located in the Datacenter as per Colocation agreement № ____/____/CL as of «__» _____ 20__.

1. Date and time of visit.
2. Scope of work.
3. Expected work duration.
4. Cabinet number or list of equipment (model, serial number).
5. Full name(s) of Client representative(s).
6. Vehicle model and license plate number (if vehicle pass is required).
7. List of equipment (model, serial number) to be brought in.
8. List of equipment (model, serial number) to be carried out.
9. Request for additional service to be provided by the Technical Center (select appropriate)
 - Demount equipment (specify MOEX ID) and deliver it to the Client Room:
 - By the time of the visit,
 - Upon client representatives' request during the visit;
 - If the equipment is requested to be demounted:
 - Equipment would be already powered off,
 - It should be powered down by button,
 - It should be powered down by pulling out the cables,
 - contact _____(specify contact person);
 - Prepare ports/connections (please specify);
 - Other (please specify).

Title

Full name

Contact details

Note: please submit this request to colo@moex.com from authorized Email address.

Appendix 3. Cross-connect between the Client's own equipment request form.

Cross-connect between the Client's own equipment request.

In accordance with colocation agreement # _____ as of "___" _____ 20___ please provide the cross connection between equipment of (Client name) within the Moscow Exchange colocation facility.

Cross connect parameters:

Type (copper, fiber, other params): _____

1)

MOEX ID: _____

Port name/number: _____

Connector type: _____

2)

MOEX ID: _____

Port name/number: _____

Connector type: _____

Title

Full name

Contact details

Note: please submit this request to colo@moex.com from authorized Email address.

Appendix 4. Cross-connect between different clients' equipment request form

Cross-connect request between different clients' equipment

(this request should be provided by the **Client who initiates the connection**,
i.e. the Client who orders the cross-connect service)

In accordance with colocation agreement # _____ as of "___" _____ 20__ please provide the cross connection between equipment of (name of the Client who initiates the connection) and equipment of (name of the Client who accepts the connection) within the Moscow Exchange colocation facility.

Cross connection parameters:

Type (copper, fiber, other params): _____

From (name of the Client who initiates the connection)

MOEX ID: _____

Port name/number: _____

Connector type: _____

Cross-connect parameters for (name of the Client who accepts the connection) will be provided by (name of the Client who accepts the connection).

Title

Full name

Contact details

Note: please submit this request to colo@moex.com from authorized Email address.

Appendix 5. Consent form for cross-connect between different clients' equipment

(this consent should be provided by the **counterparty** of the Client who initiates the connection, i.e. the Client who accepts the connection)

Consent for cross-connect with another Client's equipment.

(name of the Client who accepts the connection) gives consent for cross-connection between equipment collocated as per agreement # _____ as of "___" _____ 20___ and (name of the Client who initiates the connection) equipment.

Cross connection parameters:

Type (copper, fiber, other params): _____

From (name of the Client who accepts the connection)

MOEX ID: _____

Port name/number: _____

Connector type: _____

Cross-connect parameters for (name of the Client who initiates the connection) will be provided by (name of the Client who initiates the connection).

Title

Full name

Contact details

Note: please submit this request to colo@moex.com from authorized Email address.

Appendix 6. Authorized Network Service provider cross-connect request form

(provided by the **Client who initiates the connection**)

Cross-connection request

In accordance with colocation agreement # _____ as of "___" _____ 20___ please provide the cross connection between equipment of (name of the Client who initiates the connection) and equipment of (authorized network service provider name) within the Moscow Exchange colocation facility.

Cross connection parameters:

Type (copper, fiber, other params): _____

From (name of the Client who initiates the connection)

MOEX ID: _____

Port name/number: _____

Connector type: _____

Cross-connect parameters for (authorized network service provider name) will be provided by (authorized network service provider name).

Title

Full name

Contact details

Note: please submit this request to colo@moex.com from authorized Email address.

Appendix 7. Request to connect the Client’s equipment and receiving device on the DC antenna site

Connection line request form

In accordance with colocation Agreement No. _____/CL dated _____ 20__, we request to establish a connection line between the co-located equipment of (Client name) and the receiving device of (Client name) on the Datacenter’s antenna site.

Connection parameters:

Cable type: _____

Client equipment parameters:

On Datacenter’s antenna site:

Receiving device: _____

Serial number: _____

Co-location space:

MOEX ID: _____

Port name/number: _____

Connector type: _____

Title

Full name

Contact details

Note: please submit this request to colo@moex.com from authorized Email address.

Appendix 8. Request to remove a connection line

(provided by the **Client who initiates the connection**)

Connection line removal request form

In accordance with colocation Agreement No. _____/CL dated _____ 20____, we request to remove the connection line between the equipment of (name of the Client initiating the connection) and the equipment of the Technical Center/Authorized network service provider (name)/Client in the co-location area (name).

Line parameters:

Line type: _____

MOEX ID: _____

Port name/number: _____

Connector type: _____

Cross-connect parameters used by (name of the network service provider/Client) will be provided by (name of the network service provider/Client).

Title

Full name

Contact details

Note: please submit this request to colo@moex.com from authorized Email address.

Appendix 9. IP allocation request

In accordance with colocation agreement #____/CL dated " __ " _____ 20____, please allocate the following IP addresses:

(please leave appropriate)

Production and game systems network segment:

Transactional:

Multicast (FAST):

Multicast (FAST) for Equities market:

Multicast (FAST) for FX market:

Multicast (FAST) for Derivatives market:

FAST FullOrderLog service for Derivatives:

(for FAST addresses both FeedA and FeedB IP addresses should be specified)

UAT network segment:

Transactional:

Multicast (FAST) access:

(for FAST access both FeedA and FeedB IP addresses should be specified)

Internet-facing network segment:

Internet access:

Internet access for mgmt interface:

Title

Full name

Contact details

Note: please submit this request to colo@moex.com from authorized Email address.

Appendix 10. IP-KVM request.

In accordance with agreement #____/CL dated "___" _____ 20____, please provide IP-KVM for the following equipment:

MOEX ID: _____

and allow access to IP-KVM from the following addresses:

Title

Full name

Contact details

Note: please submit this request to colo@moex.com from authorized Email address.